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FEDERAL RESERVE'S SECOND MONETARY POLICY REPORT FOR 2005

HEARING

BEFORE THE

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

ONE HUNDRED NINTH CONGRESS

FIRST SESSION

ON

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

JULY 21, 2005

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FEDERAL RESERVE'S SECOND MONETARY POLICY REPORT FOR 2005

THURSDAY, JULY 21, 2005

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

The Committee met at 10:07 a.m., in room SD–538, Dirksen Senate Office Building, Senator Richard C. Shelby (Chairman of the Committee) presiding.

OPENING STATEMENT OF CHAIRMAN RICHARD C. SHELBY

Chairman SHELBY. The hearing will come to order.

We are very pleased this morning to welcome Chairman Greenspan once again before the Committee on Banking, Housing, and Urban Affairs to testify on the Federal Reserve's Semi-Annual Monetary Policy Report to the Congress.

The June meeting of the Federal Open Market Committee marked the 1 year anniversary of incremental increases in the Federal funds rate from a low of 1 percent. These measured changes appear to have been accommodated pretty well by the economy. GDP has sustained a strong rate of growth, increases in core inflation have been moderate, and we have seen a continued decline in unemployment. The country is also fortunate to have enjoyed an unexpected increase in tax revenues and subsequent reduction in the Federal deficit for this fiscal year. But as your report highlights, Mr. Chairman, there are also some cautionary factors that we need to be mindful of in the months ahead.

This morning we will have ample opportunity to discuss in greater detail the Federal Reserve's performance in carrying out monetary policy and its views on the future direction of our Nation's economy. I look forward, as others will, to raise a number of issues during our discussion.

Chairman Greenspan, I am told that today marks the 18th anniversary of your first appearance before the Congress for the nomination to be Federal Reserve Chairman. Since that time, you have made 34 appearances before this Committee to discuss monetary policy and conditions alone. While this morning may be your last appearance—I hope it will not be, but it could be—as Federal Reserve Chairman testifying on the Federal Reserve's Semi-Annual Monetary Policy Report, the Committee would certainly extend a warm welcome to you at any time should we end up hosting you again in February of 2006.

But on behalf of the Committee, I want to thank you for your many years of service and your respected counsel. I suspect that

this Committee may still be interested in hosting you as a witness on other topics in the months ahead. Beyond your tenure, Mr. Chairman, your voice will undoubtedly continue to be valued after your departure from the Fed. We hope you will continue to accept our invitation in the years ahead.

Senator Schumer.

STATEMENT OF SENATOR CHARLES E. SCHUMER

Senator SCHUMER. Thank you, Mr. Chairman. I just ask to make a brief statement.

First, I want to join you, Mr. Chairman, in thanking Chairman Greenspan for his amazing service to this country and his willingness. I only served under two Fed Chairmen, both of whom have been very accessible, but your accessibility and interest in things that we ask you about is just incredible, and we appreciate that. And one of the things that we have worked together on, of course, is the Chinese currency, and as you know, this morning the Chinese made their first step to revalue their currency. So, I just wanted to read a brief statement on that.

And what I believe, Mr. Chairman, is that this is a good first step, albeit a baby step. It is smaller than we had hoped. But to paraphrase the Chinese philosophers, a trip of a thousand miles can well begin with the first baby step.

The most significant thing about this move is that the Chinese, in effect, have conceded that pegging their currency is bad for China, for the world economy, and for the United States. And we are glad they have come to this understanding. If there are not larger steps in the future we will not have accomplished very much. But after years of inaction, this step is welcome.

Again, I want to thank Chairman Greenspan. I want to thank Senator Graham as well as Senator Bunning and Senator Dole on this Committee, and Senator Bayh, Senator Reed, and some others who were part of our effort, and we are beginning to bear some fruit.

So, I thank you, Mr. Chairman.

Chairman SHELBY. Senator Allard.

STATEMENT OF SENATOR WAYNE ALLARD

Senator ALLARD. Thank you, Mr. Chairman, for holding this hearing, and I would like to join my colleagues in welcoming Federal Reserve Board Chairman Greenspan to the Committee today to discuss monetary policy and the state of the U.S. economy.

I also look forward to the opportunity to hear from Chairman Greenspan. His expertise and insight is always helpful to the Committee.

Chairman Greenspan, I was pleased to hear in your testimony before the House yesterday that the outlook for the U.S. economy is positive and one of sustained growth. Under your leadership, the Federal Reserve Board has done a good job monitoring the U.S. economy and managing monetary policy, as appropriate. Since this will be the last time you will be delivering the Fed's monetary policy report in your current term—and I hope you continue to serve—I want to take this opportunity to congratulate you on a job well done. I also want to thank you on behalf of the American people

for your years of public service. We have all been the beneficiaries of your careful approach, and your service has set a high standard.

Thank you for taking the time out of your busy schedule to be here, and I look forward to hearing your testimony.

Chairman SHELBY. Senator Reed.

STATEMENT OF SENATOR JACK REED

Senator REED. Thank you very much, Mr. Chairman. And let me commend you, Chairman Greenspan, for your extraordinary service over 18 years, and I think you will continue to be invited back to the Committee for many years to come.

We have a challenging economy before us. Last June, employment added about 146,000 jobs, which might be appropriate at the end of an expansion, but we are coming out of a long, protracted job slump. And this is far from the numbers we saw in the Clinton Administration of 200,000 to 300,000 jobs a month. So we have essentially a jobless recovery, and the unemployment rate, although it edged down to 5 percent, the Boston Fed points out there is still considerable evidence of hidden unemployment that does not show up. Labor force participation has not rebounded in this recovery. A study finds that the labor force shortfall is between 1.6 million and 5.1 million people. Employers are not hiring as though they believe the economy is strong, and potential workers are staying out of the labor force.

We have discussed many times, Mr. Chairman, the fact that there are disturbing trends in the distribution of earnings. Things seem to be getting worse in this recover, with most of the gains from productivity going into profits, not wages, and overall real earnings remaining stagnant. And the only group that seems to be doing exceptionally well are those at the top of the distribution of earnings and wages. People in the middle and further down are seeing their purchasing power fall because of rising costs of gasoline, food, medical care, housing, really eating into their ability to maintain their families.

And then we have seen some news that the deficit—progress has been made, but if you look behind the numbers, it looks like a one-time situation where certain tax advantages came to pass in this particular period but are not sustainable over a longer time. The deficit still is extraordinarily burdensome on our economy as we go forward. Low national savings rates and the widening trade deficit are problems that we have to deal with, an we are not dealing with them effectively and permanently.

I hope at the hearing today, Mr. Chairman, that you will touch on these issues, and once again let me commend you for your service and judgment in so many different ways. We have disagreed, but it has been a productive exchange, and I thank you for that.

Chairman SHELBY. Senator Bunning.

STATEMENT OF SENATOR JIM BUNNING

Senator BUNNING. Thank you, Mr. Chairman, particularly for holding this meeting today. I would especially like to thank Chairman Greenspan for delivering what will probably be your last monetary policy report to Congress.

According to the Congressional Research Service, this is the 35th time that you have appeared before a Committee on which I sit. I think I am finally starting to understand your statements and answers——

[Laughter.]

Which probably means it is time for one of us to go.

[Laughter.]

Seriously, I will miss our sparring, and I thank you for your service. I am sure you would be disappointed if I gave you a speech full of flowery tributes, and I would hate for you to be disappointed in what could be your last appearance before this Committee. So, I will point out my differences with the FMOC latest monetary policy decision. As my good friend and fellow Hall of Famer Yogi Berra once said, it is déjà vu all over.

Once again, I believe the FMOC is taking us down the economic path that is fraught with peril by unnecessarily raising interest rates. Surveys show that Americans are much more worried about filling their gas tanks than they are about fitting into their swimsuits this summer, which may be a first. But, nonetheless, despite record high energy prices, the FMOC continues to raises rates. I believe that you are fighting an inflationary bogeyman that does not exist.

This reminds me of the summer of 2000 when all signs pointed toward a recession, but the FMOC refused to cut interest rates. When you finally did cut rates on January 3, 2001, in an emergency meeting after refusing to cut them at the FMOC's regular meeting on December 19, 2000, the damage was done and the recession then took place. That was greatly exacerbated by September 11, and it was already underway before that took place.

I am very concerned with the Federal Reserve's continuing raising interest rates. The FMOC, it seems to me, continues to fix an economy that just is not broken. It is almost as if the Fed is frightened by success. The FMOC is once again throwing a wet blanket on the inflationary fire that does not exist.

As I have said before, I do not believe the Federal Reserve economic models are factoring in the impact of new technologies on the economy. I also do not believe they take into account the psychological effect of higher energy prices and economic worries in general. People in my State get nervous about our economy's future every time they fill up their gas tank. I also know that despite very good economic numbers, many Americans are worried about the future. They are worried that if they lose their current job, they will be unable to find another. I believe we are coming to a critical point in our economy—a point where it cannot sustain higher and higher interest rates. We almost have an inverted curve, as you know. There are only 20 basis points between the 5-year note and the 10-year note right now.

As our interest rates rise, our economy will suffer. Housing starts will be down, and we will lose the economic momentum that we have enjoyed. We just got good news about increased tax revenues helping reduce our deficits. I know you are a deficit hawk, Mr. Chairman. I hope you will do what you can to sustain our growth and help reduce the deficit.

Once again, thank you, Mr. Chairman, for coming before this Committee today and for your long and distinguished service to our country.

Chairman SHELBY. Senator Bennett.

STATEMENT OF SENATOR ROBERT F. BENNETT

Senator BENNETT. Thank you very much, Mr. Chairman.

Chairman Greenspan, listening to all of the comments about your service and your performance here reminds me of the story of Henry Kissinger, who was in a group and the person presiding over that particular event said, "We have with us today Henry Kissinger, who needs no introduction." And Henry Kissinger said, "While it is true that I need no introduction, no one enjoys an introduction more than I do." And you do not need the kind of praise that is being heaped upon you, but I hope you enjoy it because it is certainly deserved. And I want to join in it.

We appreciate your testimony here today. I have looked through it, and I look forward to asking you some questions about it. But I would hope that the tradition that when Greenspan speaks the entire country listens will hold true for your testimony today, because the recovery that we are in could be labeled "the Rodney Dangerfield recovery": It don't get no respect. And your comments about where we are and how robust the recovery is I think should get a lot of respect and a lot of currency.

So, I appreciate your testimony and look forward to having the opportunity to question you here today.

Chairman SHELBY. Senator Dole.

STATEMENT OF SENATOR ELIZABETH DOLE

Senator DOLE. Thank you, Chairman Shelby.

I want to join with Senator Schumer in recognizing the importance of China's removal of their peg of their currency to the dollar. This is significant and an important first step toward our long-term goal of having the yuan freely float. Welcome, Chairman Greenspan, for what appears to be your final semi-annual report to the Congress. Your service as Chairman of the Federal Reserve has been truly admirable and deeply appreciated. While some may worry if the overall economy will continue to improve without you in the Chairman's seat, I know that your efforts have put us on the track to find long-term sustainable growth.

The times during which you have served, Mr. Chairman, have been filled with extraordinary events and personalities. Over your 18 years as the Chairman of the Federal Reserve, the American people's understanding of the markets has dramatically improved, as has our understanding of the role of the Federal Reserve Board. I believe the relatively new measured pace that the Federal Reserve has adopted in its adjustments to the rates is part of this progress, and this predictability has benefited our economy.

Three weeks ago, the Federal Open Market Committee again raised its target for the Federal funds rate and the discount rate by 25 basis points. This was the ninth straight increase in the Federal funds rate. The release noted robust underlying growth in productivity and a gradually improving labor market. These observations appear to indicate a positive track for economic expansion

in the coming years. While these trends certainly are encouraging, I continue to be concerned about the slower pace of job creation.

As you well know, the State of North Carolina continues to experience dramatic losses in employment, especially in textile and furniture manufacturing. While the national economy may be trending positively, we continue to focus special attention on those who have lost their jobs as their companies struggled to compete with foreign firms that operate with dramatically lower cost structures. Congress continues to debate the positives and negatives of free trade, and I continue to believe we must work on agreements that bring new benefits to American workers and consumers while minimizing the negative effects.

In this changing economic environment, there are fewer and fewer opportunities for lower-skilled workers. The opportunity gap is widening. We must do everything in our power to make sure that these people do not fall through the cracks. We must educate our less-skilled workers so they take advantage of new jobs created by the expanding economy. To this end, I believe we should take steps to improve trade adjustment assistance and continue to make the goal of strenghtening our community colleges a top priority.

In addition to the President's $125 million proposal to establish a new community college access grant program, which is included in this year's Labor-HHS-Education appropriations bill, Senator Baucus and I have introduced legislation, S. 1068, which provides better links between our higher education institutions and the business community. This will help prepare a new generation of skilled workers so our workforce will remain strong and competitive in years to come. The bill is currently in the Senate HELP Committee, and I look forward to working with Chairman Enzi to see that it becomes law.

And, of course, I also remain concerned about high energy prices, the rise in steel prices, and the growing size of our trade deficit. But in spite of these concerns, I am confident that through increased trade, hard work, global communications, and improved education of our workforce, we will achieve new levels of opportunity for the people of North Carolina and for all Americans.

I look forward to hearing from you on these and other matters, Chairman Greenspan. Thank you very much for joining us today.

Chairman SHELBY. Senator Crapo.

STATEMENT OF SENATOR MIKE CRAPO

Senator CRAPO. Thank you very much, Mr. Chairman. I came to listen to Chairman Greenspan, so I will save everybody from having to listen to my opening statement.

Chairman SHELBY. Thank you.

Chairman Greenspan, your written statement will be made part of the record today. You proceed as you wish. Welcome again to the Committee.

STATEMENT OF ALAN GREENSPAN, CHAIRMAN, BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM

Chairman GREENSPAN. Thank you, Mr. Chairman. I have excerpted only part of that rather extended statement.

Mr. Chairman and Members of the Committee, I am pleased to be here to present the Federal Reserve's Monetary Policy Report to the Congress.

In recent weeks, employment has remained on an upward trend, retail spending has posted appreciable gains, inventory levels have been modest, and business investment appears to have firmed. At the same time, low long-term interest rates have continued to provide a lift to housing activity. Although both overall and core consumer price inflation have eased of late, the prices of oil and natural gas have moved up again on balance since May and are likely to place some upward pressure on consumer prices, at least over the near term.

Should the prices of crude oil and natural gas flatten out after their recent run-up—the forecast currently embedded in futures markets, incidentally—the prospects for aggregate demand appear favorable, and upward pressures on inflation would be reduced.

Thus, our baseline outlook for the U.S. economy is one of sustained economic growth and contained inflation pressures. In our view, realizing this outcome will require the Federal Reserve to continue to remove monetary accommodation. This generally favorable outlook, however, is attended by some significant uncertainties that warrant careful scrutiny.

With regard to the outlook for inflation, future price performance will be influenced importantly by the trend in unit labor costs, or its equivalent, the ratio of hourly labor compensation to output per hour. Over most of the past several years, the behavior of unit labor costs has been quite subdued. But those costs have turned up of late, and whether the favorable trends of the past few years will be maintained is unclear. Hourly labor compensation as measured from the national income and product accounts increased sharply near the end of 2004. However, that measure appears to have been boosted significantly by temporary factors.

Over the past 2 years, growth in output per hour seems to have moved off the peak that it reached in 2003. However, the cause, extent, and duration of that slowdown are not yet clear.

Energy prices represent a second major uncertainty in the economic outlook. A further rise could materially cut into private spending and thus damp the rate of economic expansion.

More favorably, the current and prospective expansion of U.S. capability to import liquefied natural gas will help ease long-term natural gas stringencies and perhaps bring natural gas prices in the United States down to world levels.

The third major uncertainty in the economic outlook relates to the behavior of long-term interest rates. The yield on 10-year Treasury notes, currently near 4¼ percent, is about 50 basis points below its level of late spring 2004.

Two distinct but overlapping developments appear to be at work: A longer-term trend decline in bond yields and an acceleration of that trend of late.

Some, but not all, of the decade-long trend decline in bond yield can be ascribed to expectations of lower inflation, a reduced risk premium resulting from less inflation volatility, and a smaller real term premium that seems due to a moderation of the business cycle over the past few decades.

In addition to these factors, the trend reduction worldwide in long-term rates surely reflects an excess of intended saving over intended investment. What is unclear is whether the excess is due to a glut of savings or a shortfall of investment. Because intended capital investment is to some extent driven by forces independent of those governing intended saving, the gap between intended saving and investment can be quite wide and variable. It is real interest rates that bring actual capital investment worldwide and its means of financing, global savings, into equality. As best we can judge, both high levels of intended saving and low levels of intended investment have combined to lower real long-term interest rates over the past decade.

Since the mid-1990's, a significant increase in the share of world gross domestic product produced by economies with persistently above average saving—predominantly the emerging economies of Asia—has put upward pressure on world saving. These pressures have been supplemented by shifts in income toward the oil-exporting countries, which more recently have built surpluses because of steep increases in oil prices.

Softness in intended investment is also evidence. Although corporate capital investment in the major industrial countries rose in recent years, it apparently failed to match increases in corporate cashflow.

Whether the excess of global intended saving over intended investment has been caused by weak investment or excessive saving—that is, weak consumption—or, more likely, a combination of both does not much affect the intermediate-term outlook for world GDP or, for that matter, U.S. monetary policy. What have mattered in recent years are the sign and the size of the gap of intentions and the implications for interest rates, not whether the gap results from a saving glut or an investment shortfall. That said, saving and investment propensities do matter over the longer-run. Higher levels of investment relative to consumption build up the capital stock and thus add to the productive potential of an economy.

The economic forces driving the global saving-investment balance have been unfolding over the course of the past decade, so the steepness of the recent decline in long-term dollar yields and the associated distant forward rates suggests that something more may have been at work over the past year. Inflation premiums in forward rates 10 years ahead have apparently continued to decline, but real yields have also fallen markedly over the past year.

Risk takers apparently have been encouraged by a perceived increase in economic stability to reach out to more distant time horizons. These actions have been accompanied by significant declines in measures of expected volatility and equity in credit markets. History cautions that long periods of relative stability often engender unrealistic expectations of its permanence and, at times, may lead to financial excess and economic stress.

Such perceptions, many observers believe, are contributing to the boom in home prices and creating some associated risks. And, certainly, the exceptionally low interest rates on 10-year Treasury notes and hence on home mortgages have been a major factor in the recent surge of homebuilding, home turnover, and particularly in the steep climb in home prices. Whether home prices on average

for the Nation as a whole are overvalued relative to underlying determinants is difficult to ascertain, but there do appear to be, at a minimum, signs of froth in some local markets where home prices seem to have risen to unsustainable levels. Among other indicators, the significant rise in purchases of homes for investment since 2001 seems to have charged some regional markets with speculative fervor.

The U.S. economy has weathered such episodes before without experiencing significant declines in the national average level of home prices. Nevertheless, we certainly cannot rule out declines in home prices, especially in some local markets. If declines were to occur, they likely would be accompanied by some economic stress, though the macroeconomic implications need not be substantial.

Historically, it has been rising real long-term interest rates that have restrained the pace of residential building and have suppressed existing home sales.

The trend of mortgage rates, or long-term interest rates more generally, is likely to be influenced importantly by the worldwide evolution of intended saving and intended investment. We are the Federal Reserve will be closely monitoring the path of this global development few, if any, have previously experienced.

We collectively confront many risks beyond those I have just mentioned. As was tragically evidenced again by the bombings in London earlier this month—and, I might add, some questions about what is going on in London today—terrorism and geopolitical risk have become enduring features of the global landscape. Another prominent concern is the growing evidence of anti-globalization sentiment and protectionist initiatives, which, if implemented, would significantly threaten the flexibility and resilience of many economies. This situation is especially troubling for the United States, where openness and flexibility have allowed us to absorb a succession of large shocks in recent years with only minimal economic disruption. That flexibility is, in large measure, a testament to the industry and resourcefulness of our workers and businesses. But our success in this dimension has also been aided importantly by more than two and a half decades of bipartisan effort aimed at reducing unnecessary regulation and promoting the openness of our market economy. Going forward, policymakers will need to be vigilant to preserve this flexibility, which has contributed so constructively to our economic performance in recent years.

In conclusion, Mr. Chairman, despite the challenges I have highlighted and the many I have not, the U.S. economy has remained on a firm footing, and inflation continues to be well contained. Moreover, the prospects are favorable for a continuation of those trends. Accordingly, the Federal Open Market Committee in its June meeting reaffirmed that it ". . . believes that policy accommodation can be removed at a pace that is likely to be measured. Nonetheless, the committee will respond to changes in economic prospects as needed to fulfill its obligation to maintain price stability."

Thank you very much. I look forward to your questions.

Chairman SHELBY. Thank you, Mr. Chairman.

Mr. Chairman, some Fed watchers speculate that the Federal Open Market Committee may halt its incremental increases after

reaching a Federal funds rate of 4 percent in November, which assumes three additional quarter-point increases in upcoming FOMC meetings. Mr. Chairman, to what extent does the Federal Open Market Committee consider the long-term interest rate in pursuing changes to the Federal funds rate? For example, would the Federal Open Market Committee continue raising the Federal funds rate even if the yield curve, which Senator Bunning alluded to, becomes inverted in the months ahead?

Chairman GREENSPAN. First of all, I cannot comment for the Federal Open Market Committee's actions in the future because we have not taken them, and we will obviously engage in ongoing deliberations to make judgments at each of our meetings. But I think there is a misconception relevant not to what we may do but to the importance of an inverted yield curve.

It is certainly the case that if you go back historically, an inverted yield curve has actually been a reasonably good measure of potential recession in front of us. The quality of that signal has been declining in the last decade, in fact, quite measurably, and the reason basically is that it was a good measure in the early period when commercial banks were the major financial intermediaries, and when you had long-term interest rates rise. I should say that when short-term interest rates—rise relative to long-term interest rates, it usually implied a squeeze on the profitability of commercial banks because they tend to hold somewhat longer maturities on the asset side of their balance sheet than on the liability side. As a consequence, that squeeze was usually associated with an economy running into some trouble.

But extraordinary new avenues of financial intermediation have developed over the last decade and a half, and, therefore, there are innumerable other ways in which savings can move into investment without going through the commercial banks. As a result, a straightforward statistical analysis of the efficacy of the yield curve inversion as a forecasting tool has diminished very dramatically because of economic events.

So, yes, we do look at the structure of long-term rates and the inversion of yields as well as a whole panoply of everything else, before we make judgments as to the Federal funds rate. Our basic goal, as I have indicated many times here, is essentially to create an environment which sustains maximum sustainable growth, and we have always argued—because the data are so persuasive that inflation stability is a necessary condition to achieve that goal. In that context, we make our judgments meeting by meeting.

Chairman SHELBY. But is the possibility of an inverted yield curve still relevant to your thinking along with other factors?

Chairman GREENSPAN. Yes, it is, and even though its forecasting or anticipatory capability is greatly diminished, it is not zero.

Chairman SHELBY. I want to touch on something else that you have spoken on many times here, and that is the GSE's. You stress the need for any GSE reform, Mr. Chairman, to provide clear guidance over the GSE's portfolio. You have also indicated that you do not believe that focusing GSE's on their core mission and securitization mission would not adversely impact liquidity in the mortgage markets.

As this Committee moves forward hopefully toward a markup next week, I would ask you to elaborate again for the record on the issue of the GSE's' role of providing liquidity in the mortgage markets and how you see the GSE's' securitization and portfolio business affecting the GSE's' ability to carry out a liquidity role. In other words, how important is the portfolio? And I know you have spoken of the risk for the GSE's being in a portfolio and so forth.

Chairman GREENSPAN. First of all, Mr. Chairman, let me stipulate that the secondary mortgage market functions of the GSE's are critical to our evolving economy. And indeed, I might say that is one of the means of improved intermediation which I was referring to previously. So let me just say that the actual actions taken by the GSE's to purchase mortgages, securitize them, and sell them into the market has been an extraordinarily valuable addition to American finance.

Chairman SHELBY. It brought liquidity to the housing market.

Chairman GREENSPAN. It brought very significant liquidity to the housing market and indeed has offered the mortgage instrument in a securitized form to a much broader segment of American investors, and that has been very helpful to them as well.

That particular function is unaffected, in our judgment, whether purchases of mortgages by the GSE's are securitized and sold off in the market, held as mortgages on the balance sheet of the GSE, or securitized and held on the balance sheet. So, in effect, the composition of the secondary market purchases—which is what their charter is all about—as best we can judge, between portfolio accumulation and securitization, has very little effect on market liquidity, interest rates, or anything else except the profitability of the GSE's.

It is strikingly obvious to those of us who have looked at this in some detail that the motive for accumulating portfolios is solely, essentially in all respects, profitmaking.

Now, I have no objection to that. Indeed, they are profitmaking organizations. They are chartered as such. And indeed their shareholders could very well presumably sue if they did not pursue those goals. But accumulating portfolios is not adding liquidity to the housing market, nor in our judgment is it assisting the market generally. In addition, because it is a highly leveraged operation, and one which requires very sophisticated hedging of interest rate risk, it is imparting a significant potential systemic risk to the American financial system.

Chairman SHELBY. Thank you.

Senator Sarbanes.

Senator SARBANES. Senator Reed.

Chairman SHELBY. You want to defer to him? Go ahead, Senator Reed.

Senator REED. Thank you very much, Mr. Chairman.

Just to follow up with respect to the GSE's, there are several issues here. One is liquidity to the market, which you talked about. Another is systemic risk. It strikes me, though, that many institutions that you regulate have very large portfolios, and they maintain them to increase their profits, which is not something bad. Would you urge that we enact legislation to set limits on these portfolios?

Chairman GREENSPAN. No, we do not, and the major reason is that these are not leveraged in anywhere near the extent to which the GSE's are.

A critical aspect here of the problem is the fact that the GSE's have relatively small amounts of capital relative to the assets they hold. Indeed, they hold 1 to 2 percent of assets. The commercial banks, as you know, are several multiples above that. And indeed interest rate risk originally was not even hedged at all by commercial banks and savings and loans in the very early years, largely because their capital was adequate to self-insure.

The GSE's cannot self-insure. Their capital segment in their balance sheet is too small. They cannot risk not fully hedging their position.

Senator REED. You raise, I think, an interesting point because the typical way risk is managed in a regulatory process is to increase capital rather than to put limits on growth portfolios. That is essentially what the Federal Reserve does. If you are concerned about the ability to manage risk in an institution, your first response, your first authority is to increase capital, which to me, frankly, is probably an appropriate response to some of the risk that has been illustrated in GSE's.

Let me change the subject slightly, and that is, I presume that the current portfolio does not engender great risk since many of your institutions hold a great deal of the paper of these GSE's. They must find that these investments are prudent.

Chairman GREENSPAN. They hold them wholly because there is a perception they are guaranteed by the full faith and credit of the U.S. Government, despite the fact that the debentures which they buy literally say, as required by law, that this instrument is not backed by the full faith and credit.

The problem basically is if you ask anybody on Wall Street, they do not care about the status of the GSE's, the financial state. It goes up and it goes down. The stock prices of these companies move all over the place, but the yield spread against U.S. Treasuries locks, and the reason is that they do not envisage their holdings of GSE's to have anything to do with the GSE's.

Senator REED. Are there some investors that buy the debt and equity of companies you regulate because they feel that you could never let them go out of business, the "too big to fail" phenomenon?

Chairman GREENSPAN. If, in fact, we found that the debentures that they issued had very narrow spreads against U.S. Treasuries, I would say yes. But they do not. There are very substantial spreads. The only way you can tell whether they believe it is to watch the spreads. The spreads of comparable debentures for large commercial banks or even large mortgage holding commercial banks is very substantially higher.

Senator REED. Let me change the subject. I mentioned in my opening remarks the study by the Boston Federal Reserve with respect to labor participation, which suggests there is a significant and growing lack of participation in the labor force which distorts our ability to see how well we are doing with respect to recoveries. In fact, one thing that I found interesting was the ratio of employment to population, 62.7 percent, is below the level at the start of

the economic recovery in November 2001. And this is the first time the ratio has failed to surpass its trial level so far into a recovery.

The reality is—this is not just statistics—there could be millions of people who have been discouraged by the workforce not working, and we have to respond to that.

Can you comment?

Chairman GREENSPAN. Yes. We have looked at the Boston report, and I must say Board staff does not come up with numbers anywhere near what they have. We have, as I think it is, less than half a percentage point.

Senator REED. Could you share those numbers with us, Mr. Chairman?

Chairman GREENSPAN. Certainly we can. But let me express to you very succinctly why that is the case.

Labor force participation over the longer-run has been driven by two factors here of importance. One is, as you know, a very marked increase in the participation of adult women in the labor force, which has been going up very dramatically for decades; it finally reached a level which is about as high as apparently it is going to go, and it has flattened out.

At the same time, the demographics are moving closer to retirement ages where the ordinary early retirement begins to occur. So those two structural factors are very dominant forces as to why we have not gotten that pickup that you were mentioning. And the result is that there is some evidence that the participation rate is down partly because of economic forces, but our numbers are nowhere near the dimensions that the Boston Fed is showing.

Senator REED. Just if I may make a final point, if, in fact, there is this type of employment slack in the economy, it would argue against precipitously increasing the interest rates because you still have some capacity, I would suspect.

Chairman GREENSPAN. Well, it would certainly be arguing against concerns with respect to rising unit labor costs and the elements underlying the economic outlook, which we obviously appraise, of course.

Senator REED. Thank you.

Thank you, Mr. Chairman.

Chairman SHELBY. Senator Bunning.

Senator BUNNING. Thank you, Mr. Chairman.

Chairman Greenspan, I have been in some other hearings on the Pension Guaranty Corporation, and they face a deficit of over $20 billion presently. With a large number of pension plans appearing to be teetering, we appear to be facing a very serious situation in that Pension Benefit Guaranty Corporation.

What impact do you think would the dumping of a few more large pension plans on the PBGC have on the economy, if any?

Chairman GREENSPAN. It is difficult to judge. It has similar effects of other types of deficits in the Federal system. It clearly is negative, and I think it is a worrisome thing for American taxpayers, needless to say. But it is hard to see at this stage any spillover effects yet on economic forces.

As large as the numbers are, relative to a $12 trillion economy obviously they are not yet critical. My main concern is that it ultimately will require U.S. Treasury bonds to fill in the gap, which

is another way of saying increasing the deficit and increasing the Federal debt.

Senator BUNNING. Do you have any comment on this morning's report that the Chinese are moving away from the dollar peg toward a currency basket?

Chairman GREENSPAN. I have not had a chance to look at the full detail of what is going on, but I must say I associate myself with Senator Schumer. This is certainly a good first step. It is the type of step that you would want to take when you have a decade-long fixed structure. And so they have been cautious, and I think admirably so. But I look at it as the first step in a number of further adjustments as they invariably increase their participation in the world trading markets. And so I believe it is a good start.

Senator BUNNING. Yesterday, in response to a question from Congressman Royce of California regarding moving the goalpost on this legislation, you claimed that the Federal Reserve had no concerns regarding the portfolios of Fannie Mae and Freddie Mac until recently. These companies have been around in one form or another since 1938.

How is it that the portfolios of the two largest financial services companies in the country, which you claim pose a systemic risk to the Nation's financial security, went unnoticed until the past year by the Federal Reserve?

Chairman GREENSPAN. Well, that is a good question. First of all, the portfolios did not exist in any substantial form prior to, say, 1990.

Yesterday, I was asked why I have not previously raised the issue. Let me answer this very simply. It has taken me quite a good deal of time to disentangle the very complex structure of these institutions to really understand how they work, what motivates them, and where the sensitive points are.

When I first looked at this situation, I knew what the stock of the debt was and the types of risks that held. But I was not aware of how sensitive their profitability was between securitizing and selling mortgages that they purchased and the amount that they accumulated in their portfolio.

It is only fairly recently that it finally became clear to me that that was basically how the system works, and I must say that it was a revelation in certain respects. The more I have looked at it since, I am impressed at how quickly, once they realized in the early 1990's how important a vehicle this was to profitability, how aggressively they pursued it.

Senator BUNNING. Last question. Do you believe energy prices have stabilized, or do you believe consumers and businesses can expect lower or higher energy prices?

Chairman GREENSPAN. Senator, I cannot answer that question, and I tried to express some of the reasons in the formal remarks which I put in the record. The big problem is that demand has picked up and has been going forward now, especially because of increased pickup in oil demand in emerging Asia, and, incidentally, also in the United States, the consequence of which has been, after a very gradual rise over the years, the rate of increase has picked up enough that it has eaten into the excess capacity of the system.

As I point out in my prepared remarks, the geographic location of proved reserves is relatively concentrated in the Middle East, and most of the oil-producing countries who perceive they had poor results when private international oil companies were extracting their oil have essentially restricted the entrance of either the majors who have significant financing capabilities. The result of this is that they have found, because of their growing population needs, they require a goodly chunk of the revenues from oil to finance their domestic needs. Therefore, there has been, as best we can judge, an inadequate amount of investment to convert the proved reserves into actual productive oil capacity, that is, oil wells and the infrastructure in which you can actually extract it. The markets, as far as long-term futures are concerned, have expressed real concern about the balance of supply and demand.

But let me just say this to you: It is a very narrow balance, and it can go either way. So we have had a very significant run-up, and it is perfectly credible that it could go down for a while. But I do think that we are in a position where forecasting the direction of oil is a particularly tricky issue short term, but longer term, unless we address the issue of getting adequate investment to convert the proved reserves into productive oil capacity, we are going to have trouble meeting long-term demands of the world a decade forward or thereabouts.

Senator BUNNING. Thank you, Mr. Chairman.

Chairman SHELBY. Senator Sarbanes.

STATEMENT OF SENATOR PAUL S. SARBANES

Senator SARBANES. Thank you very much, Mr. Chairman.

First of all, Mr. Chairman, I am pleased to welcome you back before the Committee. I think, if I am correct, this will be your last opportunity to come before us to submit a report on the conduct of monetary policy by the Fed pursuant to the changes that were made to the Federal Reserve Act to require the semiannual report to the Congress. I know we worked together on bringing about that change. My recollection is you were supportive of it at the time.

Chairman GREENSPAN. I was.

Senator SARBANES. And I hope you feel that it has proven out. I think it has been very beneficial to have these two set periods for an open report by the Fed with respect to the development of monetary policy. And before, we were on a kind of ad hoc, hit-or-miss basis. I do not think that was really very satisfactory, and my perception is that it has worked very well, and I hope you feel the same.

Chairman GREENSPAN. I certainly agree with you, Senator.

Senator SARBANES. Thank you. Now, first, I have a few questions I want to put to you. There is a vote on, so we will try to do the best we can within its constraints.

I want to address minimum capital standards for the banks to begin with in the context of the efforts to negotiate the Basel Capital Accords. Congress has expressed concern repeatedly that the minimal capital requirements on federally insured banks should be preserved in hearing after hearing. And we have been regularly assured by the bank regulators that that would happen.

Therefore, it was with some concern that we read the comments by Federal Reserve Governor Bies back in March when she spoke to the Institute of International Bankers Annual Washington Conference, and I will just quote the article reporting on that speech. "Ms. Bies made it clear the Fed still intends to jettison the straight capital assets leverage ratio eventually. It is a position some other regulators, particularly Mr. Powell at the FDIC, oppose. Executives at the largest banks, however, have argued it makes no sense to implement Basel II without also lifting the leverage minimums. 'The leverage ratio down the road has got to disappear,' Ms. Bies said. 'I would say to the industry, if you work with us and be patient, we understand the concerns about leverage ratios, and as we get more confidence in the new risk-based approach, it will be easier for us to move away from the leverage ratio.'"

And at a hearing before this Committee, you were asked about the minimum capital issue, and you responded as follows, and this was to Senator Bunning: "I think the issue that is raised with respect to the leverage ratio is that it duplicates numbers of other types of measures of capital. As you move into the Basel II framework, which is a far more sophisticated capital ratio, the need to get the old-fashioned leverage ratio, which has worked for many generations—we basically employed as a sole measure of capital—the need for that is significantly diminished."

So we had that indication of the attitude at the Fed on this issue. Recently, at the end of May, Governor Bies gave another speech. She said, "While the regulatory capital requirements ultimately produced by Basel II would be, we believe, considerably more risk-sensitive than the current capital regime, this is not the only capital regulation under which U.S. institutions would operate."

More than a decade ago, the Congress, as part of the FDIC Improvement Acts, prompt corrective action to find a critically undercapitalized insured deposit institution by reference to a minimum tangible equity to asset requirement, a leverage ratio. The agencies have also used other leverage ratios because experience has suggested there is no substitute for an adequate equity to asset ratio.

Federal Deposit Insurance Corporation, which was responsible to the Congress for the management of the critical deposit insurance portion of the safety net, has underlined the importance of that minimum leverage ratio. The Federal Reserve concurs with the FDIC's view.

Just to be clear, what is the Fed's view on the minimum capital issue, and does the Fed take the position that the leverage ratio down the road has to disappear?

Chairman GREENSPAN. The general view that we are endeavoring to express is that when you have a Basel type capital accord down the road, which is essentially fully sensitive to the various different capital needs of an institution, that there is no further need for other measures because, by definition, the system is fully controlled.

We are not yet there with respect to Basel II. As I have often said, there will be a Basel III and there will be a Basel IV because the technologies are changing, commercial banking is evolving, and supervision and regulation should not be fixed, it should actually

endeavor to adjust to the changing structure of a financial or commercial banking system.

So when we get to the point—and I do not think we are there yet—that the various structures defining what capital should be address everybody's concerns about supervision and control, then there is no longer a need for a minimum capital requirement. It would be merely duplicative, and indeed, if the system is working well, it is actually inoperative. We are not there yet, and I think what Governor Bies is trying to say is that we recognize that that not yet being there, there is still a role for minimum capital and a leverage ratio.

But that does not change the fact that when we get a sufficiently sophisticated structure of capital supervision, that issue will become moot. So it is really a question of, as you quoted earlier, the word is "eventually," and where that is, I do not yet know. But I do know, as indicated by both Governor Bies and Chairman Powell, that we are not there yet.

Senator SARBANES. One quick question and then I will——

Chairman SHELBY. Proceed.

Senator SARBANES. Every statistical study shows a marked growing inequality in the distribution of income and wealth in the country. The disparities are actually the largest of any of the advanced industrial countries, and they also loom out at you when you look at the United States in historical terms unless you go way back into——

Chairman GREENSPAN. The "Gilded Age" as they like to say.

Senator SARBANES. —the Roaring 1920's or the Roaring 1890's or something. What is your view of that development?

Chairman GREENSPAN. I think it is a very disturbing trend, Senator, and the reason I say that is twofold. One, it is a reflection, as best I can judge, of a faulty educational system in the United States. As you know, we receive relatively poor marks internationally, especially as our students move from the 4th grade to the 12th grade. That, as I think I have testified here before, creates a inadequate movement of students through high school, into college, and into skilled jobs, so that the total supply of skilled workers is sufficiently large relative to the increasing demand for skills because of technology to keep the skilled wage level down.

We have been unable to do that, and indeed, we end up with too many people who are lesser skilled, vying for jobs which are declining in number, so that the wage rates there are constricted, and it is causing this rather major dispersion.

A free market democratic society is ill-served by an economy in which the rewards of that economy distributed in a way which too many of our population do not feel is appropriate. More importantly, they do not feel the advantages and benefits coming from the system that a smaller but still significant group have experienced. So, I am concerned about this. I think it is a major issue in this country.

Senator SARBANES. Thank you very much.

Thank you, Mr. Chairman.

Senator ALLARD. [Presiding.] Thank you, Senator Sarbanes. The Chairman has stepped out. My turn is next, so I will go ahead and resume questioning.

As Chairman of the Housing Subcommittee, I would like to discuss a number of issues related to housing. Your testimony mentioned exotic loan products, and that caught my attention because I believe that Colorado is probably one of the higher States as far as foreclosures are concerned. Many in Congress I think have shared your concerns about those certain loan products such as interest-only loans, and also what we call negative advertising loans.

My question is, do these loan products create new sustainable homeownership? In other words, these new products, are they replacing the conventional loan, and are there some negative results as a result of that?

Chairman GREENSPAN. Well, Senator, actually all of these loans, properly used, are not bad instruments. In other words, they give the consumers, the mortgagors, indeed the mortgagees as well, a broader set of instruments which can be employed, so there is greater consumer choice.

Our concern is that a number of these instruments are being used to enable people to purchase homes who would otherwise not have been able to do so. In other words, they are stretching to make the payments, and that is not good lending practice for banks or other purveyors of mortgages, and certainly it is not good practice on the part of pending homeowners.

It is a concern to us. Fortunately, it is not a large enough part of the market to create serious systemic problems, but it is an issue, and we at the Federal Reserve and other banking supervisors are looking at that. We are examining these issues, and we are making decisions as to what, if any, guidance to the banking system we would endeavor to convey.

Senator ALLARD. So just to follow up on that, you do not see any need for any kind of legislative remedy or anything at this point in time?

Chairman GREENSPAN. We do not need any legislative remedy. It is wholly under the regulatory authorities of the banking agencies.

Senator ALLARD. Do you think the banks are utilizing proper underwriting standards for these type of products, and are we having more of a problem in certain States than in other States?

Chairman GREENSPAN. I do not know that. That is factually capable of being ascertained, and I assume some of my colleagues do know the answer to that question. It is not, in my judgment, at least what I have heard, an issue that is critical or something that requires immediate response. But it is enough of an issue that I think we have to look at it, and that is what we are doing, we are looking very closely.

Senator ALLARD. I appreciate your response on that.

Now, on various occasions you have downplayed the idea of a national housing bubble, and have instead pointed to a situation which some regions of the country are exhibiting signs of, I quote, "froth" I guess. And I am pleased to hear comments that while housing prices may well decline, such a decline would not necessarily derail the economy. Would you not agree though that while this may be true for the Nation as a whole, a correction could have a significant impact within a specific community or region? Could you please elaborate what the future could hold for such a city or

region, and what can or should be done to mitigate the damage such a correction could cause?

Chairman GREENSPAN. We have had such experiences in the past, and quite correctly, there have been regional problems associated with unwinding of frothy local housing markets.

One thing that obviously is an issue with respect to the overall economy of these metropolitan areas, is that unlike earlier history, we have developed a mortgage instrument to a point, and the ability to extract equity from homes to such an extent, that now a surprisingly large proportion of consumer expenditures and home modernization outlays are financed by home equity extraction. That is clearly a consequence of one, house turnover, largely because, of course, the seller of the home extinguishes a mortgage which is less than the mortgage of the buyer of the home, which is essentially a reduction or extraction of equity from that home of that exact difference. Then of course there are cash-outs, which have increased over the years, associated with refinancing, and then finally, a significant amount of extraction of unrealized capital gains essentially from home equity loans.

These are large enough to be an issue in the overall consumption expenditures of a local community, and in the event that you begin to get a retrenchment in house turnover, which would presumably be associated with unwinding of a frothy market, you would probably also have impacts on consumer expenditures in that particular area.

There are obviously national implications of this as well. We would expect as the housing boom eventually simmers down, as we have long expected it would but find no evidence that it is about to, that it would begin to have some impact on consumption expenditures, and if not for the fact that we perceive capital investment picking up the slack, it would give us some pause as to economic consequences of the adjustment process.

Senator ALLARD. Mr. Chairman, you kind of moved into my second question where people were extracting this equity out of their home. If the value of these homes should begin drop or something, that could create some problems for our national economy, or would it not?

Chairman GREENSPAN. Well, the run up in prices has been so significant, and the accumulated equity has been so large, indeed, it has been larger than the debt increase. So that the ratio of equity in homes to debt has been rising in the most recent period. So there is a fairly significant buffer. But there is no question that, if you confronted a situation of declining house turnover and even declining house prices, home equity extraction would be expected to decrease.

Senator ALLARD. Mr. Chairman, I have a few questions, if I may proceed.

Chairman SHELBY. [Presiding.] You go ahead, you take your time.

Senator ALLARD. This has to do with the terrorist attacks and the security in our financial industry. Do you believe that the financial services industry is prepared to protect people, processes, and infrastructure against potential disruptions from a terrorist attack, and do you see any further steps that need to be taken if not?

Chairman GREENSPAN. This is obviously under significant discussion now with the question of the expiration of TRIA. It gets to the base of a very difficult question: How does a civilized society with an economy based on the rule of law deal with the losses from violence?

What we have done over the years is very successfully construct an insurance system which basically has picked up a lot of different losses from disruption from violence, from everything else, and it is a very sophisticated system which has evolved over the years and is still evolving.

We are now confronted with something different, and it is different because of the technological changes and the ways in which things can be destroyed. There is a potential very large scope of damage that can occur, which the existing insurance system would have difficulty figuring out how to insure and basically cope with the problem.

This is why I have argued that there should be a fall-back position for very large terrorist attacks, where as the Government socializes a good deal of potential violence—and that is what our military budgets are, that is what our police forces are—there is a role if this terrorism level continues to pose the potential for very large disasters.

So, I would perceive that until and unless we get this issue of terrorism to a dimension where the private sector can fully handle it, there is a role here for Government.

Senator ALLARD. So you think that at this particular point, it might be appropriate for the Congress to provide some subsidy to the terrorist insurance, on the umbrella coverage?

Chairman GREENSPAN. Yes. But I think the Administration's proposals of delimiting some of it and having very large copayments are very sensible. The reason is that to the extent you socialize risks, you cause the misallocation of capital in a market economy and this reduce the standards of living, and so you have a tradeoff here. The more socialization of risk that you create, which is what we are talking about, the more potential distortion in the private sector's capital account allocation. So we have to be very careful about what types of things we are trying to insure against, and it should be very succinctly limited to very large events. Part of the reason is that the technology has never been there for a small number of people to create as much damage as they apparently can with essentially various different forms of terrorism, which we have not really experienced in this country, and hopefully will never.

If we, however, can find ways of diminishing the risk, at some point it is conceivable the private sector could handle the whole thing.

Senator ALLARD. Thank you, Mr. Chairman. You have been very tolerant.

And thank you, Chairman Greenspan.

Chairman SHELBY. Senator Bennett.

Senator BENNETT. Thank you very much.

Several items, Chairman Greenspan. In your prepared testimony, in that portion which you read to us, you made reference to—let me read it because I was struck by it as important to note—"A

prominent concern is the growing evidence of antiglobalization sentiment and protectionist initiatives, which if implemented, would significantly threaten the flexibility and resilience of many economies. The situation is especially troubling for the United States, where openness and flexibility have allowed us to absorb a succession of large shocks in recent years with only minimal economic disruption."

I am fishing here for a comment on the importance of CAFTA. I think economically CAFTA is a relatively small deal because the economies of Central America are not that vital to our $12 trillion economy, but symbolically I think CAFTA is a very big deal, and I get the sense from your testimony that you would agree. But I want to give you the opportunity to comment rather than just put words in your mouth.

Chairman GREENSPAN. I do, Senator, and the reason is it is part of the very critical issue of globalization. We in this country have embraced globalization over the decades, very much to our benefit. The world trading system has expanded dramatically. World standards of living have expanded dramatically, and it is we in the United States who have benefited the most.

We recognize, however, that the very nature of globalization, which creates ever higher standards of living, also is a process which we call "creative destruction," which essentially means that the depreciation reserves of obsolescent capital get employed to finance cutting edge capital, and the differential productivity between the obsolescent capital and the newer capital creates the increase in standards of living. That is the actual thing which engenders the result.

The problem with creative destruction is that it is destruction, and there is a very considerable amount of turmoil that goes on in the process. As I have mentioned here many times, we hire and essentially let go a million workers a week in this country. It is a huge churning turnover. What we must focus on is that as we gain the benefits of globalization, it is important that the problems of those who are on the destruction side of the globalization problem be addressed appropriately.

As Senator Dole said earlier today, we have to get focused on training, on the issue of various different means to retrain workforces which are being altered, or doing what is required to recognize the nature of the problems of those people who are associated—it is a minority of the people, but it is a large enough minority that we have to address the fact that they are in serious trouble on occasion.

Senator BENNETT. When you are a member of the minority, it is not a small problem.

Chairman GREENSPAN. It is 100 percent of the problem.

Senator BENNETT. Let me turn again to the GSE's and the issue. One of the facts of life that I have learned here is that you can tell how a piece of legislation is going to affect the marketplace by seeing who is lined up on which side of the issue. And as people have come to see me, pleading that heavy restrictions be put on the portfolio size of the GSE's, and then others have come to see me pleading that nothing be done with respect to the portfolios of the GSE's, aside from the GSE's themselves—you know, you kind of set aside

their statements because their position is fairly clear. A pattern has seemed to emerge. The small banks, the mortgage brokers, the homebuilders, realtors, are all saying do not mess with the portfolios of the GSE's. The big banks, Citibank, Wells Fargo, saying yeah, absolutely do this to the GSE's.

This may be an oversimplification, but as I sort through the advocates on either side of this fight, I find it is kind of rural on one side and big city on another. It is kind of small bank brokerage operations that deal with small institutions on one side, big banks on the other. The implication being that the independent banks, the community banks are benefitted by the present situation and the big banks are competing with the present situation; therefore, the one would like to see it stay and the other would like to see it change.

Fannie Mae and Freddie Mac do not require anybody to sell them a mortgage. The market works. People bring it to them. And the only reason that somebody would bring a mortgage to Fannie Mae would be if the price were better or if the service were better. And as I have talked to people on the anti side, if you will, they have indicated that they believe if Fannie Mae and Freddie Mac are constrained in their portfolios, that the price will go up and they will be forced to deal with other institutions where they think the service—if the price goes up, they still would rather deal with Fannie Mae because they think it is more convenient, they move more rapidly, they are much more flexible.

What would you say to these groups, legitimate groups, who are not shareholders of Fannie Mae or Freddie Mac? How would you reassure them that if we did what you wanted to do, they were going to be just fine?

Chairman GREENSPAN. It is a question of fact. See, here is what the problem is, to directly relate to your issue. I am a community bank and I have been very appreciative of the secondary mortgage market to take the mortgages I have and sell to them. They are confronted with an issue of uncertainty as to what would happen in the event if the portfolio of the GSE's went down. The GSE's and a lot of other people say it is going to cause interest rates to go up. Nobody says, including the Federal Reserve, that will cause interest rates to go down.

So, they are confronted with an uncertainty of the fact that they seem to be better off with the status quo. The truth of the matter is they are not. That is, there is no evidence that the amount of purchases made by Fannie, Freddie, and indeed a very large and increasing private sector, would be bidding significantly different prices for their home mortgages. And the decision whether those accumulated mortgages by, say, Fannie and Freddie, end up in their portfolio or end up securitized and sold into the marketplace is essentially made after they are purchased from, let us say, a community bank.

So there is an understandable concern if you are not fully familiar with how the markets work and there is no potential on the other side. In other words, if I am confronted with very little knowledge but I know the chances are only that a certain thing can go in the wrong direction for me, I will argue for the status quo. Now, that is a perfectly understandable and reasonable case, and

that is true, incidentally, I think, of the homebuilders as well. I think they are mistaken. Indeed, I know they are mistaken. But I fully understand where they are coming from.

So the concern that I have is that over the longer-run they are actually at risk here, as we will all be at risk if indeed there is a systemic problem. Then there will be very serious problems for the housing market and they will find that they are at significant risk. They do not perceive that now because they do not perceive what could conceivably be occurring in the future, which is what is motivating Federal Reserve. So it is a difficult issue of who knows what about what is going on. I do not find any difficulty in understanding where these various positions are coming from. And I would make the same argument, incidentally, in reverse, for the big banks.

Senator BENNETT. If I may, Mr. Chairman, go forward with that.

Chairman SHELBY. Go ahead.

Senator BENNETT. You would make the same argument in reverse?

Chairman GREENSPAN. Yes, in other words——

Senator BENNETT. The big banks presumably will increase their market share——

Chairman GREENSPAN. Yes, what I am basically saying is I think that the amount of market share that they think that will occur as a consequence of this is not obvious to me in any particular way.

Senator BENNETT. Okay, so you are saying that the big banks who are beating on me, you have to do this, this is a terrible competitive they are going to be disappointed.

Chairman GREENSPAN. Well, unless they are using the arguments that I am using. We have to distinguish between the mortgage market and the securitized market. In the securitized market, yes, the commercial banks will probably pick up some advantages because indeed that will be one of the purposes of changing the system. I think, however, that the nature of the argument misses the really fundamental point, which is that we are creating a potential very serious systemic risk. And to have arguments that are going on about whose market share or whose potential profits will change in somewhat different ways, I think, is missing the much larger point.

Let me respond in writing to you about how I think the specific changes might occur in these markets. There are changes. I do not want to deny that there will be changes. But I think people extraordinarily exaggerate what the implications are. And for the self-interest of all parties, in my judgment, making certain that we do not have a systemic problem occurring because there is a very large accumulation created by incentives to hold ever-increasing portfolios to get ever-increasing incomes, in the long-run will redound to nobody's benefit, because we will all lose.

Chairman SHELBY. Mr. Chairman, I would also request a copy of that letter, if you would, please.

Senator BENNETT. Yes, that would be very helpful. And my time is gone, but I look forward to having additional conversations with you about this.

Thank you very much.

Chairman SHELBY. Chairman Greenspan, since we are talking about GSE's, how many companies with $12 billion accounting errors—which would be representing a significant portion of the capital of that company—see no increase in debt cost in the market after that? I am referring to Fannie Mae.

Chairman GREENSPAN. It is very simple. Because it has nothing to——

Chairman SHELBY. Oh, it is the implicit guaranty.

Chairman GREENSPAN. Yes. It has nothing to do with the status of Fannie Mae or Freddie Mac.

Chairman SHELBY. Thank you.

This Committee has previously raised questions with you, Mr. Chairman, and Treasury Secretary Snow regarding the large Chinese and Japanese official holdings of U.S. Treasuries. Your report today indicates that data from Treasury indicates that demand for these securities from foreign official investors has ebbed during the first 5 months of this year. Obviously, the Chinese Government announcement to switch to a currency basket in setting its peg could also affect that demand.

Mr. Chairman, do you anticipate that long-term rates may be affected by the changes in foreign official demand, or do you expect such changes to unfold slowly over time and thus be absorbed into the market?

Chairman GREENSPAN. Well, two things happened. We have estimated, I think I have testified before, that the accumulation on foreign account has probably subtracted something under 50 basis from long-term interest rates in the United States. Should that unwind, that is about the order of magnitude we are talking about. But markets anticipate what is likely to occur. As a consequence of that, you could very well get changes that are up front in anticipation of things that will go on longer term.

Chairman SHELBY. Factored it in, in a sense?

Chairman GREENSPAN. Yes. In other words, the markets do not wait—they anticipate. So we could get some impact sooner rather than later.

Chairman SHELBY. Mr. Chairman, the Chinese Government today, as we have been talking about, announced a 2 percent reevaluation of its currency and the move to a currency peg linked to a basket of currencies rather than just linked to the U.S. dollar. Other Asian countries, like Japan and Korea, who have extensive trade relationships with China, have grown accustomed to China's fixed exchange rate policies. How will China's other Asian trading partners manage this transition by the Chinese, and won't these countries have to allow more flexibility in their currencies in order to see a more level playing field for the United States?

Chairman GREENSPAN. I think we are already seeing that. I mean, Malaysia this morning also moved, as I recall.

Chairman SHELBY. So the market again anticipated this move and has reacted to it?

Chairman GREENSPAN. Yes. If you look, for example, the dollar weakened significantly against the yen this morning, as a consequence of this move.

Chairman SHELBY. Mr. Chairman, your testimony also discussed at length what others have referred to as the savings glut. One fac-

tor you note is corporate behavior and the softness in capital investment. This is particularly puzzling in light of strong profits in the corporate sector and lower interest rates. Could you touch further on the potential causes of this behavior and whether our Nation's economy has ever experienced similar circumstances? Should the situation persist, how would this affect the Federal Reserve's growth projections?

Chairman GREENSPAN. Well, as I indicated in my prepared remarks, capital investment in the United States is expanding, and indeed we are expecting it to expand a good deal further.

Chairman SHELBY. Do you think it is adequate?

Chairman GREENSPAN. It is less than one would have expected, given the levels of cashflow and, indeed, other measures that usually were associated with capital investment. I attribute this in my remarks to the aftermath of the stock market liquidation and the corporate scandals, which had a fairly profound effect on corporate governance and on the risk aversion of corporate managers. I think we are still seeing the aftermath of that, although there is some evidence that it is beginning to dissipate, and that is one of the reasons we perceive that the outlook for capital investment in the United States is quite favorable.

Chairman SHELBY. Thank you.

Oh, excuse me, Senator Corzine. My eyes aren't as good as yours.

Senator Corzine.

STATEMENT OF SENATOR JON S. CORZINE

Senator CORZINE. Your eyes are pretty good, particularly when we are looking at legislation, Mr. Chairman.

I appreciate the Chairman being here. Let me ask, have you commented today, with respect to the House bill, with regard to GSE's?

Chairman GREENSPAN. I have not, Senator.

Senator CORZINE. Do you have views with regard to the House bill?

Chairman GREENSPAN. You are talking about what the House Financial Services Committee voted on?

Senator CORZINE. Yes.

Chairman GREENSPAN. That question was asked me yesterday at that Committee, and I said it did not address the problems that I thought were extant with respect to the GSE's, and indeed, went further and said that we would probably be better off with no bill than a bill of that nature.

Senator CORZINE. And your major problems?

Chairman GREENSPAN. Largely the issue of portfolio to what we have been discussing with——

Senator CORZINE. And I know you have spoken often about this, but have you narrowed or become more precise on how you believe those portfolios restrictions should——

Chairman GREENSPAN. I thought that the particular formulation by the Secretary of the Treasury with respect to what he thought would be an appropriate bill struck us as pretty much where we thought it should be. That is essentially, as you may recall, stipulating that the level of portfolio should reflect, aside from obvious liquidity needs and the turnover of very vast amounts of mortgages, the charter requirements of the GSE's, but that strictly for

the purpose of creating increased earnings would not be a justification for building up portfolios.

Senator CORZINE. But are you suggesting, and is the Treasury Secretary suggesting, in your view, that would be based on risk-based modeling with respect to what was an appropriate——

Chairman GREENSPAN. You mean for the GSE's?

Senator CORZINE. Yes.

Chairman GREENSPAN. No. We are not raising the question with respect to the portfolios as a risk to the GSE's; on the contrary. It is expanding their profitability and everything else that goes with it. Our concern is the systemic risk, not safety and soundness risk. The House bill specifically puts the capability of a regulator to adjust portfolios on the basis of safety and soundness, which I read refers to the safety and soundness of the GSE's, not the systemic questions that we raise.

Senator CORZINE. Is that consistent with bank regulation?

Chairman GREENSPAN. No, it is a different standard.

Senator CORZINE. It is a different standard for GSE's?

Chairman GREENSPAN. Yes, indeed. At least in my judgment.

Senator CORZINE. And could you explain to me why that systemic risk is so much different in an institution of a trillion dollars in one format versus a trillion dollars in another format?

Chairman GREENSPAN. Let me be very explicit. It has to do with the extent of leverage. In commercial banks, for example, I should say capital is several multiples, many multiples higher than what the GSE's are holding. As a consequence, banks do not, in our judgment, raise the level of systemic risk that the GSE's raise. It is a different order of magnitude largely because of, one, the size of the leverage and two, the extent to which the financial markets grant the GSE's effective U.S. Treasury status with respect to their bond issuance, when they do not do for commercial banks.

Senator CORZINE. Okay, so if it were capital, then risk capital associated with the underlying assets should put them on an equal playing field, I would think. If their regulator chose risk capital measures——

Chairman GREENSPAN. There would be two issues here. Unquestionably, if their risk-based capital were raised to the level of where the commercial banks are, that would assuage a good deal of the problem. It would still leave the issue, however, of the ability of the part of these institutions to raise any amount of capital at very low interest rates, irrespective of the status of the institution. Indeed as the Chairman pointed out, how is it possible I do not know whether that was just before you came in or not——

Senator CORZINE. I apologize. I had other things——

Chairman GREENSPAN. —how is it possible to have these huge accounting losses and serious questions about what the earnings of these institutions are and have virtually no effect on the rates at which they can sell debentures. The reason, essentially, is that the financial state of Fannie and Freddie has almost nothing to do with what the interest rate is on their debentures or their ability to actually sell them.

Senator CORZINE. Supply and demand, at some point, has impact on rates.

Chairman GREENSPAN. It does, and it will eventually occur with U.S. Treasury issues, and I presume at that time it will affect the GSE's.

Senator CORZINE. May I ask one other question?

Chairman SHELBY. Go ahead.

Senator CORZINE. Have you been asked about TRIA?

Chairman GREENSPAN. Yes, I have.

Senator CORZINE. I will check the record, then, unless you want to repeat.

Chairman GREENSPAN. I will be glad to respond in writing to you if there are other things that you would like.

Senator CORZINE. Please. Thank you.

Chairman SHELBY. I will get Senator Bennett first. I think he has a question.

Senator BENNETT. Yes, one quick additional issue that I would like to raise with you again just to get this on the record.

As we grapple with the Social Security problem, and I am trying to craft a solution that deals with the solvency challenge, I think the political situation says that the personal accounts will be a fight we will have at some future point. I think there are good enough idea that they will stay around and I think eventually the Congress will adopt them. But in this Congress, there does not seem to be an appetite to do that and the solvency issue is still very much with us. So, I have tried to craft a bill to deal with that, as my colleagues know.

But in this process, I come back to an issue that you have commented on in the past and I would like to get a fresh response from you so that I am not guilty of using outdated information. This has to do with the professional consensus among economists which says that the CPI overstates changes in the cost of living, and the Bureau of Labor Statistics in 2002, perhaps in response to that consensus, began publishing a new index called the Chain CPI. I had a little trouble understanding what that meant. But it takes into account the fact that consumers will make substitutions in their purchases. If the price of X goes so high, they will switch to Y, and so their standard of living presumably has not changed that much, but the cost of living is better measured by the chain CPI.

My staff on the Joint Economic Committee has come up with information that the implications of using the chain CPI as opposed to the CPI are huge. Over 10 years, the Boskin Commission says, quoting CBO, that if CPI overstated the cost of living by 1.1 percent per year, the standard programs that we have in place would increase the national debt by a trillion dollars over a 10-year period. And Congress may want, as a matter of policy, to say let's increase the national debt by a trillion dollars in order to increase these programs by more than the cost of living, but at least the stated position of Congress in the current law is that we simply want to have the actual cost of living taken care of.

Another side of it is that CPI is tied to the taxation bracket, which means that people get a massive tax cut over time with respect to the issue of bracket creep. Bracket creep is dampened by using the CPI. So you get less revenues and more expenditures by doing this, which means that the trillion-dollar number may be exacerbated by the impact on the tax side. I do not think they took

the tax side into consideration when they looked at the expenditure side.

Could you comment on all of this and where you think we as policymakers should go on this issue?

Chairman GREENSPAN. We at the Federal Reserve Board have been looking at this for a number of years. I think our most recent estimate is that the Consumer Price Index itself is biased upward by a little under 1 percent at this stage.

Senator BENNETT. That is a little less than the Boskin thing, so it would not be quite a trillion dollars.

Chairman GREENSPAN. Yes. The reason for that is, remember that the Bureau of Labor Statistics has made a number of changes addressing the problems of the Boskin Commission, which in retrospect probably underestimated the extent of what the issue of the bias was. Because if you take our current evaluation and add back the BLS adjustments, I think we go higher than the Boskin Commission data would suggest.

What we also find is that the CPI chain index takes off roughly half of that bias. It does not take the whole bias out, and indeed, if the Congress literally wanted to have an index which was the optimum estimate of what the cost-of-living change really was, you would need to find a mechanism that actually made the adjustment for the full bias. And that, you know, is close to the 1.1 percent number to which you were referring.

I think that is very difficult to do unless you get, as I suggested many years ago, a commission which would sit there each year, reevaluate what the nature of the bias was, and set what the adjustment for all Federal programs would be. Short of that, switching to the chain index, which is just a reweighting in a fully mechanical, understandable way by the BLS, would give us a far superior, less biased measure of what the cost of living is. It will not go all the way, but it will take a good deal out of both, obviously, the tax side and the spending side.

Senator BENNETT. Thank you very much.

Chairman SHELBY. Mr. Chairman, just for the record again, I would like to know what size portfolio, in your judgment, roughly, should the GSE's maintain?

Chairman GREENSPAN. I do not have a specific number. It is significantly below where it is now. They still have very significant needs for liquidity, but incidentally, that liquidity should be in Treasury bills. But they do not want to hold Treasury bills, because to sell debentures and invest in Treasury bills does not make any money; in fact, you would probably lose something. It is the selling of debentures to invest in mortgage-backed securities which gives you a nice big fat yield.

So the presumption that is often stated—that they need this whole stock of mortgage-backed securities for liquidity purposes—raises a very interesting point: How in the world does holding mortgage-backed securities in your portfolio give you the capability of buying other mortgage-backed securities? In other words, the only thing that will do that——

Chairman SHELBY. That is a bogus argument, really.

Chairman GREENSPAN. Yes. The only thing that will do that is if they built up either cash balances or Treasury bills or something

which they could liquidate quickly and employ. The presumption that you have a large portfolio of mortgage-backed securities for the purposes of liquidity presupposes that you sell a mortgage-backed security to get the cash to support another mortgage-backed security. That obviously is a zero-sum game.

So the amount of liquidity that is involved and required, strikes me as something that the regulator has to make a judgment on. But I do think that what should be specified is what that portfolio could be held for. There are liquidity purposes; there are a significant number of mortgages which cannot be securitized, a lot of them basically under affordable housing programs, and we would say they should be held in the portfolio; and a number of other things. But essentially restrict it to the purposes of the charter.

Chairman SHELBY. The mission, huh?

Chairman GREENSPAN. Yes.

Chairman SHELBY. Thank you.

Senator Schumer.

Senator SCHUMER. Well, thank you, Mr. Chairman. I apologize for being away for a long, busy day in many ways.

I know you have talked a little bit about the Chinese currency, so I will not have you repeat that. You were asked about terrorism insurance, so I will not have you repeat that. And I could not agree with you more, the private market cannot handle this alone.

I have one topic I would like to ask about, and I thank the Chairman.

As you know, Mr. Chairman, there are ongoing discussions as to whether we should fully repeal the estate tax—this is a tax that affects about one American in 100—or whether there can be some reasonable or permanent compromise that can garner the necessary 60 votes, because it breaks the Budget Act, as you know.

The Federal deficit this year, excluding Social Security, will be huge, more than half a trillion this year alone. You also know, of course, that full repeal would cost $300 billion in the next 10 years and $750 billion if you go between 2011 and 2020—you know, the years that the present law is not in effect. And that would be if the costs are not offset.

So my question is, given these deficits and the cost of repeal, if there are no offsets, can we afford to repeal the estate tax and increase the deficit by another $750 billion, if there are no offsets?

Chairman GREENSPAN. I think that is the critical question because, as I have testified on numerous occasions, I am strongly in favor of reducing taxes on capital, but under PAYGO. As a consequence, I would say if there are no offsets, obviously PAYGO is operative in that respect and the issue is moot.

Senator SCHUMER. The issue is not moot.

Chairman GREENSPAN. Well, the issue—in other words, if you—the issue——

Senator SCHUMER. Not everyone has your view.

Chairman GREENSPAN. Okay. Well, that is a——

Senator SCHUMER. But I just—if we could just translate——

Chairman GREENSPAN. I will rephrase.

Senator SCHUMER. If we could just translate that into a straight—you know, into——

Chairman GREENSPAN. I am trying not to translate.

Senator SCHUMER. Oh, c'mon. This is your last time here. We have a big, big deficit.

Chairman GREENSPAN. You mean I am going to become perfectly clear the last time I come here?

Senator SCHUMER. Yeah, exactly.

[Laughter.]

But is it unfair to say you would advise not to repeal the estate tax if there are not offsets, if there is no PAYGO?

Chairman GREENSPAN. That is correct. I think that PAYGO is an essential ingredient going forward and that all programs, both the spending and revenue programs, come under that.

Senator SCHUMER. I take it there is a proposal for a compromise, which would cost about 80 to 90 percent of the full cost. In other words, some have proposed going to a capital gains rate rather than the 55 percent—that would be 15—and raising the floor to about $7.5 million. It is now, I do not know, it was originally 1. I think it is 1.5 now. It is one and a half now; it goes up and then it goes back down.

I take it that would cost, instead of $750 billion over the next 10 full years, v2011 to 2020, that would cost $600, $625, $630 billion. I take it, again, without PAYGO, without an offset, you would think we should not do that at this point.

Chairman GREENSPAN. That is correct.

Senator SCHUMER. Thank you, Mr. Chairman.

Chairman SHELBY. Chairman Greenspan, thank you for your appearance today and all the other appearances and your service to the country.

The hearing is adjourned.

[Whereupon, at 12:10 p.m., the hearing was adjourned.]

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

PREPARED STATEMENT OF ALAN GREENSPAN

CHAIRMAN, BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM

JULY 21, 2005

Mr. Chairman and Members of the Committee, I am pleased to be here to present the Federal Reserve's Monetary Policy Report to the Congress.

In mid-February, when I presented our last report to the Congress, the economy, supported by strong underlying fundamentals, appeared to be on a solid growth path, and those circumstances prevailed through March. Accordingly, the Federal Open Market Committee (FOMC) continued the process of a measured removal of monetary accommodation, which it had begun in June 2004, by raising the Federal funds rate 1/4 percentage point at both the February and the March meetings.

The upbeat picture became cloudier this spring, when data on economic activity proved to be weaker than most market participants had anticipated and inflation moved up in response to the jump in world oil prices. By the time of the May FOMC meeting, some evidence suggested that the economy might have been entering a soft patch reminiscent of the middle of last year, perhaps as a result of higher energy costs worldwide. In particular, employment gains had slowed from the strong pace of the end of 2004, consumer sentiment had weakened, and the momentum in household and business spending appeared to have dissipated somewhat.

At the May meeting, the Committee had to weigh the extent to which this weakness was likely to be temporary—perhaps simply the product of the normal ebb and flow of a business expansion—and the extent to which it reflected some influence that might prove more persistent, such as the further run-up in crude oil prices. While the incoming data highlighted some downside risks to the outlook for economic growth, the FOMC judged the balance of information as suggesting that the economy had not weakened fundamentally.

Moreover, core inflation had moved higher again through the first quarter. The rising prices of energy and other commodities continued to place upward pressures on costs, and reports of greater pricing power of firms indicated that they might be more able to pass those higher costs on to their customers. Given these considerations, the Committee continued the process of gradually removing monetary accommodation in May.

The data released over the past 2 months or so accord with the view that the earlier soft readings on the economy were not presaging a more serious slowdown in the pace of activity. Employment has remained on an upward trend, retail spending has posted appreciable gains, inventory levels are modest, and business investment appears to have firmed. At the same time, low long-term interest rates have continued to provide a lift to housing activity. Although both overall and core consumer price inflation have eased of late, the prices of oil and natural gas have moved up again on balance since May and are likely to place some upward pressure on consumer prices, at least over the near-term. Slack in labor and product markets has continued to decline. In light of these developments, the FOMC raised the Federal funds rate at its June meeting to further reduce monetary policy accommodation. That action brought the cumulative increase in the funds rate over the past year to 2¼ percentage points.

Should the prices of crude oil and natural gas flatten out after their recent run-up—the forecast currently embedded in futures markets—the prospects for aggregate demand appear favorable. Household spending—buoyed by past gains in wealth, ongoing increases in employment and income, and relatively low interest rates—is likely to continue to expand. Business investment in equipment and software seems to be on a solid upward trajectory in response to supportive conditions in financial markets and the ongoing need to replace or upgrade aging high-tech and other equipment. Moreover, some recovery in nonresidential construction appears in the offing, spurred partly by lower vacancy rates and rising prices for commercial properties. However, given the comparatively less buoyant growth of many foreign economies and the recent increase in the foreign exchange value of the dollar, our external sector does not yet seem poised to contribute steadily to U.S. growth.

A flattening out of the prices of crude oil and natural gas, were it to materialize, would also lessen upward pressures on inflation. Overall inflation would probably drop back noticeably from the rates experienced in 2004 and early 2005, and core inflation could hold steady or edge lower. Prices of crude materials and intermediate goods have softened of late, and the slower rise in import prices that should result from the recent strength in the foreign exchange value of the dollar could also relieve some pressure on inflation.

Thus, our baseline outlook for the U.S. economy is one of sustained economic growth and contained inflation pressures. In our view, realizing this outcome will

require the Federal Reserve to continue to remove monetary accommodation. This generally favorable outlook, however, is attended by some significant uncertainties that warrant careful scrutiny.

With regard to the outlook for inflation, future price performance will be influenced importantly by the trend in unit labor costs, or its equivalent, the ratio of hourly labor compensation to output per hour. Over most of the past several years, the behavior of unit labor costs has been quite subdued. But those costs have turned up of late, and whether the favorable trends of the past few years will be maintained is unclear. Hourly labor compensation as measured from the national income and product accounts increased sharply near the end of 2004. However, that measure appears to have been boosted significantly by temporary factors. Other broad measures suggest hourly labor compensation continues to rise at a moderate rate.

The evolution of unit labor costs will also reflect the growth of output per hour. Over the past decade, the U.S. economy has benefited from a remarkable acceleration of productivity: Strong gains in efficiency have buoyed real incomes and restrained inflation. But experience suggests that such rapid advances are unlikely to be maintained in an economy that has reached the cutting edge of technology. Over the past 2 years, growth in output per hour seems to have moved off the peak that it reached in 2003. However, the cause, extent, and duration of that slowdown are not yet clear. The traditional measure of the growth in output per hour, which is based on output as measured from the product side of the national accounts, has slowed sharply in recent quarters. But a conceptually equivalent measure that uses output measured from the income side has slowed far less. Given the divergence between these two readings, a reasonably accurate determination of the extent of the recent slowing in productivity growth and its parsing into cyclical and secular influences will require the accumulation of more evidence.

Energy prices represent a second major uncertainty in the economic outlook. A further rise could cut materially into private spending and thus damp the rate of economic expansion. In recent weeks, spot prices for crude oil and natural gas have been both high and volatile. Prices for far-future delivery of oil and gas have risen even more markedly than spot prices over the past year. Apparently, market participants now see little prospect of appreciable relief from elevated energy prices for years to come. Global demand for energy apparently is expected to remain strong, and market participants are evidencing increased concerns about the potential for supply disruptions in various oil-producing regions.

To be sure, the capacity to tap and utilize the world's supply of oil continues to expand. Major advances in recovery rates from existing reservoirs have enhanced proved reserves despite ever fewer discoveries of major oil fields. But, going forward, because of the geographic location of proved reserves, the great majority of the investment required to convert reserves into new crude oil productive capacity will need to be made in countries where foreign investment is currently prohibited or restricted or faces considerable political risk. Moreover, the preponderance of oil and gas revenues of the dominant national oil companies is perceived as necessary to meet the domestic needs of growing populations. These factors have the potential to constrain the ability of producers to expand capacity to keep up with the projected growth of world demand, which has been propelled to an unexpected extent by burgeoning demand in emerging Asia.

More favorably, the current and prospective expansion of U.S. capability to import liquefied natural gas will help ease longer-term natural gas stringencies and perhaps bring natural gas prices in the United States down to world levels.

The third major uncertainty in the economic outlook relates to the behavior of long-term interest rates. The yield on 10-year Treasury notes, currently near 4¼ percent, is about 50 basis points below its level of late spring 2004. Moreover, even after the recent widening of credit risk spreads, yields for both investment-grade and less-than-investment-grade corporate bonds have declined even more than those on Treasury notes over the same period.

This decline in long-term rates has occurred against the backdrop of generally firm U.S. economic growth, a continued boost to inflation from higher energy prices, and fiscal pressures associated with the fast approaching retirement of the baby-boom generation.[1] The drop in long-term rates is especially surprising given the in-

[1] Under current law, those longer-run pressures on the Federal budget threaten to place the economy on an unsustainable path. Large deficits could result in rising interest rates and ever-growing interest payments on the accumulating stock of debt, which in turn would further augment deficits in future years. That process could result in deficits as a percentage of gross domestic product rising without limit. Unless such a development were headed off, these deficits could cause the economy to stagnate or worse at some point over the next couple of decades.

crease in the Federal funds rate over the same period. Such a pattern is clearly without precedent in our recent experience.

The unusual behavior of long-term interest rates first became apparent last year. In May and June 2004, with a tightening of monetary policy by the Federal Reserve widely expected, market participants built large short positions in long-term debt instruments in anticipation of the increase in bond yields that has been historically associated with an initial rise in the Federal funds rate. Accordingly, yields on 10-year Treasury notes rose during the spring of last year about 1 percentage point. But by summer, pressures emerged in the marketplace that drove long-term rates back down. In March of this year, long-term rates once again began to rise, but like last year, market forces came into play to make those increases short lived.

Considerable debate remains among analysts as to the nature of those market forces. Whatever those forces are, they are surely global, because the decline in long-term interest rates in the past year is even more pronounced in major foreign financial markets than in the United States.

Two distinct but overlapping developments appear to be at work: A longer-term trend decline in bond yields and an acceleration of that trend of late. Both developments are particularly evident in the interest rate applying to the 1 year period ending 10 years from today that can be inferred from the U.S. Treasury yield curve. In 1994, that so-called forward rate exceeded 8 percent. By mid-2004, it had declined to about 6½ percent—an easing of about 15 basis points per year on average.[2] Over the past year, that drop steepened, and the forward rate fell 130 basis points to less than 5 percent.

Some, but not all, of the decade-long trend decline in that forward yield can be ascribed to expectations of lower inflation, a reduced risk premium resulting from less inflation volatility, and a smaller real term premium that seems due to a moderation of the business cycle over the past few decades.[3] This decline in inflation expectations and risk premiums is a signal development. As I noted in my testimony before this Committee in February, the effective productive capacity of the global economy has substantially increased, in part because of the breakup of the Soviet Union and the integration of China and India into the global marketplace. And this increase in capacity, in turn, has doubtless contributed to expectations of lower inflation and lower inflation-risk premiums.

In addition to these factors, the trend reduction worldwide in long-term yields surely reflects an excess of intended saving over intended investment. This configuration is equivalent to an excess of the supply of funds relative to the demand for investment. What is unclear is whether the excess is due to a glut of saving or a shortfall of investment. Because intended capital investment is to some extent driven by forces independent of those governing intended saving, the gap between intended saving and investment can be quite wide and variable. It is real interest rates that bring actual capital investment worldwide and its means of financing, global saving, into equality. We can directly observe only the actual flows, not the saving and investment tendencies. Nonetheless, as best we can judge, both high levels of intended saving and low levels of intended investment have combined to lower real long-term interest rates over the past decade.

Since the mid-1990's, a significant increase in the share of world gross domestic product (GDP) produced by economies with persistently above-average saving—prominently the emerging economies of Asia—has put upward pressure on world saving. These pressures have been supplemented by shifts in income toward the oil-exporting countries, which more recently have built surpluses because of steep increases in oil prices. The changes in shares of world GDP, however, have had little effect on actual world capital investment as a percentage of GDP. The fact that investment as a percentage of GDP apparently changed little when real interest rates were falling, even adjusting for the shift in the shares of world GDP, suggests that, on average, countries' investment propensities had been declining.[4]

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[2] Dollar interest rate swaps 5 years forward and maturing in 10 years declined 19 basis points per year on average over the same period. Comparable euro (pre-1999, Deutschemark) swaps declined 27 basis points, sterling swaps 35 basis points, and yen swaps 23 basis points.

[3] Term premiums measure the extent to which current prices of bonds discount future uncertainties.

[4] Nominal GDP figures by country are estimated in dollars by the International Monetary Fund using purchasing power parities (PPP) of currencies. These GDP figures are used to calculate weights applied to national saving and investment rates to form global measures. When the GDP figures are instead measured at market exchange rates, the results are similar. The PPP estimates emphasize the economic factors generating investment and the use of saving. Exchange rates emphasize the financial forces governing the financing of investment across borders. Both approaches are useful.

Softness in intended investment is also evident in corporate behavior. Although corporate capital investment in the major industrial countries rose in recent years, it apparently failed to match increases in corporate cashflow.[5] In the United States, for example, capital expenditures were below the very substantial level of corporate cashflow in 2003, the first shortfall since the severe recession of 1975. That development was likely a result of the business caution that was apparent in the wake of the stock market decline and the corporate scandals early this decade. (Capital investment in the United States has only recently shown signs of shedding at least some of that caution.) Japanese investment exhibited prolonged restraint following the bursting of their speculative bubble in the early 1990's. And investment in emerging Asia excluding China fell appreciably after the Asian financial crisis in the late 1990's. Moreover, only a modest part of the large revenue surpluses of oil-producing nations has been reinvested in physical assets. In fact, capital investment in the Middle East in 2004, at 25 percent of the region's GDP, was the same as in 1998. National saving, however, rose from 21 percent to 32 percent of GDP. The unused saving of this region was invested in world markets.

Whether the excess of global intended saving over intended investment has been caused by weak investment or excessive saving—that is, by weak consumption—or, more likely, a combination of both does not much affect the intermediate-term outlook for world GDP or, for that matter, U.S. monetary policy. What have mattered in recent years are the sign and the size of the gap of intentions and the implications for interest rates, not whether the gap results from a saving glut or an investment shortfall. That said, saving and investment propensities do matter over the longer-run. Higher levels of investment relative to consumption build up the capital stock and thus add to the productive potential of an economy.

The economic forces driving the global saving-investment balance have been unfolding over the course of the past decade, so the steepness of the recent decline in long-term dollar yields and the associated distant forward rates suggests that something more may have been at work over the past year.[6] Inflation premiums in forward rates 10 years ahead have apparently continued to decline, but real yields have also fallen markedly over the past year. It is possible that the factors that have tended to depress real yields over the past decade have accelerated recently, though that notion seems implausible.

According to estimates prepared by the Federal Reserve Board staff, a significant portion of the sharp decline in the 10-year forward 1 year rate over the past year appears to have resulted from a fall in term premiums. Such estimates are subject to considerable uncertainty. Nevertheless, they suggest that risk takers have been encouraged by a perceived increase in economic stability to reach out to more distant time horizons. These actions have been accompanied by significant declines in measures of expected volatility in equity and credit markets inferred from prices of stock and bond options and narrow credit risk premiums. History cautions that long periods of relative stability often engender unrealistic expectations of its permanence and, at times, may lead to financial excess and economic stress.

Such perceptions, many observers believe, are contributing to the boom in home prices and creating some associated risks. And, certainly, the exceptionally low interest rates on 10-year Treasury notes, and hence on home mortgages, have been a major factor in the recent surge of homebuilding, home turnover, and particularly in the steep climb in home prices. Whether home prices on average for the Nation as a whole are overvalued relative to underlying determinants is difficult to ascertain, but there do appear to be, at a minimum, signs of froth in some local markets where home prices seem to have risen to unsustainable levels. Among other indicators, the significant rise in purchases of homes for investment since 2001 seems to have charged some regional markets with speculative fervor.

The apparent froth in housing markets appears to have interacted with evolving practices in mortgage markets. The increase in the prevalence of interest-only loans and the introduction of more-exotic forms of adjustable-rate mortgages are developments of particular concern. To be sure, these financing vehicles have their appropriate uses. But some households may be employing these instruments to purchase homes that would otherwise be unaffordable, and consequently their use could be adding to pressures in the housing market. Moreover, these contracts may leave some mortgagors vulnerable to adverse events. It is important that lenders fully ap-

[5] A significant part of the surge in cashflow of U.S. corporations was accrued by those financial intermediaries that invest only a small part in capital assets. It appears that the value added of intermediation has increased materially over the past decade because of major advances in financial product innovation.

[6] The decline of euro, sterling, and yen forward swap rates also steepened.

preciate the risk that some households may have trouble meeting monthly payments as interest rates and the macroeconomic climate change.

The U.S. economy has weathered such episodes before without experiencing significant declines in the national average level of home prices. Nevertheless, we certainly cannot rule out declines in home prices, especially in some local markets. If declines were to occur, they likely would be accompanied by some economic stress, though the macroeconomic implications need not be substantial. Nationwide banking and widespread securitization of mortgages make financial intermediation less likely to be impaired than it was in some previous episodes of regional house-price correction. Moreover, a decline in the national housing price level would need to be substantial to trigger a significant rise in foreclosures, because the vast majority of homeowners have built up substantial equity in their homes despite large mortgage-market-financed withdrawals of home equity in recent years.

Historically, it has been rising real long-term interest rates that have restrained the pace of residential building and have suppressed existing home sales, high levels of which have been the major contributor to the home equity extraction that arguably has financed a noticeable share of personal consumption expenditures and home modernization outlays.

The trend of mortgage rates, or long-term interest rates more generally, is likely to be influenced importantly by the worldwide evolution of intended saving and intended investment. We at the Federal Reserve will be closely monitoring the path of this global development few, if any, have previously experienced. As I indicated earlier, the capital investment climate in the United States appears to be improving following significant headwinds since late 2000, as is that in Japan. Capital investment in Europe, however, remains tepid. A broad worldwide expansion of capital investment not offset by a rising worldwide propensity to save would presumably move real long-term interest rates higher. Moreover, with term premiums at historical lows, further downward pressure on long-term rates from this source is unlikely.

We collectively confront many risks beyond those that I have just mentioned. As was tragically evidenced again by the bombings in London earlier this month, terrorism and geopolitical risk have become enduring features of the global landscape. Another prominent concern is the growing evidence of antiglobalization sentiment and protectionist initiatives, which, if implemented, would significantly threaten the flexibility and resilience of many economies. This situation is especially troubling for the United States, where openness and flexibility have allowed us to absorb a succession of large shocks in recent years with only minimal economic disruption. That flexibility is, in large measure, a testament to the industry and resourcefulness of our workers and businesses. But our success in this dimension has also been aided importantly by more than two and a half decades of bipartisan effort aimed at reducing unnecessary regulation and promoting the openness of our market economy. Going forward, policymakers will need to be vigilant to preserve this flexibility, which has contributed so constructively to our economic performance in recent years.

In conclusion, Mr. Chairman, despite the challenges that I have highlighted and the many I have not, the U.S. economy has remained on a firm footing, and inflation continues to be well contained. Moreover, the prospects are favorable for a continuation of those trends. Accordingly, the Federal Open Market Committee in its June meeting reaffirmed that it ". . . believes that policy accommodation can be removed at a pace that is likely to be measured. Nonetheless, the Committee will respond to changes in economic prospects as needed to fulfill its obligation to maintain price stability."

RESPONSE TO A WRITTEN QUESTION OF SENATOR REED FROM ALAN GREENSPAN

Q.1. I mentioned in my opening remarks the study by the Boston Federal Reserve with respect to labor participation, which suggests there is a significant and growing lack of participation in the labor force which distorts our ability to see how well we are doing with respect to recoveries. In fact, one thing that I found interesting was the ratio of employment to population, 62.7 percent, is below the level at the start of the economic recovery in November 2001. And this is the first time the ratio has failed to surpass its trial level so far into a recovery. Can you comment?

A.1. At my July 21 testimony before the Senate Banking Committee, you asked if I could provide additional detail concerning the Board staff's assessment of recent developments in labor force participation and their implications for the interpretation of the unemployment rate as a measure of slack in the labor market. As I noted in my response at the hearing, while cyclical factors likely have contributed to the weak recovery in labor force participation, our staff estimates that part of that weak performance in recent years can also be traced to a downtrend in the underlying rate of participation. The change in the overall trend has occurred both because the trend in the participation of adult women appears to have flattened out and because the large baby boom cohorts are moving into the age range in which their labor force participation will likely drop off sharply as many workers in these cohorts retire. More specifically, we estimate that the underlying trend in the participation rate has fallen from a little more than 66½ percent of the civilian working-age population in 2001 to about 66¼ percent this year. Because the participation rate in recent months has averaged just over 66 percent, we estimate that the implied cyclical shortfall in participation equates to a few tenths of a percentage point on the unemployment rate.

Our estimates are broadly similar to those of the Congressional Budget Office. Differences between our estimates and those reported in the Boston Fed study that we discussed at my hearing primarily reflect different views about the evolution of trends in participation for various demographic groups and different ways to measure the size of the current participation shortfall. In particular, the Boston Fed study examines a range of alternative trajectories for participation rates for women and older workers and calibrates the size of the estimated current shortfall as a percentage of the labor force. Of course, all such estimates are subject to considerable uncertainty, and our understanding of the relationship between labor force participation and labor market slack will undoubtedly benefit from additional research on this topic.

RESPONSE TO WRITTEN QUESTIONS OF SENATOR BENNETT FROM ALAN GREENSPAN

Q.1. What guidance could you offer for selection of an index to use for maintaining purchasing power over time in Federal programs with cost-of-living adjustments?

A.1. As you know, I have long advocated improvements in the price indexes published by the Bureau of Labor Statistics (BLS). As you

have indicated, this issue is important for several reasons. In addition to the need for accurate measures of inflation, price indexes are used for the automatic inflation adjustments of many Federal tax and spending programs, and inaccurate price measures can lead to adjustments that are inconsistent with true changes in the cost of living.

In recent years, the BLS has taken important steps to improve the quality of the price indexes. However, reviews of the academic literature on price measurement suggest that frequently cited consumer price indexes published by the BLS still tend to overstate increases in the cost of living. This evidence indicates that, if Congress intends the inflation adjustments to compensate for changes in the cost of living, adjustments based on the CPI-U or CPI-W will be too large, perhaps by a significant amount.

Q.2. Do you believe that replacing the CPI-U with the C-CPI-U in indexing Federal programs would be truer to the original intent of Congress in making cost-of-living adjustments?

A.2. As indicated, research suggests that the CPI-U and CPI-W overstate increases in the cost of living. A portion of this measurement error owes to substitution bias, and, to address this problem, the BLS recently developed the Chained CPI-U (C-CPI-U).

Although the C-CPI-U is still subject to other sources of bias—especially those related to changes in the quality of existing products and introduction of new goods and services—basing inflation indexation of Federal programs on the C-CPI-U would, in my view, give us a less biased measure of changes in the cost of living.

Q.3. Because construction of the C-CPI-U requires data on the changing expenditure patterns of consumers as relative prices shift, the index is subject to revision as better data on expenditures become available. However, this presents a problem because retroactive adjustments may become necessary as revisions are made if the C-CPI-U were to be used for indexation purposes in Federal programs.

One possible way to overcome such a problem would be to use "true up" factors as revisions are made. For example, if last year's C-CPI-U growth was revised down by 0.2 percent and this year's C-CPI-U growth was 1.4 percent, then we could actually increase whatever is being indexed by only 1.2 percent (this year's 1.4 percent less a "true up" factor of 0.2 percent to reflect the revision). Assuming that errors are unbiased (essentially, that revisions have mean zero), such a procedure should average out correctly over time. However, in the short-run, revision issues could be significant.

If you believe that the C-CPI-U represents a truer measure of the cost of living than the CPI-U, how would you address the problem of data revisions?

A.3. As you noted, the indexation of Federal programs to a price index that is subject to revision, such as the C-CPI-U, does lead to certain complications. If the index is subsequently revised, then programs tied to that index will have been set at levels learned, *ex post,* to have been inappropriate. (Of course, use of a price index that is not subject to revision also may generate inappropriate adjustments to Federal programs, and the absence of revision may

mean that any such errors are never corrected.) The complications introduced by such revisions are readily surmountable, however. Indexation formulas may be structured in ways that take such revisions into account and ensure that, in the period following the revision, the programs are set back at appropriate levels. The use of "true up" factors, as you suggest, is one way to achieve this goal.

Q.4. If you were to change the price measure used in indexing Federal programs, how would you respond to a criticism that such a change is merely a sneaky way of cutting benefits and increasing taxes?

A.4. As indicated above, I believe that it would be desirable, insofar as possible, to index Federal programs in a way that captures actual changes in the cost of living.

Q.5. In remarks on price measurement at the Center for Financial Studies in Frankfurt, Germany on November 7, 1997, you advocated establishment of an objective, nonpartisan, and independent national commission to set annual cost-of-living adjustment factors for Federal programs. Do you still feel that it would be beneficial to establish such a commission? How would you constitute such a commission? Would you be willing to coordinate research efforts of Federal Reserve staff with those of my staff on the Joint Economic Committee to help explore the possibility of formalizing such a commission?

A.5. Further improvements in our price indexes would be a welcome development. In the meantime, it is important to consider how best to index Government programs, given price measures still appear to suffer from significant biases. Many approaches to this latter problem have the potential to yield progress, including the establishment of an independent commission.

RESPONSE TO A WRITTEN QUESTION OF SENATOR CORZINE FROM ALAN GREENSPAN

Q.1. This morning, the Senate Agriculture Committee is marking up legislation reauthorizing the Commodities Futures Trading Commission. The proposed legislation would modify the Commodity Futures Modernization Act (CFMA) of 2000, which, as you know, this Committee and Agriculture jointly worked on to develop. That effort was based on recommendations from the President's Working Group (the Federal Reserve, Treasury, SEC, and CFTC) on Financial Markets.

Yesterday, you expressed concerns to Agriculture Committee Chairman Chambliss about the legislation in response to a letter from Senator Crapo. Those concerns seem to revolve around the fact that the President's Working Group has not had the opportunity to review or deliberate key proposals contained in the draft reauthorization legislation. SEC Acting Chairman Glassman has expressed a similar concern, and Chairman Shelby and Ranking Member Sarbanes have done so as well.

As you know, of major concern with the draft legislation are the provisions that would modify portions of the CFMA that were painstakingly crafted to balance the differing interests of all Federal financial regulators. I wonder if you could discuss more in depth the nature of the concerns you expressed in your letter and

what specific harm could come from Congressional action that, done in haste, could disrupt the balance and legal certainty the CFMA struck which has aided the development of important financial markets and reaped significant benefits for the broader economy?

A.1. The Federal Reserve Board believes the CFMA has unquestionably been a successful piece of legislation. It enacted provisions that excluded transactions between institutions and other eligible counterparties in over-the-counter financial derivatives and foreign currency from regulation under the Commodity Exchange Act (CEA). This exclusion resolved long-standing concerns that a court might find that the CEA applied to these transactions, thereby making them legally unenforceable.

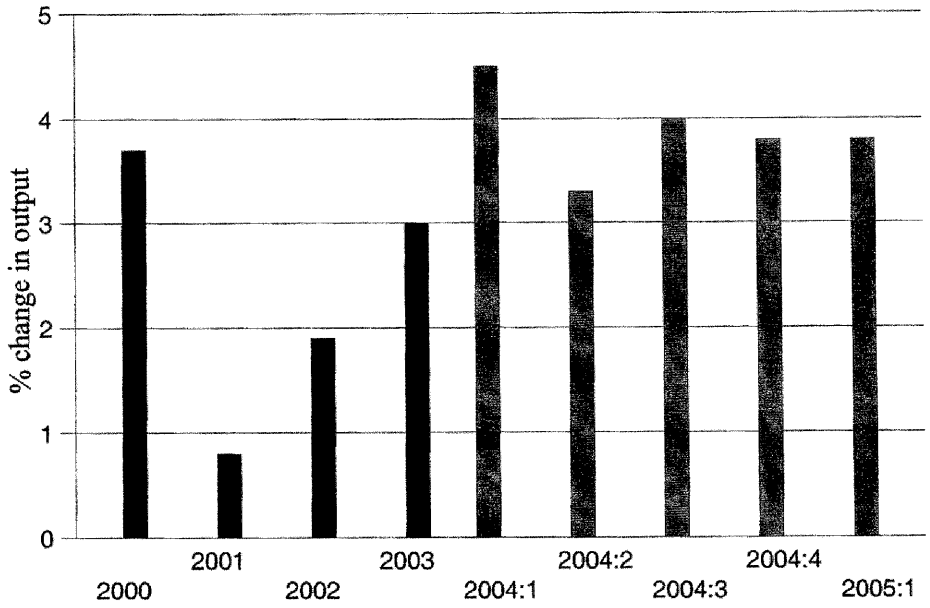
Another important part of the CFMA addressed problems associated with "bucket shops" that were marketing foreign currency futures to retail customers (that is, an individual or business that does not meet the definition of eligible counterparty). The legislation marked up by the Senate Agriculture Committee in July 2005 would apply the CEA as a whole to certain retail foreign currency contracts, regardless of whether they are futures contracts. We seriously question whether it is necessary to apply all the provisions of the CEA to these transactions in order to enable the CFTC to address fraud, and believe that a broad application of the Act could have unintended consequences.

Monetary Policy Hearings

July 18, 2005

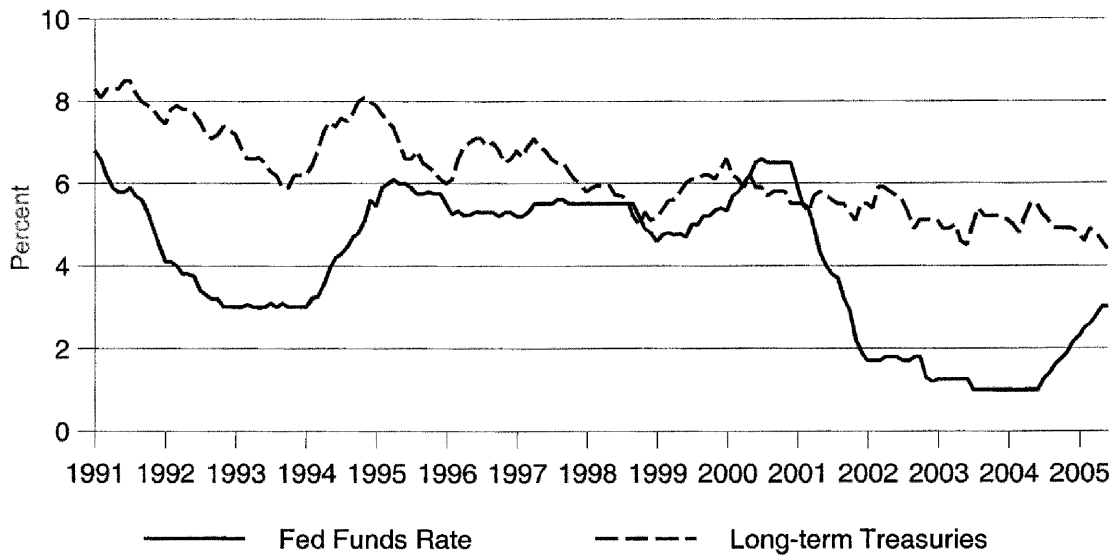
Marc Labonte
Analyst in Macroeconomics
Congressional Research Service
x7-0640

GDP Growth



Source: Bureau of Economic Analysis Note: 2004-2005 quarterly growth rates are annualized

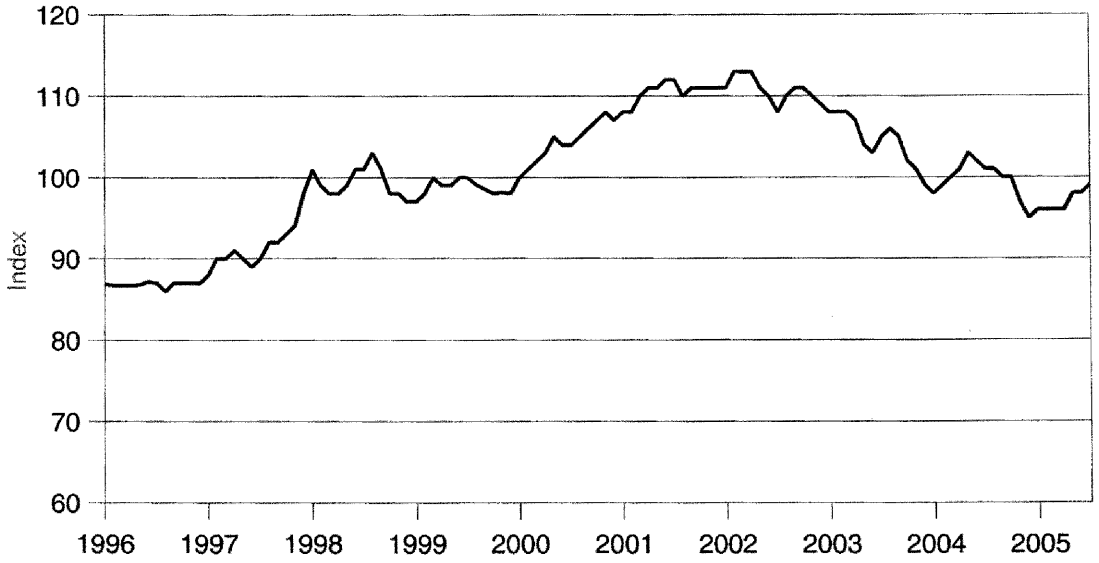
Monetary Policy and Interest Rates



Source: Federal Reserve

Dollar Exchange Rate

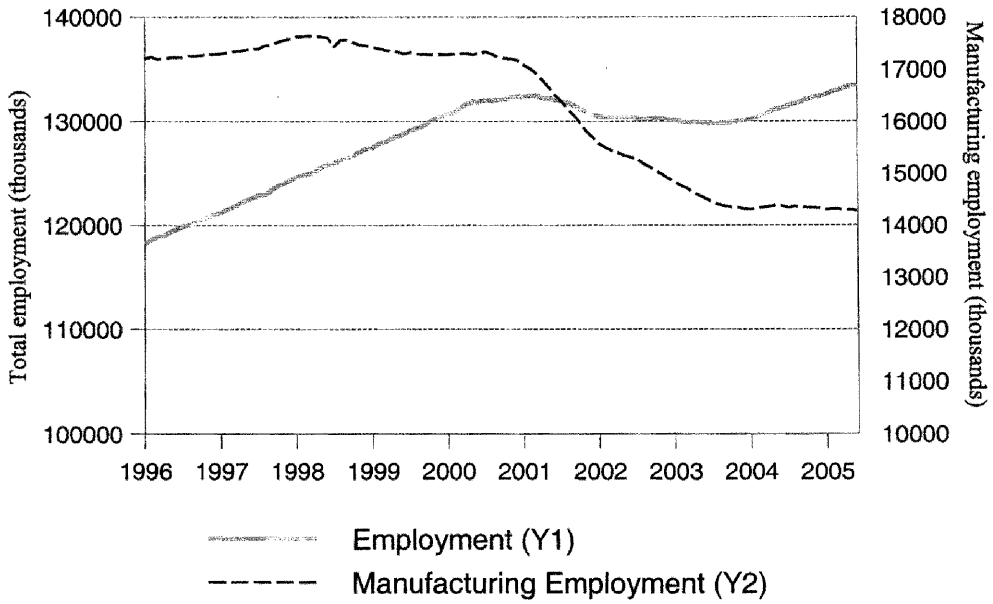
Value of dollar against a basket of 26 currencies, adjusted for inflation



Source: Federal Reserve

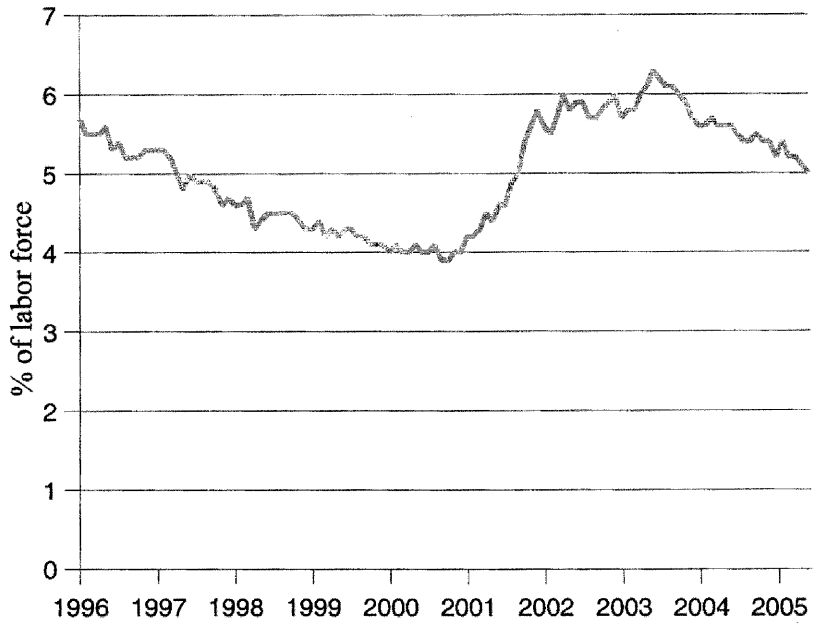
Civilian Employment

Thousands of Workers



Source: Bureau of Labor Statistics

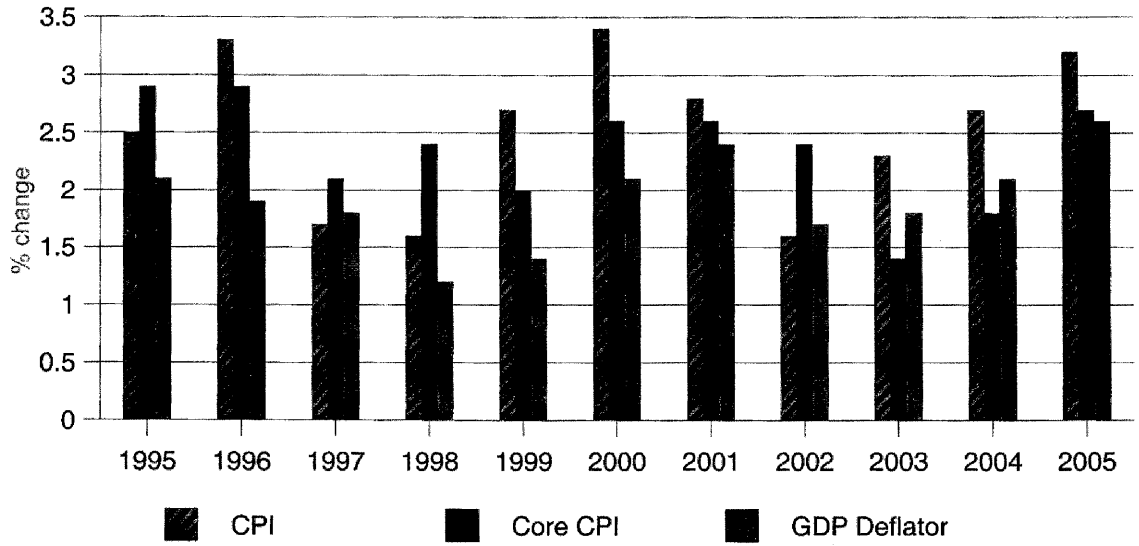
Unemployment Rate



Source: Bureau of Labor Statistics

Inflation Rates

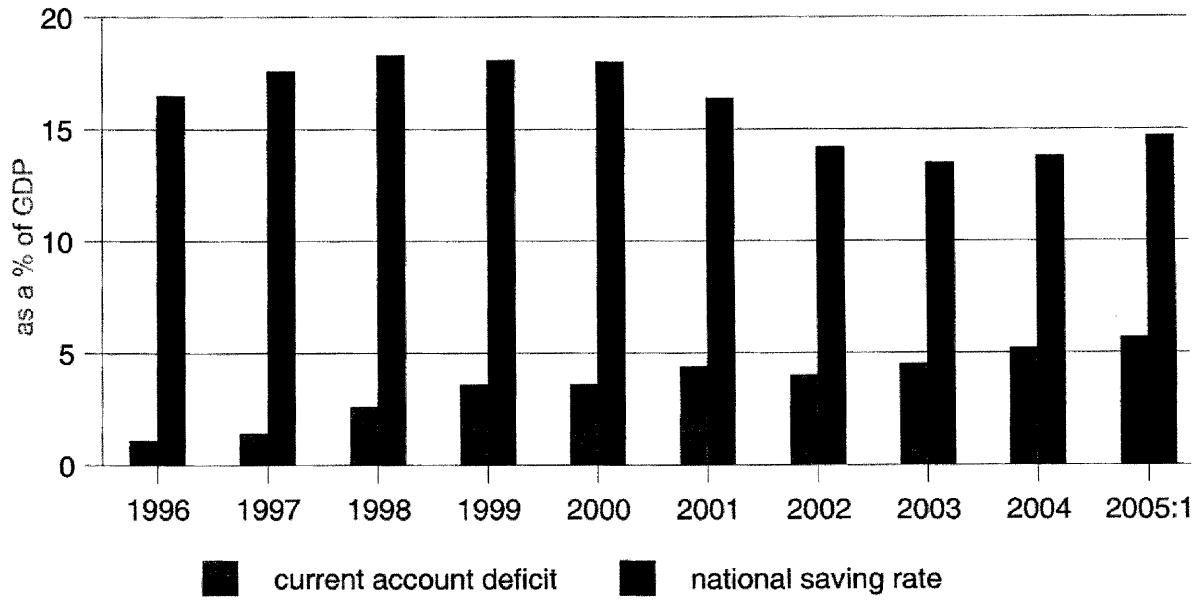
CPI, Core CPI, and GDP Deflator



Source: BEA; BLS

Note: Core CPI excludes food and energy prices.
2005 CPI data is first half, GDP data is first quarter.

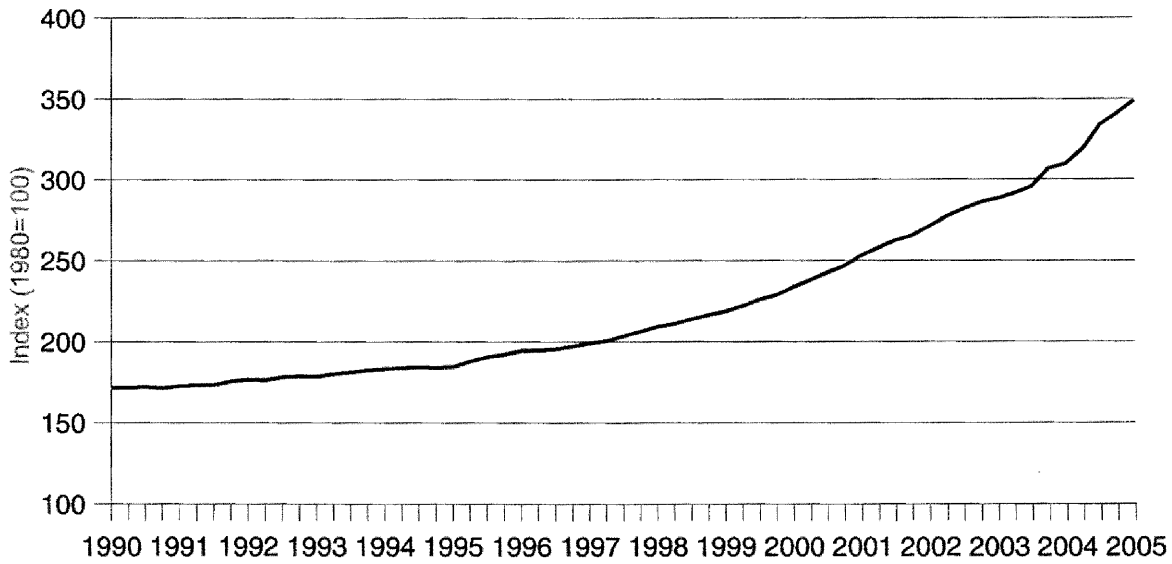
Trade Deficit and National Saving



Source: Bureau of Economic Analysis

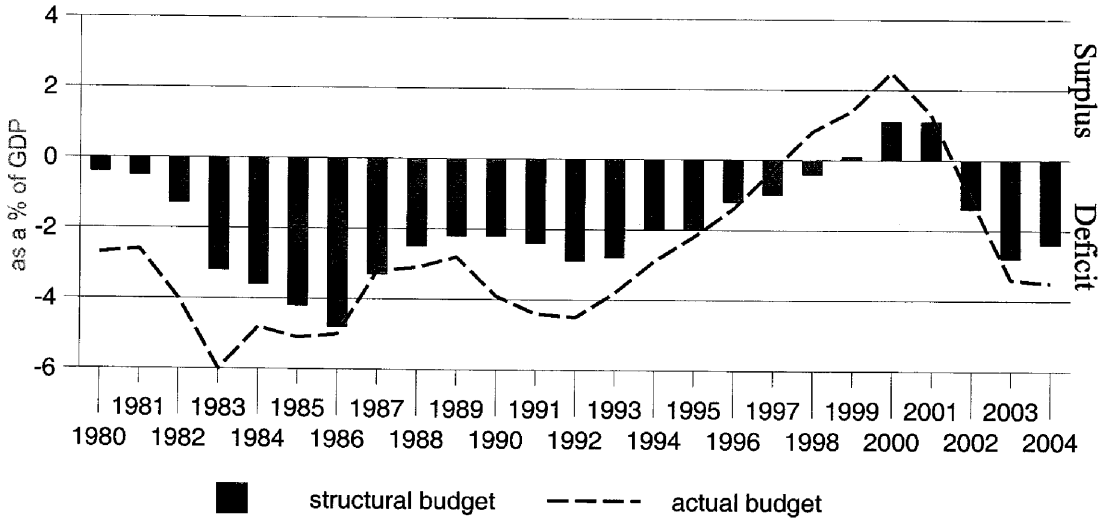
House Price Index

Nominal Prices



Source: OFHEO

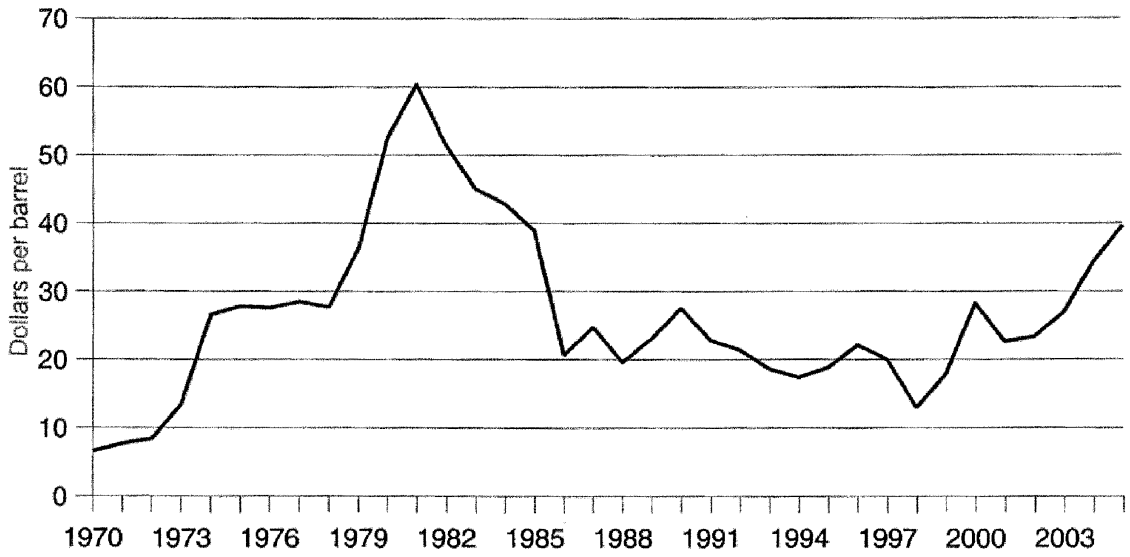
Fiscal Policy and the Budget Deficit



Source: Congressional Budget Office

Oil Prices

Yearly Average, Adjusted for Inflation (2000 prices)

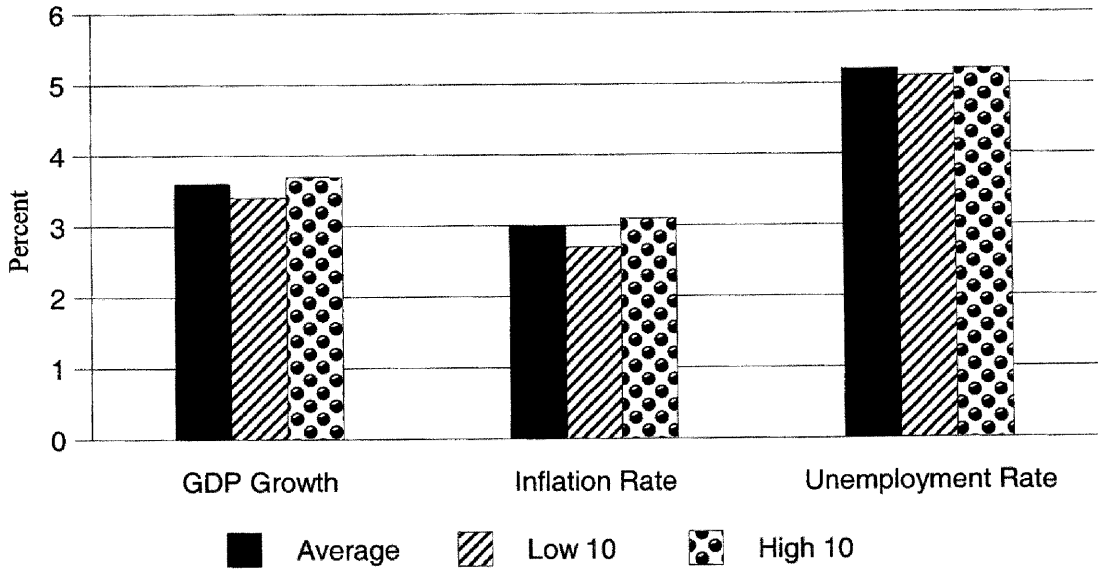


Source: Energy Information Administration

Note: 2005 prices are Jan.-May

Economic Forecast for 2005

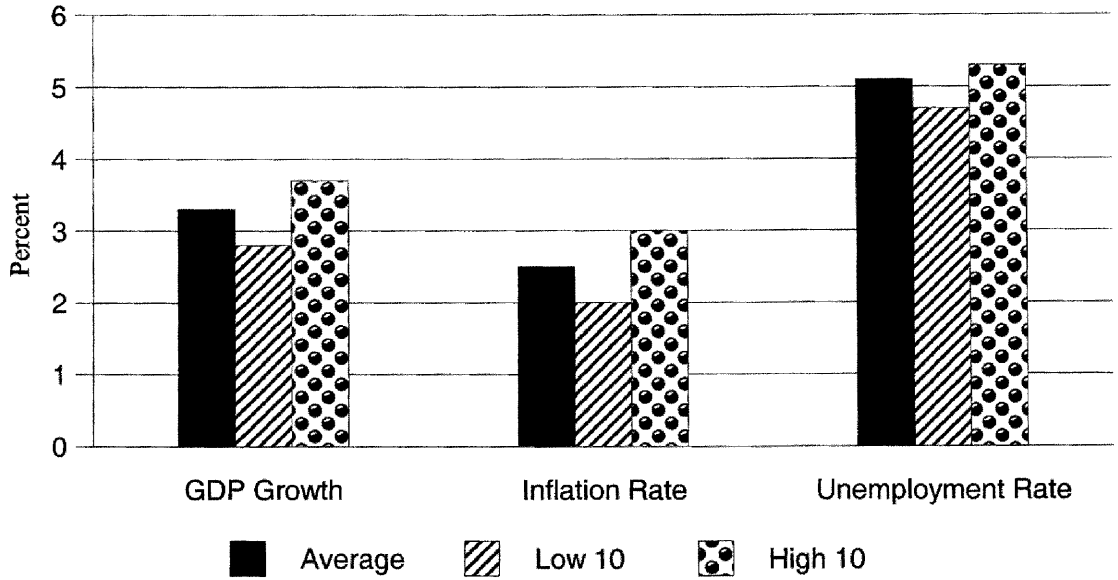
Blue Chip Survey of 50 private sector forecasters
(data in percentages)



Source: Blue Chip, July 2005

Economic Forecast for 2006

Blue Chip Survey of 50 private sector forecasters
(data in percentages)



Source: Blue Chip, July 2005

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

September 2, 2005

ALAN GREENSPAN
CHAIRMAN

The Honorable Robert F. Bennett
United States Senate
Washington, D.C. 20515

Dear Senator:

I wish to thank you for the opportunity to give a fuller description of our views concerning government-sponsored enterprises (GSEs), the systemic risks they pose to the financial system of the United States, and the potential consequences of requiring them to reduce their retained portfolios of mortgage-backed securities (MBS). As I indicated during my testimonies before the Senate Banking Committee, the interest rate and prepayment risks inherent in mortgages with refinancing options cannot be eliminated. However, they can be markedly contained, and the accompanying risks to systemic stability reduced, by diversifying the concentration of risk away from two large, highly leveraged GSE portfolios for which significant misjudgments can have quick and destabilizing consequences.

Overall, the mortgage-backed securities markets in the United States are highly liquid and have many sophisticated participants. Indeed, even prior to the GSEs' portfolio expansions, the interest rate and prepayment risks inherent in mortgages with a low-cost refinancing option had been reasonably well absorbed by the numerous commercial and investment banks, pension funds, insurance companies and mutual funds--all of whom buy and sell securities daily in the market for high-quality assets. The strategies employed by private non-GSE holders of MBS to hedge interest rate risk and the positions they hold are far more diverse and backed by capital that is generally multiples of assets greater than that held by Fannie Mae (Fannie) and Freddie Mac (Freddie). The larger capital buffers of the non-GSEs enable them to contain the inevitable mistakes and inherent shocks associated with risk-mitigating strategies far better than the GSEs. Moreover, unlike the GSEs, market discipline is sufficiently strong for these non-GSEs that any efforts on their part to significantly increase their leverage would be met with market resistance. Hence, they pose measurably less risk to the financial system as a whole.

Today, the U.S. financial system is highly dependent on the risk-managers at Fannie and Freddie to do everything right, rather than depending on a market-based system supported by the risk assessments and management capabilities of many market participants who have different views and different strategies for hedging risk. The concentrations of

mortgage-backed securities at Fannie and Freddie are well beyond what market forces would normally allow because there are no meaningful limits to the expansion of the GSEs' portfolios, which are funded with debt that the market believes to be federally guaranteed. In the current system of mortgage financing, as Fannie and Freddie increase in size relative to the counterparties for their hedging transactions, the ability of these GSEs to quickly correct the inevitable misjudgments inherent in their complex hedging strategies becomes more difficult, especially when vast reversal transactions backed by thin capital holdings are required to rebalance portfolio risks. Moreover, the success of interest-rate-risk management, especially the exceptionally rapid timing necessitated by dynamic risk adjustments, requires that the ultimate counterparties to the GSEs' transactions provide sufficient liquidity to finance an interest-rate-risk transfer that counters the risk. Otherwise, large and rapid destabilizing adjustments will result in sharp changes in the interest rates required to rebalance and hedge a mortgage portfolio.

To avoid the exceptional risks and uncertainties associated with dynamic hedging of their portfolios, Fannie and Freddie might attempt to fully rely on so-called passive hedges. Although implemented through use of derivatives, passive hedging is equivalent to holding a sufficiently large portfolio of debt instruments whose value can be made to vary in a manner that offsets the risks associated with mortgage-related securities. The costs and the quantity of options (or swaps and other derivatives) needed to sufficiently passively hedge a mortgage portfolio, however, can become substantial, especially when the portfolio is leveraged, is growing rapidly, is large relative to the supply of options and whose outcome, in any event, is not a perfect hedge. Moreover, these strategies, which are complex, can be costly when they fail. Thus, even if Fannie and Freddie were to fully rely on passive hedges (a very expensive approach to managing prepayment risks), the system would again rely on Fannie and Freddie avoiding large errors.

One way to limit potentially destabilizing portfolio strategies is to focus Fannie and Freddie on securitization activities, which do not require the maintenance of large portfolios. It is Fannie's and Freddie's securitization activities, whether or not the home mortgages and MBS end up in their portfolio holdings, that provide liquidity to mortgage originators. To focus these GSEs on securitization activities, the Federal Reserve Board supports efforts to require that the GSEs demonstrate to their regulator that any asset held in their portfolios furthers their affordable housing obligations or secondary market liquidity objectives and could not have been securitized and sold to others.

We also believe that should there be a market crisis where secondary mortgage market liquidity dries up, Fannie and Freddie, with their regulator's approval, should be able to *temporarily* expand their portfolios by issuing debt and purchasing MBS.

But there is no purpose in holding the newly acquired MBS after the crisis has passed. As market stringency waned and liquidity returns to the MBS market, sales of this crisis-acquired MBS and the accompanying repayment of GSE debt can be readily executed with minimal effect on MBS interest rates (for reasons expressed below).

It is important to recognize that providing liquidity to the MBS market does not require that Fannie and Freddie hold any MBS beyond the very small amounts required to support a pipeline for mortgage securitization. Indeed, MBS already purchased can do nothing to support the MBS market. The key element for Fannie and Freddie to be able to provide such support is that investors treat their debt as the equivalent to Treasury debt. Under such a circumstance, a financial crisis characterized by a flight to quality increases the demand for, and lowers the relative interest rate on, U.S. Treasury debt and, correspondingly, Fannie's and Freddie's debentures. This opens up a spread between the interest rate Fannie and Freddie pay on their debt and the yield they can earn by holding MBS adequate to encourage the purchase of mortgage-backed securities financed with their debentures.

Any liquidation of GSE holdings of mortgage-related assets, such as MBS, by Fannie and Freddie of course can not affect the level of total home mortgage debt outstanding. Fannie and Freddie are financial intermediaries that purchase mortgages and finance them with debt, leaving mortgage debt owed by homeowners unchanged. Thus, reversing this intermediation activity would not affect outstanding mortgage debt. It is the purchases of home mortgages by Fannie and Freddie from mortgage originators that provide liquidity to the home mortgage market, not whether the GSEs subsequently securitize and sell them as MBS, hold them directly, or hold them in the form of MBS. But because Fannie and Freddie must simultaneously issue new GSE debentures to finance their increased portfolio holdings, the purchase or sale of MBS by the GSE has no effect on the supply of and demand for highly rated debt securities overall or on their interest rates, on average. The only net impact to be expected from such transactions should be a decline in MBS yields relative to GSE debenture yields, as the additional supply of MBS only slightly exceeds that additional supply of GSE debt because of the GSEs' minimum equity requirements.

However, research by staff at the Federal Reserve Board indicates this spread has instead *increased* noticeably as the portfolios of Fannie and Freddie rose since 1997, as has the spread between yields on MBS and yields on Treasury notes. The spread between home mortgage interest rates in primary markets and Treasury rates also has widened. Clearly, it is hard to imagine that Fannie's and Freddie's portfolio purchases have actually *caused* MBS or mortgage spreads to increase. In fact, the causation is likely

to run in the opposite direction; increased spreads have induced increased portfolio purchases. Like other profit-maximizing purchasers of MBS, Fannie and Freddie add to their portfolios when such spreads widen. And, like other such individual purchasers, the GSEs' actions, we have found, have little or no effect on the spreads themselves, which are established competitively by the deep and liquid world markets in highly rated securities.

It is important to recognize that a long, phased reduction of GSE portfolios, the preferred option, is likely to require little, if any, sales of mortgage-related securities by Fannie or Freddie. The natural run-off of their portfolios is very large. Over the past seven years (1997 to 2003), an average of 30 percent of the outstanding portfolios of Fannie and Freddie has been repaid by homeowners each year.[1] Thus, a gradual reduction over time of the GSE portfolios should be a non-event to investors and market participants, other than GSE shareholders. Indeed, Fannie's portfolio has shrunk over $75 billion during the past five months without any notable problems occurring in markets for MBS or home mortgages.[2]

You asked specifically about who would hold MBS if Fannie and Freddie did not have their large portfolios and about the relative market shares of participants in the MBS market. Fannie's and Freddie's portfolios accounted for about 27 percent of all holdings of GSE-government-backed MBS outstanding at mid-year 2005 or roughly about $850 billion in total.[3] The approximately 7,600 commercial banks in the United States currently hold, in the aggregate, a slightly smaller amount of outstanding MBS.[4] These guaranteed MBS, as well as the GSEs' debt, largely compete with United States Treasuries; indeed they are often held in lieu of Treasuries to obtain an additional yield on securities which the market presumes is government guaranteed.

If Fannie and Freddie reduced their holdings of MBS, for example, by approximately half, say to $400 billion (and assuming their debt outstanding fell a similar amount), the MBS issues liquidated or simply not purchased by the GSEs likely would be

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[1] Data for Fannie Mae are not yet available for 2004.

[2] However, recent accounting problems at the GSEs and the possibility that legislation might reduce the size of the GSE portfolios has markedly lowered the share prices of Fannie and Freddie. Such events usually have only small and short-lived effects on either MBS or GSE spreads, again indicating that the market perceives the value of GSE senior debentures to be mainly determined by their assumption of a government guarantee and not by the current or prospective financial state of Fannie and Freddie.

[3] At the end of 2004, Fannie Mae's MBS portfolio consisted of roughly 92 percent of its own MBS and 7 percent of Freddie Mac's MBS. Freddie Mac's MBS portfolio consisted of 86 percent of its own MBS and 14 percent of Fannie Mae's MBS.

[4] At the end of 2004, insurance companies, mutual funds, thrifts, and private holders outside the United States each held more than 5 percent of the total. The remaining holders were widely dispersed across other entities.

purchased by a wide range of entities such as commercial banks, insurance companies, mutual funds and other domestic and international investors. Assuming the patterns of acquisition of MBS relative to other highly rated securities (such as Treasuries and AAA/AA corporate bonds) were similar during such a reduction as they have been in recent years, we believe it likely that as much as a third to a half of the $400 billion would go to holders outside the United States.[5] Insurance companies, who naturally desire longer-term assets, also should be large acquirers. Mutual funds and commercial banks likely would acquire most of the remainder of these MBS. In most instances, these acquisitions would be marginal additions to aggregate securities holdings of these entities. The available funds to acquire the MBS sold or not purchased by Fannie and Freddie would be supplied to the market by the $400 billion in cash stemming from the redemption of Fannie and Freddie debentures.

The market for highly rated assets in the United States alone is vast and deep, exceeding $23 trillion, and thus the replacement of one form of such assets (GSE debt) with other forms (e.g., GSE-guaranteed MBS, Treasuries or highly rated corporate bonds) should have little effect on interest rates overall. The MBS sales would be absorbed and distributed world-wide with yields on MBS and of other highly rated debt shifting by the very few basis points that would be required to induce the purchase of MBS relative to other high grade bond issues.

A significant reduction in GSE portfolios would leave home mortgage credit widely available to homeowners, just as it was prior to the late 1990s, before the GSEs' rapid expansion of their large mortgage and MBS portfolios. Moreover, Fannie and Freddie would continue to purchase similar quantities of mortgages for securitization; they just would not hold the mortgage-related securities in portfolio except for an MBS pipeline and any temporary acquisitions as the result of a crisis.[6] Thus, the liquidity and services they provide to the primary mortgage market should be unaffected by a contraction in their holdings of MBS, and mortgage originators such as small or rural banks would not need to change to whom they sell their mortgages because Fannie and Freddie would still have strong profit incentives to purchase them for securitization. [7]

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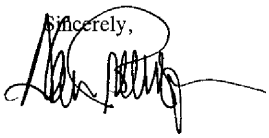
[5] I would note that central banks in other countries have long purchased agency debt and that many now hold MBS, in ever increasing quantities.

[6] Of course, Fannie and Freddie would be expected to hold those home mortgages that were difficult to securitize but required to fulfill their mission.

[7] I would be happy to provide you or your staff with more details on our views about the effect of an MBS portfolio reduction at the GSEs, or about our research on GSEs more generally.

In closing, it is certainly true that when dealing with policies that affect so important an institution as homeownership in this country, caution is always commendable. However, caution based on concerns without merit can be counterproductive. Indeed, in the case of the GSEs, excessive caution in reducing their portfolios could prove to be destabilizing to our financial system as a whole and in the end could seriously diminish the availability of home mortgage funds.

Sincerely,



Board of Governors of the Federal Reserve System

Monetary Policy Report to the Congress

Submitted pursuant to section 2B of the Federal Reserve Act

July 20, 2005

Letter of Transmittal

BOARD OF GOVERNORS OF THE
FEDERAL RESERVE SYSTEM
Washington, D.C., July 20, 2005

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,

Alan Greenspan, Chairman

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Monetary Policy Report to the Congress

Report submitted to the Congress on July 20, 2005, pursuant to section 2B of the Federal Reserve Act

Monetary Policy and the Economic Outlook

The U.S. economy continued to expand at a solid pace over the first half of 2005 despite the restraint imposed on aggregate demand by a further rise in crude oil prices. Household spending trended up, propelled by rising wealth and income and by low interest rates, and business outlays received ongoing support from favorable financial conditions, rising sales, and increased profitability. Moreover, the earlier declines in the foreign exchange value of the dollar shifted some domestic and foreign demand toward U.S. producers. Overall, the economic expansion was sufficient to create jobs at roughly the same pace as in late 2004 and to lower the unemployment rate further over the first half of this year.

Higher oil prices boosted retail prices of a broad range of consumer energy products and, as a result, continued to hold up the rate of overall consumer price inflation in the first half of 2005. In addition, the rise in energy prices this year, coupled with increases in the prices of some other commodities, imported goods, and industrial materials, put upward pressure on the costs of many businesses. A portion of these costs was passed on to consumers, which contributed to a higher rate of inflation in core consumer prices (that is, total prices excluding the food and energy components, which are volatile). As measured by the price index for personal consumption expenditures excluding food and energy, core inflation increased from an annual rate of 1½ percent in 2004 to about 2 percent between the fourth quarter of 2004 and May 2005. While survey measures of near-term inflation expectations have edged up this year, surveys, as well as readings from financial markets, suggest that expected inflation at longer horizons has remained contained.

With financial conditions advantageous for households and firms, a solid economic expansion in train, and some upward pressure on inflation, the Federal Open Market Committee (FOMC) continued to remove policy accommodation at a measured pace over the first half of the year, raising the intended federal funds rate an additional 1 percentage point, to 3¼ percent, by the end of June. At the most recent FOMC meeting, the Committee judged that policy remained accommodative. With appropriate monetary policy, however, the upside and downside risks to output and inflation were viewed as balanced, and the Committee underscored its commitment to respond to changes in economic prospects as needed to fulfill its obligation to maintain price stability.

The fundamental factors that supported the U.S. economy in the first half of 2005 should continue to do so over the remainder of 2005 and in 2006. In the household sector, the combination of further gains in employment, favorable borrowing terms, and generally healthy balance sheets should keep consumer spending and residential investment on an upward path. In the business sector, expanding sales, the low cost of capital, and the replacement or upgrade of aging equipment and software should help to maintain increases in capital spending. And, although economic performance has been uneven across countries, continued growth overall in the economies of U.S. trading partners should sustain the demand for U.S. exports. In contrast, ongoing increases in imports will likely continue to subtract from the growth of U.S. gross domestic product. In addition, high energy prices remain a drag on aggregate demand both here and abroad, though this drag should lessen over time if prices for crude oil level out in line with quotes in futures markets.

Despite the upward pressure on costs and prices over the past year or so, core consumer price inflation is likely to remain contained in 2005 and 2006. Longer-run inflation expectations are still well anchored, and because businesses are adding to their stocks of capital and are continuing to find ways to use their capital and work forces more effectively, structural productivity will likely rise at a solid pace over the foreseeable future. In addition, barring a further increase in oil prices, the boost that higher energy costs have given to core inflation should wane in coming quarters, while the recent appreciation of the dollar, as well as the deceleration in global materials prices, will likely reduce the impetus to inflation from rising import prices.

Of course, substantial uncertainties surround this economic outlook. A further sharp rise in crude oil prices would have undesirable consequences for both economic activity and inflation, and the possibility that housing prices, at least in some locales, have moved above levels that can be supported by fundamentals remains a concern. As another example, if the recent surge in measured

unit labor costs were to prove more persistent than currently appears likely, the outlook for inflation would be adversely affected. Economic growth and inflation will also be shaped importantly by the evolution of the imbalance in the U.S. current account.

The Conduct of Monetary Policy over the First Half of 2005

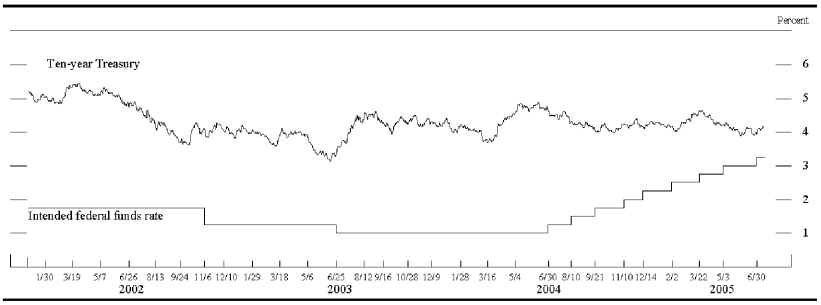
Despite increases in the federal funds rate totaling 1¼ percentage points in 2004, monetary policy was still judged to be accommodative at the start of 2005. At the time of the February FOMC meeting, the available information indicated that the economy had expanded at a robust pace through the end of 2004 and retained considerable momentum. Accordingly, the Committee voted to raise its target for the federal funds rate from 2¼ percent to 2½ percent and to make minimal changes to the text of the accompanying statement. The statement reiterated that "the Committee believes that policy accommodation can be removed at a pace that is likely to be measured." Members noted, however, that this forward-looking language was clearly conditioned on economic developments and therefore would not stand in the way of either a pause or a step-up in policy firming depending on events.

By March, the data were pointing to a further solid gain in activity during the first quarter, fueled especially by continued increases in consumption expenditures and residential investment. In addition, private nonfarm payrolls were posting widespread advances, and slack in resource utilization appeared to be diminishing. The Committee voted at its March meeting to raise the federal funds rate another 25 basis points, to 2¾ percent. In view of the rise in prices of energy and other commodities and recent elevated readings on inflation in core consumer prices, the Committee altered the text of the policy statement to note the pickup in inflationary pressures. The Committee also decided to modify the assessment of the balance of risks to make it explicitly conditional on an assumption of "appropriate" monetary policy, so as to underscore that maintaining balanced risks would likely require continued removal of policy accommodation.

The evidence that had accumulated by the spring pointed to some moderation in the pace of activity. Retail spending flattened out for a time, likely in response to higher energy prices, and the growth of capital spending dropped back from its elevated pace of late last year. Nonetheless, with long-term interest rates still quite low and with employment and profits continuing to rise, economic activity appeared to retain considerable momentum, suggesting that the softness would be short lived. Against this backdrop, the FOMC decided to raise the federal funds rate another 25 basis points at its May meeting and to make few changes to the text of the accompanying statement.

In the weeks after the May meeting, incoming indicators supported the view that the underlying pace of activity was not faltering. The information that the Committee reviewed at the time of the June FOMC meeting showed that consumer spending and business investment had turned up, on balance, and that demand for housing continued to be strong. With economic activity remaining firm and crude oil prices ratcheting higher, the FOMC

Selected interest rates



NOTE: The data are daily and extend through July 13, 2005. 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 FOMC meetings.
SOURCE: Department of the Treasury and the Federal Reserve.

voted to raise the funds rate an additional 25 basis points, to 3¼ percent, and to make only minimal changes to the text of the accompanying statement. This action brought the cumulative increase in the target federal funds rate since June 2004 to 2¼ percentage points.

Economic Projections for 2005 and 2006

In conjunction with the FOMC meeting at the end of June, the members of the Board of Governors and the Federal Reserve Bank presidents, all of whom participate in the deliberations of the FOMC, were asked to provide economic projections for 2005 and 2006. In general, Federal Reserve policymakers expect the economy to continue to expand at a moderate pace and core inflation to remain roughly stable over this period. The central tendency of the FOMC participants' forecasts for the increase in real (that is, inflation adjusted) GDP is 3½ percent over the four quarters of 2005 and 3¼ percent to 3½ percent in 2006. The civilian unemployment rate is expected to average 5 percent in both the fourth quarter of 2005 and the fourth quarter of 2006. FOMC participants project that the chain-type price index for personal consumption expenditures excluding food and energy will increase between 1¾ percent and 2 percent both this year and next.

Economic projections for 2005 and 2006

Percent

Indicator	Federal Reserve Governors and Reserve Bank presidents	
	Range	Central tendency
	2005	
Change, fourth quarter to fourth quarter[1]		
Nominal GDP	5–6¼	5½–5¾
Real GDP	3–3¾	3½
PCE price index excluding food and energy	1½–2¼	1¾–2
Average level, fourth quarter		
Civilian unemployment rate	5–5¼	5
	2006	
Change, fourth quarter to fourth quarter[1]		
Nominal GDP	5–6	5¼–5½
Real GDP	3¼–3¾	3¼–3½
PCE price index excluding food and energy	1½–2½	1¾–2
Average level, fourth quarter		
Civilian unemployment rate	5	5

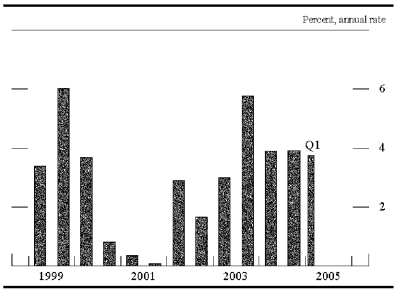
1. Change from average for fourth quarter of previous year to average for fourth quarter of year indicated.

Economic and Financial Developments in 2005

The economic expansion entered 2005 on a solid footing and was led by ongoing increases in consumption, residential investment, and business spending on equipment and software. Although the pace of expansion slowed somewhat in the early spring, activity has picked up again more recently. On average, real GDP appears to have increased a little less rapidly over the first half of 2005 than in the second half of 2004, a reflection in part of reduced fiscal stimulus and the drag on economic activity from higher energy prices. Industrial production has also risen more slowly so far this year than in 2004: The increase totaled 3 percent at an annual rate between December 2004 and June 2005, down from 5 percent during the previous six months. Nevertheless, the economic expansion has been sufficient to gradually absorb slack in labor and product markets. Nonfarm payroll employment has continued to increase, and the unemployment rate has moved down further since the beginning of the year, to 5 percent in June. Similarly, the rate of capacity utilization in the manufacturing sector stood at 78.4 percent in June, up from 77.9 percent at the end of 2004 and just a little below its long-term historical average.

Rising energy prices continued to boost consumer price inflation in the first half of 2005. With consumer energy prices having climbed more than 13 percent at an annual rate so far this year, the price index for personal consumption expenditures (PCE) increased at an annual rate of about 2½ percent between the fourth quarter of 2004 and May 2005, the same pace as in 2004. Meanwhile, the core PCE price index rose at an annual rate of about

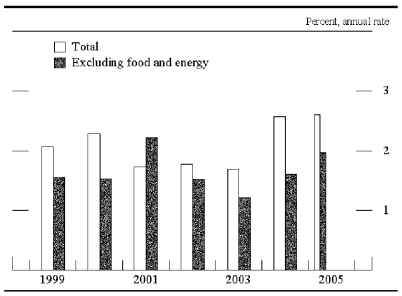
Change in real GDP



NOTE. Here and in subsequent charts, 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 PCE chain-type price index



NOTE: The data are for personal consumption expenditures (PCE). The changes for 2005 are from 2004:Q4 to May 2005.
SOURCE: Department of Commerce, Bureau of Economic Analysis.

2 percent in the first half of 2005, up from 1½ percent in 2004.

The Household Sector

Consumer Spending

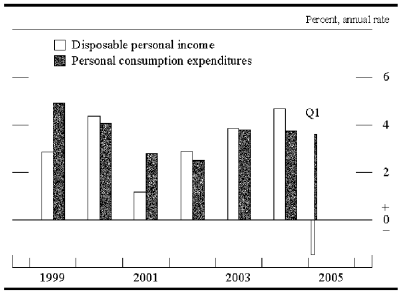
Consumer spending continued to move higher in the first half of this year, though not as rapidly as in the second half of 2004. After increasing at an average annual rate of 4½ percent in the third and fourth quarters of last year, real personal consumption expenditures rose at a 3½ percent rate in the first quarter and appear to have advanced at a roughly similar pace in the second quarter. Household spending this year has been supported by rising employment and household wealth as well as by the low level of interest rates. However, higher costs for consumer energy products have eroded households' purchasing power.

Sales of light motor vehicles, which had been buoyed in the second half of last year by a variety of sales inducements, dropped back in the first quarter after many of the inducements expired. However, sales firmed again in the second quarter to an average annual pace of more than 17 million units, a level similar to that in the fourth quarter of last year. Underlying demand for light motor vehicles has remained relatively strong, though sales likely have also been boosted recently by sizable price discounts.

Excluding motor vehicles, consumer spending posted strong gains in early 2005, flattened out in March, and picked up again in the spring. On a quarterly average basis, the rate of increase in non-auto spending appears to have stepped down in the second quarter, largely because of a deceleration in outlays for consumer goods. Meanwhile, real outlays for services rose at an annual rate of about 3 percent in the first quarter, and the available data point to an increase of about the same magnitude in the second quarter.

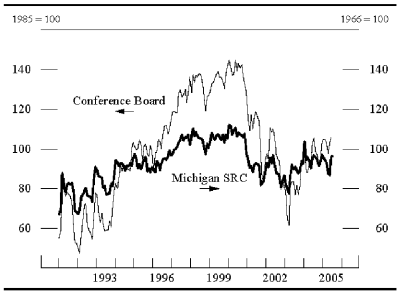
If the effect of Microsoft's $32 billion special dividend payment in December 2004 is excluded from the calculation, real disposable personal income (that is, after-tax income adjusted for inflation) rose at an annual rate of about 2 percent between the fourth quarter of 2004 and May 2005, a slower pace than in 2004. Although increases in employment and earnings pushed up wage and salary income over the first half of 2005, the rise in real income was damped to some degree by the energy-driven increase in consumer prices. Higher energy prices also appear to have weighed on consumer confidence for much of this year. Surveys by both the Michigan Survey

Change in real income and consumption



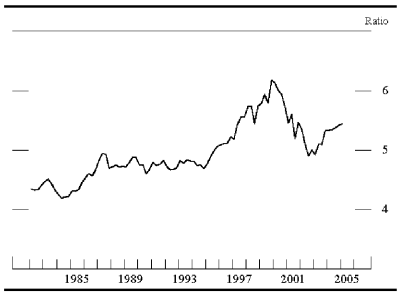
SOURCE: Department of Commerce, Bureau of Economic Analysis.

Consumer sentiment



NOTE: The Conference Board data are monthly and extend through June 2005. The Michigan SRC data are monthly and extend through a preliminary estimate for July 2005.
SOURCE: The Conference Board and University of Michigan Survey Research Center.

Wealth-to-income ratio



NOTE: The data are quarterly and extend through 2005:Q1. The wealth-to-income ratio is the ratio of household net worth to disposable personal income.
SOURCE: For net worth, Federal Reserve Board, flow of funds data; for income, Department of Commerce, Bureau of Economic Analysis.

Research Center (SRC) and the Conference Board indicate that household sentiment edged down through the early spring, though readings from these surveys turned up again more recently.

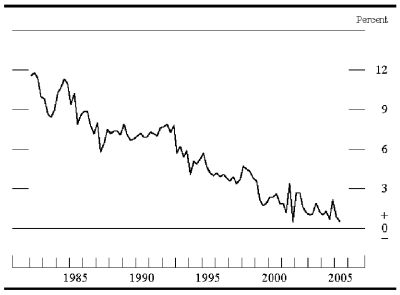
Household wealth appears to have increased a bit faster than nominal disposable income over the first half of this year; the small increase in the wealth-to-income ratio comes on the heels of substantial increases in 2003 and 2004. Although stock prices have changed little, on net, thus far this year, home prices have continued to rise sharply. Because changes in wealth influence consumer spending with a lag, both the earlier and the more-recent increases in household net worth have supported consumption this year. As wealth increased and interest rates remained quite low, the personal saving rate edged down to just ½ percent of disposable income in April and May. Over the previous two decades, the personal saving rate averaged close to 5 percent.

Residential Investment

Activity in the housing market continued at a strong pace in the first half of 2005. Real expenditures on residential structures increased at an annual rate of 11½ percent in the first quarter and appear to have posted another gain in the second quarter. In the single-family sector, starts of new units averaged 1.69 million at an annual rate between January and June—nearly 4 percent above the pace posted over the second half of 2004. Similarly, starts of multifamily units averaged 360,000 over the first six months of 2005, about 3¼ percent higher than in the previous six months.

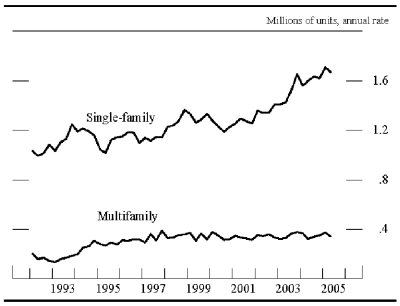
As in 2004, the demand for housing during the first half of 2005 was supported by rising employment and income and by low mortgage rates. Rates on thirty-year fixed-rate mortgages have fluctuated between 5½ percent and 6 percent in recent months and are currently near the low end of that range. In addition, demand reportedly has been boosted by a rise in purchases of second homes—either as vacation units or as investments—and by the greater availability of less-conventional financing instruments. These financing instruments, including interest-only mortgages and adjustable-rate mortgages that allow borrowers a degree of flexibility in the size of their monthly payments, have enabled some households to buy homes that would otherwise have been unaffordable. As a result, both new and existing home sales have remained remarkably robust this year, and both were at or near record levels in May.

Personal saving rate



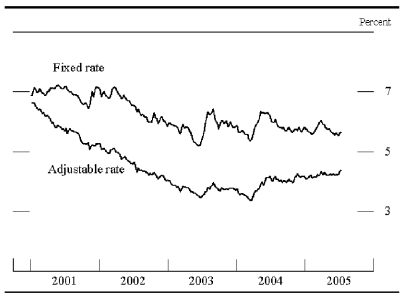
NOTE: The data are quarterly; the reading for 2005:Q2 is the average of April and May.
SOURCE: Department of Commerce, Bureau of Economic Analysis.

Private housing starts



NOTE: The data are quarterly and extend through 2005:Q2.
SOURCE: Department of Commerce, Bureau of the Census.

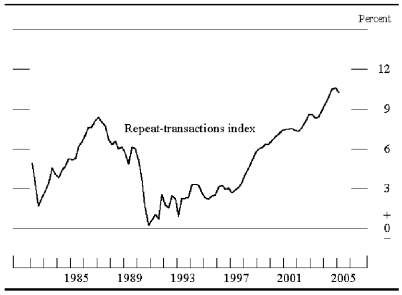
Mortgage rates



NOTE: The data, which are weekly and extend through July 13, 2005, are contract rates on thirty-year mortgages.
SOURCE: Federal Home Loan Mortgage Corporation.

The strong demand for housing has continued to push up home prices this year. Although rates of house price appreciation were a little slower in the first quarter of this year than in 2004, the repeat-transactions price index for existing homes (limited to purchase-transactions only), which is published by the Office of Federal Housing Enterprise Oversight and partially adjusts for changes in the quality of homes sold, was nonetheless up 10 percent relative to its year-earlier level. Price appreciation has been especially sharp over the past year in some large metropolitan areas, including Las Vegas, Miami, San Francisco, and New York, but rapid increases in home prices have been observed in other areas as well. In many of these locales, recent price increases have far exceeded the increases in rents and household incomes.

Change in house prices



NOTE: The data are quarterly and extend through 2005:Q1. Change is over four quarters. For the years preceding 1991, changes are based on an index that includes appraisals associated with mortgage refinancings. Beginning in 1991, changes are based on an index that includes purchase transactions only.
SOURCE: Office of Federal Housing Enterprise Oversight.

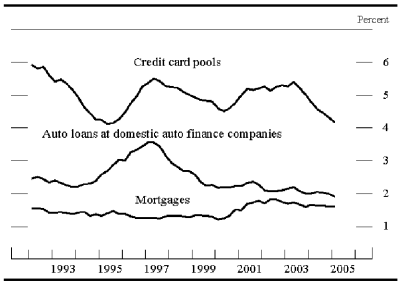
Household Finance

Supported by rising house prices and continued economic expansion, household debt increased at an annual rate of about 9¼ percent in the first quarter of 2005. This advance was paced by a rise in mortgage debt of 10½ percent at an annual rate. However, even that rapid rise in mortgage debt represented a slight deceleration from the torrid pace in 2004, a development in line with the small slowdown in the pace of house price appreciation. Despite the increase in mortgage debt, net housing wealth rose. Refinancing activity has remained subdued, as rates on fixed-rate mortgages are a little above levels at which many households would currently find refinancing to be attractive.

Consumer credit expanded at an annual rate of about 4½ percent over the first quarter of the year and was about unchanged in April and May. The growth of consumer credit has continued to be restrained by substitution toward home equity debt as a means to finance household expenditures.

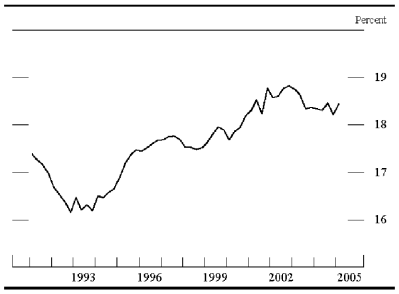
Measures of household credit quality have remained favorable. Delinquency rates on credit card debt and auto loans have continued to decline from already low levels. The pace of bankruptcy filings has run a little higher than at the same time last year; however, that pace has probably been boosted by a rush to file before the new rules in the Bankruptcy Abuse Prevention and Consumer Protection Act of 2005 take effect in October. Reflecting the rapid pace of household debt growth, the ratio of household financial obligations to disposable personal income has edged up from a year earlier, though this ratio remains a bit below the peak level reached in late 2002.

Delinquency rates on selected types of household loans



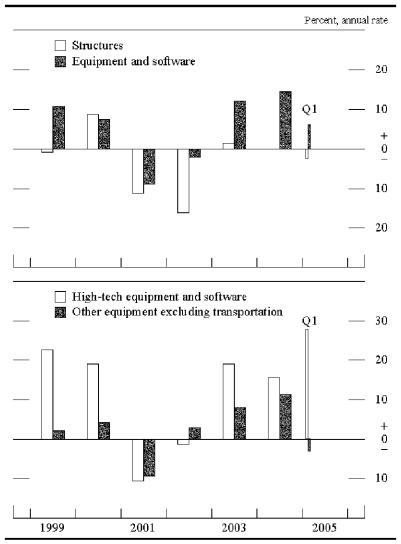
NOTE: The data are quarterly and extend through 2005:Q1.
SOURCE: For credit cards, Moody's Investors Service; for auto loans, the financing subsidiaries of the three major U.S. automobile manufacturers; for mortgages, Mortgage Bankers Association.

Household financial obligations ratio



NOTE: The data are quarterly and extend through 2005:Q1. The financial obligations ratio equals the sum of required payments on mortgage and consumer debt, automobile leases, rent on tenant-occupied property, homeowners' insurance, and property taxes, all divided by disposable personal income.
SOURCE: Federal Reserve Board.

Change in real business fixed investment



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

The Business Sector

Fixed Investment

After posting a robust gain in the second half of 2004, real business fixed investment rose at a more moderate pace over the first half of 2005, as the rate of increase in expenditures on equipment and software (E&S) dropped back and outlays for nonresidential structures remained lackluster. Nonetheless, economic and financial conditions appear to be supportive of capital spending: Sales and corporate profits have continued to increase, businesses have ample liquid assets at their disposal, and financial market participants appear willing to finance new investment projects at favorable terms.

Real E&S spending rose at an annual rate of 6 percent in the first quarter after having advanced at an 18 percent pace in the second half of 2004. Led by large increases in purchases of computers and communications equipment, spending on high-tech equipment posted a sizable gain in the first quarter. In contrast, outlays for transportation equipment dropped back early in the year because of a small decline in business expenditures on motor vehicles and a sharp drop in aircraft purchases after a surge in the fourth quarter of 2004. Investment in equipment other than high-tech and transportation goods, a category that accounts for about 40 percent of E&S in nominal terms, also edged down in the first quarter after registering a sizable gain in the second half of last year. The types of equipment in this category of investment tend to be sensitive to trends in business sales, but the timing of business spending may have been influenced by the provisions of the partial-expensing tax incentive, which encouraged capital spending to be pulled forward in advance of the incentive's expiration at the end of 2004.

More-recent indicators of E&S spending point to another moderate rise in investment in the second quarter. In particular, outlays for transportation equipment appear to have turned up, on net, as a step-up in purchases of aircraft more than offset a further decline in business spending on motor vehicles. At the same time, the evidence on high-tech spending has been mixed: Real spending on computers appears to have registered another large gain in the second quarter, while the rate of increase in outlays for communications equipment apparently fell back. Indicators of spending on equipment other than transportation and high tech have looked more favorable recently, as shipments and imports for this broad category increased noticeably, on balance, in April and May. In addition, unfilled orders for such equipment remain at high levels.

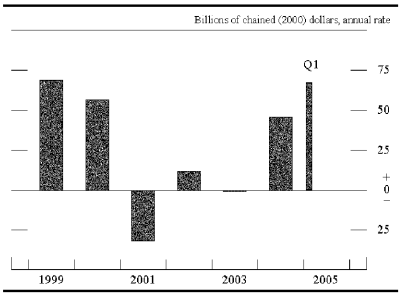
Real nonresidential construction continued at a low level in the first half of this year, but fundamentals are starting to show signs of improvement. The construction of office buildings and industrial facilities has been restrained for some time by elevated vacancy rates, weak

demand, and higher costs for construction materials. However, vacancy rates in these sectors have recently turned down, and construction outlays for these types of buildings appear to have edged higher, on net, so far this year. Commercial building—which includes retail outlets and warehouses—also appears to have increased this year, in part because of strong growth in the construction of large retail stores. Meanwhile, investment in the drilling and mining sector has trended up, on balance, over the past year, as higher prices for natural gas boosted the demand for new drilling rigs.

Inventory Investment

As in 2004, businesses accumulated inventories at an appreciable pace early this year. Outside the motor vehicle industry, nonfarm inventories increased at an annual rate of $66 billion in real terms in the first quarter of 2005. The rapid rate of inventory accumulation late last year and early in 2005 appears primarily to have been the result of efforts by firms to replenish stocks that had been depleted by the strong pace of sales in 2003 and 2004; apart from firms in a limited number of sectors, such as steel and paper, most businesses do not appear to be holding excess stocks, even taking into account the downward trend in inventory–sales ratios that has resulted from the improvement in supply-chain management capabilities. The rebuilding of inventories in most industries appears to have been largely completed, and the available data for April and May point to a noticeable step-down in the pace of stockbuilding. Indeed, in recent surveys, businesses have been reporting that they and their customers are increasingly comfortable with current levels of stocks, whereas in 2004 and early 2005, many were still characterizing inventory positions as too lean.

Change in real business inventories



SOURCE: Department of Commerce, Bureau of Economic Analysis.

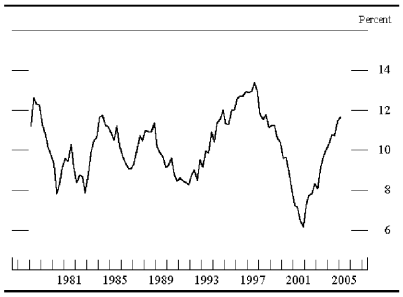
One important exception to this characterization is the motor vehicle industry, for which dealer stocks—especially of light trucks—were high by historical standards in recent months. In response, several major motor vehicle manufacturers reduced production in the second quarter, and, more recently, some have introduced price discounts on many 2005 models. These efforts appear to have helped, in that inventories of light vehicles at the end of June fell to sixty-five days of supply, a level more in line with historical norms.

Corporate Profits and Business Finance

Corporate profits have continued to rise so far this year, though at a slower pace than in 2003 and 2004. Earnings per share for S&P 500 firms in the first quarter of 2005 were up about 13 percent since the same time last year, a pace in line with the profit figures reported in the national income and product accounts (NIPA). The ratio of before-tax profits of nonfinancial corporations to that sector's gross value added was about flat in the first quarter after having moved up in 2003 and 2004. In the first half of this year, the petroleum and gas industries benefited from higher oil prices, but corporate earnings in the automobile sector declined sharply.

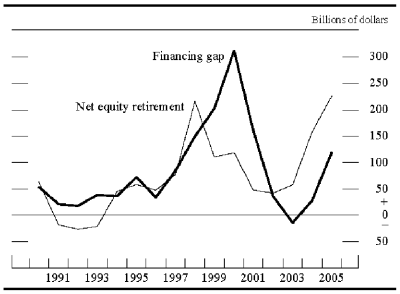
Given continued strong corporate profits and the accompanying strength in cash flow, nonfinancial firms' demand for external financing to fund capital expenditures has remained somewhat subdued. Net equity issuance has stayed negative so far this year, and share retirements have been boosted by considerable stock buybacks and cash-financed merger and acquisition activity. Gross corporate bond issuance has been limited, and the pro-

Before-tax profits of nonfinancial corporations as a percent of sector GDP



NOTE: The data are quarterly and extend through 2005:Q1. Profits are from domestic operations of nonfinancial corporations, with inventory valuation and capital consumption adjustments.
SOURCE: Department of Commerce, Bureau of Economic Analysis.

Financing gap and net equity retirement at nonfinancial corporations

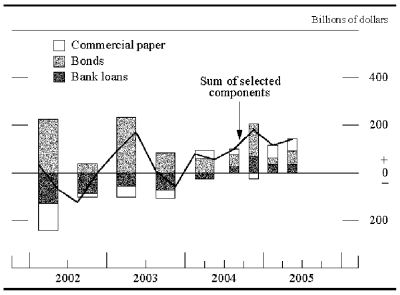


NOTE: The data are annual through 2004; for 2005, they are estimates based on data from 2005:Q1. The financing gap is the difference between capital expenditures and internally generated funds. Net equity retirement is the difference between equity retired through share repurchases, domestic cash-financed mergers, or foreign takeovers of U.S. firms and equity issued in public or private markets, including funds invested by venture capital partnerships.
SOURCE: Federal Reserve Board, flow of funds data.

ceeds have been used mainly to pay down existing debt. Short-term debt financing, however, continued to pick up in the first half of 2005. Both commercial and industrial loans and commercial paper expanded at a brisk pace that was likely in part the result of firms' need to fund the rapid rate of inventory accumulation earlier in the year. The Federal Reserve's Senior Loan Officer Opinion Survey on Bank Lending Practices conducted in April 2005 indicated that demand for business loans had strengthened over the previous three months and that substantial fractions of banks had eased standards and terms on these loans. In response to special questions regarding longer-term changes in lending practices, most banks reported that standards on business loans were somewhat tighter, but that terms were somewhat easier, than they had been in 1996 and 1997.

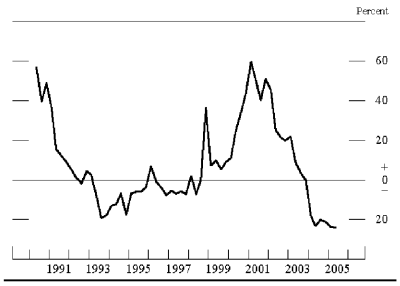
Indicators of credit quality in the nonfinancial business sector have stayed generally very strong amid continued growth of profits and corporate balance sheets that remain flush with liquid assets. Both the default rate on outstanding corporate bonds and the delinquency rate

Selected components of net business financing



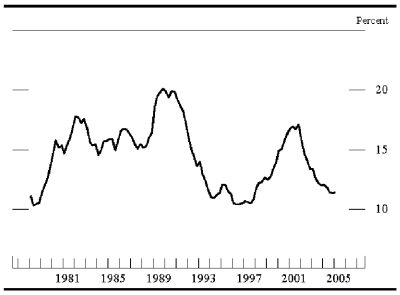
NOTE: Seasonally adjusted annual rate for nonfinancial corporate business. The data for the sum of selected components are quarterly. The data for 2005:Q2 are estimated.
SOURCE: Federal Reserve Board; Securities Data Company; and Federal Financial Institutions Examination Council, Consolidated Reports of Condition and Income (Call Report).

Net percentage of domestic banks tightening standards on commercial and industrial loans to large and medium-sized borrowers



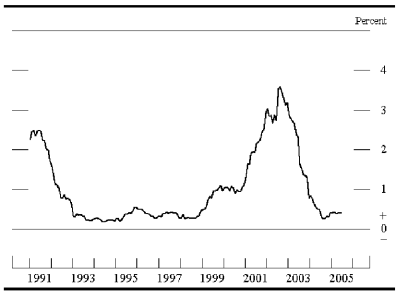
NOTE: The data are drawn from a survey generally conducted four times per year; the last observation is for the April (Q2) 2005 survey. Net percentage is the percentage of banks reporting a tightening of standards less the percentage reporting an easing. The definition for firm size suggested for, and generally used by, survey respondents is that large and medium-sized firms have sales of $50 million or more.
SOURCE: Federal Reserve, Senior Loan Officer Opinion Survey on Bank Lending Practices.

Net interest payments of nonfinancial corporations as a percent of cash flow



NOTE: The data are quarterly and extend through 2005:Q1.
SOURCE: Department of Commerce, Bureau of Economic Analysis.

Default rate on outstanding corporate bonds



NOTE. The data are monthly and extend through June 2005. The rate for a given month is the face value of bonds that defaulted in the twelve months ending in that month divided by the face value of all bonds outstanding at the end of the calendar quarter immediately preceding the twelve-month period.
SOURCE. Moody's Investors Service.

on business loans stand at the low end of their historical ranges. However, the automobile sector has been an exception to the pattern of solid corporate credit quality. All three major credit rating agencies downgraded the debt of both Ford and General Motors this year in response to disappointing earnings news. General Motors' debt now has a below-investment-grade rating from both Standard & Poor's and Fitch, though it is still rated as investment-grade by Moody's. Ford retains an investment-grade rating with all the rating agencies except Standard & Poor's.

Expansion of commercial-mortgage debt continued apace in the first half of the year and was accompanied by record issuance of commercial-mortgage-backed securities. Likely because of that heavy issuance, spreads of yields on commercial-mortgage-backed securities over those on comparable-maturity Treasuries have turned up recently, but these spreads remain relatively low. The credit quality of commercial-mortgage debt remains quite strong, as delinquency rates on holdings of commercial mortgages at banks and insurance companies and on loans that back mortgage securities have been declining from already low levels.

The Government Sector

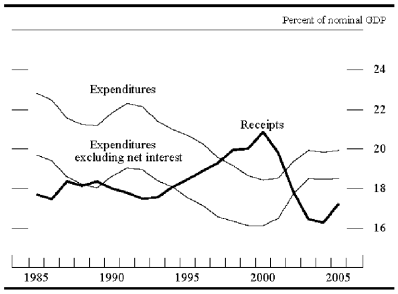
Federal Government

The deficit in the federal unified budget narrowed over the past year. Over the twelve months ending in June, the unified budget recorded a deficit of $336 billion, $99 billion less than during the comparable period last year. Both revenues and outlays rose faster than did nominal GDP over this period, but the rise in receipts was especially strong. Even at its lower level, the deficit was still equal to about 2¾ percent of nominal GDP.

Nominal federal receipts during the twelve months ending in June were 14 percent higher than during the same period a year earlier and reached 17 percent of nominal GDP. Revenues were boosted by a large increase in corporate receipts that was driven by the strength of corporate profits. In addition, individual income and payroll taxes rose nearly 12 percent, twice as fast as the growth of household income. However, some of this rise was due to the features of the Jobs and Growth Tax Relief Reconciliation Act of 2003 that altered the timing of tax payments in a way that temporarily reduced the level of tax collections last year.

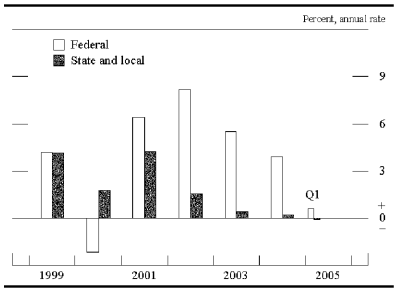
Nominal federal outlays during the twelve months ending in June were 7 percent higher than during the same period a year ago and stood at 20 percent of nominal GDP. Spending for national defense continued to trend up at a rapid clip, and outlays for Medicare also posted a sizable increase. In addition, federal net interest payments, boosted both by higher interest rates and by the higher level of federal debt, rose more than 13 percent over this period. Real federal expenditures for consumption and investment—the part of government spending that is a component of real GDP—increased at an annual rate of just ½ percent in the first calendar quarter of 2005 after having risen 4 percent in 2004. Although defense spending changed little in real terms in the first quarter, it has risen considerably in recent years and is likely to increase further in coming quarters. Nondefense spending in the first quarter edged up in line with its recent trend, and enacted legislation is consistent with its continuing to rise at a subdued pace.

Federal receipts and expenditures



NOTE. The budget data are from the unified budget through 2004 and are for fiscal years (October through September), and GDP is for Q4 to Q3. For 2005, the budget data are for the twelve months ending in June, and GDP is for 2004:Q4 to 2005:Q1.
SOURCE. Office of Management and Budget.

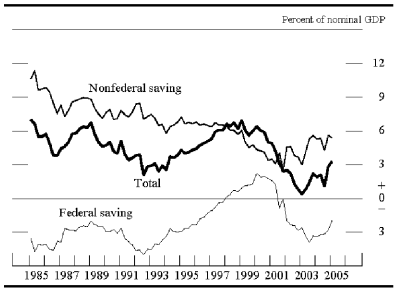
Change in real government expenditures on consumption and investment



SOURCE: Department of Commerce, Bureau of Economic Analysis.

The deficit in the federal budget has depressed national saving in the past few years. The narrowing of the deficit of late has lessened this reduction in national saving from a little more than 3 percent of nominal GDP in 2003 and 2004 to roughly 2 percent in the first quarter of 2005. Even so, as business and personal saving rates changed little, on average, over the past year, net national saving rose to just 3¼ percent of nominal GDP in the first quarter, well below the long-term historical average of about 7 percent and below recent levels of net domestic investment. If not reversed, such a low level of net national saving will necessitate either slower capital formation or continued heavy borrowing from abroad. The pressures on national saving will intensify greatly with the retirement of the baby-boom generation and the associated increases in Social Security and Medicare benefit payments.

Net saving



NOTE: The data are quarterly and extend through 2005:Q1. Nonfederal saving is the sum of personal and net business saving and the net saving of state and local governments.

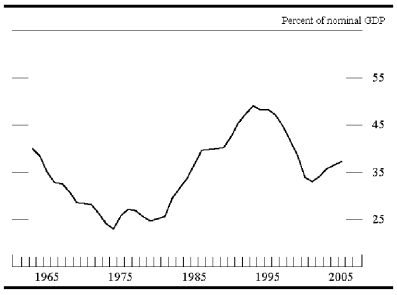
SOURCE: Department of Commerce, Bureau of Economic Analysis.

Federal Borrowing

Because of the need to finance the sizable federal budget deficit, federal debt held by the public expanded at a seasonally adjusted annual rate of 13¾ percent in the first quarter of the year. The ratio of this debt to nominal GDP increased to more than 37 percent for the first time since 2000. The average maturity of outstanding marketable Treasury debt has been declining for several years and reached fifty-three months at the end of the first quarter of 2005, down from about seventy months in 2000. However, in the May mid-quarter refunding statement, the Treasury announced that it was considering reintroducing regular issuance of a thirty-year nominal bond in February 2006, a move that would presumably slow or arrest this downtrend.

Indicators of demand for Treasury securities by foreign investors have been mixed so far this year; demand by foreign official institutions seems to have moderated, but demand by foreign private investors appears to have remained robust. Indirect bidders at Treasury auctions—which include foreign official institutions that place bids through the Federal Reserve Bank of New York—have been awarded an average of 33 percent of coupon securities issued at auctions held so far this year, down from 42 percent in 2004. Treasury securities held in custody at the Federal Reserve Bank of New York on behalf of foreign official institutions have grown only about $25 billion so far this year after an increase of more than $200 billion in 2004. Data from the Treasury International Capital System also suggest an ebbing of demand for Treasury securities from foreign official investors during the first five months of the year. These data, however, indi-

Federal government debt held by the public



NOTE: The final observation is for 2005:Q1. For previous years, the data for debt are as of year-end, and 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.

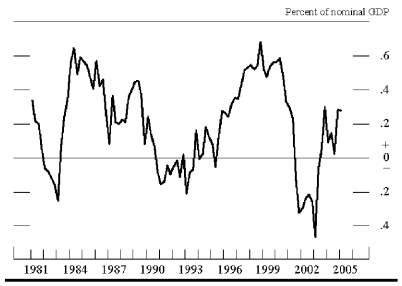
cate that foreign private investors have continued to accumulate Treasury securities at a rapid pace.

State and Local Governments

The fiscal positions of states and localities have improved this year. Ongoing gains in income and consumer spending, along with sharp increases in property values, have continued to boost tax receipts. Although many jurisdictions have increased their spending moderately, some are also using the additional revenues to rebuild reserve funds. On a NIPA basis, net saving by state and local governments equaled $34 billion at an annual rate in the first quarter (roughly ¼ percent of nominal GDP), double the 2004 average. In addition, virtually all states registered surpluses in their general fund budgets in fiscal year 2005, which ended on June 30 for all but four states. Nevertheless, lingering fiscal concerns are still evident in some jurisdictions; these concerns are related primarily to rising Medicaid costs, the termination of temporary federal grants that were appropriated in fiscal year 2004, and pressures to restore funding to programs—such as elementary and secondary education—that were cut back earlier in the decade.

Real consumption and investment spending by state and local governments edged down in the first quarter of 2005 after having changed little in 2004. Real outlays for consumption items increased at an annual rate of less than ½ percent, a reflection of some slowing in the pace of hiring. Nominal spending on investment rose at a moderate rate in the first quarter, but because construction costs escalated, investment spending declined a little in real terms.

State and local government net saving



NOTE: The data, which are quarterly, are on a national income and product account basis and extend through 2005:Q1. Net saving excludes social insurance funds.
SOURCE: Department of Commerce, Bureau of Economic Analysis.

State and Local Government Borrowing

State and local government debt held by the public expanded at a rapid pace in the first quarter of the year, rising at a seasonally adjusted annual rate of 16¼ percent, up from 5½ percent in the fourth quarter of last year. However, much of this borrowing was for the advance refunding of existing debt, as state and local governments continued to take advantage of low long-term interest rates. A significant portion of the proceeds of these advance refundings were invested in U.S. Treasury instruments tailored to meet the cash management needs of municipal governments. In addition, financing of transportation- and education-related projects boosted issuance of long-term municipal bonds for new capital.

The credit quality of municipal borrowers improved last year, and this trend has generally continued so far in 2005, as upgrades of municipal bonds by Standard & Poor's continued to outpace downgrades.

The External Sector

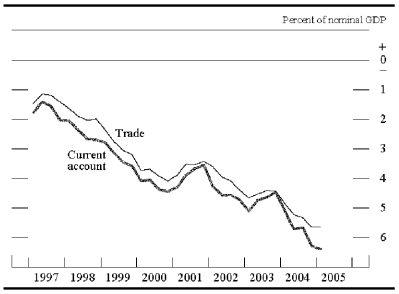
The U.S. current account deficit expanded in the first quarter of 2005 to $780 billion at an annual rate, or about 6.4 percent of nominal GDP. The deficit in trade in goods continued to widen, increasing $17 billion from the previous quarter. The deficit on net unilateral transfers also widened in the first quarter, largely because of an increase in government grants. In contrast, the surplus on trade in services rose $7 billion, and the surplus on net investment income rose $2 billion.

International Trade

Real exports of goods and services accelerated in the first quarter of 2005 to an annual rate of about 9 percent, roughly twice as fast as the rate in the second half of last year. The dollar's decline in recent years has raised the competitiveness of U.S. relative prices and has continued to provide a mounting boost to exports. Support from foreign economic activity, though still substantial, moderated after the first half of 2004 as growth abroad slowed. Increases in exports of U.S. goods were widespread across major U.S. trading partners, with the exception of Japan, and were concentrated in capital goods and consumer goods. Real exports of services rose at an annual rate of about 13¼ percent.

Real imports of goods and services rose at an annual rate of about 9½ percent in the first quarter, a pace similar to the average in 2004. The growth of real oil imports ebbed after surging late last year. Increases in imports of non-oil goods were widespread across categories. The

U.S. trade and current account balances

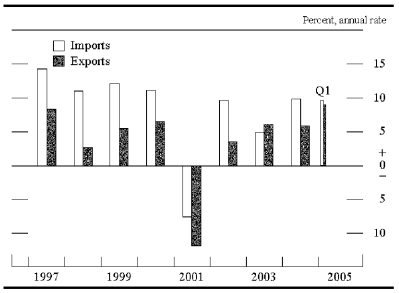


NOTE: The data are quarterly and extend through 2005:Q1.
SOURCE: Department of Commerce.

expiration of the Multifibre Arrangement and the resulting elimination of quotas shifted the source of some U.S. textile and apparel imports among U.S. trading partners, but these events appear to have had a limited effect on the overall level of imports of these goods. Real imports of services reversed their fourth-quarter decline, posting a gain of 7 percent at an annual rate, as some travel-related expenditures and also royalties and license fees recovered from a very weak fourth quarter.

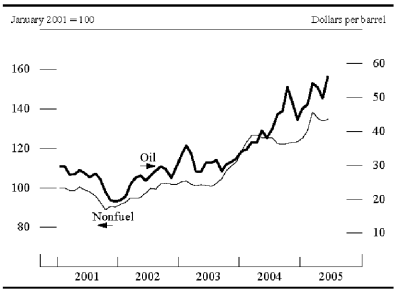
Boosted by substantial increases in the prices of primary commodities and industrial supplies, prices of total exports rose at an annual rate of 4¼ percent in the first quarter. Prices of U.S. agricultural exports rebounded in the first quarter after good harvests in the second half of 2004 had caused prices to fall sharply. The available data for the second quarter point to continued increases in export prices.

Change in real imports and exports of goods and services



SOURCE: Department of Commerce.

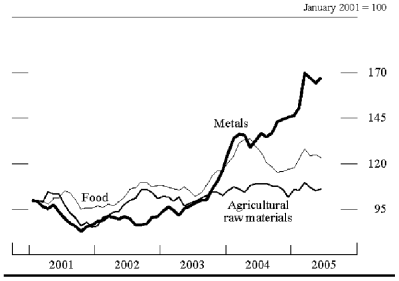
Prices of oil and of nonfuel commodities



NOTE: The data are monthly and extend through June 2005. 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, *Wall Street Journal;* for nonfuel commodities, International Monetary Fund.

Prices of imported non-oil goods rose at an annual rate of 3¾ percent in the first quarter, almost 1½ percentage points faster than in the second half of 2004. Prices of material-intensive items, such as industrial supplies and foods, steadily increased in the last quarter of 2004 and in the first quarter of 2005. In part, this rise reflected higher prices for nonfuel primary commodities, as strength in global demand for many commodities outstripped a slow expansion of supply. Prices for finished goods, such as consumer goods and many kinds of capital goods, also turned noticeably higher. Available data for the second quarter show that the increases in prices of both material-intensive and finished goods have slowed.

Prices of major nonfuel commodities



NOTE: The data are monthly and extend through June 2005. The category of agricultural raw materials consists of timber, cotton, wool, rubber, and hides; food includes cereals, vegetable oils and protein meals, seafood, and meat; and metals includes aluminum, copper, and iron ore.
SOURCE: International Monetary Fund.

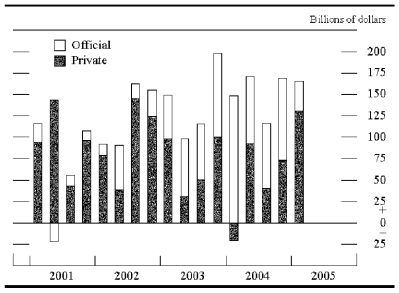
The spot price of West Texas intermediate (WTI) crude oil began 2005 near $43 per barrel, but it climbed above $50 per barrel in late February and breached $60 per barrel in late June. The increase in the spot price of WTI largely reflects several global factors: continued strong demand for oil, limited spare production capacity, and concerns about the reliability of supply from some foreign sources. In contrast to the market outlook during last October's peak in oil prices, futures contracts indicate that market participants now expect oil prices to remain near their current high levels, a view consistent with the belief that demand will remain strong and production will have difficulty keeping pace. The price of the far-dated NYMEX oil futures contract (currently for delivery in December 2011) rose from about $38 per barrel as of last October to about $56 per barrel in late June.

OPEC spare production capacity appears to be near historical lows, with only Saudi Arabia able to increase production substantially. Many other OPEC producers are either pumping close to capacity or encountering production problems. Venezuela and Indonesia cannot meet their production quotas, and Iraqi production this year has averaged less than in 2004. In addition, several governments have moved to increase their control of the energy industry as oil prices have risen. Russian oil production, which had provided most of the growth in non-OPEC supply over the previous five years, has stagnated since last September amid the partial nationalization of Yukos, formerly Russia's largest oil company. Venezuela has also increased the taxes and royalty payments of foreign oil firms.

The Financial Account

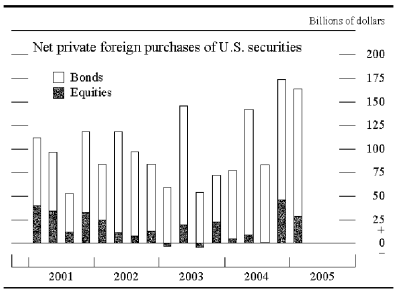
Foreign official inflows, which accounted for more than half of all net financial inflows to the United States in 2004, slowed significantly in the first quarter but showed signs of renewed strength in April and May. In contrast, private inflows moderated in April and May after having increased substantially in the preceding six months. As has been the case for several years, the U.S. current account has been financed primarily by foreign purchases of U.S. debt securities. U.S. residents' purchases of foreign securities increased after a temporary lull in the fourth quarter and have been more heavily weighted toward purchases of equities.

U.S. net financial inflows



SOURCE: Department of Commerce.

U.S. net international securities transactions



SOURCE: Department of Commerce and the Federal Reserve Bank of New York.

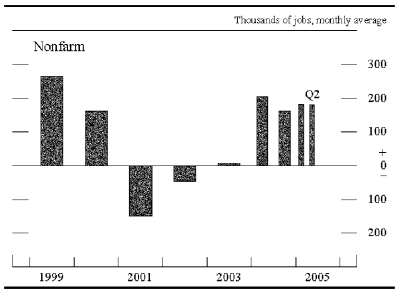
Net direct investment outflows in the first quarter were well below their levels in the fourth quarter; direct investment into the United States was roughly unchanged, but U.S. direct investment abroad fell back after a surge in new equity late last year. There is little evidence to date that U.S. companies have repatriated earnings from their foreign subsidiaries using the temporarily reduced tax rate available under the American Jobs Creation Act of 2004. However, there are indications that these remittances may pick up in the second half of this year.

The Labor Market

Employment and Unemployment

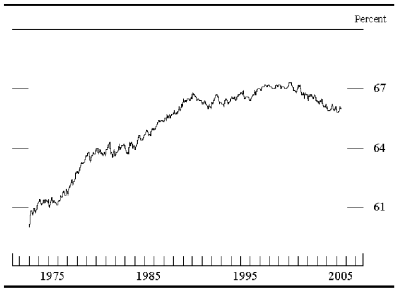
Labor markets have continued to improve this year, albeit at an uneven pace from month to month. On average, nonfarm payroll employment expanded roughly 180,000 per month over the first half of 2005, about the same pace as in the fourth quarter of 2004. At the same time, the civilian unemployment rate, which had declined from 5¾ percent to just below 5½ percent over 2004, continued to move down. The jobless rate stood at 5 percent in June, the lowest level since September 2001.

Net change in payroll employment



SOURCE: Department of Labor, Bureau of Labor Statistics.

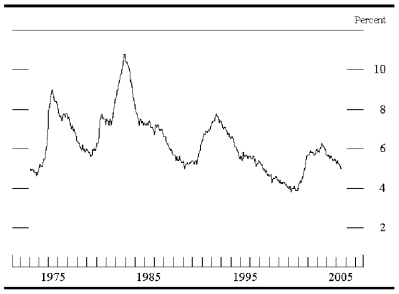
Labor force participation rate



NOTE: The data are monthly and extend through June 2005.
SOURCE: Department of Labor, Bureau of Labor Statistics.

The increases in payrolls over the first half of 2005 were relatively widespread across industries. Particularly sizable gains were registered at providers of health-care services and leisure and hospitality services and at establishments that provide business services, such as professional and technical assistance and administrative and support services (a category that includes temporary help). In addition, construction employment continued to climb at a steady pace, a reflection of the buoyant residential housing market and increased spending on infrastructure by state and local governments. In contrast, manufacturing employment continued to trend down, as cutbacks in industries that produce wood products, furniture, and a variety of nondurable goods more than offset hiring at producers of fabricated metals and machinery. Employment in retail trade has advanced at a moderate pace this year. Increases in employment at state and local governments slowed somewhat in the first half of this year from the pace in the second half of last year, and federal civilian employment changed little.

Civilian unemployment rate



NOTE: The data are monthly and extend through June 2005.
SOURCE: Department of Labor, Bureau of Labor Statistics.

The gradual rise in job opportunities appears to be attracting some potential workers back into the labor market. The labor force participation rate, which had declined noticeably between 2000 and 2004, edged up over the first half of 2005. Nevertheless, the participation rate in June, at 66 percent, remained well below the high of 67¼ percent reached in early 2000. To some extent, both the high level of the participation rate in 2000 and the more recent decline are likely related to cyclical developments in the economy: The tight labor markets of the late 1990s, perhaps coupled with the introduction of work requirements for many welfare recipients, undoubtedly drew additional people into the labor force at that time, while the subsequent recession and slow recovery in the labor market have discouraged many job seekers in recent years. However, the downtrend in the aggregate participation rate also appears to be associated with structural developments that seem likely to limit future increases. For example, the large baby-boom cohorts are now entering ages at which labor force participation rates typically drop off sharply. And, in contrast to patterns observed in previous decades, participation rates for women between 25 and 54 years of age no longer appear to be trending up.

Productivity and Labor Costs

Gains in labor productivity have slowed, on balance, in recent quarters. According to currently published data, output per hour in the nonfarm business sector rose 2½ percent over the year ending in the first quarter of

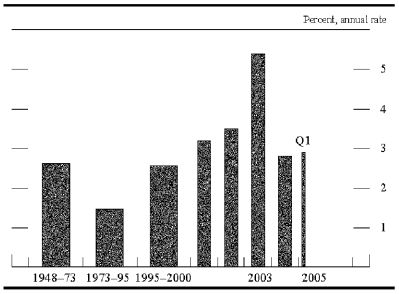
2005, down from the 5½ percent pace registered in the comparable period a year earlier. A deceleration in productivity is not unusual as an economic expansion matures and as businesses—which become increasingly confident about future prospects for sales—step up their pace of hiring. In addition, the recent slowdown in productivity growth was from the unusually rapid average rate that prevailed between 2002 and early 2004. That elevated rate likely reflected both an atypical reluctance to hire—as employers reacted to a succession of economic and geopolitical shocks—and newfound efficiencies brought about by the better use of high-tech capital purchased by businesses in earlier years and by organizational changes implemented to maintain profitability when the economy was relatively weak. As the impetus from these influences has waned, productivity growth has fallen back.

Measures of labor compensation for recent quarters suggest that the remaining slack in labor markets continued to restrain increases in base wage rates but that large increases in some of the more flexible components of worker pay and for some types of employer-provided benefits added to labor costs. In particular, compensation per hour in the nonfarm business sector, which is based on the data from the national income and product accounts, rose 7 percent over the four quarters ending in the first quarter of this year, having registered a particularly large bulge in the final quarter of 2004. Much of this sharp rise may be the result of the exercise of a large number of stock options late last year, a development perhaps induced by an increase in equity prices that boosted the number of options that were "in the money" and by a proposed change in accounting regulations that led some companies to accelerate the vesting of options that had been previously granted. In addition, the strong performance of profits in 2004 may have been associated with sizable nonproduction bonus payments at the end of last year.

A more modest rate of increase in hourly compensation is indicated by the employment cost index (ECI), which is based on a quarterly survey of private nonfarm establishments conducted by the Bureau of Labor Statistics and which excludes income received from the exercise of stock options. In particular, the ECI measure of hourly compensation rose 3½ percent over the twelve months ending in March 2005, about ½ percentage point less than the increases over the preceding two years. The wages and salaries component of the ECI was up just 2½ percent over the twelve months ending in March, a pace similar to that in the preceding year, while employer costs for benefits increased 5¾ percent, a bit below the pace of the previous year but a sizable gain nonetheless. Part of the outsized rise in benefit costs stemmed from the need by many companies to rebuild their defined-benefit pension assets to make up for earlier losses in those plans. In addition, health insurance costs have continued to rise more rapidly than wages, although the 7½ percent increase in these costs over the year ending in March of this year was down from the double-digit rates of growth in 2002 and 2003.

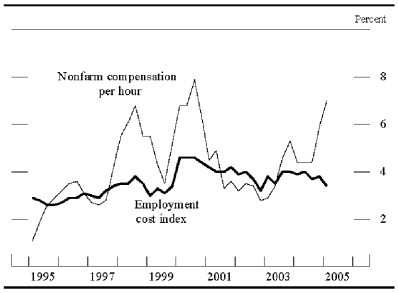
The acceleration in the nonfarm business measure of hourly compensation, coupled with the deceleration in productivity, has contributed to a noticeable pickup in unit labor costs in recent quarters. In particular, unit labor costs rose 4¼ percent over the four quarters ending in the first quarter of 2005 after having declined 1 percent over the preceding four quarters. However, to the extent that the acceleration in compensation was the

Change in output per hour



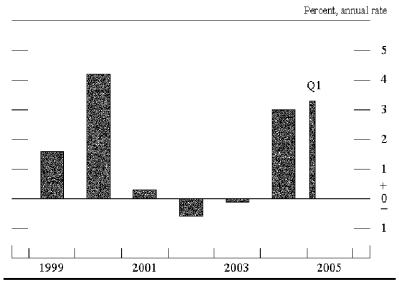
NOTE: Nonfarm business sector.
SOURCE: Department of Labor, Bureau of Labor Statistics.

Measures of change in hourly compensation



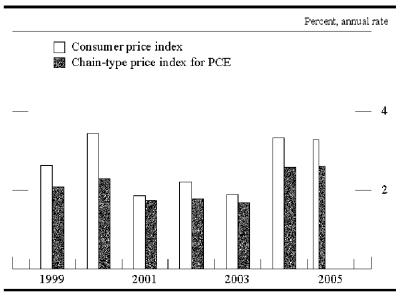
NOTE: The data are quarterly and extend through 2005:Q1. For nonfarm compensation, change is over four quarters; for the employment cost index (ECI), change is over the twelve months ending in the last month of each quarter. Nonfarm compensation is for the nonfarm business sector; the ECI is for private industry excluding farm and household workers.
SOURCE: Department of Labor, Bureau of Labor Statistics.

Change in unit labor costs



NOTE: Nonfarm business sector. The change in unit labor costs is defined as the increase in nonfarm compensation per hour less the growth in labor productivity.
SOURCE: Department of Labor, Bureau of Labor Statistics.

Change in consumer prices



NOTE: For 2005, the change for the PCE price index is from 2004:Q4 to May 2005; for the consumer price index, it is from 2004:Q4 to 2005:Q2.
SOURCE: For consumer price index, Department of Labor, Bureau of Labor Statistics; for chain-type measure, Department of Commerce, Bureau of Economic Analysis.

result of a temporary bulge in stock option exercises in late 2004, unit labor costs should moderate significantly this year. Moreover, the implications of such a spike in unit labor costs for price inflation are probably minimal, at least as judged by previous spikes of this nature. For example, the sharp rise in unit labor costs in 2000 had little or no subsequent effect on price inflation.

Prices

Higher energy prices continued to show through to overall consumer price inflation this year. The chain-type price index for personal consumption expenditures rose at an annual rate of about 2½ percent between the fourth quarter of 2004 and May 2005, a rate of increase similar to that over the four quarters of 2004. Within that total, core PCE prices accelerated over that period to an annual rate of about 2 percent, from 1½ percent in 2004. However, data for the consumer price index (CPI), which are available through June, suggest that core inflation has moderated in recent months; the core CPI rose at an annual rate of 1¼ percent in the three months ending in June after having increased at a 3¼ percent pace over the first three months of this year.

The PCE price index for energy, which moved up more than 18 percent in 2004, increased at an annual rate of nearly 14 percent between the fourth quarter of 2004 and May 2005, having been pushed higher by a further run-up in crude oil prices. Gasoline prices climbed especially rapidly between February and April, when higher crude costs were accompanied by a significant widening in retail margins. Although these margins subsequently dropped back, retail gasoline prices in June were still nearly 10 percent above their level at the end of last year, and they moved up further in early July. Electricity prices also rose sharply over the first half of 2005 because of higher input costs for electricity generation.

Consumer food prices increased at an annual rate of about 2½ percent over the first half of 2005, a bit less than in 2004. Prices for fruits and vegetables dropped back early in the year, as supplies recovered from the damage associated with last year's succession of hurricanes. Although these prices turned up a little in the spring, they remain below their fourth-quarter levels. In contrast, meat prices rose at an annual rate of 3 percent over the first half of the year; relatively strong domestic demand has lifted prices despite increases in the number of cattle being fed for slaughter and ample supplies of other meats and poultry. Prices for beef were also influenced by a variety of trade restrictions associated with concerns about mad cow disease: Both the full resumption of imports

Alternative measures of price change

Percent

Price measure	2003 to 2004	2004 to 2005
Chain-type (Q1 to Q1)		
Gross domestic product (GDP)	1.7	2.4
Gross domestic purchases	1.7	2.8
Personal consumption expenditures (PCE)	1.7	2.2
Excluding food and energy	1.4	1.6
Market-based PCE excluding food and energy	1.3	1.7
Fixed-weight (Q2 to Q2)		
Consumer price index	2.9	2.9
Excluding food and energy	1.8	2.2

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.

from Canada (which would tend to push down prices) and the resumption of exports to other important trading partners (which would tend to push up prices) were delayed. Prices of food away from home, for which labor costs are more important than raw food costs, rose at an annual rate of about 3½ percent over the first half of this year, a little higher than the recent trend.

The pickup in core PCE inflation this year is due both to the sharp run-up in energy prices and to higher prices for other intermediate materials; these developments have raised production and distribution costs for a wide range of domestically produced goods and services. In addition, the decline in the exchange value of the dollar into early 2005 continued to push up prices of core nonfuel imports this year, both for items used in the domestic production of other goods and services and for items sold directly to consumers. Partially offsetting these influences have been the gains in productivity, which have enabled firms to absorb a portion of the higher costs. Moreover, although the price of crude oil remains high, prices for some other industrial materials have decelerated or edged down of late: The *Journal of Commerce* industrial price index—which excludes energy items—has fallen 6 percent since the beginning of April, while the producer price index for core intermediate materials rose at an annual rate of just 1¼ percent in the second quarter of this year after having increased at roughly a 7 percent pace, on average, in the preceding few quarters.

Measures of shorter-term inflation expectations have edged higher this year, while those of longer-term expectations have held steady or moved lower. Most notably, the Michigan SRC survey indicates that households' median expectations for inflation over the next twelve months have ranged between 3 percent and 3¼ percent in recent months, up from just under 3 percent at the beginning of the year. In contrast, households' median expectations for inflation over the next five to ten years, at a little under 3 percent, are similar to readings in recent years. The latest Survey of Professional Forecasters likewise shows that inflation is expected to average 2½ percent over the next ten years, a figure unchanged since 2001. Readings of longer-term inflation compensation from financial markets show a more pronounced decline: Inflation compensation as measured by the spread of the yield on nominal Treasury securities over their indexed counterparts for the period five to ten years ahead has fallen about 50 basis points since the end of 2004.

U.S. Financial Markets

Financial market conditions remained generally accommodative during the first half of 2005, as Treasury and private interest rates stayed low. Risk spreads on speculative-grade debt had become very tight by the end of the first quarter, but they subsequently rose, on balance, after the downgrades of Ford and General Motors; current levels suggest more-typical compensation for default risk. Banks continued easing terms and standards on lending to businesses. The pace of business borrowing, which had been sluggish, picked up last year and remained fairly robust in the first half of 2005. Nevertheless, strong corporate profits and the large stockpile of liquid assets already on firms' balance sheets continued to limit their demand for external financing. Debt of the federal government, of state and local governments, and of households continued to expand briskly. Broad equity price indexes were little changed on net; higher oil prices boosted share prices in the energy sector but weighed on other stocks.

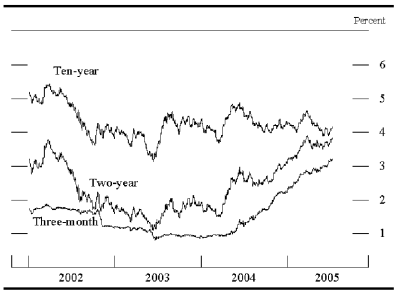
Interest Rates

The FOMC boosted the intended federal funds rate 25 basis points at each of its four meetings in the first half of the year. Judging from federal funds futures quotes, these policy actions had all been widely anticipated by investors for some time before each meeting. Since the start of the year, rates on interest rate futures contracts that will expire at the end of 2005 have moved up about 60 basis points in response to evidence of robust economic growth and concerns about the possible emergence of inflationary pressures. Two-year nominal Treasury yields have risen about 80 basis points over that period, reflecting both the firming of policy expectations and actual monetary policy tightening.

Nevertheless, ten-year nominal Treasury yields have edged down so far this year and are now about 60 basis points below their level just before the FOMC meeting in June 2004. Moreover, this fall in long-term yields is a global phenomenon: Long-term yields have declined in most foreign industrialized economies, in several cases by more than in the United States. From the term structure of interest rates, the ten-year Treasury yield can be decomposed into a series of ten consecutive one-year forward rates. The last of these—the one-year forward rate ending ten years hence—now stands about 160 basis points below its level just before the June 2004 FOMC meeting.

Several potential explanations have been offered for the decline in long-term yields and distant-horizon forward rates in the United States since mid-2004. Among these is the possibility that long-term inflation expectations have fallen and become more firmly anchored. Indeed, longer-term inflation compensation, measured by the spread between the yields on ten-year Treasury inflation-protected securities and their nominal counterparts,

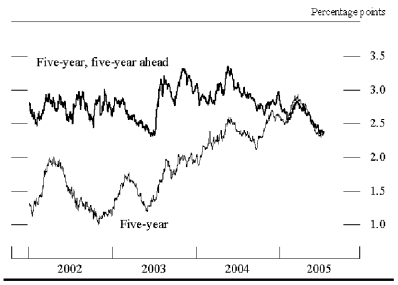
Interest rates on selected Treasury securities



NOTE: The data are daily and extend through July 13, 2005.
SOURCE: Department of the Treasury.

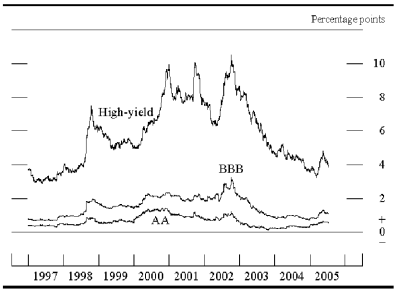
has fallen about 30 basis points over this period. A second possible explanation is investors' willingness to accept smaller risk premiums on long-term securities amid declining macroeconomic and interest rate uncertainty. The volatility of short-term interest rates and Treasury yields implied by option prices has indeed declined to historically low levels. A third possibility is that several factors have spurred an excess of global saving over planned investment, such as rising incomes in countries with high saving rates, the desire by the aging citizens of many industrialized countries to save for retirement, and apparently diminished investment prospects in many industrialized and developing economies.

TIPS-based inflation compensation



NOTE: The data are daily and extend through July 13, 2005. Based on a comparison of the yield curve for Treasury inflation-protected securities (TIPS) to 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



NOTE: The data are daily and extend through July 13, 2005. The high-yield index is compared with the five-year Treasury yield, and the BBB and AA indexes are compared with the ten-year Treasury yield.
SOURCE: Merrill Lynch AA and BBB indexes and Merrill Lynch Master II high-yield index.

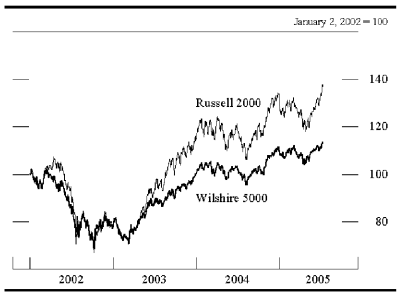
Spreads of yields on investment-grade corporate debt over those on comparable-maturity Treasury securities fell during the first quarter of 2005, and risk spreads on high-yield corporate debt reached very low levels. However, in March, news about difficulties in the domestic motor vehicle industry apparently became a focal point for a revision of investors' assessment of risks. Further revelations of accounting irregularities in the insurance industry also seem to have made investors somewhat charier of risk. As a result, risk spreads on corporate bonds and credit default swaps have widened; speculative-grade bond spreads are now about 50 basis points higher than at the start of the year.

Equity Markets

Broad equity price indexes fell modestly in the first quarter, but they rebounded and are now little changed, on net, since the start of 2005. Thus far this year, stock prices have been buoyed by continued strong profits and low long-term interest rates, but higher oil prices and a few high-profile earnings disappointments have weighed on share prices outside the energy sector. The forward earnings–price ratio held about steady despite the fall in real interest rates. Equity price volatility implied by quotes on stock options declined, as the implied volatility on the S&P 500 index dropped to a record low level of less than 11 percent.

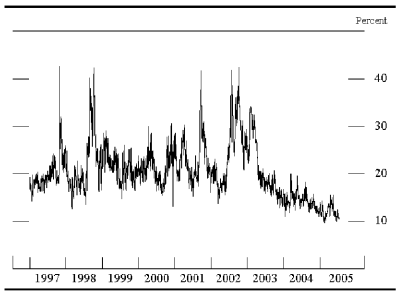
Net inflows into equity mutual funds were moderate in the first half of 2005, down from the rapid pace during the same period last year. These flows likely followed the pattern set by share prices, which surged about

Stock price indexes



NOTE: The data are daily and extend through July 13, 2005.
SOURCE: Frank Russell Company; Dow Jones Indexes.

Implied S&P 500 volatility



NOTE: The data are daily and extend through July 13, 2005. The series shown 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.

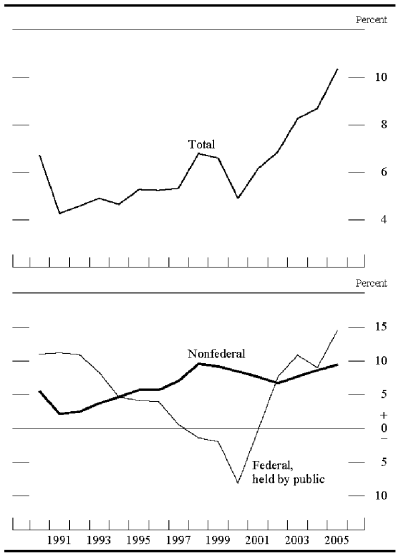
30 percent in 2003, rose about 10 percent in 2004, and have been flat so far this year.

Debt and Financial Intermediation

The aggregate debt of the domestic nonfinancial sectors expanded at an annual rate of about 10 percent in the first quarter of 2005, up from an 8¼ percent pace in the fourth quarter of 2004, mainly because of faster growth of federal government debt and state and local government debt. The mix of household and business debt growth has shifted modestly since the same time last year. Household debt decelerated, though it continued expanding at a rapid pace, and the growth of business-sector debt picked up even though ample internal funding continued to limit firms' need for external financing.

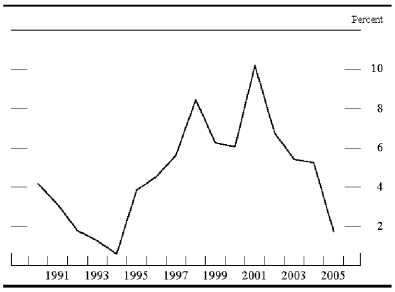
Commercial bank credit expanded at an annual rate of 13 percent in the first quarter of 2005. Financing secured by residential real estate, including home mortgages, home equity loans, and mortgage-backed securities, extended its long, robust expansion. In May, the Federal Reserve Board and other federal agencies that regulate depository institutions issued guidance on sound underwriting and effective credit-risk-management practices for home equity lending. Recently there has been increased use of potentially riskier types of mortgages, including adjustable-rate and interest-only loans, which could pose challenges to both lenders and borrowers. Business loans, which had begun to grow in 2004 after several years of runoffs, accelerated to a 15 percent annual rate of growth in the first quarter of 2005, supported in part by strong demand for short-term financing to fund rising accounts

Change in domestic nonfinancial debt



NOTE: For 2005, change is from 2004:Q4 to 2005:Q1 at an annual rate. For earlier years, 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. The total consists of nonfederal debt and federal debt held by the public. Nonfederal debt consists of the outstanding credit market debt of state and local governments, households, nonprofit organizations, and nonfinancial businesses. Federal debt held by the public excludes securities held as investments of federal government accounts.
SOURCE: Federal Reserve Board, flow of funds data.

M2 growth rate



NOTE: For 2005, growth is estimated using monthly data through May; for earlier years, the data are annual averages. 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 Statistical Release H.6, "Money Stock Measures."

receivable, inventories, and merger and acquisition activity.

Credit market assets held by government-sponsored enterprises declined in the first quarter of this year, as Freddie Mac and Fannie Mae reduced their outright holdings of mortgage-backed securities.

The M2 Monetary Aggregate

In the first half of 2005, M2 grew at a 2½ percent annual rate—probably slower than nominal GDP and down from a 5¼ percent pace last year. Slower growth in liquid deposits—likely a consequence of their rising opportunity cost—accounted for most of this deceleration. Yields on retail money market mutual funds rose noticeably in the first half but continued to lag interest rates on market instruments, and assets in these funds continued their prolonged runoff. Small time deposits, whose yields have better kept pace with rising market interest rates, rose briskly during the same period. Currency expanded at a slow rate, apparently a reflection in large measure of weak demand from abroad. On net, the velocity of M2 is estimated to have moved up in the first half at a somewhat slower pace than would be expected from the historical relationship between money, income, and opportunity cost.

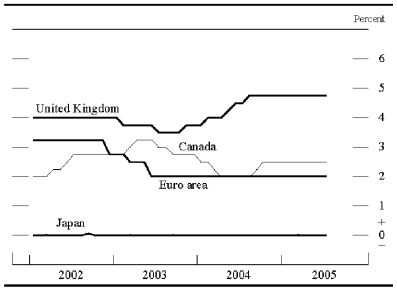
International Developments

Foreign economic activity has expanded a bit less rapidly this year than in the second half of 2004, as measured by an export-weighted average of growth among U.S. trading partners. The pace of expansion in the industrial economies has generally increased, but, with the important exception of China, this increase has been offset by moderating growth in many developing economies. Inflation has remained well contained in most countries.

The stance of monetary policy has not changed this year in most major foreign economies. The European Central Bank has held its policy rate constant since June 2003, and both the Bank of England and the Bank of Canada have kept policy rates unchanged after having raised them in the latter half of 2004. The Bank of Japan has maintained its commitment to a policy of quantitative easing until deflation ends, but in late May it made what it described as a technical change to allow temporary deviations below the target range for reserve accounts if banks' demand for funds is too weak to satisfy the target. Reserve account balances temporarily fell below ¥30 trillion, the lower end of the target, in early June. Monetary policy has also remained unchanged in most emerging Asian economies; however, several Latin American monetary authorities have continued tightening cycles that began last year in efforts to restrain inflationary pressures.

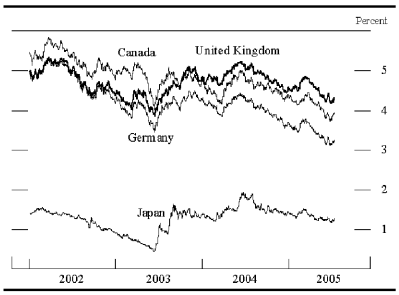
After having edged up during the first three months of this year, long-term interest rates in the major foreign industrial economies have fallen and now stand below their levels at the start of the year. As in the United States, the decline in foreign long-term interest rates continues a trend that began in mid-2004. However, long-term rates in the major foreign industrial economies have fallen more than rates in the United States this year. The decline in

Official interest rates in selected foreign industrial countries



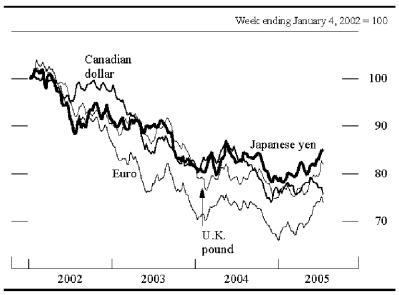
NOTE: The data are as of month-end; the last observation for each series is for July 13, 2005. The data shown are the call money rate for Japan, the overnight rate for Canada, the refinancing rate for the euro area, and the repurchase rate for the United Kingdom.

Yields on benchmark goverment bonds in selected foreign industrial countries



NOTE: The data are for ten-year bonds and are daily. The last observation is for July 13, 2005.
SOURCE: Bloomberg L.P.

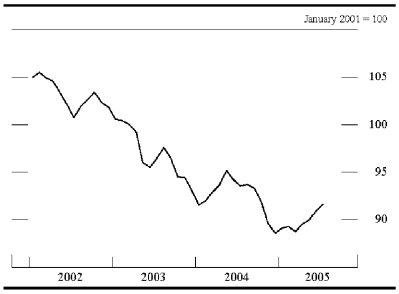
U.S. dollar exchange rate against selected major currencies



NOTE: The data are weekly and are in foreign currency units per dollar. The last observation for each series is the average of July 11, 2005, through July 13, 2005.
SOURCE: Bloomberg L.P.

European long-term rates occurred amid weak economic news and a shift away from market expectations of a policy rate increase. In contrast, long-term rates in Canada and the United Kingdom have trended down despite policy rate increases in the second half of last year by both countries' central banks, though market perceptions that the Bank of England may cut rates have recently increased. Although the decline in Japanese rates last year was consistent with both the weak performance of the economy and the persistence of deflation, long-term rates fell further this year despite solid growth in the first quarter.

U.S. dollar nominal exchange rate, broad index

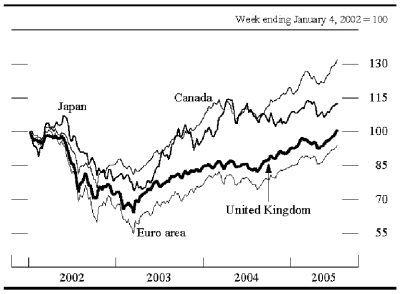


NOTE: The data are monthly and are in foreign currency units per dollar. The last observation is the average of trading days from July 1, 2005, through July 13, 2005. The broad index is a weighted average of the foreign exchange values of the U.S. dollar against the currencies of a large group of major 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.

As foreign interest rates have fallen in recent months, the value of the dollar has risen. Most of this rise has been against the currencies of the major industrial countries; the dollar is largely unchanged against the currencies of the United States' other important trading partners. The dollar has appreciated about 12 percent against the euro and about 9 percent against the yen and sterling since the start of the year. Some of the appreciation against the euro occurred after voters in France and the Netherlands rejected the proposed constitution for the European Union by unexpectedly large margins in May.

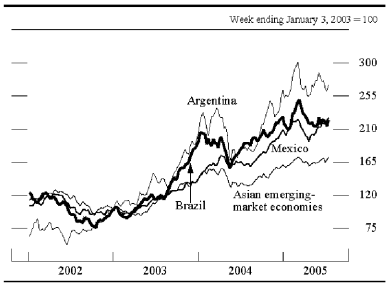
European, British, and Canadian stock indexes have risen more than 8 percent since the start of the year. The

Equity indexes in selected foreign industrial countries



NOTE: The data are weekly. The last observation for each series is the average of July 11, 2005, through July 13, 2005.
SOURCE: Bloomberg L.P.

Equity indexes in selected emerging-market economies



NOTE: The data are weekly. The last observation for each series is the average of July 11, 2005, through July 13, 2005. The Asian emerging-market economies are China, Hong Kong, India, Indonesia, Malaysia, Pakistan, the Philippines, Singapore, South Korea, Taiwan, and Thailand; the index weight for each of these economies is its market capitalization as a share of the group's total.

SOURCE: For Asian emerging-market economies, Morgan Stanley Capital International (MSCI) index; for others, Bloomberg L.P.

rise in European stock prices is notable because indicators of economic activity have been fairly weak. In contrast, Japanese stock prices are now little changed after having reversed first-quarter gains. Equity prices in the majority of emerging markets began the year on a strong note but reversed course late in the first quarter and currently stand close to their January levels. Despite these swings, intraday volatility has remained subdued in most equity markets.

Industrial Economies

Real GDP in Japan increased at an annual rate of nearly 5 percent in the first quarter of 2005, bouncing back from last year's recession. Personal consumption spending reversed its recent declines, pushing the household saving rate down further. Private investment also rose sharply after having grown tepidly in the second half of 2004. In contrast, the external sector made a small negative contribution to GDP, as imports rose modestly but exports fell. While Japanese manufacturers of high-tech goods reduced their levels of inventories from last year's peak, inventory stocks of firms outside the high-tech sector increased, perhaps because of the slowdown in exports. The labor market has steadily improved: The unemployment rate has reached a seven-year low, and the ratio of job offers to job applicants is at a twelve-year high. Despite the pickup in economic activity and continuing inflation in wholesale prices, consumer price deflation has worsened slightly. The GDP price deflator returned to a year-over-year rate of deflation of more than 1 percent after having temporarily registered a more modest decline in the fourth quarter of 2004.

The pace of activity in the euro area appears to have slowed after a stronger start to the year. Real GDP grew at a 2 percent annual rate in the first quarter, as private consumption rose moderately and both households and firms switched expenditures away from imports and toward domestically produced goods. Both Germany and Spain grew at rates above the area average in the first quarter. In contrast, real GDP in both Italy and the Netherlands declined, while French growth was slower than in most of 2004. Measures of activity point toward slower growth in the euro area in the second quarter. Retail sales, which had risen in the first quarter, were roughly flat, on average, in April and May. The trade balance fell in April, threatening a main engine of growth, though the recent rise in the dollar against the euro should help stimulate export demand going forward. Twelve-month consumer price inflation edged up in June to just above the European Central Bank's target ceiling of 2 percent for inflation over the medium term. The European Central Bank's measure of core inflation, which excludes energy and unprocessed foods, has eased since January to an annual rate comfortably below 2 percent.

Consumer spending in the United Kingdom increased only modestly in the first quarter, slowing real GDP growth to 1½ percent. Nevertheless, the labor market remains tight, as unemployment is at its lowest levels since the mid-1970s and real earnings continue to trend up. The twelve-month rate of consumer price inflation ticked up in June to the Bank of England's target of 2 percent. In its May *Inflation Report,* the Bank of England forecast that inflation would temporarily rise but stay near the target over a two-year period. House prices have been fairly stable this year, and household net mortgage borrowing has also been subdued.

Growth in Canada remains moderate. Continuing a pattern that has largely held for the past two years, private consumption and investment demand rose in the first quarter while net exports fell. Activity in the second quarter appears to have been solid. Data on housing starts indicate that construction spending grew further, and the merchandise trade surplus improved in April, as exports rose and imports decreased slightly. Twelve-month consumer price inflation fell in May to about 1½ percent after having averaged slightly above 2 percent in the first quarter. The Bank of Canada's measure of core inflation has stayed below 2 percent throughout this year.

Emerging-Market Economies

Chinese real GDP continues to rise rapidly following strong growth in 2004. Economic expansion has been led

by investment, exports, and, more recently, a surge in domestic production of goods that had previously been imported. Investment expenditure has remained vigorous despite the government's attempts early last year to slow its rate of increase. Import growth slowed in the first quarter, but the rise of exports was unabated, leading to a significant widening of the trade surplus. Although recent attention has focused on China's exports of textiles, export growth has remained strong across most major categories of goods. The slowdown in imports has also been broadly based. Despite China's strong rate of economic expansion, consumer price inflation fell to less than 3 percent in the first quarter and has remained low, as declining food prices have offset modest increases in nonfood prices.

Economic developments in other Asian emerging-market economies have varied. Hong Kong maintained its strong performance. As in China, growth in Hong Kong has been driven by both investment and exports. Export growth has also played an important role in supporting growth in most of the other countries in this region, but domestic demand, particularly inventory investment, has declined in many economies so far this year. Inflation has risen slightly, reflecting higher food and energy prices, but remains well contained and under 3 percent in most countries.

The Mexican economy has slowed so far this year, as demand for its manufacturing exports has weakened and monetary tightening has tempered investment and consumption demand. The Bank of Mexico has left monetary policy unchanged since March, but its tightening over the preceding twelve months raised short-term interest rates 500 basis points. Twelve-month consumer price inflation has fallen from its levels of late last year but still stands above the Bank of Mexico's target range of 2 percent to 4 percent. After having risen in the second half of last year, core inflation has also trended down in recent months.

Economic growth in most South American economies has also slowed compared with the pace of activity at the end of 2004. Brazil's real GDP rose at only a 1¼ percent annual rate in the first quarter, as both private consumption and investment declined in the wake of the Brazilian central bank's decision to begin raising its policy rate in the second half of 2004 to counter inflationary pressures. Exports, which rose rapidly and outpaced imports, provided the only bright spot. Twelve-month inflation has remained above 7 percent, and the central bank has continued to raise its policy rate this year. Argentina has gradually recovered from its 2001 crisis, but real GDP sharply decelerated in the first quarter. The unemployment rate, which had steadily fallen over the past few years, also edged up slightly. Twelve-month consumer price inflation appears to have stabilized after having been pushed up by food price increases earlier in the year, but it still lies above the central bank's unofficial target range of 5 percent to 8 percent. The Argentine government recently completed the final settlement of its debt exchange but has not yet resolved the treatment of the remaining investors (holders of roughly one-fourth of all defaulted government bonds) who rejected the agreement.