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FEDERAL RESERVE'S FIRST MONETARY POLICY REPORT FOR 2006

HEARING

BEFORE THE

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

ONE HUNDRED NINTH CONGRESS

SECOND SESSION

ON

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

FEBRUARY 16, 2006

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C O N T E N T S

THURSDAY, FEBRUARY 16, 2006

	Page
Opening statement of Chairman Shelby	1
Opening statements, comments, or prepared statements of:	
Senator Reed	2
Senator Bunning	3
Senator Menendez	4
Senator Sununu	4
Senator Stabenow	4
Senator Dole	5
Senator Carper	6
Senator Crapo	7
Senator Sarbanes	8
Senator Bayh	8

WITNESS

Ben S. Bernanke, Chairman, Board of Governors of the Federal Reserve System, Washington, DC	9
Prepared statement	35
Response to written questions of:	
Senator Menendez	39
Senator Crapo	43
Senator Enzi	43

Additional Material Supplied for the Record

Monetary Policy Report to the Congress, February 15, 2006	46
Letter to Senator John E. Sununu from Alan Greenspan, Chairman, Board of Governors of the Federal Reserve System dated January 3, 2006	74

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THURSDAY, FEBRUARY 16, 2006

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

The Committee met at 10:02 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 Bernanke before the Committee on Banking, Housing, and Urban Affairs to provide his first testimony on the Federal Reserve Semiannual Monetary Policy Report to the Congress. On behalf of this Committee, I want to congratulate Dr. Bernanke on becoming only the 14th Chairman of the Federal Reserve Board. This Committee has had the opportunity to work with you in your previous tenure as Board Governor and as Chairman of the Council on Economic Advisors. We look forward to continuing that good and productive relationship as you guide the Federal Reserve System over the next years.

Our hearing this morning serves as an important part of the Committee's oversight function over the Federal Reserve System. It is also an important mechanism for assuring that Congress maintains accountability over the Fed's policies and operations. Within broad statutory parameters, the Fed sets and implements U.S. monetary policy independent from the Congress and the President. This hearing, which is also required by statute, provides the Congress an opportunity to have an open and detailed discussion and debate about the Fed's monetary policy goals and their implementation.

Chairman Bernanke, your testimony and report this morning note the economy's impressive performance in 2005. GDP growth continues to be strong and core inflation remain moderate. We also saw continued improvement in the labor markets with the number of jobs created and a low unemployment rate.

At its meeting on January 31, the Federal Open Market Committee raised its target for the Federal funds rate by 25 basis points to 4.5 percent. This is the 14th increase since June 2004 when the FOMC began raising the target rate from a low of 1 percent. The Federal Open Market Committee will meet next at the end of March, its first session under your leadership. Clearly, new economic data will be reported and other events will transpire be-

tween now and then so you cannot tell us exactly what will happen at that meeting and you should not. However, our discussion this morning gives us the opportunity to discuss which factors will be significant in your deliberations leading up to that meeting. In that sense, we hope our hearing and discussion this morning can add to the transparency of the FOMC process.

Mr. Chairman, this Committee is eager to hear your views on the future direction of our Nation's economy and how you plan to guide the Federal Reserve System in the months and years ahead. I look forward to raising a number of issues during our discussion this morning.

Senator Reed, do you have an opening statement?

STATEMENT OF SENATOR JACK REED

Senator REED. Thank you very much, Mr. Chairman, and thank you, Chairman Bernanke. Welcome and congratulations. You come to this job, Mr. Chairman, with considerable bipartisan goodwill, with very strong academic credentials, and a reputation for independent thinking, and you will need to draw on all these resources as you confront an economy that seems to be humming along on the surface, but in fact there is a number of lurking problems, problems such as large budget deficits, a record trade deficit, negative household saving rate, high energy prices, and a disappointing labor market recovery. All of these pose tremendous challenges in setting monetary policy.

We welcome your championship of greater openness and demystification of the Fed. You really assured us during the confirmation process that you are sensitive to the multiple goals of monetary policy so I hope that you will continue the Greenspan model of responding to changing economic circumstances with flexibility rather than a rigid adherence to a predetermined policy.

Now, critical tests will be balancing the goals of fighting inflation with allowing sufficient employment growth. These are difficult economic times for many Americans who are facing stagnant incomes, rising costs for health care, rising costs of home heating, rising costs for education, and so I hope, Chairman Bernanke, that you will look hard at the economic data at the FOMC meetings rather than allowing some type of rigid plan to take hold.

GDP is growing, but the typical American worker has been left out of the economic gains of this recovery. Strong proprietary gains have shown up in the bottom lines of shareholders but not in the paychecks of many workers. Clearly, there is room for real wages to catch up with productivity before the Fed needs to worry about inflationary pressure from the labor market.

Finally, I hope you keep your promise to not comment on the public policy matters beyond the realm of monetary policy and to remain politically independent. I think that will be a major service to the Nation. I look forward to your discussion about the issues that are important to all of us today and thank you, again, for not only attending but also your service.

Chairman SHELBY. Senator Bunning.

STATEMENT OF SENATOR JIM BUNNING

Senator BUNNING. Thank you, Mr. Chairman. Welcome, Chairman Bernanke, to your first appearance before this Committee as Chairman of the Federal Reserve.

I would like to point out that at the beginning of your hearing yesterday, the stock market indexes jumped and then fell throughout the hearing. Fortunately, after it was over they recovered and ended up back in positive territory.

On the way out the door last month, Chairman Greenspan left us with another hike in interest rates to 4.5 percent. His recent comments, which came at a much higher price to his fellow diners than the taxpayers, seem to have tied your hands at the beginning of your term.

You will not chair your first FOMC meeting until next month, but it is already taken for granted that another rate hike is coming and probably more after that. As I told Mr. Greenspan at his last appearance before this Committee, I do not think that increases are needed, especially with your projections of reasonable inflation for the coming year.

I hope they do not continue until it is too late and damage is done. Our economy is strong and inflation is low, despite high energy prices. Several other factors pose dangers to sustained economic growth in the short and long terms.

We all know that inverted yield curves have been a reliable indicator of trouble ahead. Increased Federal budget deficits cause uncertainty and long-term obligations will begin to soak up more and more capital that could be put to other productive uses. And our trade deficit means that we are more dependent on other countries to sustain our lifestyle and could lead to job loss if we do not begin to close the gap. Even with those negative factors hanging out there, the Fed paints a strong picture of the economy.

During your confirmation process, I urged you to be independent of the other Fed Members, as well as Congress and the executive branch. I also stressed the importance of further openness at the Fed and the tolerance of other viewpoints. In other words, I would like to see less group-think.

I criticized your predecessor for speaking out of place when it comes to policy matters that do not belong to the Fed. I encourage you to stay away from those discussions and I am glad that to some extent you did so yesterday.

Something about this town makes people want to be liked. The longer someone stays here, the more they seem to want to be liked. Maybe it has something to do with one day getting paid more than your previous salary for attending a few dinners and not even having to pay for your own food.

Do not fall into that trap and do not be afraid to tell people "no." It is an uncommon thing to say around here, but do not try to follow in the footsteps of your predecessor. In other words, be yourself, do not be "Greenspan-lite." I hope when your time at the Fed is over people will look back and see a record of doing no harm. I think the decisions you and the other Board Members make in the next few months will have a lot to do with the success of your leadership at the Fed.

Thank you, Mr. Chairman, and I look forward to asking some questions.

Chairman SHELBY. Senator Menendez.

STATEMENT OF SENATOR ROBERT MENENDEZ

Senator MENENDEZ. Thank you, Mr. Chairman. Mr. Chairman, welcome, congratulations. We are pleased to welcome you, as a fellow New Jersian, and we know that you will do an exceptional job in this regard. I certainly look forward to your testimony today and to some of the challenges I think we face: The cooling off of the housing market and what that may mean, rising energy prices, consequences of deficit and debt, a variety of global influences, and a dynamic, modern economy that we have.

Those are all the challenges that you face before you and so we look forward to your stewardship in meeting, having a steady hand in the midst of all of the dynamic realities that we face, so we look forward to hearing your testimony, and once again congratulations on your appointment, Mr. Chairman.

Chairman SHELBY. Thank you. Senator Sununu.

STATEMENT OF SENATOR JOHN E. SUNUNU

Senator SUNUNU. Thank you, Mr. Chairman, and welcome, Chairman Bernanke. Yesterday, you touched briefly on issues related to the GSE's, better regulation of Fannie Mae and Freddie Mac. This is something that has been of interest to the Committee.

We enacted legislation that you spoke to at the hearing yesterday, and I note that you emphasized two specific concerns with the portfolios held by the GSE's, one, the systemic risk that they create inevitably because of the nature of the portfolios carrying interest rate risk and prepayment risk, and two, the fact that they really do not contribute directly to the GSE's fulfilling their mission.

I appreciate you making these points, some points that are very consistent with testimony and presentation by other representatives from the Fed in the past, and I think it is important because we have an opportunity to take up legislation this year, probably the best opportunity to improve the regulation of these large institutions that we will have in a long time.

Mr. Chairman, I have a letter that I received from the outgoing Fed Chairman speaking to these issues at the beginning of January. I would ask that that be included in the record so that I do not have to belabor these points in any greater detail.

Chairman SHELBY. It will be part of the record without objection.

Senator SUNUNU. I appreciate the comments that you made yesterday. Perhaps we will have an opportunity to get into them in more detail, but not surprisingly you were very direct and plain-spoken and I appreciate having you on the record.

Thank you, Mr. Chairman.

Chairman SHELBY. Senator Stabenow.

STATEMENT OF SENATOR DEBBIE STABENOW

Senator STABENOW. Thank you, Mr. Chairman, and welcome, Chairman Bernanke. This is an important time and we wish you all of the best as we all work together on so many issues that re-

late to our economy and what is happening in terms of monetary policy.

The Annual Monetary Policy Report comes at a very important time for many middle class Americans, and I know in my home State right now, the headlines everyday relate to manufacturing loss in Michigan and families are feeling squeezed on all sides from concerns about losing their job, losing their pension, their health care costs rising, businesses, manufacturers seeing their health care costs go through the roof basically, and it relates to their ability to compete internationally.

We also know that issues of unfair trade practices are not just words for us in manufacturing. In Michigan, things like currency manipulation are real with Japan or with China when we look at the differences in costs coming in. Counterfeiting, counterfeit auto parts, which is a $12 billion business costs us 200,000 jobs.

So when we look at all of the issues, the fact that we have lost 2.4 million jobs, 2.4 million people plus their families. Since 2000, we have lost over 200,000 jobs, families experiencing layoffs in the last 5 years in my State alone. Just last year, 21,000 manufacturing jobs were lost. I say this because the trade deficit is a critical issue for us, a trade deficit now that is about twice as much as the budget deficit, the budget deficit being the highest in our Nation's history, but the trade deficit now hitting $726 billion.

This is real for us and so I know your basket of economic metrics, the international component, is just a piece of the analysis, but I want to stress with you that this is extremely important piece to us in manufacturing and in Michigan.

And I hope your analysis now and in the future will consider the global issues that are devastating middle class families and devastating American businesses. We need to be focused on that. We need your leadership, your thoughts, and your recommendations as it relates to this global economy now and the international pressures, the unfair trade practices, the currency manipulation, other kinds of issues in the economy, the way we fund health care which is different than any other country in the world, and the impact on our businesses.

All of these issues come down on the people that I represent, my own family in Michigan and the others that I represent, and so I hope this international component of your analysis is something that you will place an emphasis on and work with us on as we address monetary issues and the economy in America.

Thank you.

Chairman SHELBY. Thank you, Senator. Senator Dole.

STATEMENT OF SENATOR ELIZABETH DOLE

Senator DOLE. Thank you, Mr. Chairman. Chairman Bernanke, a very warm welcome to you. I certainly look forward to working with you very closely in the months and years to come, and I have every confidence in you. I want to underscore what Senator Sununu said about the GSE's, and one of the issues that I raised when we met in November was the economic transition that we are going through in North Carolina.

We continue to experience job loss, especially in textiles and furniture manufacturing. The national economy is indeed trending

positively, but I think we must continue to focus special attention on the areas where people have lost their jobs, where companies struggle to compete with foreign firms, and their dramatically lower cost structures.

We have to work toward trade agreements that benefit American workers and consumers and support jobs and growth in our domestic industries.

One issue I was focused on during my days as Secretary of Labor was addressing the growing gap between skilled and unskilled workers. Today in our changing economic environment, this gap has unfortunately widened, and as our economy moves forward, the opportunities for lower skilled workers are diminishing. We have to do everything in our power to ensure that these people realize new opportunities, educate our less skilled workers so they can take advantage of the new jobs that are being created.

To this end, I believe that we should take steps to improve trade adjustment assistance and continue to make strengthening our community colleges a top priority, and I might add that the Labor Department has estimated that 80 percent of new jobs that are going to be created over the next decade will require postsecondary education.

Now, in my conversations with many North Carolinians, I hear concerns about job creation, high energy and health care costs, and our growing trade imbalance. I continue to have confidence that the very forces that stimulate economic growth—tax relief to spur investment, free but fair trade, ever-improving global communications, higher education and training for our workforce, and of course hard work—these forces indeed will put us on a course toward greater opportunity for North Carolina and this Nation.

Mr. Chairman, thank you for being here today. I look forward to your testimony and again to working closely with you. Thank you.

Chairman SHELBY. Senator Carper.

STATEMENT OF SENATOR THOMAS R. CARPER

Senator CARPER. Thanks, Mr. Chairman. Welcome. It is good to have you back. Thank you for joining us today and again for your service to our country.

I think others have indicated that they have an interest in questioning you on some of these same subjects. I will mention them again. I will be asking you about our savings rate or really our lack of savings or negative savings rate and what you think we are doing right to turn that around and maybe what more we could do or should do.

I want to also visit the issue, the interplay between the trade deficit and the budget deficit, and the potential effect of doing the wrong thing or not doing the right thing with respect to interest rates going forward.

Playing into the trade deficit, our growing reliance on foreign oil. I think I read the other day that our trade deficit for last year topped out at a little bit more than $700 billion and roughly a third of that is now our reliance on foreign oil.

And others have suggested—I think Senator Dole and I believe Senator Sununu have mentioned the regulatory structure for Government Sponsored Enterprises, Fannie Mae, Freddie Mac, and

some of our Federal Home Loan Banks—and I understand, I read in a news account that you addressed that in your testimony before the House of Representatives, but I want us to have a chance maybe to talk with you a bit further about that today.

And finally, just some general thoughts. Maybe put on your old hat from one of your last jobs about economic policy, and just to talk about some steps we need to take if our country is going to continue to be an economic superpower in this century, what we are doing right and what we are doing wrong, and what we need to do differently, more of or less of.

Welcome. Thanks for coming.

Chairman SHELBY. Senator Crapo.

STATEMENT OF SENATOR MIKE CRAPO

Senator CRAPO. Thank you very much, Mr. Chairman, and Chairman Bernanke, I welcome you to your first appearance before this Committee. I look forward to many more and appreciate the opportunity we have already had to work together on important issues, and I am certain that the forecast and information that you will give us today will be very helpful to us.

I share a lot of the other feelings that have already been expressed to you so I will not repeat them now. There are two issues that I wanted to raise in addition to those, and if I am here when it is time for questions, I will go through this a little more in questions, but I have three hearings going on today, one with a member of the cabinet, one with the U.S. Trade Ambassador, and one with yourself. And they are all going on right now.

So if I slip out to try to catch a little bit of one of those other hearings and miss the chance to ask you questions, I wanted to just toss these two things out right now.

We are getting very close to a markup on the regulatory reform legislation that we have been working on for several years now, and we are talking, I think, in terms of weeks, not months, before we are going to move forward, and I would like to have some kind of an indication from you as to when the Federal Reserve will be able to give us its comments on the proposals that are out there.

So, I just toss that one out to you.

And then the second issue is one which you will probably hear me talk to you a lot about as we have opportunities, and that is the question of derivatives. I am very concerned about the potential efforts in this Congress to change the manner in which we regulate derivatives or to impact the manner in which derivatives operate in the economy, and I would like to have your comments on the importance of having a strong, stable, and dynamic derivatives market in this country and what it means to our economy.

So, again, in addition to the other issues that we have talked about, those are just a couple specific ones that I would like you to think about. If I am not here to ask questions, maybe we can talk later at a different time.

Thank you.

Chairman SHELBY. Senator Sarbanes.

STATEMENT OF SENATOR PAUL S. SARBANES

Senator SARBANES. Thank you very much, Mr. Chairman. I join my colleagues in welcoming Chairman Bernanke before the Committee. I think we had him last year at his nomination hearing in November, and given the schedule, he went to the House first, not by his choice. That was the process, I hasten to add, so that the Members of the Committee do not feel slighted in any way, but actually I want to say just a word about that.

We think the Semiannual Report by the Fed is a very important step forward in the transparency and oversight with respect to monetary policy. It was a change that Chairman Greenspan welcomed at the time, and I think I recall we had talked about that, and you indicated very strong support for that process as well.

And I think it does give the public a chance on a regular basis for the Fed to come before the Congress and spell out its views with respect to monetary policy and the health of the economy.

And Mr. Chairman, I want to thank you for your oversight and focus in that regard. It is clearly important.

Chairman SHELBY. I had a good trainer.

Senator SARBANES. The Federal Reserve has a double mandate, as we all know: Stable prices and maximum employment. And we have seen in recent years that the goals are not inherently in conflict, as some had argued in the past, and we got unemployment down to below 4 percent actually, inflation below 3 percent, and at his hearing, Dr. Bernanke told the Committee, and I quote him, that he "subscribes entirely to the Humphrey-Hawkins mandate which puts employment growth and output growth on a fully equal footing with inflation in terms of the Federal Reserve's objectives."

And we look forward to working with him in that regard. I am a little concerned about how sanguine we are about the economy. Paul Volcker not long ago in an editorial in the *Washington Post* said this about our economy:

> Under the placid surface, there are disturbing trends, huge imbalances, disequilibria, risks, call them what you will, although the circumstances seem to me as dangerous and intractable as any I can remember, and I can remember quite a lot.

Of course, the Commerce Department recently reported that our Nation ran a record trade deficit of over $725 billion last year. Warren Buffett summarized the situation: "Right now the rest of the world owns [$] three trillion more of us than we own of them. In my view, it will create political turmoil at some point. Pretty soon, I think there will be a big adjustment."

And I hope to go into that with Chairman Bernanke when we reach the question period or in subsequent meetings, but we welcome you back before the Committee as Chairman of the Fed, and we wish you well in this new responsibility.

Thank you, Mr. Chairman.

Chairman SHELBY. Senator Bayh.

STATEMENT OF SENATOR EVAN BAYH

Senator BAYH. Thank you, Mr. Chairman. Welcome, Chairman Bernanke. Just two quick things. First, congratulations on apparently being able to speak in plain English and still not moving the markets. That is quite an accomplishment.

Second, I want to follow up on something that Senator Sarbanes mentioned. I am increasingly concerned with some of the global imbalances that are accumulating and their effect not only on our potential economic performance but also on our Nation's security. I am going to save my time for questions, but I would like to delve into that with you later today and perhaps at a later point.

Having said that, I have learned from hard experience that we are all here to hear from you, not from me, and so I would just congratulate you and welcome you again.

Chairman SHELBY. If you will put up with us for a few minutes, Mr. Chairman, we have established a quorum, and at this time I would like to move——

Senator SARBANES. Does he have an alternative to putting up with us?

[Laughter.]

Chairman SHELBY. I am not going to say. If you will stay put just a few minutes, Mr. Chairman.

[Recess.]

Chairman SHELBY. Chairman Bernanke, your written testimony will be made part of the record. You may proceed. Welcome again to the Committee.

Chairman BERNANKE. Thank you.

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

Chairman BERNANKE. Thank you. Mr. Chairman and Members of the Committee, I am pleased to be here today to present the Federal Reserve's Monetary Policy Report to the Congress. I look forward to working closely with the Members of this Committee on issues of monetary policy as well as on matters regarding the other responsibilities with which the Congress has charged the Federal Reserve System.

The U.S. economy performed impressively in 2005. Real gross domestic product increased a bit more than 3 percent, building on the sustained expansion that gained traction in the middle of 2003. Payroll employment rose two million in 2005 and the unemployment rate fell below 5 percent. Productivity continued to advance briskly.

The economy achieved these gains despite some significant obstacles. Energy prices rose substantially yet again in response to the increasing global demand, hurricane-related disruptions to production, and concerns about the adequacy and reliability of supply. The Gulf Coast region suffered through severe hurricanes that inflicted a terrible loss of life, destroyed homes, personal property, businesses and infrastructure on a massive scale, and displaced more than a million people. The storms also damaged facilities and disrupted production in many industries with substantial effects on the energy and petrochemical sectors and on the region's ports. Full recovery in the affected areas is likely to be slow. The hurricanes left an imprint on aggregate economic activity as well, seen in part in the marked deceleration of real GDP in the fourth quarter. However, the most recent evidence, including indicators of production, the flow of new orders to businesses, weekly data on initial

claims for unemployment insurance, and the payroll employment and retail sales figures for January, suggest that the economic expansion remains on track.

Inflation pressures increased in 2005. Steeply rising energy prices pushed up overall inflation, raised business costs, and squeezed household budgets. Nevertheless, the increase in prices for personal consumption expenditures excluding food and energy, at just below 2 percent, remained moderate, and longer-term inflation expectations appear to have been contained.

With the economy expanding at a solid pace, resource utilization rising, cost pressures increasing, and short-term interest rates still relatively low, the Federal Open Market Committee over the course of 2005 continued the process of removing monetary policy accommodation, raising the Federal funds rate 2 percentage points in eight increments of 25 basis points each. At its meeting on January 31 of this year, the FOMC raised the Federal funds rate another one-quarter percentage point, bringing its level to 4½ percent.

At that meeting, monetary policymakers also discussed the economic outlook for the next 2 years. The central tendency of the forecast of Members of the Board of Governors and the Presidents of the Federal Reserve Banks is for real GDP to increase about 3½ percent in 2006 and 3 percent to 3½ percent in 2007. The civilian unemployment rate is expected to finish both 2006 and 2007 at a level between 4¾ percent and 5 percent. Inflation, as measured by the price index for personal consumption expenditures excluding food and energy, is predicted to be about 2 percent this year and 1¾ percent to 2 percent next year. While considerable uncertainty surrounds any economic forecast extending nearly 2 years, I am comfortable with these projections.

In the announcement following the January 31 meeting, the Federal Reserve pointed to risks that could add to inflation pressures. Among those risks is the possibility that to a greater extent than we now anticipate, higher energy prices may pass through into the prices of nonenergy goods and services or have a persistent effect on inflation expectations. Another factor bearing on the inflation outlook is that the economy appears now to be operating at a relatively high level of resource utilization. Gauging the economy's sustainable potential is difficult and the Federal Reserve will keep a close eye on all the relevant evidence and be flexible in making those judgments. Nevertheless, the risk exists that with aggregate demand exhibiting considerable momentum, output could overshoot its sustainable path, leading ultimately—in the absence of countervailing monetary policy action—to further upward pressure on inflation. In these circumstances, the FOMC judged that some further firming of monetary policy may be necessary, an assessment with which I concur.

Not all of the risks to the economy concern inflation. For example, a number of indicators point to a slowing in the housing market. Some cooling of the housing market is to be expected and would not be inconsistent with continued solid growth of overall economic activity. However, given the substantial gains in house prices, and the high levels of home construction activity over the past several years, prices and construction could decelerate more rapidly than currently seems likely. Slower growth in home equity,

in turn, might lead households to boost their saving and trim their spending relative to current income by more than is now anticipated. The possibility of significant further increases in energy prices represents an additional risk to the economy. Besides affecting inflation, such increases might also hurt consumer confidence and thereby reduce spending on nonenergy goods and services.

Although the outlook contains significant uncertainties, it is clear substantial progress has been made in removing monetary policy accommodation. As a consequence, in coming quarters, the FOMC will have to make ongoing, provisional judgments about the risks to both inflation and growth, and monetary actions will be increasingly dependent on incoming data.

As I noted, core inflation has been moderate despite sharp increases in energy prices. A key factor in this regard has been confidence on the part of public and investors in the prospects for price stability. Maintaining expectations of low and stable inflation is an essential element in the Federal Reserve's effort to promote price stability, and thus far the news has been good. Measures of longer-term inflation expectations have responded only a little to larger fluctuations in energy prices that we have experienced, and for the most part they were low and stable last year.

Inflation prospects are important, not just because price stability is in itself desirable and part of the Federal Reserve's mandate from the Congress, but also because price stability is essential for strong and stable growth of output and employment. Stable prices promote long-term economic growth by allowing households and firms to make economic decisions and undertake productive activities with fewer concerns about large or unanticipated changes in the price level and their attendant financial consequences. Experience shows that low and stable inflation and inflation expectations are also associated with greater short-term stability and output and employment, perhaps in part because they give the central bank greater latitude to counter transitory disturbances to the economy. Similarly, the attainment of the statutory goal of moderate long-term interest rates requires price stability, because only then are the inflation premiums that investors demand for holding long-term instruments kept to a minimum. In sum, achieving price stability is not only important in itself; but it is also central to attaining the Federal Reserve's other mandated objectives of maximum sustainable employment and moderate long-term interest rates.

As always, however, translating the Federal Reserve's general economic objectives into operational decisions about the stance of monetary policy poses many challenges. Over the past few decades, policymakers have learned that no single economic or financial indicator or even a small set of such indicators can provide reliable guidance for the setting of monetary policy.

Rather, the Federal Reserve, together with all modern central banks, has found that the successful conduct of monetary policy requires painstaking examination of a broad range of economic and financial data, careful consideration of the implications of those data for the likely path of the economy and inflation, and prudent judgment regarding the effects of alternative courses of policy action on the prospects for achieving our macroeconomic objectives.

In that process, economic models can provide valuable guidance to policymakers and over the years substantial progress has been made in developing formal models and forecasting techniques. But any model is by necessity a simplification of the real world and sufficient data are seldom available to measure even the basic relationships with precision. Monetary policymakers must therefore strike a difficult balance, conducting rigorous analysis informed by sound economic theory and empirical methods while keeping an open mind about the many factors including myriad global influences at play in a dynamic modern economy like that of the United States. Amid significant uncertainty, we must formulate a view of the most likely course of the economy under a given policy approach while giving due weight the potential risks and associated costs to the economy should those judgments turn out to be wrong.

During the 3 years that I previously spent as a Member of the Board of Governors of the Federal Open Market Committee, the approach to policy that I have just outlined was standard operating procedure under the highly successful leadership of Chairman Greenspan. As I indicated to the Congress during my confirmation hearing, my intention is to maintain continuity with this and the other practices of the Federal Reserve in the Greenspan era. I believe that with this approach, the Federal Reserve will continue to contribute to the sound performance of the U.S. economy in the years to come.

Thank you, Mr. Chairman.

Chairman SHELBY. Mr. Chairman, we are in our last few minutes of a vote on the floor. We are going to recess and we will probably be back in 15 or 20 minutes, soon as we can get here.

The hearing will stand in recess.

[Recess.]

Chairman SHELBY. The hearing will come back to order. Mr. Chairman, some Fed watchers speculate that the Federal Open Market Committee may—may—continue to increase its Federal funds rate target to 5 percent while others seem to believe that 5.5 percent may be likely.

Do you regard either of these speculations regarding the level as more likely than the other giving the FOMC forecast that you have outlined today?

Chairman BERNANKE. Mr. Chairman, as I mentioned, in the statement following the January 31 meeting, the Committee pointed to some potential pressures on inflation and suggested that some additional firming may be necessary.

However, as you know, it is still about 6 weeks until the next FOMC meeting.

Chairman SHELBY. You will have to examine the data at that——

Chairman BERNANKE. We will be examining the data as it comes in and, of course, my colleagues and I will have an extensive discussion and we will be thinking about both our inflation mandate and our full employment mandate as we make our decision.

Chairman SHELBY. To what extent, Mr. Chairman, does the Federal Open Market Committee consider the long-term interest rate in pursuing changes to the Federal funds rate? For example, would the FOMC continue raising the Federal funds rate even if the yield

curve remains inverted in the months ahead and will that be a factor or is that bothersome to you, the inverted yield?

Chairman BERNANKE. Mr. Chairman, the inversion of the yield curve is due to a number of different factors which have different implications for policy.

Chairman SHELBY. But historically they meant something? Senator Bunning alluded to that earlier.

Chairman BERNANKE. That is true that historically an inverted yield curve has often predicted slowing economic activity. That relationship seems to have weakened in the past 15 years or so.

Chairman SHELBY. Why?

Chairman BERNANKE. Well, one of the reasons, as we looked into it, is that the inverted yield curve is more likely to be indicative of coming slowing when interest rates in general are high, when real rates in general are high, because when real rates in general are high, that tends to restrain activity.

We have an inverted yield curve at this point. It is due to a number of factors which I can go into, if you are interested, but the short-term, real interest rate is in a fairly normal range and the long-term real interest rate is actually relatively low historically speaking. So we are not overly concerned about the implications of the inverted yield curve for future economic activity.

Chairman SHELBY. Mr. Chairman, your testimony also notes the possibility of some risk which could add to inflationary pressures such as high energy prices feeding into the prices of nonenergy goods and services.

Your testimony further notes the risk to our economy due to a slowing housing market you reference. What would be the impact on the economy if both of these effects materialize to a greater degree than is currently anticipated? How would the Federal Reserve be likely to respond to such a scenario if you found the pressure there from a double hit?

Chairman BERNANKE. That would be a difficult situation because, on the one hand, higher energy prices would put pressure on inflation, but higher energy prices would also hurt consumer budgets and would probably or could possibly lead consumers to spend less. Together with weakening of the housing market, which might also lead to a higher savings rate and slower consumption spending, we would be in a situation with pressures in both directions, and I cannot really offer much more guidance other than to say that we would have to weigh the relative severity of the two risks.

Chairman SHELBY. If they were to come about?

Chairman BERNANKE. If they both were to come about, and then try to manage those risks in a way that would give us the best outcome.

Chairman SHELBY. You reference further in your testimony your thoughts on global savings glut, with this glut being part of the reason that the real interest rate in global markets is low. In other words, there is a lot of money out there.

How does this factor into the Federal Reserve's growth projections and how would you envision economic events unfolding to bring returns back to more historical normal levels?

Chairman BERNANKE. Well, we were just discussing the relatively low level of long-term real interest rates. I think one of the factors relevant to the long-term, low, real interest rates is that there is a lot of savings coming into the global capital market, from emerging market economies and from oil producers, which is looking for returns.

I think that over time, as the global economy continues to grow and as those economies find more investment opportunities in their domestic economies, that some of this global savings glut may begin to dissipate, but I think that is likely to be a relatively gradual process.

Chairman SHELBY. Yesterday, did the market behavior reflect an accurate interpretation of the Federal Reserve's report and your comments? Do you think it is a good outcome when markets receive enough signals to know what to expect about monetary policy? Is that a prediction?

Chairman BERNANKE. We are trying, and we have been for some time trying, to be transparent and as clear as we can about our strategy, our objectives, and our approach, and one of the implications of that has been that interest rate moves have been highly predicted by the markets, and I think, as a general matter, that is good. It reduces volatility in financial markets and makes policy actually more effective.

Chairman SHELBY. Senator Bunning.

Senator BUNNING. Thank you, Mr. Chairman. I would like to go back to the inverted yield curve for a minute. You were a professor at this time. Maybe you remember this at Princeton. In 1989, if I am wrong, I think you were a professor at Princeton.

Chairman BERNANKE. Yes, sir.

Senator BUNNING. In 1989, even as the economy slowed, the Fed continued to raise interest rates, and we had a recession. The signs of the economic problems were ignored. Yesterday, you stated that the inverted yield curve was "not signaling" a slowdown. Those were your words—"not signaling." But in recent economic history, the inverted yield curve has predicted a recession, not just sometimes, but almost every time.

Now, the Fed has pushed interest rates to the highest level in 4½ years. The January rate hike was the 14th consecutive 25 basis point move since the Fed began raising interest rates in June 2004. You said you think we are not facing a downturn because interest rates are lower now than in past inversions.

Do you have any other reason to think that this inverted yield curve is not a warning, any other reason, other than we started lower?

Chairman BERNANKE. Yes, Senator. As I was indicating in my testimony, we look at a wide variety of indicators. We do look at the structure of interest rates and other financial asset market prices, but we also look at a wide variety of indicators in the real economy, and we are seeing very low unemployment insurance claims, for example, and we are seeing strong retail sales. We are seeing increased industrial production.

My comments notwithstanding about slowing of the housing market, the level of activity in housing construction remains strong, and so the economic expansion appears still to be on a solid track.

When we make policy, we have to think not only about all these indicators, but we also have to think in terms of a forecast. We look ahead and try to think where the economy is likely to be at a period 6 months, a year, 18 months in the future, and based on that forecast and the risk to that forecast, we try to pick the best policy.

Senator BUNNING. You know as well as I do that normal everyday citizens do not borrow at the Fed funds rate, but about a 300 basis point markup from that. So if Fed funds get to 5½ percent, the prime rate for borrowing would be about 8½ percent. I do not know too many Americans that can borrow at 8½ percent on prime rate. Most Americans pay prime plus. So we are getting to the point, if the Fed moves two more times, and Fed funds increase 25 basis points and 25 basis points, we are to that point, eight plus on prime.

Do you find that disturbing to the economy or would that be just normal for our economic outlook?

Chairman BERNANKE. Well, Senator, again, the choices we make will be conditioned on our views of where the economy is going and what interest rates are needed to give us the best combination of growth and low inflation. The interest rates we currently see are in some cases historically low. Take mortgage rates, for example; they are about 6¼ percent right now which is relatively low historically.

It is not really a question of comparing it to rates at another period of time, but rather asking, given those rates, what will be the level of activity in the economy? Will we be on a path that is strong and sustainable going forward? So we will try to do our very best to get the best outcome we can for the American people.

Senator BUNNING. Do you not think with the past history of the Fed and looking at interest rates, when we get them too high, the economy kind of does a little swan song and turns over for awhile and we have some kind of a recession? I am talking on Fed funds. Do you see that happening in the future or do you see that you would anticipate that before it happened?

Chairman BERNANKE. Senator, there are two possible mistakes. One is to go on too long and one is not to go on long enough, and it is a very difficult balancing act, and as I said earlier, we do not have any kind of mechanical rule. We do not have built in any kind of set of future moves. As we go along, we are going to be looking carefully at all the data, trying to make our best assessment where the economy is, where it is going, and respond to that.

Senator BUNNING. Last question. Is there a lot of discussion at the FOMC meeting on this very topic when you meet? In other words, it is not that the Chairman leads and everybody follows?

Chairman BERNANKE. There is extensive discussion and I look forward to getting a lot of input from my colleagues on the FOMC.

Senator BUNNING. Thank you.

Chairman SHELBY. Senator Bayh.

Senator BAYH. Mr. Chairman, I would like to follow up on my brief comment in the introductory component here about our increasing global interdependence, some advantages, benefits that come from that, also some potential threats to both our economy and our national security, potentially even our sovereignty, and that is what I would like to ask you about.

And increasingly, these are not hypothetical risks. Let me start by remembering, it was a year or so ago, maybe a year and a half, there was a rumor going through Seoul, Korea that they were going to begin to diversify out of dollar denominated assets, and for a brief period of time, that sent the U.S. dollar into a free fall.

Sometime after that, a matter of months, the Prime Minister of Japan misspoke, and similar phenomenon followed. He said we perhaps will start diversifying out of dollar denominated assets; the dollar headed straight down. Someone from the ministry comes out and says, no, no, the Prime Minister misspoke.

My question to you is twofold. Number one, does it trouble you that a mere statement by a foreign leader could have such a profound effect on our Nation's currency? And number two, what if the Chinese were to misspeak? Or even more, what if they were to announce a similar policy? What kind of impact would that have on our currency and should we be concerned about that? Is there not a loss of sovereignty involved in such a situation? So does this bother you that a mere misstatement can impact in our currency in a tangible way? And what about the Chinese and their possible course of action in the future?

Chairman BERNANKE. Senator, as you know, the Chinese central bank and other Asian central banks do hold large quantities of U.S. dollar assets in the form of foreign exchange reserves. They hold those assets because they are very attractive assets to hold. They are highly liquid, they are very safe, and they are very good assets to hold in that form as reserves. I am not aware of any significant changes in the plans to hold U.S. dollar assets by foreign central banks and my belief is that moderate changes in the holding of dollar assets would not have significant impact on U.S. asset values.

You have to remember that whereas Chinese holdings of U.S. dollar reserves of about $800 billion is an enormous number——

Senator BAYH. Could I interject just for a moment, Mr. Chairman, with my apologies? Boy, when the rumor was going through Seoul and the Japanese Prime Minister misspoke, the markets seemed to disagree with your evaluation and we are more reliant on the Chinese than we are either of them. So I want to—look, I do not expect you in an open forum here to give me—let me just fall back on my first question, and we will kind of save the others for a little bit later.

Does it trouble you that a mere statement could have that kind of impact at least in the marketplace?

Chairman BERNANKE. Well, I cannot speak to the marketplace, but I think that over a longer period of time, always there is information that comes in that can affect markets. Perceptions can affect markets. Psychology can affect markets. But over a longer period of time, the holdings of U.S. dollar assets by foreigners are only a portion of the very deep, very large markets in U.S. dollar assets, not only in treasuries but also in other high quality assets, such as corporates and the like, and I believe that those markets are sufficiently deep and liquid that they can withstand moderate changes in the holdings of any group, whether it be domestic or foreign.

Senator BAYH. I have time for one more question so I will move on. And I hope you are right. But with the kind of imbalances that

we are building up, we may be testing the definition of moderate adjustments and that is my concern going forward, that the longer these things accumulate, the greater risk we run that there will be a disorderly rather than an orderly adjustment of some kind and that does put us—last comment I would make is I always hear the argument, well, they have to consider their own financial interests and that is true.

But nation states sometimes have interests other than their own pecuniary gain, and I am concerned that we rely upon their financial interests perhaps at our peril because there are other interests that might motivate their actions moving forward. That is my concern as these balances pile up.

My final thing is somewhat related. It is the energy front. This is no longer a hypothetical concern. Russia used their gas exports to leverage Ukraine and possibly Western Europe. Iran has now said, well, if you pressure us unduly on our nuclear program, we will just shut off the oil spigot. Does that concern you, and if so, what would the impact be on our economy if the Iranians were to make good on their threat?

Chairman BERNANKE. Once again, of course, it cuts two ways. It would hurt the Iranians quite a bit to stop exporting their oil. It hurt the Russians quite a bit to stop exporting their natural gas. But I agree in the following general sense, that whereas there are substantial reserves of oil and natural gas in the world, a large share of them are in areas where there is geopolitical uncertainty or geopolitical risk, and that means that is a risk factor for the economy.

We do not have a wide range of spare capacity in these energy areas so that a major change in the supply of energy available could make prices move a lot and that could have a major impact on the economy. That is a concern that we are going to have, I think, for a number of years. My view, in the long-run, is that with energy prices at current levels, over a longer period of time, there are going to be substantial new substitutes, alternative sources of energy, as well as new ways of conserving and reducing the use of energy.

But over the next few years, our room for error is modest and we do face the risk that energy prices may fluctuate with changes in supply.

Senator BAYH. Thank you. My closing comment, Chairman Bernanke, would be, you know, interdependence is one thing, increasing dependency is another, and it raises potential risks that we best think about in advance so that we do not face a potentially difficult situation at some point down the road. That is the underlying theme of my remarks. Thank you very much.

Chairman SHELBY. Senator Sarbanes.

Senator SARBANES. Thank you, Mr. Chairman. Actually, I want to pursue a line of questioning that just follows along with what Senator Bayh has been examining in the course of his questioning, which I thought was right on target and, of course, this is an issue—he chairs our Subcommittee in the international arena—and this is an issue on which he has focused and made some very substantial and positive contributions.

Chairman Bernanke, you said to Senator Bayh, they like to hold our dollar assets. They are attractive to hold. I am interested whether there is not something more than that here. Now, these dollar assets, at least according to Marty Feldstein, are being purchased by foreign governments primarily, not by foreign individuals. Feldstein writing in the *Financial Times* on January 10 said:

> My own belief, based on widespread conversations with officials and with private bankers, is that the inflow of capital that now finances the U.S. current account deficit is coming primarily, perhaps overwhelmingly, from governments and from institutions acting on behalf of those governments.

Do you agree with that statement? Is that your perception as well?

Chairman BERNANKE. We do not have complete information on these numbers, as you know, Senator, but I do not agree with the thrust of the statement. I think that there are substantial private sector inflows that play a big role in the financing of the U.S. current account deficit.

Senator SARBANES. If Feldstein were right, that the holders or that this inflow is primarily from foreign governments, would that raise your concern, or do you have any concern about the current account deficit? Let me start there first. I mean it is now at, well, the trade deficit is at $725 billion last year. That is the largest figure we have ever had for a trade deficit. Is that a matter of concern for you?

Chairman BERNANKE. Yes, Senator, it is.

Senator SARBANES. Okay. All right. Now, if Feldstein is right, that it is foreign governments that are putting in the capital, would that cause you added concern?

Chairman BERNANKE. I do not think he is correct, Senator. There is something on the order——

Senator SARBANES. No, I understand that, and that would require presumably some factual examination, but if he were right, would that heighten your concern?

Chairman BERNANKE. It depends really on which type of investor is more sensitive to changes in yields. Central banks have actually been less sensitive to changes in yields than private sector investors.

So, I cannot say a priori which situation would be one of more concern. I think it is really not so much the portfolio situation; it is the fact that we are accumulating foreign debt over time, year by year. We can do that because foreigners are willing to finance that debt, but I do not think that we can continue to finance the current account deficit at 6 or 7 percent of GDP indefinitely, and it is desirable for us to bring down that ratio over a period of time.

Senator SARBANES. Now it is your view, I take it, that they are doing this because these are attractive investments; is that right?

Chairman BERNANKE. Attractive in not only the return sense but also in the sense that they are safe, liquid, and easily negotiated.

Senator SARBANES. Well, now if the governments are doing it, would it not have an added significance in terms of trying to gain a trade advantage? Now this is the change in foreign currencies versus the dollar, the appreciation.

[Chart.]

Senator SARBANES. This line is the euro, which generally is seen as free floating, responding in a market forces and so forth, the euro-dollar relationship. And this line down here is the Chinese currency, the yuan, right down here.

Now that is a pretty dramatic contrast. And China, which of course is holding more and more of our Government debt, actually our trade deficit with China last year was a record in terms of the trade deficit ever recorded with a single country; is that correct?

Chairman BERNANKE. I believe so.

Senator SARBANES. Over $200 billion. Does this not enable them to gain an unfair trade advantage?

Chairman BERNANKE. Senator, if you are asking me whether I would support or advocate that the Chinese go to greater flexibility in their exchange rate, I certainly would.

Senator SARBANES. Yes.

Chairman BERNANKE. I think it is, in fact, in their own long-term interest to do so for a number of reasons. It will give them more monetary policy independence. It will reduce the overdependence of their economy on exports and I think it will be commensurate with their increasing global role for them to take an interest in the overall stability of global financial markets and trade.

Senator SARBANES. But if they can do this on the currency relationship, does it not give them a step up in the trade relationship?

Chairman BERNANKE. To the extent that their currency is undervalued, it does, yes.

Senator SARBANES. Yes. In fact, we are becoming more and more dependent. Tennessee Williams has that wonderful line in "A Streetcar Named Desire" where Blanche DeBois says dependent upon the kindness of strangers, and there are some who look at the American economy and are increasingly concerned that that is what is happening.

I quoted Warren Buffett earlier in my opening statement saying right now the rest of the world owns $3 trillion more of us than we own of them. In my view, it will create political turmoil at some point. Pretty soon, I think there will be a big adjustment.

Aren't the Chinese accumulating a leverage over our decision-making as a consequence of increasing so substantially these holdings of our Government debt?

Chairman BERNANKE. First, Senator, I think the $3 trillion should be put in some context. If I recollect, there is something like $15 trillion gross holdings of U.S. assets from foreigners and U.S. holders own about $12 trillion foreign assets, so that is a net number, part of a much bigger flow of in and out of capital.

Senator SARBANES. But that is a big change from what it used to be——

Chairman BERNANKE. We have much more open capital markets.

Senator SARBANES. —not so long ago; is it not?

Chairman BERNANKE. Yes, we have much more open capital markets, much greater capital flows, and it is worth noting that U.S. national wealth as of the third quarter was $51 trillion to compare that to the $3 trillion.

Now, as I said, I think that we should work to reduce the current account deficit over time. I think that would reduce the possibility of an uncomfortable adjustment process. But, again, as I said ear-

lier in response to Senator Bayh, I do not think that the Chinese ownership of U.S. assets is so large as to put our country at risk economically.

Senator SARBANES. You do not think they could use it for political purposes?

Chairman BERNANKE. It would be very much against their own interest to do so.

Senator SARBANES. Well, it would be against their economic interest. It might not be against their political interests in the particular context of what the issue might be. I mean we are struck by the fact—Senator Bayh, I think, made reference to it—a South Korean Government official, and of course their holdings are much less, but still substantial, made a comment about South Korea continuing to hold the dollar, maybe that they would not do it and so forth, and it sent the stock market down over 150 points. Of course, then everyone scrambled and he pulled the statement back and so forth.

But if it can have that kind of impact, is it not suggestive of the leverage that the Chinese may have in this situation, or others as well for that matter, but I mean since the deficit with China was at a record last year, I am focusing on them?

Chairman BERNANKE. Again, information, psychology, and news can always affect markets in the short-term, but I think that over a longer period of time that the depth and liquidity of U.S. financial markets would be sufficient to sustain changes in holdings by foreign central banks.

Senator SARBANES. Mr. Chairman, I see my time is up. I just want to, in closing——

Chairman SHELBY. Take another minute.

Senator SARBANES. —when we talk about the deterioration and the net international investment position, when you talk about so much, this is the chart which illustrates what has happened.

[Chart.]

Senator SARBANES. The first line back there is 1980. We had a positive net position. We then went into a negative position, but look at what has happened to it in recent years. I mean if you regard a minus or a negative position as something to worry about, it seems to me we have very good reason to be worried about what has happened to our net international investment position.

It is no wonder Buffett is saying this or Volcker says, "Under the placid surface there are disturbing trends, huge imbalances, disequilibria, risk, call them what you will. All together the circumstances seem to me as dangerous and intractable as any I can remember, and I can remember quite a lot."

Thank you, Mr. Chairman.

Chairman SHELBY. Thank you, Senator Sarbanes. I want to shift to Basel II capital requirements, Mr. Chairman. The Federal Reserve is presently in the process of implementing the Basel II Capital Accord, which will establish new capital requirements for our largest banks.

Capital requirements play a vital role in protecting the safety and soundness of the U.S. banking system. I think it is very important that there be no surprises to this Committee and others in the

implementation of Basel II, especially unanticipated reductions in capital requirements.

Last year, Chairman Bernanke, this Committee held a hearing at which several witnesses here expressed concerns that the adoption of Basel II would result in the lowering of capital requirements. In addition, last year, the Fourth Quantitative Impact Study, unexpectedly, Mr. Chairman, showed that Basel II would result in substantially lower capital requirements which gives then this Committee concern.

What steps, Mr. Chairman, need to be taken to make sure that Federal banking regulators, and you are one of these regulators, Congress and the public at large are confident that the implementation of Basel II will not, will not adversely impact the safety and the soundness of the banking system that we know today?

Chairman BERNANKE. Mr. Chairman, let me just assure you that the Federal Reserve does not want to see a significant reduction in capital in the U.S. banking system. We are prudential supervisors. We have a very strong interest in maintaining a safe and sound banking system and a stable financial system.

We are planning a very slow phase-in process, one that will involve considerable consultation, will involve a variety of safeguards such as floors that will be phased out over a period of time. Moreover, there are a number of other safeguards such as the leverage ratio and Pillar II which allows the supervisors to evaluate the overall safety and soundness of the bank and look at such things as compliance risk or interest rate or liquidity risk.

We are very much on the same page as you are, Mr. Chairman. We think Basel II is very important because it will allow banks' capital holdings to be sensitive to the risks that they take, and it will be consistent with modern risk management techniques, so we think it is important to move forward with Basel II. But we do not see this, we certainly do not want this, to be a source of a significant reduction in aggregate capital in the U.S. banking system.

Chairman SHELBY. Senator Sarbanes wants to be recognized now. Go ahead.

Senator SARBANES. Mr. Chairman, I just want to observe that is kind of calming the waters in terms of assurance. Vice Chairman Ferguson did that when this Basel II was under his jurisdiction. Mrs. Bies has it now, I think, in her portfolio. And he told us that they were not going to lower capital and so forth and so on.

But you ran the formula in the QIS–4 and it resulted in very substantial capital reductions. Everyone said, the regulators all rushed to say, well, we do not want that; that is not where we want to go. We do not intend to do that if the Congress raises questions about it. But you are moving ahead with a proposed regulation, as I understand it, that is still utilizing the same formula that produced the QIS–4 result, and you are saying, well, if it produces these bad results, we will take all kinds of band-aid measures in order to contain it.

But why would you not pull the regulation back, develop a revised formula as part of the proposed regulation, which upon testing did not produce these kind of results about which everyone says, oh, we are very concerned about it, and yet they move ahead

with the proposed regulation, still encompassing the formula that everyone admitted created a terrific problem?

Chairman BERNANKE. Senator, the QIS–4 results were on a best efforts basis. The banks did the best they could with the information they had. They had not yet developed the models. They do not have all the data they need. It was just a very experimental kind of study. In order for this to be really put to the test, the banks need to have the guidance from the regulators about what our expectations are so that they can actually go ahead and develop the models, get the data, and take this to the next level.

They really cannot proceed with the process and allow us to do further analysis without some guidance from us. This is very much a dialectical process. We are going to provide guidance, we are going to see the results, we are going to get commentary, and we are going to work together with the banks to make sure that the bank capital is adequate.

Senator SARBANES. I understand all that, but why are you moving ahead with a formula that has been shown to be faulty? Why do you not pull back and develop a different formula?

Chairman BERNANKE. We are adjusting the formulas based on what we have learned and we will continue to do so.

Senator SARBANES. What is going to happen, and I just sound a warning, is you are going to continue down this path, you are going to become more committed, as it were, to your international partners. You are already very heavily committed, I think overcommitted, because you have moved way ahead there, created a problem, and then one day the Congress is going to say to you wait a minute, this is not the path we want to go on; this path is going to lead to a significant reduction in capital. And somehow or other we are going to put a stop to it.

Now that is the potential that I see developing by what I think is a faulty process. I think once you had these bad results from the QIS, you should have pulled back, revised the formula, and gone back into a—so when you moved ahead on the process, you had some confidence it was meeting all of these concerns. You are moving ahead on a process now that still has within it the very seeds from which all this concern flows.

Chairman BERNANKE. Senator, first, we cannot really evaluate the formulas unless we see the results from the banks' own models and their own analyses. There needs to be a dialogue process going on so that we can continue to learn, and second, it is, after all, a very flexible framework that allows for capital under Pillar II. It allows for multipliers and other changes.

I hear you very clearly and I assure you once again that it is not in the Federal Reserve's interest to allow inadequate capital in the banking system because financial stability is one of our primary objectives.

Senator SARBANES. Let me just add. Is it a conflict for the banks, to look to the banks to develop the model since the banks stand to benefit in significant ways if they can lower the capital requirement? It will enhance their competitive position vis-á-vis other banks in the U.S. and it will keep them, or they would argue presumably, in a competitive position vis-á-vis banks in other countries that are moving to Basel II.

So you keep telling me, well, we are looking for the banks to give us the models, but don't the banks have a particular vested interest in what they want the models to produce?

Chairman BERNANKE. Well, actually we are looking for them to give us statistical indicators of their own loss experience in their past credits. And part of the process will be validation. That is, they have to show us that their numbers were derived from their actual experience over a period that encompasses both strong and weak credit conditions and that they are using those models for their own internal analysis of capital. So there will be a lot of checks and we will continue to work with the banks and with the Congress on this issue.

Chairman SHELBY. Mr. Chairman, before I recognize Senator Carper for his first found of questions, I just want to emphasize that Senator Sarbanes and I have talked at length to our counterparts in the House, Democrats and Republicans. They have the same concerns we do. We have all been on this Committee—Senator Sarbanes and I have been on this Committee during the thrift bailout and everything. We believe that capital is very, very important for the safety and soundness of our banking system, period.

Senator Carper.

Senator CARPER. Mr. Chairman, I think I would like to ask you a human question before we get into some of the other things I mentioned earlier. I told you I wanted to talk about our savings rate, our poor savings habits in this country, and I wanted to talk about the interplay between the trade deficit and the budget deficit and potential impact on interest rates.

But just really a human question at first. You have been in your new job for how long?

Chairman BERNANKE. Oh, about 14 days now.

Senator CARPER. And we were talking in the anteroom before we came in, and I was asking you how you are doing as a human being. And you mentioned jumping right into these hearings 2 weeks into the job was a challenge, and I can understand that. But where does so far 2 weeks into this job, where does it meet your expectations; maybe where is it a little bit different from the expectations you had for it?

I say that recognizing that you are probably uncommonly well prepared for this position.

Chairman BERNANKE. Well, it has been very challenging and very interesting, and I do have the benefit of having spent almost 3 years at the Board as a Governor, and that experience has been invaluable in trying to address the wide range of issues the Federal Reserve deals with.

Senator CARPER. You will be scheduled to come back before us when? About 6 months or so from now?

Chairman BERNANKE. That is correct.

Senator CARPER. And one of the questions—this is telegraphing my pitch—but one of the questions I will ask you then is with 6 months of experience under your belt, how do you see the world or this job, your responsibilities, differently, if at all, then than you do as you assume these responsibilities?

Let us talk about savings rates. Just share with us, if you will, your view of the kind of job we are doing as savers in this country,

where we might do better, and some things that not just the Federal Reserve but those of us in the Congress should be thinking about to encourage a better savings rate? And why should this or should this not be a concern to us?

Chairman BERNANKE. Senator, this actually ties back to the questions raised about the current account, for example. The reason we have a current account deficit is that we invest more, including housing, than we save, and we have to make up the difference by borrowing abroad, so our national saving is not sufficient to fund our domestic investment opportunities.

It is a good thing in a sense that we are able to go to the international capital markets and find funding for good domestic investment opportunities, but we would be better off in some sense if we ourselves could fund those investment opportunities creating more wealth for Americans and greater capacity in the future for us to deal with the long-term challenges associated with demographic changes and the like.

So, I think it is desirable for us to try to raise our national saving. There are various dimensions to that. One is on the fiscal side. We are looking in the next 5, 10, 15 years to increasing obligations and entitlement spending, for example, and increasing challenges in the Government's budget.

Congress is going to have to make some very tough decisions about controlling the deficit, and by doing so, to the extent that the deficit can be reduced, that is a direct contribution to national saving and would be constructive.

In addition, Americans, in part because of the increased wealth they have gained through increased home values and through other asset price increases, have not saved too much out of current income. In fact, the current saving out of disposable income is a negative rate.

Senator CARPER. Say that one more time.

Chairman BERNANKE. The savings rate, the ratio of household savings to after-tax income, is currently less than zero. That is, spending is more than income. Our expectation is that that saving rate will increase over time for a number of natural reasons, including the possibility that house prices will no longer rise as quickly as they have and so people will be forced to turn to saving out of current income in order to build their assets.

But in addition, it would be desirable for Americans to save more to prepare better for the future. The problem is we do not have really good effective tools to achieve that. There are obviously ways of providing tax incentives or other kinds of tax-favored vehicles to help people save.

There is a lot of debate about how effective those actually are and I really cannot give you a strong answer there. One thing which I think can be done and would be positive would be on the financial literacy front. When I was on the school board in New Jersey many years ago, I argued for more economics in the schools. I thought that it was very important for young people to understand early on that they need to put something away; they need to develop a habit of saving, and they need to understand enough about financial markets and financial instruments that they can save effectively.

So that is one dimension where I think we can be helpful, but I agree that saving is something that needs to be promoted and that it is good for our long-term future to have greater wealth accumulation.

Senator CARPER. I would just say, Mr. Chairman, and to my colleagues and to Chairman Bernanke, in our experience in Delaware, trying to get people to save through the State of Delaware's deferred compensation program, State employees, people who were higher income, and there are not very high-income State employees in Delaware, but people whose incomes are higher tend to save a lot. They maxed out in the deferred comp program.

But in order to get the people who were at the lower end to save, we had to be able to provide some incentives for them, and to say for every dollar that you save, we will like match it with two dollars, and to get to prime the pump, and once we did, they would participate.

And the other thing I would say, for most of us, the biggest source of savings is really the equity in our homes, and to the extent that we can include homeownership opportunities not for people like $150,000 or $200,000, but to the people who are making $25,000, then we do a very good thing for them as they prepare for their golden years.

Thank you, sir.

Chairman BERNANKE. Thank you.

Chairman SHELBY. Senator Schumer for your first round.

Senator SCHUMER. Thank you, Mr. Chairman, and I thank you, Chairman Bernanke—that has a nice ring to it. I am glad you are here. I thought your confirmation process was both a tribute to you and a model of how we should do other confirmations, particularly on other Committees on which I might serve or do serve, with a lot of consultation, bipartisanship, et cetera.

I have a bunch of questions. The first relate to the overall global situation of the United States and as it relates to China. You said yesterday that we need to increase national savings as one of the ways to deal with our big trade deficit with the rest of the world and China.

Yet, the budget we passed 2 weeks ago increased the debt we have further and there is a push to put new tax cuts in that. Now, I am not asking you to opine on tax cuts. I know you do not want to do that.

I do want to ask you does it make sense, from a global perspective, for us to continue to increase this deficit, whether it is by tax cuts or increased savings? Does that not weaken the position of the United States in trying to accomplish many of our other international economic goals?

Chairman BERNANKE. As I indicated to Senator Carper, I think reducing the fiscal deficit is an important priority. It is important because looking forward 10, 15, 20 years, we have a demographic challenge coming, and we need to be prepared for that, and it does contribute to national savings which enhances our wealth creation and the strength of our economy in the future.

So, I do think that we should look at that. There really are two separate questions. I just would note the first one is the size of the Government itself. I mean what we should agree on how big the

Federal Government, that is the Federal budget, should be, and then we need to make sure that the revenues we collect are commensurate with those expenditures over a period of time.

Senator SCHUMER. You do agree that, again, now looking more at the type of actions that Senator Graham and I have been active in, not commenting on our methodology, that it would be better for the world economy and for the United States if China were after some point of time to allow its currency to float, which would adjust for trade imbalances that would occur. Do you agree with that?

Chairman BERNANKE. Yes, Senator, I do. I think China should move toward a more flexible exchange rate.

Senator SCHUMER. And why do you think we are making so little progress with China right now?

Chairman BERNANKE. That is a good question. They have, I think, mixed views about the benefits to their own economy of making that change.

Senator SCHUMER. Right.

Chairman BERNANKE. They see some benefits in what they view as stability. They see an advantage in exports from keeping their exchange rate where it is. But as I was suggesting, I think, to Senator Sarbanes, it is very much in their interest to move toward a more flexible exchange rate to increase their monetary independence, to reduce their reliance on exports, and just to continue to play an appropriate role in contributing to global financial and trade stability.

Senator SCHUMER. Right. And I agree with the thrust of your comments there. The Chinese seem to want a lot of the benefits of being part of the global system, but are much less quick to take their responsibilities.

What would you suggest to people like Senator Graham and I? Now make no mistake about it, our legislation is very popular in Congress, but lots of economists and people I respect say you are right on your goals and you are right that China is not moving quickly enough, but this is the wrong way to go.

The problem is we are ready to tear our hair out. There seems to be no other way to go. The Administration has tried talking softly and talking loudly. It just seems nothing gets them to move. Do you have any suggestions on how we can get the Chinese to let the currency float? No one is saying it has to float freely, completely, immediately. There have to be adjustments. But what can we do other than the legislation that Senator Graham and I have introduced?

We do not see any other solution at this point. The Chinese say to us if you put pressure on us, we will not move, and then when we do not put pressure on them, they do not move.

Chairman BERNANKE. I appreciate your frustration, Senator Schumer. As you probably know, I think it is not a good idea to break down some of the gains we have made in terms of free and open trade in the world economy. We should be very careful about that.

But in terms of working with China, there are really two things we can do. We can continue to try to be persuasive and we can try to offer technical assistance in helping them. They have taken some steps in terms of increasing their trading platforms and their

capacity to allow the exchange rate to float. I agree they need to do more and we just need to continue to work with them and be as persuasive as possible.

Senator SCHUMER. One final question on this, if I might, Mr. Chairman.

Chairman SHELBY. Go ahead.

Senator SCHUMER. Doesn't the fact that China and other countries, Japan, have such large amounts of American reserves mean that they could, if they wanted, actually have a little bit of your job, have some effect over interest rates in the United States by what they do?

Chairman BERNANKE. As I indicated already this morning, I think that the capital markets for U.S. dollar assets are sufficiently large, deep, and liquid that the impact of such changes would be mostly transitory and could be managed.

Senator SCHUMER. Thank you, Mr. Chairman.

Chairman SHELBY. Senator Bunning.

Senator BUNNING. Thank you, Mr. Chairman. We are on 5 minute round of questions, are we not?

Chairman SHELBY. Or as much time as you need.

Senator BUNNING. Thank you. Just to follow up on Senator Schumer's discussion about China. We took six Senators to China to talk trade with the Chinese. They would not even visit with us. Six U.S. Senators, five were on the Trade Subcommittee of the Finance Committee, and we got number six in line in the Chinese bureaucracy and he knew nothing about trade.

So, I just want you to know what a problem there is, and we worked like the devil to get them into the WTO, and I wish that they would just follow the rules of WTO. That is an aside.

Yesterday, you talked a lot about our budget deficits and particularly our long-term obligations that are only going to increase. You also rightly said those decisions are ones that Congress needs to make. How much of a factor are those long-term entitlements in your economic forecast? I am speaking about Medicare, Medicaid, and Social Security.

It looks like by the year 2030 that they will take up about 70 to 75 percent of our budget. So we will be squeezed down to about 25 percent for discretionary spending. So how much do they come into your forecast?

Chairman BERNANKE. Senator, your basic facts are absolutely right. The numbers I have are that in the next 40 years the share of GDP being devoted to Social Security, Medicare, and the Federal part of Medicaid is going to go from about 8 percent today to about 16 percent 40 years from now.

Since the historical share of GDP collected as tax revenues is something in the order of 18.2 percent, that suggests there will be very little room in the budget for anything other than entitlement spending and suggests it is very important for Congress to begin thinking about how it wants to reorder or set its priorities.

It is important to get that going soon, first of all, to assure financial markets that Congress will be responsible and, second, and perhaps even more importantly, to give people the time they need to plan for retirement and make provision based on any changes that Congress might decide to make.

In terms of our forecast, as I reported today, are usually only a year or two in the future, uncertainty being what it is. So only the near-term effects are reflected in our forecasts. We are already beginning to see some effects of entitlement spending on the budget deficit. We factor that in, but since we are only looking at the near-term effects, we obviously are not incorporating these very large, long-term entitlement obligations into the near-term forecasting exercise.

Senator BUNNING. If nothing is done to shore up these programs, and I am speaking about entitlements, for several more years, what kind of impact is this going to have on our economic growth and employment and how will that affect your ability to act?

Chairman BERNANKE. Well, the widening deficits over a period of years will reduce national savings, will probably exacerbate the current account deficit, may raise interest rates, and will probably inhibit the dynamism of the economy.

I do not foresee, in the near-term, that these factors are going to substantially affect monetary policy or the way monetary policy functions in the economy, but from a broader perspective, the health of our economy, in the long-run, requires that we achieve a better fiscal situation and higher national saving.

Senator BUNNING. In reference to the trade deficit, how long do we have to reduce trade imbalances before our economy starts to suffer because of them?

Chairman BERNANKE. Senator, it is very hard to judge. It took us about 10 years to get where we are today from about 1995 when the current account deficit began to open up. It might take that long to reverse. It might take a number of years to reverse, and I think that it is certainly possible to have a decline in the current account taking place over a number of years, but it is very hard to judge exactly how long the process is going to take.

Senator BUNNING. Thank you, Chairman.

Chairman SHELBY. Mr. Chairman, the January survey of senior loan officers indicated that 40 percent of respondents felt that the outlook for delinquencies and chargeoffs of nontraditional mortgages was likely to deteriorate somewhat.

Would this type of credit quality deterioration be consistent with the forecast that you outlined for a soft landing in housing markets? And do you believe that bank regulators including the Fed, yourself, acted quickly enough in putting out supervisory guidance regarding these types of nontraditional mortgage products?

Chairman BERNANKE. I cannot really speak to the timing. We have put out——

Chairman SHELBY. First of all, I realize you have just gone to the Fed.

Chairman BERNANKE. We have put out guidance for comment on nontraditional mortgages and I think that it is good guidance. It addresses what I think are the main issues. First, are banks underwriting nontraditional mortgages in an appropriate way? In particular, are they selling these mortgages to people who are able to manage them effectively?

Chairman SHELBY. Will you as a regulator at the Federal Reserve require banks to take any additional steps to mitigate the

risk and how might these steps affect the economy if you see it is necessary?

Chairman BERNANKE. Mr. Chairman, as I was saying, the guidance includes several components, including both underwriting and consumer disclosure to protect consumers, but also safety and soundness. The banks should manage the risks associated with nontraditional mortgages in a way that maintains their capital at a safe and sound level.

Chairman SHELBY. Your report this morning, Chairman Bernanke, indicates that growth in labor productivity over the past 5 years has averaged over 3 percent per year.

For the fourth quarter of 2005, it declined 0.2 percent in the business sector and 0.6 percent in the nonfarm business sector. The productivity declines were unexpected by most market watchers.

What is your assessment of these numbers? Do they represent a one time aberration or are they indicative of things to come? Do you believe it is possible for us to sustain the pace that we have seen over the past 5 years?

Chairman BERNANKE. Mr. Chairman, the fourth quarter appears to have been a transitory decline in growth related to a number of special factors, including effects of the hurricanes, the seasonal pattern of sales of automobiles, and some other factors as well.

So with output down more than the underlying trend would indicate, productivity, which of course is output per worker, also declined in the fourth quarter.

Chairman SHELBY. Think that will continue?

Chairman BERNANKE. It appears that the first quarter will see significant rebound from the fourth quarter and likely productivity will come back with it. We, in the Federal Reserve, pay most attention to productivity growth over the longer-term, and the ability of the U.S. economy to generate ongoing productivity gains through use of technology, through the flexibility of our labor and capital markets has been most impressive. And we expect good productivity gains to continue for the next few years.

Chairman SHELBY. Thank you. Senator Bennett for your first round.

Senator BENNETT. Thank you, Mr. Chairman. I apologize for coming in late. I have been over in the House side chairing the meeting of the Joint Economic Committee to hear the President's Annual Economic Report from the Council of Economic Advisors, and they miss you, Mr. Chairman, but they acquitted themselves extremely well, and your former colleagues did a great job.

Let me focus on an area where you had questioning on the House side where some of your comments were, shall I say, not the ones that I would have wanted. I want to talk to you about ILC's. I am sure that comes as no surprise to you. Being the Senator from Utah, I represent the State where the ILC's are a very significant industry.

I have not had a chance to review the transcript directly. I have been told by one of the Members of the House who was there that you were told that some ILC's have failed, and that is not true.

Chairman BERNANKE. I was not told that.

Senator BENNETT. Okay. I want to get the record straight on that. The ILC's are back in the news right now because of Wal-

mart's application, and people are saying, well, we have to prevent Wal-mart from getting an ILC charter. That is just awful. No one wanted to prevent Target from getting an ILC charter, and I have a hard time understanding why it is okay for one large retailer to have such a charter and not for its competitor to have such a charter.

I have talked with the Wal-mart executives. I believe they are sincere in their statement that they do not intend to go into the banking business. Indeed, they are signing long-term leasing contracts with community banks, community banks entering Wal-mart with their own branches. The Wal-mart people told me we have looked at this, but we are not bankers, we are retailers, they are different businesses, and we do not want to go into a business we do not understand.

However, simply getting an ILC charter will save Wal-mart $30 million a year in processing fees to a bank. If they are technically a bank, they do not have to pay another bank to process all the charges, all the credit card charges, all the checks, and money orders, et cetera, that they process. They will process them themselves through their ILC. It is worth $30 million a year to them.

I do not see anything wrong with that, and I hope the FDIC does not see anything wrong with that. They are the regulator of the ILC's. For years, the staff at the Federal Reserve has felt strongly that the FDIC is not capable of regulating the ILC's and they either want them destroyed or short of that, they want them transferred to the Fed, so that the Fed oversees them.

I see no market reasons why that is necessary, no circumstances in the real world that says the Fed could do a better job than the FDIC. So, I would like your responses to that and your comments about the ILC's, your attitude as to how dangerous they may be, and any data that you might have to back that up, and then your sense of what would happen to the ILC's if indeed the Fed were to succeed in its crusade to get the regulatory responsibility shifted away from the FDIC?

Chairman BERNANKE. Senator, first of all, as you point out, the specific case at hand, the Wal-mart case is the FDIC's decision. I understand they are going to have a public hearing and will evaluate the merits of that individual case.

The concerns that the Federal Reserve have had about ILC's have turned largely on recent proposals that ILC's would have additional powers including interest on business checking and out-of-State branching which would de facto make ILC's the functional equivalent of banks.

And our concern has been that if ILC's are to be the functional equivalents of banks, that they receive parallel treatment in terms of consolidated supervision and other responsibility requirements that banks face. And it may be that I have only been in the job 2 weeks, but I am not aware that the Fed has lobbied to become the regulator of the ILC's.

Senator BENNETT. I think the staff will make you aware of that fairly soon.

Chairman BERNANKE. Perhaps they will. The main thing is that Congress should try to be consistent, make sure that rules that they apply are applied consistently across similar types of organiza-

tions, and that is the concern that we have had, and we have been concerned about the ownership of ILC's by nonfinancial institutions and whether or not that poses risks to the safety net or creates an unlevel playing field with other kinds of financial institutions.

Senator BENNETT. I think those are legitimate questions, and I believe the ILC's qualify for their present circumstance in the face of all of those questions. In 1997, Chairman Greenspan said, quote:

> The case is weak in our judgment for umbrella supervision of a holding company in which the bank is not the dominant unit and is not large enough to induce systemic risk should it fail.

And that, of course, is the case with the ILC's. If Wal-mart were to get its charter, the bank would clearly not be the dominant unit. And its size would not indicate systemic risk. Taking that statement from your predecessor, do you have any ideas about how it no longer applies or any reaction or, again, is this issue, and I am not saying this to put you down in any sense, I think it is very possible that this issue is simply too new for you to feel comfortable commenting on it, and I would not complain if you said that was the case. But we do have this comment by Chairman Greenspan, which he has subsequently recanted, but which we really like. And I would like your reaction to it.

Chairman BERNANKE. Again, I think that it would probably not be appropriate for me to comment on the Wal-mart case given its status of being adjudicated by the FDIC.

Senator BENNETT. Just comment about this whole idea generally because this statement was made before Wal-mart applied for their charter.

Chairman BERNANKE. The general concern is that if a commercial firm owns a bank, would there not be a possibility that the safety net would be inadvertently extended to the commercial firm? Would we be able to segregate the financial condition of the commercial firm from the bank and would it be possible for not just the FDIC but for any bank supervisor to adequately supervise not only the bank but also the owning firm to ensure that the safety and soundness rules were being met?

Senator BENNETT. Now we are edging into Gramm-Leach-Bliley and the conversation about banking and commerce. I used Wal-mart as the example because they put a specific number on it. Simply having an ILC charter is worth $30 million to them a year if they do absolutely nothing as far as the consumer is concerned and it does not change the safety and soundness of anything to me.

Many of the largest ILC's in Utah are owned by automobile companies. GMAC, Volkswagen, Mercedes, they do very large financing operations, and they find that having an ILC charter is enormously valuable to them even if they do not issue checkbooks and they do not open branches, and they do not do the traditional kinds of things that banks do. This is a device, created by the Congress, that is helping the marketplace, making things more efficient, saving money all the way around, which presumably means that consumers benefit because there is less money going into it.

We do not have to continue this, but I just want to lay this issue on the table before you because I think you will see down at the Fed that there is an effort on the part of some members of the staff to, if not curtail the ILC's all together, to bring them under Fed

jurisdiction, and that is certainly former Chairman Leach's desire. He is not fond of ILC's and I think would like to see them eliminated, and I am laying down again the marker, I am very fond of them, and I want to see them continued.

Chairman BERNANKE. Senator, the thrust of the Leach bill would be essentially to restrict the kind of firm that could own an ILC and that was the part that I commented on favorably yesterday. Again, the Federal Reserve is not in itself looking to find new areas, new domains, but having a financial holding company or a financial company owning the ILC mitigates some of the concerns that I have talked about relating to consolidated supervision.

Senator BENNETT. Thank you. I am sure we will be having more conversations about this.

Thank you, Mr. Chairman.

Chairman SHELBY. Senator Sarbanes, you have any other questions?

Senator SARBANES. Senator Bennett having laid the issue on the table, I think I should continue with it for a bit just to be clear. As I understand it, the FDIC does not have consolidated supervisory authority and that is the problem with these ILC's, unlike the role the Fed has with respect to regular financial institutions under the Federal Bank Holding Company Act; is that correct?

Chairman BERNANKE. That is correct.

Senator SARBANES. And, of course, Chairman Greenspan was quite outspoken about this issue. I do not know. You cited him for something, but it is——

Senator BENNETT. I acknowledge he has changed his mind since he said that.

Senator SARBANES. He has been quite strong about it. In fact, he expressed a concern that the ILC's, which are chartered in just a handful of States, represented a breach in the traditional separation of banking and commerce in the United States, and unlike the financial institutions with banking subsidiaries, the owners of the ILC's are not currently subject to the supervisory requirements of the Bank Holding Company Act.

So you have a very significant loophole here. I mean these ILC—I understand Senator Bennett's interest in this matter—but, you know, they have grown at an incredible rate. The aggregate amount of assets controlled by Utah-chartered ILC's is 16 times the total of all the banks, savings associations, and credit unions chartered in Utah.

Senator BENNETT. We are very grateful.

Senator SARBANES. It has become a huge business there. One ILC has more than $58 billion in assets. I do not think Target should have a bank. I mean you said no one questions that. I question that.

Senator BENNETT. Okay.

Senator SARBANES. In Gramm-Leach-Bliley, we closed the unitary thrift loophole as a way to further the separation of banking and commerce, and this one loophole remained and is now being exploited and expanded to the hilt, and I think it is a very serious problem.

Now, the Leach legislation, as I understand it, would simply subject the ILC's to the same prudential constraints including consoli-

dated supervisory requirements, bank level capital, managerial criteria, enforcement mechanisms, as applied to financial holding companies. And the GAO was asked to do a study and they concluded that the ILC's were not adequately regulated under current law.

The problem may come somewhere down the line, just like it did with the savings and loans. I mean we had the savings and loans people came in and said, well, we need to accommodate here, it is an important part of our economy. And 50 percent of the savings and loans that failed were in the State of Texas. So we had Members of the Committee who were deeply interested in that and so we went along, went along, and whammo.

I think the taxpayers paid $132 billion for the savings and loans. So, I am concerned about these loopholes and the exploitation of these loopholes because there is not around them the kind of regulatory examination, the regulatory framework, which helped to assure the safety and soundness of the system. So the matter having been put on the table, I thought I should contribute to the discussion.

Senator BENNETT. I am always grateful for your contribution.

Senator SARBANES. I want to very quickly, Mr. Chairman, ask you two or three quick questions, just as kind of an alert of our interest. One is the remittances, an issue that you have taken an interest in. I want to underscore that. Is there a greater role for the Fed to play in expanding the service of its international automated clearinghouse? There is some opinion that think that.

I mean you have just reached an understanding with the Mexican central bank and it is felt that that is going to make a difference. What about expanding it?

Chairman BERNANKE. It is correct that we have reached an agreement with Mexico, and to the best of my knowledge we are exploring further opportunities and we are open to your comments or suggestions.

Senator SARBANES. Okay. Everyone thinks of you as primarily a monetary policy, and that is understandable, but the Fed has a very significant role, of course, as a bank regulator. Privacy and data security, something the Chairman has focused a great deal of attention on. Last year, we had these incredible instances of several financial institutions—actually Government agencies, private companies as well—reporting these breaches of Social Security numbers, credit and debit card numbers, security codes, and bank account information.

What can the Fed do to help tighten up data privacy and security and enhancing the privacy rights of consumers?

Chairman BERNANKE. The Federal Reserve together with the other banking regulators already has issued, I believe, its regulations to the banking system concerning management of data. There are really two parts to it. First, that banks are required to have good internal controls, to make sure the data are protected. And second, that banks are required, and other financial institutions are required, to inform customers if there is a data breach that has caused, or is likely to cause, or be a source of fraud.

So we have created a structure in the banking system to address these issues, and to my knowledge, I believe that Congress is look-

ing to some extent at our approach as a model for thinking about extending these rules to other kinds of organizations.

Senator SARBANES. And finally this Committee has held a number of hearings on money laundering and terrorism financing. Actually, you know, the Department of Justice has undertaken criminal investigations of bank officials in these areas. But that suggests that the regulatory authorities, the bank regulatory authorities of whom the Fed is one, somehow fell behind the curve, so to speak. What can be done to boost that oversight with respect to money laundering and terrorism financing?

Chairman BERNANKE. We consider it a very important issue, and we are putting a lot of resources into it. Our approach is again to assess information management systems that banks have to make sure that they know their customer or they know the source of a transaction. That is the best way we have to approach this and again we will continue to work hard to make sure that the Anti-Money Laundering and Bank Secrecy Act rules are obeyed.

Senator SARBANES. Is there a special unit at the Fed that focuses on this?

Chairman BERNANKE. I think it is part of the general Bank Supervision Division, but there are certainly quite a number of individuals who are specially involved in it, who have special backgrounds.

Senator SARBANES. Do you think it has a high enough profile within the Fed organization or the Fed hierarchy?

Chairman BERNANKE. Would you allow me more time to learn more about the structure of the organization?

Senator SARBANES. Fine. Thank you, Mr. Chairman. I do want to commend the Fed on the work it is doing in the area of financial literacy and in particular Chairman Bernanke's commitment to that effort. He made reference to when he was on the school board. It was an elected school board, as I recall; correct?

Chairman BERNANKE. Yes, sir. I received over 1,000 votes.

[Laughter.]

Senator SARBANES. We are always impressed by that.

Senator SARBANES. Thank you, Mr. Chairman.

Chairman SHELBY. Chairman Bernanke, we look forward to working with you in many areas, and we know you will be back before the Committee. We wish you the best as you undertake your new opportunities and responsibilities.

The hearing is adjourned.

Chairman BERNANKE. Thank you, Mr. Chairman.

[Whereupon, at 12:23 p.m., the hearing was adjourned.]

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

PREPARED STATEMENT OF BEN S. BERNANKE

CHAIRMAN, BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM

FEBRUARY 16, 2006

Mr. Chairman and Members of the Committee, I am pleased to be here today to present the Federal Reserve's Monetary Policy Report to the Congress. I look forward to working closely with the Members of this Committee on issues of monetary policy as well as on matters regarding the other responsibilities with which the Congress has charged the Federal Reserve System.

The U.S. economy performed impressively in 2005. Real gross domestic product (GDP) increased a bit more than 3 percent, building on the sustained expansion that gained traction in the middle of 2003. Payroll employment rose 2 million in 2005, and the unemployment rate fell below 5 percent. Productivity continued to advance briskly.

The economy achieved these gains despite some significant obstacles. Energy prices rose substantially yet again, in response to increasing global demand, hurricane-related disruptions to production, and concerns about the adequacy and reliability of supply. The Gulf Coast region suffered through severe hurricanes that inflicted a terrible loss of life; destroyed homes, personal property, businesses, and infrastructure on a massive scale; and displaced more than a million people. The storms also damaged facilities and disrupted production in many industries, with substantial effects on the energy and petrochemical sectors and on the region's ports. Full recovery in the affected areas is likely to be slow. The hurricanes left an imprint on aggregate economic activity as well, seen, in part, in the marked deceleration of real GDP in the fourth quarter. However, the most recent evidence—including indicators of production, the flow of new orders to businesses, weekly data on initial claims for unemployment insurance, and the payroll employment and retail sales figures for January—suggests the economic expansion remains on track.

Inflation pressures increased in 2005. Steeply rising energy prices pushed up overall inflation, raised business costs, and squeezed household budgets. Nevertheless, the increase in prices for personal consumption expenditures excluding food and energy, at just below 2 percent, remained moderate, and longer-term inflation expectations appear to have been contained.

With the economy expanding at a solid pace, resource utilization rising, cost pressures increasing, and short-term interest rates still relatively low, the Federal Open Market Committee (FOMC) over the course of 2005 continued the process of removing monetary policy accommodation, raising the Federal funds rate 2 percentage points in eight increments of 25 basis points each. At its meeting on January 31 of this year, the FOMC raised the Federal funds rate another ¼ percentage point, bringing its level to 4½ percent.

At that meeting, monetary policymakers also discussed the economic outlook for the next 2 years. The central tendency of the forecasts of Members of the Board of Governors and the presidents of Federal Reserve Banks is for real GDP to increase about 3½ percent in 2006 and 3 percent to 3½ percent in 2007. The civilian unemployment rate is expected to finish both 2006 and 2007 at a level between 4¾ percent and 5 percent. Inflation, as measured by the price index for personal consumption expenditures excluding food and energy, is predicted to be about 2 percent this year and 1¾ percent to 2 percent next year. While considerable uncertainty surrounds any economic forecast extending nearly 2 years, I am comfortable with these projections.

In the announcement following the January 31 meeting, the Federal Reserve pointed to risks that could add to inflation pressures. Among those risks is the possibility that, to an extent greater than we now anticipate, higher energy prices may pass through into the prices of nonenergy goods and services or have a persistent effect on inflation expectations. Another factor bearing on the inflation outlook is that the economy now appears to be operating at a relatively high level of resource utilization. Gauging the economy's sustainable potential is difficult, and the Federal Reserve will keep a close eye on all the relevant evidence and be flexible in making those judgments. Nevertheless, the risk exists that, with aggregate demand exhibiting considerable momentum, output could overshoot its sustainable path, leading ultimately—in the absence of countervailing monetary policy action—to further upward pressure on inflation. In these circumstances, the FOMC judged some further firming of monetary policy may be necessary, an assessment with which I concur.

Not all of the risks to the economy concern inflation. For example, a number of indicators point to a slowing in the housing market. Some cooling of the housing market is to be expected and would not be inconsistent with continued solid growth of overall economic activity. However, given the substantial gains in house prices

and the high levels of home construction activity over the past several years, prices and construction could decelerate more rapidly than currently seems likely. Slower growth in home equity, in turn, might lead households to boost their saving and trim their spending relative to current income by more than is now anticipated. The possibility of significant further increases in energy prices represents an additional risk to the economy; besides affecting inflation, such increases might also hurt consumer confidence and thereby reduce spending on nonenergy goods and services.

Although the outlook contains significant uncertainties, it is clear that substantial progress has been made in removing monetary policy accommodation. As a consequence, in coming quarters the FOMC will have to make ongoing, provisional judgments about the risks to both inflation and growth, and monetary policy actions will be increasingly dependent on incoming data.

In assessing the prospects for the economy, some appreciation of recent circumstances is essential, so let me now review key developments of 2005 and discuss their implications for the outlook. The household sector was a mainstay of the economic expansion again last year, and household spending is likely to remain an important source of growth in aggregate demand in 2006. The growth in household spending last year was supported by rising employment and moderate increases in wages. Expenditures were buoyed as well by significant gains in household wealth that reflected further increases in home values and in broad equity prices. However, sharply rising bills for gasoline and heating reduced the amount of income available for spending on other consumer goods and services.

Residential investment also expanded considerably in 2005, supported by a strong real estate market. However, as I have already noted, some signs of slowing in the housing market have appeared in recent months: Home sales have softened, the inventory of unsold homes has risen, and indicators of homebuilder and homebuyer sentiment have turned down. Anecdotal information suggests that homes typically are on the market somewhat longer than they were a year or so ago, and the frequency of contract offers above asking prices reportedly has diminished. Financial market conditions seem to be consistent with some moderation in housing activity. Interest rates on 30-year, fixed-rate mortgages, which were around 5¾ percent over much of 2005, rose noticeably in the final months of the year to their current level of around 6¼ percent. Rates on adjustable-rate mortgages have climbed more considerably. Still, despite the recent increases, mortgage rates remain relatively low. Low mortgage rates, together with expanding payrolls and incomes and the need to rebuild after the hurricanes, should continue to support the housing market. Thus, at this point, a leveling out or a modest softening of housing activity seems more likely than a sharp contraction, although significant uncertainty attends the outlook for home prices and construction. In any case, the Federal Reserve will continue to monitor this sector closely.

Overall, the financial health of households appears reasonably good. Largely reflecting the growth in home mortgages, total household debt continued to expand rapidly in 2005. But the value of household assets also continued to climb strongly, driven by gains in home prices and equity shares. To some extent, sizable increases in household wealth, as well as low interest rates, have contributed in recent years to the low level of personal saving. Saving last year was probably further depressed by the rise in households' energy bills. Over the next few years, saving relative to income is likely to rise somewhat from its recent low level.

In the business sector, profits continued to rise last year at a solid pace, boosted in part by continuing advances in productivity. Strong corporate balance sheets combined with expanding sales and favorable conditions in financial markets fostered a solid increase in spending on equipment and software last year. Investment in high-tech equipment rebounded, its increase spurred by further declines in the prices of high-tech goods. Expenditures for communications equipment, which had fallen off earlier this decade, showed particular strength for the year as a whole. In contrast, nonresidential construction activity remained soft.

Although the financial condition of the business sector is generally quite strong, several areas of structural weakness are evident, notably in the automobile and airline industries. Despite these problems, however, favorable conditions in the business sector as a whole should encourage continued expansion of capital investment.

For the most part, the financial situation of State and local governments has improved noticeably over the past couple of years. Rising personal and business incomes have buoyed tax revenues, affording some scope for increases in State and local government expenditures. At the Federal level, the budget deficit narrowed appreciably in fiscal year 2005. Outlays rose rapidly, but receipts climbed even more sharply as the economy expanded. However, defense expenditures, hurricane relief, and increasing entitlement costs seem likely to worsen the deficit in fiscal year 2006.

Outside the United States, economic activity strengthened last year, and at present global growth seems to be on a good track. The economies of our North American neighbors, Canada, and Mexico, appear to be expanding at a solid pace. Especially significant have been signs that Japan could be emerging from its protracted slump and its battle with deflation. In the euro area, expansion has been somewhat modest by global standards, but recent indicators suggest that growth could be strengthening there as well. Economies in emerging Asia generally continue to expand strongly. In particular, growth in China remained vigorous in 2005.

Expanding foreign economic activity helped drive a vigorous advance in U.S. exports in 2005, while the growth of real imports slowed. Nonetheless, the nominal U.S. trade deficit increased further last year, exacerbated in part by a jump in the value of imported petroleum products that almost wholly reflected the sharply rising price of crude oil.

Surging energy prices also were the dominant factor influencing U.S. inflation last year. For the second year in a row, overall consumer prices, as measured by the chain-type index for personal consumption expenditures, rose about 3 percent. Prices of consumer energy products jumped more than 20 percent, with large increases in prices of natural gas, gasoline, and fuel oil. Food prices, however, rose only modestly. And core consumer prices (that is, excluding food and energy) increased a moderate 1.9 percent.

The relatively benign performance of core inflation despite the steep increases in energy prices can be attributed to several factors. Over the past few decades, the U.S. economy has become significantly less energy intensive. Also, rapid advances in productivity as well as increases in nominal wages and salaries that, on balance, have been moderate have restrained unit labor costs in recent years.

Another key factor in keeping core inflation low has been confidence on the part of the public and investors in the prospects for price stability. Maintaining expectations of low and stable inflation is an essential element in the Federal Reserve's effort to promote price stability. And, thus far, the news has been good: Survey measures of longer-term inflation expectations have responded only a little to the larger fluctuations in energy prices that we have experienced, and for the most part, they were low and stable last year. Inflation compensation for the period 5 to 10 years ahead, derived from spreads between nominal and inflation-indexed Treasury securities, has remained well-anchored.

Restrained inflation expectations have also been an important reason that long-term interest rates have remained relatively low. At roughly 4½ percent at year-end, yields on ten-year nominal Treasury issues increased only slightly on balance over 2005 even as short-term rates rose 2 percentage points. As previous reports and testimonies from the Federal Reserve indicated, a decomposition of long-term nominal yields into spot and forward rates suggests that it is primarily the far-forward components that account for the low level of long rates. The premiums that investors demand as compensation for the risk of unforeseen changes in real interest rates and inflation appear to have declined significantly over the past decade or so. Given the more stable macroeconomic climate in the United States and in the global economy since the mid-1980's, some decline in risk premiums is not surprising. In addition, though, investors seem to expect real interest rates to remain relatively low. Such a view is consistent with a hypothesis I offered last year—that, in recent years, an excess of desired global saving over the quantity of global investment opportunities that pay historically normal returns has forced down the real interest rate prevailing in global capital markets.

Inflation prospects are important, not just because price stability is in itself desirable and part of the Federal Reserve's mandate from the Congress, but also because price stability is essential for strong and stable growth of output and employment. Stable prices promote long-term economic growth by allowing households and firms to make economic decisions and undertake productive activities with fewer concerns about large or unanticipated changes in the price level and their attendant financial consequences. Experience shows that low and stable inflation and inflation expectations are also associated with greater short-term stability in output and employment, perhaps in part because they give the central bank greater latitude to counter transitory disturbances to the economy. Similarly, the attainment of the statutory goal of moderate long-term interest rates requires price stability, because only then are the inflation premiums that investors demand for holding long-term instruments kept to a minimum. In sum, achieving price stability is not only important in itself; but it is also central to attaining the Federal Reserve's other mandated objectives of maximum sustainable employment and moderate long-term interest rates.

As always, however, translating the Federal Reserve's general economic objectives into operational decisions about the stance of monetary policy poses many challenges. Over the past few decades, policymakers have learned that no single eco-

nomic or financial indicator, or even a small set of such indicators, can provide reliable guidance for the setting of monetary policy.

Rather, the Federal Reserve, together with all modern central banks, has found that the successful conduct of monetary policy requires painstaking examination of a broad range of economic and financial data, careful consideration of the implications of those data for the likely path of the economy and inflation, and prudent judgment regarding the effects of alternative courses of policy action on prospects for achieving our macroeconomic objectives. In that process, economic models can provide valuable guidance to policymakers, and over the years substantial progress has been made in developing formal models and forecasting techniques. But any model is by necessity a simplification of the real world, and sufficient data are seldom available to measure even the basic relationships with precision. Monetary policymakers must therefore strike a difficult balance—conducting rigorous analysis informed by sound economic theory and empirical methods while keeping an open mind about the many factors, including myriad global influences, at play in a dynamic modern economy like that of the United States. Amid significant uncertainty, we must formulate a view of the most likely course of the economy under a given policy approach while giving due weight to the potential risks and associated costs to the economy should those judgments turn out to be wrong.

During the nearly 3 years that I previously spent as a Member of the Board of Governors and of the Federal Open Market Committee, the approach to policy that I have just outlined was standard operating procedure under the highly successful leadership of Chairman Greenspan. As I indicated to the Congress during my confirmation hearing, my intention is to maintain continuity with this and the other practices of the Federal Reserve in the Greenspan era. I believe that, with this approach, the Federal Reserve will continue to contribute to the sound performance of the U.S. economy in the years to come.

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

Chairman Bernanke, you wrote in your macroeconomic textbook about the consequences of budget deficits.

The Congressional Budget Office estimates that the deficit for 2006 will be $337 billion—even before including the cost of an anticipated supplemental appropriation for Iraq and Afghanistan expected early this year. The deficits for 2003, 2004, 2005, and 2006 are the four largest deficits in American history.

Because of these deficits, the long-term attractiveness of the United States as an investment destination could be hurt as investors worry about our Nation's ability to manage its debts. And the deficits could also cause consumers problems if foreign investors stop buying U.S. assets, forcing interest rates to rise sharply. Finally with the ongoing wars in Iraq and Afghanistan, our budget is going to be under continued pressures in the future.

Over time, large deficits and debt will raise interest rates, crowd out private sector investment, and slow long-term economic growth.

Q.1. How much importance do you put on paying down the publicly held debt that our Nation currently holds?

A.1. I am quite concerned about the intermediate to long-term Federal budget outlook. In particular, the budget is expected to come under severe pressure as impending demographic changes fuel rapid increases in entitlement spending. By holding down the growth of national saving and real capital accumulation, the prospective increase in the budget deficit will place at risk future living standards of our country. As a result, I think it would be very desirable to take concrete steps to lower the prospective path of the deficit. Such actions would boost national saving and ultimately the future prosperity of our country, as our children and grandchildren would inherit a larger capital stock that would support greater productivity and higher income. Moreover, steps should be taken soon to address the long-term budget pressures so that people have adequate time to prepare for whatever changes might occur, especially to entitlement programs.

Although the stock of debt held by the public would decline in absolute magnitude only if budget surpluses are run, fiscal actions that result in smaller deficits can slow the growth in the stock of debt held by the public and reduce the Federal debt relative to the size of the economy. The key is not so much the absolute level of Federal debt, but rather that we take deficit-reducing steps to increase national saving and, hence, future living standards.

As you know, the pay-as-you-go budget provisions of the 1990's required lawmakers to pay for any increases in entitlement spending or decreases in revenues (that is, tax cuts); such changes had to be offset either by equivalent budget cuts or by revenue increases elsewhere. Since those rules expired in 2002, Congress has strived and did enact a variation on PAYGO that completely exempts taxes from the equation: No tax cuts would require offsetting, and spending increases could only be offset by entitlement cuts elsewhere—never by tax increases. This despite the fact our Federal budgets over the last few years have run recorded deficits.

This one-sided PAYGO passed despite the recommendations of people like Federal Reserve Chairman Alan Greenspan, Congressional Budget Office Director Douglas Holtz-Eakin, and Government Accountability Office Comptroller General David Walker, who all strongly and repeatedly urged Congress to adopt full PAYGO rules.

Q.2.a. Chairman Bernanke, do you support full PAYGO rules over spending-only ones?

A.2.a. As I noted in response to the previous question, I believe reducing the Federal deficit is very important, especially in light of the need to prepare for the retirement of the baby-boom generation. I urge the Congress to proceed on that effort in a timely manner and to pay particular attention to how its decisions on spending and tax programs will affect the U.S. economy over the long-term. However, I also believe that in my role as head of the Federal Reserve, I should not be involved in making specific recommendations about the internal decisionmaking process of the Congress and the structure of its budget procedures.

Q.2.b. The Treasury Department recently issued its first 30-year bonds in over 4 years. Do you support this decision to bring back the long bond?

A.2.b. The responsibility for Federal debt management, of course, rests with the Treasury Department. However, I do support the Treasury's decision to resume issuance of 30-year bonds. Given the large current and prospective Federal financing needs, it is prudent to distribute the Treasury's borrowing across the yield curve. Moreover, long-term interest rates are currently quite low, apparently reflecting in part strong demand among investors for long-term issues. In these circumstances, it is sensible for the Treasury to accommodate this demand in part by issuing 30-year securities.

Last week, when the Treasury issued its first 30-year bond since 2001, there was $28 billion in bids for $14 billion of bonds being offered. This in turn made it cheaper for the Treasury to borrow for 30 years than 6 months.

Q.3. Do you have any concern that this will contribute to the creation of a bond market bubble, which has the potential effect of lowering inflation-adjusted interest rates to incredibly low levels?

A.3. I do not have any such concerns. I should note that I do not see particular significance to the level of bids relative to the size of the recent auction. I attribute the relatively low level of long-term interest rates generally to several factors, including a tendency in recent years for global saving to exceed the amount of potential capital investments, yielding historically normal rates of return as well as relatively low-term premiums in interest rates to compensate investors for interest rate risk. In the unlikely event that any of these factors tended to push real long-term yields to levels that appeared to be incompatible with our macroeconomic objectives, the Federal Reserve would respond by adjusting the stance of monetary policy appropriately.

Q.4. What impacts could this have on our economy?

A.4. No significant adverse effects are likely.

Last week, the Commerce Department reported that our trade deficit rose 17.5 percent to $725.8 billion in 2005, a new record for the fourth consecutive year.

You have stated in the past your belief that what you call a "global savings glut" is the main driver behind America's record trade deficit, and that the ability to reduce our trade deficit is largely beyond our control.

Q.5. Is there nothing we can do to alleviate the pressure building up in the global financial system?

A.5. The emergence of large U.S. trade deficits and corresponding surpluses on the part of our trading partners is, to an important extent, the outcome of market forces. Several factors, including the lingering effects of financial crises in emerging market economies and concerns about the outlook for growth in some industrial economies, have led saving abroad to exceed investment. This excess saving has been attracted to the United States by our favorable investment climate, strong productivity growth, and deep financial markets. Although the U.S. net external debt has been growing as a consequence of these inflows, as a fraction of our Nation's income it remains within international and historical norms. Given the strength and flexibility of our economy, there is every reason to believe that, if changes in the foreign outlook or in the tone of financial markets were to cause a reduction in capital inflows and the trade deficit, economic activity, and employment would stay strong.

Q.6. Wouldn't reducing our budget deficit and getting tough on currency manipulators help?

A.6. All that said, as our net external debt rises, the cost of servicing that debt increasingly will subtract from U.S. income. Accordingly, it would be helpful to raise our domestic saving and reduce our trade deficit while maintaining an environment conducive to investment and growth. Reducing the budget deficit would release resources for private investment and reduce the future burden of repaying the public debt, although studies indicate a relatively modest effect of budget-cutting on the trade deficit. Pro-growth policies among our trading partners would also contribute to some adjustment of external imbalances. Finally, more flexible exchange rate regimes in some countries would provide greater scope for market forces to reduce our trade deficit, and would be in the interests of the countries implementing these regimes as well. Nevertheless, in the absence of a shift in market perceptions of the relative attractiveness of United States and foreign assets, government policies would likely have only limited effects on the trade balance.

Chairman Bernanke, under the fiscal year 2006 Congressional budget resolution and the two related reconciliation bills, Congress has cut Medicaid by $6.9 billion while spending up to $70 billion over the next 5 years to repeal some of the sunsets of President Bush's 2001 and 2003 tax cut packages. According to the Urban-Brookings Tax Policy Center, more than 70 percent of the benefits of those tax breaks have gone to the 20 percent of taxpayers with the highest incomes, and more than 25 percent of the benefits to the top 1 percent. Medicaid's benefits, by contrast, go almost entirely to those at the bottom of the income scale.

Q.7. Don't these additional tax breaks (from the fiscal 2006 reconciliation bills), when combined with the Medicaid cuts, amount to a massive redistribution of income from those at the bottom to those at the top?

A.7. As I stated in my testimony on the Monetary Policy Report, the Federal Government has an important role to play in boosting national saving as a share of national income over time. Of particular concern to me is the mismatch between taxes and spending in long-term budget projections. This mismatch means that over time either taxes will have to be raised or the spending increases embedded in current laws will need to be scaled back, or some combination of the two. Deciding on the mix of policy actions to be implemented will require the difficult balancing of sometimes conflicting goals regarding the provision of public services, the effects on economic efficiency of increasing taxes, and the distribution of fiscal burdens among various groups. The judgments about how to balance these priorities are ultimately political judgments and not ones that I believe I should address in my role as Chairman of the Federal Reserve.

Chairman Bernanke, the 1991 edition of your Macroeconomics textbook contains a policy debate on the minimum wage. At the end of the debate, the textbook concludes: "Therefore, the total labor income of unskilled workers does increase when the minimum wage rises . . . . Overall, taking these various effects into account, a recent study finds that raising the minimum wage from $3.35 per hour to $4.25 per hour [note: *those were the amounts under discussion at that time]* could reduce the number of families in poverty by about 6 percent, on balance a reasonably substantial effect." The textbook goes on to find: "Thus, the inflationary effects of an increase in the minimum wage are relatively small . . . As a result, an increase in the minimum wage has negligible effects on aggregate employment and output."

Your textbook was written in 1991 when the minimum wage was $4.25 an hour. Today, in real terms it is below that level ($4.25 in 1991 would be $5.89 today).

Q.8. Do you believe that increasing the minimum wage above its current level of $5.15 an hour—where it has been stuck for over 8 years—would be good economic policy, along the lines that your textbook concluded?

A.8. I am reluctant to comment on specific proposals regarding the minimum wage, but I can offer some general comments. In particular, I would note that the minimum wage is a very controversial issue among economists. Clearly, if the minimum wage were raised, then those workers who retain their jobs will benefit from the higher income associated with the higher minimum wage. However, economists have raised two concerns about minimum wages. The first is whether minimum wages have adverse employment effects; that is, do higher wages lower employment of low-skilled workers? The second is whether the minimum wage is as well targeted as it could be; that is, to what extent is the increase benefiting workers other than those from low-income families?

My own view is that an increase in the minimum wage probably does lower employment. However, I would note that while this is

the consensus view among economists, there is some research indicating that any such disemployment effects could be negligible. In any event, it does seem likely that the employment losses from a modest increase in the minimum wage would be relatively small from a macroeconomic standpoint and thus, at the levels of the minimum wage prevailing in the United States, a modest increase would not have sizable negative effects on aggregate output.

The effect of a higher minimum wage on poverty is also a hotly debated topic among economists. However, my reading of the research that has become available over the past 10 years or so is that if there is any reduction in poverty associated with a higher minimum wage, it is likely to be quite small. In this context, one might consider alternative ways of helping low-income workers, such as the Earned Income Tax Credit, which delivers money directly to working families and is thus better targeted toward poverty reduction than is the minimum wage.

RESPONSE TO A WRITTEN QUESTION OF SENATOR CRAPO FROM BEN S. BERNAKE

Q.1. I am very concerned about the potential efforts in this Congress to change the manner in which we regulate derivatives or to impact the manner in which derivatives operate in the economy, and I would like to have your comments on the importance of having a strong, stable, and dynamic derivatives market in this country and what it means to our economy.

A.1. Derivatives markets have had important effects on two dimensions of our economy. First, as is often noted, derivatives enable financial risks to be unbundled and shifted to those willing and able to bear them. The U.S. economy has proven to be resilient in the face of shocks over the past several years. Although no single factor accounts for this favorable performance, derivative instruments undoubtedly have contributed to this resilience because they offer firms means for managing their risks. Second, derivatives have contributed to our understanding of the measurement and management of risk. Today's sophisticated risk management systems developed in tandem with derivatives markets. When individual firms become less vulnerable to shocks, the financial system as a whole becomes more resilient. Certainly, derivative instruments pose challenges to risk managers and to supervisors, but these risks are manageable and thus far have generally been managed quite well. Market discipline has provided strong incentives for effective risk management, the key to ensuring that the benefits of derivatives continue to be realized.

RESPONSE TO WRITTEN QUESTIONS OF SENATOR ENZI FROM BEN S. BERNAKE

Mr. Chairman, I noted in a press release dated November 10, 2005 that the Federal Reserve would cease publication of the M3 money aggregate, the broadest measure of the U.S. money supply. I have carefully read your testimony in the House Financial Services Committee on this topic. I have some follow-up questions:

Q.1. You noted in your testimony to the House Financial Services Committee that money aggregates are among the many indicators that the Federal Reserve Board uses to determine monetary policy.

In your opinion, would discontinuing the M3 aggregate deprive the Board of information useful in the formation of U.S. monetary policy? Has the M3 aggregate become obsolete?

A.1. Over time, the Federal Reserve continuously assesses the usefulness of the various statistics that it monitors in the conduct of monetary policy. In cases in which the Federal Reserve compiles and publishes the data, the Board seeks to revise its statistical program appropriately, taking into account ongoing developments in the economy and the financial system as well as both the benefits and the costs of data collection. For example, in the early 1980's the Federal Reserve redefined the monetary aggregates to reflect changes in the financial environment. Similarly, for a time research suggested that a broad measure of nonfinancial sector debt should receive considerable attention in monetary policymaking, and the Board began to publish monthly data on such an aggregate. Over subsequent years, policy experience and accumulating empirical evidence indicated that some of these aggregates—in particular, domestic nonfinancial sector debt at a monthly frequency, and the broadest monetary aggregate—were not particularly useful in the conduct of policy. Accordingly, the publication of those aggregates was either scaled back or dropped. Similarly, the Board over time recognized that M3 was not providing information that was useful to policymakers. Recently, the Board decided that discontinuing the compilation of that aggregate would not deprive the Federal Reserve of information useful in the formulation of U.S. monetary policy and, given the costs involved in compiling the aggregate, it decided to discontinue M3.

Q.2. Reducing regulatory burden for our Nation's banks is a laudable goal and an effort I support. How many financial institutions are currently required to provide data to the Fed to calculate the M3? Do these same institutions report data to calculate the M1 and M2 aggregates? Is there any quantitative data on the savings achieved by reporting institutions once publication of the M3 has ceased?

A.2. A complex system of reports is employed to collect the data necessary to compile the monetary aggregates, and discontinuing M3 will allow two reports—the FR 2415 and the FR 2050—to be dropped. The FR 2415 form (Report of Repurchase Agreements [RP's] on U.S. Government and Federal Agency Securities with Specified Holders) is reported by approximately 450 institutions (270 reporting annually, 90 quarterly, and 90 weekly). The FR 2050 form (Weekly Report of Eurodollar Liabilities Held by Selected U.S. Addressees at Foreign Offices of U.S. Banks) is reported by about 35 institutions. The discontinuation of the FR 2415 and the FR 2050 is estimated to reduce annual reporting burden by a total of 4,487 hours. These reports are used to obtain data only for M3, not M1 or M2.

I should note that discontinuing M3 will also allow two of our fellow central banks, the Bank of Canada and the Bank of England, to stop collecting, editing, compiling, and transmitting additional data on Eurodollars—a task that no doubt involved the expenditure of significant resources for which those institutions were not compensated. We do not have estimates of the savings that will accrue

to the Bank of Canada and the Bank of England, or of any of the entities that report to those central banks, as a result of the elimination of M3.

Q.3. Is there any indication of how useful the M3 aggregate is to the U.S. public? How did the Fed determine the public's demand for this data?

A.3. Federal Reserve staff conducted a search to determine the extent to which M3 was used in the professional literature on monetary economics. The staff found that the vast majority of academic papers published between 1990 and 2000 that referenced "M3" actually referred to foreign versions of M3, which correspond most closely to the Federal Reserve's M2 aggregate rather than our M3 aggregate. The remaining papers, which actually did use U.S. M3, fell into the following categories:

- Papers testing new methods of creating monetary aggregates (for example, so-called "Divisia monetary aggregates"). These papers did not demonstrate any important indicator properties of M3.
- Papers testing new methods of estimating long-run econometric relationships. Some of these papers estimated equations based on the quantity theory of money for a range of monetary aggregates. Again, these papers suggested that M3 played no particularly valuable role.
- Papers testing the forecasting properties of various financial or other variables. M3 would be one of hundreds of variables used in such tests.

In all cases, M3 was studied only in combination with M2 and other monetary aggregates. In summary, our review of the academic literature revealed no evidence that M3 was particularly useful in macroeconomic analysis or forecasting.

The Board believes that it has a responsibility to the taxpayer to weigh carefully the costs and benefits of all of the various activities of the Federal Reserve, including data collection and publication, to determine whether the Federal Reserve is performing its responsibilities most efficiently. In the course of such a review, the Board recently judged that the costs to the Federal Reserve of collecting and processing the data necessary to publish M3 exceeded the benefits. Moreover, discontinuing two of the reports that need to be filed in order to construct M3 will permit a small reduction in the burden on some depository institutions.

As the Nation's central bank, the Federal Reserve recognizes the importance of carefully monitoring as well as releasing to the public data on useful concepts of the money supply, and the Board will continue to publish timely data on the monetary aggregate M2. Of the various monetary and debt aggregates, in our view M2 has exhibited the most stable, explicable, and useful relationship with measures of nominal spending and interest rates. In addition, the Board will continue to publish the monetary aggregate M1, which is a component of M2, as well as the other components of M2. The Board will also continue to publish data on shares issued by institution-only money market mutual funds, which are currently included in the non-M2 component of M3.

Board of Governors of the Federal Reserve System

Monetary Policy Report to the Congress

Submitted pursuant to section 2B of the Federal Reserve Act

February 15, 2006

Letter of Transmittal

Board of Governors of the
Federal Reserve System
Washington, D.C., February 15, 2006

The President of the Senate
The Speaker of the House of Representatives

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

Sincerely,

Ben Bernanke, Chairman

Contents

	Page
Monetary Policy and the Economic Outlook	1
Economic and Financial Developments in 2005 and Early 2006	4

Monetary Policy Report to the Congress

Report submitted to the Congress on February 15, 2006, pursuant to section 2B of the Federal Reserve Act

Monetary Policy and the Economic Outlook

The U.S. economy delivered a solid performance in 2005 despite a further sharp increase in energy prices and devastating hurricanes that claimed many lives, destroyed homes and businesses, and displaced more than 1 million persons. Real gross domestic product is estimated to have risen a little more than 3 percent over the four quarters of 2005 even though growth slowed significantly in the fourth quarter as a result of storm-related disruptions and other factors that are likely to prove transitory. The increase in real GDP in 2005 was sufficient to add 2 million new jobs, on net, to employers' payrolls and to further reduce slack in labor and product markets. As in 2004, overall consumer price inflation was boosted by the surge in energy prices. Core consumer price inflation (as measured by the price index for personal consumption expenditures excluding the direct effects of movements in food and energy prices) picked up early in the year, but it subsequently eased and totaled less than 2 percent over the year as a whole. The dollar appreciated against most major currencies in 2005, and, with domestic demand expanding strongly, the U.S. current account deficit widened further.

In 2005, energy prices were up substantially for a second year in a row. Crude oil costs climbed further, on net, and prices of refined petroleum products and natural gas came under additional upward pressure for a time after supplies were curtailed by hurricane damage to production facilities in the Gulf Coast region. As a result, households in the United States faced steep increases in gasoline and home heating expenses, and many firms were likewise burdened with rising energy costs.

The resilience of the U.S. economy in the face of these major shocks likely reflects, in part, improvements in energy efficiency over the past several decades. A number of other factors also helped to keep economic activity moving forward in 2005. For one, the rapid gain in real estate values in the past few years, in combination with the rise in stock prices since 2002, has encouraged households to sustain their spending through a period of relatively weak growth in real income. For another, credit conditions remained supportive for businesses last year, facilitating a brisk expansion of capital spending. In addition, labor productivity has been on a strong uptrend in recent years, which has fostered substantial growth in the economy's productive capacity and no doubt lifted households' and businesses' assessments of their long-term income prospects.

In light of elevated inflation pressures and shrinking margins of unutilized resources, and with short-term interest rates relatively low, the Federal Open Market Committee (FOMC) continued to remove monetary policy accommodation gradually in 2005, raising the target federal funds rate 25 basis points at each of its eight meetings. This cumulative policy firming of 2 percentage points was substantially greater than market participants had expected at the start of the year. But each action was anticipated by the time of the meeting at which it was taken, as the Committee's communications, policy strategy, and responses to incoming economic data appear to have been well understood. At its meeting in January 2006, the FOMC increased the target federal funds rate another 25 basis points, bringing it to 4½ percent. The Committee indicated that possible increases in resource utilization as well as elevated energy prices had the potential to add to inflation pressures and that, as a result, some further policy tightening may be needed.

The U.S. economy should continue to perform well in 2006 and 2007. To be sure, higher energy prices will probably exert some restraint on activity for a while longer. But so long as energy price increases slow, as is suggested by futures prices, this restraint should diminish as 2006 progresses. In addition, economic activity should receive some impetus from post-hurricane recovery efforts. Although progress to date has been uneven in the affected regions, the reopening of facilities shut down by the hurricanes is already being reflected in a rebound in industrial production. Federal assistance will buttress rebuilding activity in coming quarters.

More broadly, the major factors that contributed to the favorable performance of the U.S. economy in 2005 remain in place. Long-term interest rates are low, and conditions in corporate credit markets are generally positive. The household sector is also in good financial shape overall and should stay so even if—as expected—the housing sector cools. In addition, the improved outlook for economic growth abroad bodes well for U.S. exports. How-

ever, the effects of the cumulative tightening in monetary policy should keep the growth in aggregate output close to that of its longer-run potential.

Core inflation is likely to remain under some upward pressure in the near term from rising costs as the pass-through of higher energy prices runs its course. But those cost pressures should wane as the year progresses. Moreover, strength in labor productivity should continue to damp business costs more generally. With little evidence to date that resource utilization has put appreciable upward pressure on prices, and with longer-run inflation expectations continuing to be well anchored, core inflation should remain contained in 2006 and 2007.

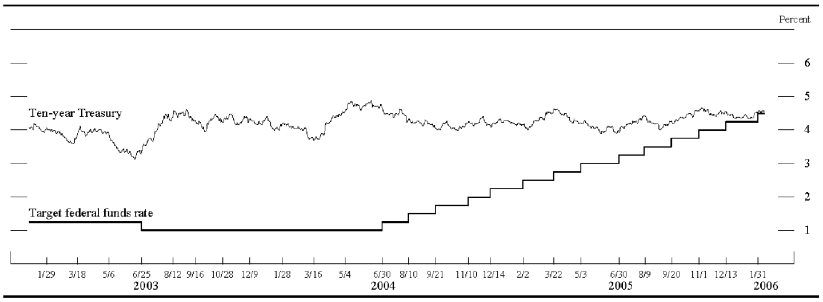
Nonetheless, significant risks attend this economic outlook. Some of the uncertainty is centered on the prospects for the housing sector. On the one hand, some observers believe that home values have moved above levels that can be supported by fundamentals and that some realignment is warranted. Such a realignment—if abrupt—could materially sap household wealth and confidence and, in turn, depress consumer spending. On the other hand, if home values continue to register outsized increases, the accompanying increment to household wealth would stimulate aggregate demand and raise resource utilization further. With the economy already operating in the neighborhood of its productive potential, this higher resource utilization would risk adding to inflation pressures. Another major source of uncertainty is the price of energy, which continues to be buffeted by concerns about future supply disruptions. Additional steep increases in the price of energy would intensify cost pressures and weigh on economic activity.

Monetary Policy, Financial Markets, and the Economy in 2005 and Early 2006

The year 2005 opened with the target federal funds rate at 2¼ percent, a level that Federal Reserve policymakers judged to be quite accommodative. During the first few months of the year, output appeared to be growing at a solid pace despite rising energy prices. Improving labor market conditions and favorable financing terms were providing considerable support to consumer outlays and homebuilding activity, while reasonably bright sales prospects and strong profitability were buoying business investment. Pressures on inflation appeared to be mounting, however, partly owing to increasing energy prices. Measures of inflation compensation derived from securities markets were on the rise as well. In these circumstances, the Committee firmed policy 25 basis points at both its February and March meetings and signaled that, if economic conditions progressed as anticipated, it would need to continue to remove policy accommodation gradually to keep inflation pressures contained.

In the spring, policymakers perceived some signs of softness in spending, which they attributed in part to the earlier step-up in energy prices. Nonetheless, the federal funds rate was still relatively low, and robust underlying growth in productivity was providing ongoing support to economic activity. Accordingly, the Committee anticipated some strengthening of activity, and it reduced policy accommodation further in May by lifting the target federal funds rate another quarter percentage point, to 3 percent.

Selected interest rates, 2003–06



NOTE: The data are daily and extend through February 8, 2006. 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.

In the event, the signs of softness proved transitory. Incoming data suggested that output, employment, and spending were growing moderately through midyear. Inflation expectations seemed to be well contained, but pressures on inflation remained elevated. With the stance of policy still accommodative, the Committee added another 25 basis points to the target federal funds rate at both its June and August meetings.

Subsequently, the devastation caused by Hurricane Katrina increased uncertainty about the vitality of the economic expansion in the near term. The destruction in the Gulf Coast region, the associated dislocation of economic activity—including considerable disruption of energy production—and the accompanying further boost to energy prices were expected to impose some restraint on spending, production, and employment in the near term. Although the region had been dealt a severe blow, the Committee did not see these developments as posing a more persistent threat to the overall economic expansion. Consequently, it decided to firm policy another 25 basis points at its September meeting.

Over the following weeks, the Gulf Coast region absorbed further setbacks from Hurricanes Rita and Wilma. The growth of economic activity dipped for a time—hiring slowed, consumer spending softened, and confidence declined. At the same time, however, soaring energy prices fed through to top-line consumer price inflation and pushed some survey measures of inflation expectations upward. With employment and growth expected to be supported by accommodative financial conditions, the FOMC continued the process of policy tightening at its November meeting.

By December, incoming data indicated that the overall expansion remained on track, although recovery from the damage in the hurricane-affected areas would apparently require considerable time. The Committee judged that possible increases in resource utilization as well as elevated energy prices had the potential to add to inflation pressures. Accordingly, policy was firmed another 25 basis points, bringing the target federal funds rate to 4¼ percent. In the accompanying statement, monetary policy was no longer characterized as "accommodative" because the federal funds rate had been boosted substantially and was now within the broad range of values that, in the judgment of the Committee, might turn out to be consistent with output remaining close to its potential. Indeed, because policy actions over the previous eighteen months had significantly reduced the degree of monetary accommodation, Committee members thought that the outlook for their near-term policy actions was becoming considerably less certain. In such an environment, policy decisions would increasingly depend on incoming data and their implications for future economic growth and inflation. Nonetheless, the Committee indicated that some further measured policy firming was likely to be needed to keep the risks to the attainment of its goals of sustainable economic growth and price stability roughly in balance.

Over the period leading up to the January 2006 meeting, incoming data on economic activity were uneven. The advance estimate of real GDP pointed to a slowing in the growth of output in the fourth quarter, but the underlying strength in consumer and business spending suggested that the economic expansion remained on solid footing. With the potential for added pressures on inflation still evident, the FOMC raised the target federal funds rate another 25 basis points, bringing its level to 4½ percent. In its statement after the meeting, the Committee indicated that some further policy firming may be necessary and again noted that it would respond to changes in economic prospects as needed.

Economic Projections for 2006 and 2007

In conjunction with the FOMC meeting in January, the members of the Board of Governors and the Federal Reserve Bank presidents, all of whom participate in the deliberations of the FOMC, provided economic projections for 2006 and 2007. The central tendency of the

Economic projections of Federal Reserve Governors and Reserve Bank presidents for 2006 and 2007

Percent

Indicator	Memo 2005 actual	2006		2007	
		Range	Central tendency	Range	Central tendency
Change, fourth quarter to fourth quarter[1]					
Nominal GDP	6.2	5¼–6½	5½–6	5–6	5–5¾
Real GDP	3.1	3¼–4	About 3½	3–4	3–3½
PCE price index excluding food and energy	1.9	1¾–2½	About 2	1¾–2	1¾–2
Average level, fourth quarter					
Civilian unemployment rate	5.0	4½–5	4¾–5	4½–5	4¾–5

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

FOMC participants' forecasts for the increase in real GDP is about 3½ percent over the four quarters of 2006 and 3 percent to 3½ percent in 2007. The civilian unemployment rate is expected to lie between 4¾ percent and 5 percent in the fourth quarter of 2006 and to remain in that area in 2007. As for inflation, the FOMC participants expect that the price index for personal consumption expenditures excluding food and energy (core PCE) will rise about 2 percent in 2006 and between 1¾ percent and 2 percent in 2007.

Economic and Financial Developments in 2005 and Early 2006

The economic expansion remained firmly entrenched in 2005, although the growth of real GDP late in the year was apparently restrained by the effects of the hurricanes and by sharp drops in some volatile categories of spending. In the labor market, payroll employment rose moderately for a second year in a row, and the unemployment rate declined further. As in 2004, headline inflation was boosted appreciably by soaring energy prices; however, core inflation remained subdued. In 2005, financial market conditions were once again supportive of growth, with long-term market interest rates low and credit spreads and risk premiums narrow.

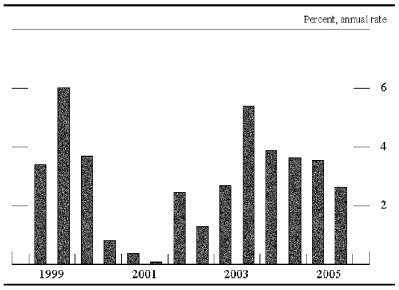
The Household Sector

Consumer Spending

Consumer spending had gathered considerable steam in 2003 and 2004 and remained vigorous in 2005. Higher energy prices last year continued to siphon off household purchasing power, and short-term interest rates moved up; nevertheless, spending was again bolstered by an improving labor market and rising household wealth.

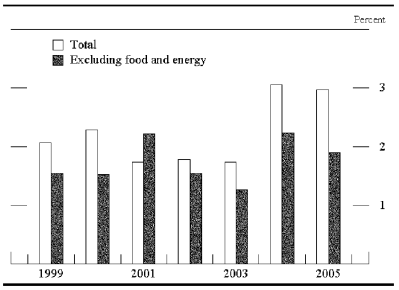
Real personal consumption expenditures (PCE) had posted back-to-back increases of 3¾ percent in 2003 and 2004 and continued to rise at about that pace over the first three quarters of 2005; in the fourth quarter, PCE growth slowed to an annual rate of just 1 percent as consumer outlays for motor vehicles slackened after a surge prompted by last summer's "employee discount" programs. For 2005 as a whole, sales of light vehicles (cars, vans, sport-utility vehicles, and pickup trucks) totaled nearly 17 million units, about the same as the annual figure for 2004. Real spending on consumer goods other than motor vehicles was robust in 2005, with substantial gains almost across the board; a notable exception was real spending on gasoline, which was up only modestly

Change in real GDP, 1999–2005



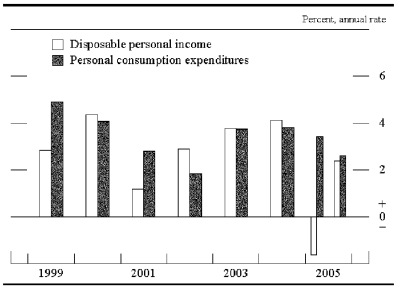
NOTE: Here and in subsequent charts, except as noted, change for a given period is measured to its final quarter from the final quarter of the preceding period.
SOURCE: Department of Commerce, Bureau of Economic Analysis.

Change in PCE chain-type price index, 1999–2005



NOTE: The data are for personal consumption expenditures (PCE).
SOURCE: Department of Commerce, Bureau of Economic Analysis.

Change in real income and consumption, 1999–2005



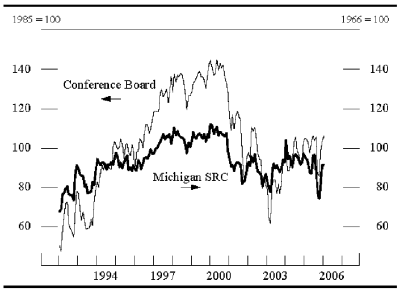
SOURCE: Department of Commerce, Bureau of Economic Analysis.

for a second year in a row as prices at the pump soared. Real expenditures on services rose moderately in 2005, as a sizable further increase in outlays for medical care was partly offset by a relatively small gain in outlays for energy services.

Excluding the estimated effects of the one-time special dividend payment that Microsoft made in December 2004, disposable personal income (DPI)—that is, personal income less personal current taxes—rose about 1½ percent in real terms in 2005, considerably less than in 2003 and 2004. Although aggregate wages and salaries advanced moderately last year and some other major types of nominal income posted notable gains, the increases in real terms were eroded by the rise in energy prices. In addition, personal tax payments rose faster last year than did personal income as measured in the national income and product accounts (NIPA). In the second half of the year, the growth of real DPI was volatile, mainly because of the hurricanes. Rental income and proprietors' income were pulled down in the third quarter as a result of uninsured losses on residential and business property. Real DPI snapped back in the fourth quarter as income in these hurricane-affected categories rebounded from the exceptionally low levels in the third quarter.

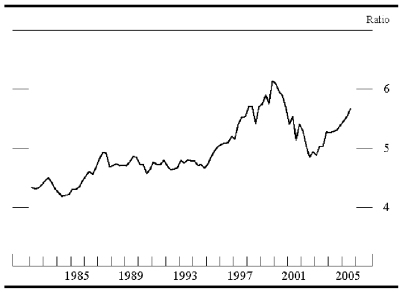
Although the run-up in energy prices restrained the growth of real DPI in 2005, its effect on overall spending appears to have been largely offset by other factors. In particular, sharp increases in household wealth since 2002 have provided many households with the resources and inclination to sustain their spending through a period of relatively weak growth of real income. Household net worth, which typically feeds through to spending over several quarters, posted sizable gains in 2003 and 2004, and it rose further in 2005 as house values continued to climb and as stock prices moved modestly higher. At the end of the third quarter (the most recent period for which complete data on wealth are available), the ratio of household net worth to disposable income stood at 5.65, well above its long-run average level of 4.75. Meanwhile, surveys by the Michigan Survey Research Center (SRC) and the Conference Board suggest that, apart from the first few months after the hurricanes, consumer confidence was about at the favorable levels that had prevailed in 2004. All in all, personal outlays exceeded disposable income in 2005. As a result, the personal saving rate, which had dropped below 2 percent in 2004, fell further in 2005, ending the year at negative ½ percent.

Consumer sentiment, 1992–2006



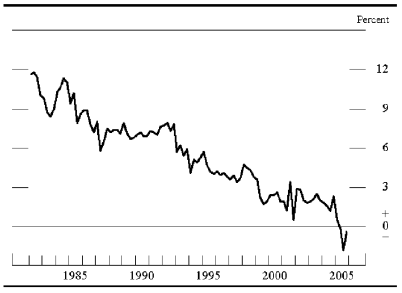
NOTE: The data are monthly and extend through January 2006.
SOURCE: The Conference Board and University of Michigan Survey Research Center.

Wealth-to-income ratio, 1982–2005



NOTE: The data are quarterly and extend through 2005:Q3. The wealth-to-income ratio is the ratio of household net worth to disposable personal income.
SOURCE: For net worth, Federal Reserve Board, flow of funds data; for income, Department of Commerce, Bureau of Economic Analysis.

Personal saving rate, 1982–2005



NOTE: The data are quarterly and extend through 2005:Q4.
SOURCE: Department of Commerce, Bureau of Economic Analysis.

Residential Investment

Activity in the housing sector remained torrid through much of 2005. By the end of the year, however, a few tentative signs of cooling had begun to appear. In the single-family sector, starts of new units dipped in December after a string of exceptionally strong months; still, they totaled 1.7 million for the year as a whole—6½ percent above the already rapid pace in 2004. Starts in the multifamily sector totaled 350,000 in 2005, a pace similar to that of the preceding three years. Real expenditures on residential structures—which include outlays not only for new construction but also for additions and alterations as well as commissions paid to real estate agents— rose nearly 8 percent in 2005, the fourth large yearly increase in a row.

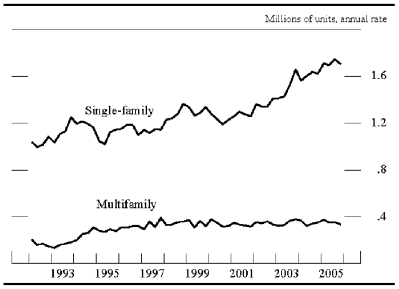
Sales of both new and existing homes set records in 2005, although they, like housing starts, seem to have lost some steam late in the year. Rates on thirty-year fixed-rate mortgages were in the neighborhood of 5¾ percent for much of the year, but they rose in the autumn. Since October, they have averaged close to 6¼ percent, at the upper end of the narrow range that has prevailed since 2003 but still fairly low by historical standards. Rates on adjustable-rate mortgages have been trending up since early 2004. The softening of home sales in recent months has contributed to an updrift in the stock of unsold new and existing homes. As of December, the stock of unsold new homes was equal to nearly five months of supply when measured at that month's sales pace. Between 1998 and 2004, the stock of unsold new homes had averaged about four months of supply.

Measures of house prices that attempt to control for shifts in the quality and composition of homes sold show that prices continued to rise rapidly through the third quarter of 2005, though partial data for the fourth quarter point to some slowing. Notably, the purchase-only version of the repeat-transactions price index for existing homes, which is published by the Office of Federal Housing Enterprise Oversight and tracks sales of the same houses over time, rose 11 percent over the year ending in the third quarter (the latest available data), once again outstripping the increases in household incomes and rents. The Census Bureau's constant-quality price index for new homes, which controls for changes in the composition of sales by geography, home size, and other readily observable characteristics, had also shown sizable increases through the third quarter, but it decelerated sharply in the

Mortgage rates, 2001–06

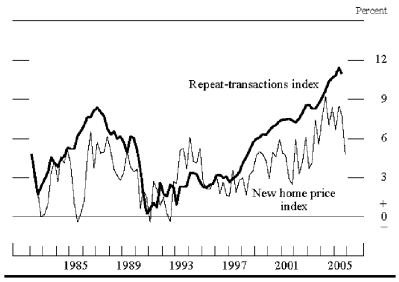
NOTE: The data, which are weekly and extend through February 8, 2006, are contract rates on thirty-year mortgages.
SOURCE: Federal Home Loan Mortgage Corporation.

Private housing starts, 1992–2005



NOTE: The data are quarterly and extend through 2005:Q4.
SOURCE: Department of Commerce, Bureau of the Census.

Change in house prices, 1982–2005



NOTE: The repeat-transactions index includes purchase transactions only and extends through 2005:Q3. The new home price index extends through 2005:Q4. Change is over four quarters.
SOURCE: For repeat transactions, Office of Federal Housing Enterprise Oversight; for new home prices, Department of Commerce, Bureau of the Census.

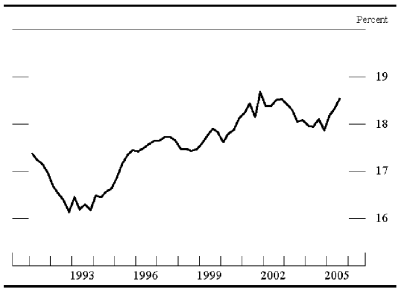
fourth quarter and was up just 4¾ percent over 2005 as a whole; in 2004, this measure had risen 8½ percent.

Household Finance

Household debt expanded about 10½ percent at an annual rate over the first three quarters of last year, roughly the same brisk pace as had been registered in 2004. Home-mortgage debt continued to grow rapidly, as homeowners took advantage of the further sizable increases in house prices last year. The use of alternative mortgage products spread further in 2005, in part because rising home values generally made house purchases less affordable. Last May federal regulators issued guidance promoting sound risk-management practices to financial institutions with home equity lending programs. Mortgage-related borrowing likely took the place of some funding with consumer credit, which expanded only modestly again last year. Overall, the expansion in household debt outpaced the growth in disposable personal income, and the financial obligations ratio moved up to a level close to the peak that it had reached earlier this decade. However, the relatively low readings on most measures of loan delinquencies last year indicate that most households were not struggling to meet their obligations.

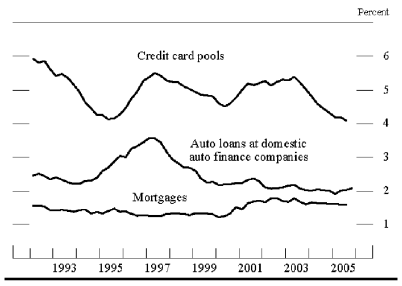
A large number of households filed for bankruptcy in the weeks leading up to October 17, the date when a new bankruptcy law took effect. The law was designed in part to diminish the ability of households to discharge their debts through chapter 7 filings. After the new law became effective, filings fell sharply to a level significantly below the average of recent years, and they have since remained low. This suggests that, to avoid the new rules, some households accelerated filings they would have undertaken eventually even under the old law. The spike in bankruptcies appears to have induced a jump in charge-offs of consumer loans in the fourth quarter.

Household financial obligations ratio, 1991–2005



NOTE: The data are quarterly and extend through 2005:Q3. The financial obligations ratio equals the sum of required payments on mortgage and consumer debt, automobile leases, rent on tenant-occupied property, homeowner's insurance, and property taxes, all divided by disposable personal income.
SOURCE: Federal Reserve Board.

Delinquency rates on selected types of household loans, 1992–2005



NOTE: The data are quarterly. The data for credit card pools and mortgages extend through 2005:Q3; the rate for auto loans extends through 2005:Q4.
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.

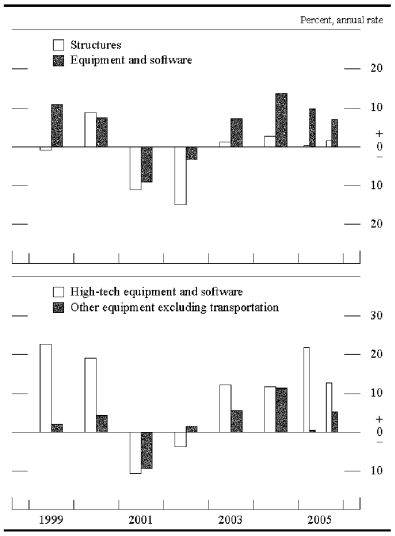
The Business Sector

Fixed Investment

Real business fixed investment rose 6½ percent in 2005. Real spending on equipment and software (E&S) posted an increase of more than 8 percent after rising nearly 14 percent in 2004. The broadly based growth in E&S spending last year was supported by favorable fundamentals: appreciable growth in final sales, ample financial resources in the corporate sector, and supportive conditions in financial markets.

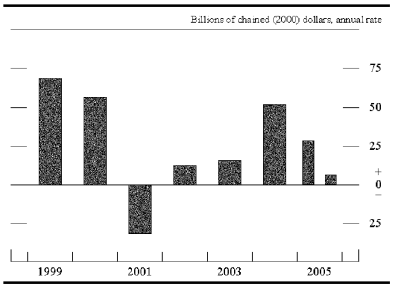
Real investment in high-technology equipment rose 17 percent in 2005, as further declines in prices provided a substantial incentive for firms to step up their outlays on such items; the increase was 5 percentage points faster than in 2003 and 2004 and about in line with the average annual gain over the past twenty-five years. Spending on communications equipment was exceptionally strong last year, as telecom service providers rolled out major new fiber-optic systems and third-generation wireless gear. Business spending for computing equipment rose roughly 30 percent in real terms, a pace close to its historical average, while spending on software posted its largest increase in several years.

Change in real business fixed investment, 1999–2005



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

Change in real business inventories, 1999–2005



SOURCE: Department of Commerce, Bureau of Economic Analysis.

Although aircraft investment remained depressed as domestic airlines continued to grapple with overcapacity and soaring fuel prices, the other major categories of E&S spending outside the high-tech area did well in 2005. Business outlays on motor vehicles rose markedly, with the demand for heavy trucks especially strong. Investment in equipment other than high-tech and transportation goods—a broad category that accounts for nearly half of E&S spending when measured in nominal terms—barely rose in real terms over the first half of 2005. Investment in this category sped up after midyear, to increase moderately over the year as a whole.

Apart from the drilling and mining sector, where investment has strengthened in response to higher energy prices, outlays for nonresidential construction have yet to gain much traction. Spending on office and commercial structures has been essentially flat since 2003; construction of manufacturing facilities leveled out in 2005 after having firmed in late 2004; and investment in the power and communications sector moved down further last year. However, vacancy rates have continued to reverse some of the run-up that occurred between 2000 and 2003, and some industry reports suggest that an upturn in building activity is in train.

Inventory Investment

After having been exceptionally restrained earlier in the economic expansion, inventory investment picked up sharply in 2004, and the higher pace of accumulation extended into early 2005. The step-up in accumulation, which provided considerable impetus to industrial production for a time, brought stocks into better alignment with sales and set the stage for a subsequent downswing in inventory investment. Inventories in the motor vehicle sector were drawn down in both the second and third quarters, though accumulation resumed in the fourth quarter after last summer's surge in sales cleared out dealers' lots. Apart from motor vehicles, real stockbuilding slowed sharply over the course of the year and, according to the advance NIPA estimate, came to a halt in the fourth quarter. At year-end, inventories seemed to be in reasonable alignment with sales, even taking into account the downward trend in inventory–sales ratios that has resulted from the ongoing improvement in supply-chain management.

Corporate Profits and Business Finance

With profits posting further solid gains in 2005 and ample liquid assets on corporate balance sheets, nonfinancial businesses were able to finance much of their capital expenditures out of internal funds, pay record sums to shareholders in the form of share buybacks, and still maintain strong balance sheets. Nonetheless, elevated merger and acquisition activity and the considerable rise in share buybacks boosted the pace of business borrow-

ing. Short-term borrowing rose significantly, driven by financing from banks. The issuance of long-term debt remained moderate overall, but debt related to commercial mortgages continued to expand rapidly. Indicators of corporate credit quality generally remained favorable.

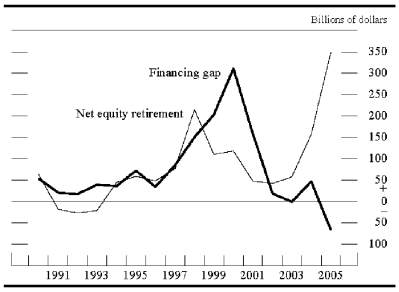
Corporate profits continued to grow strongly in 2005. The ratio of before-tax profits of domestic nonfinancial corporations to that sector's gross value added rose to more than 12 percent, near its 1997 peak. Gains in earnings were fairly widespread, with profits in the petroleum and gas industries especially strong. In the fourth quarter of 2005, operating earnings per share for S&P 500 firms appear to have been nearly 14 percent above their level four quarters earlier.

Gross equity issuance remained modest in 2005, while net equity issuance sank into deeply negative territory as corporations retired shares at a rapid pace. Both a jump in cash-financed mergers and a record-setting level of share repurchases were spurred by the strong growth of profits as well as by the substantial liquidity that firms had built up in recent years.

Net corporate bond issuance was subdued in 2005, as modest growth in nominal capital expenditures, strong cash positions, and robust profits apparently limited the demand for such financing. However, commercial-mortgage debt grew rapidly last year. Gross issuance of commercial-mortgage-backed securities likely reached a record pace in the fourth quarter.

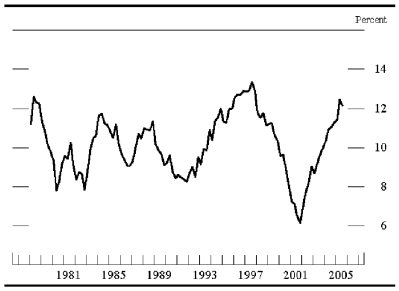
Short-term borrowing by businesses rose smartly in 2005, as business lending by both large and small commercial banks surged. Throughout the year, respondents to the Senior Loan Officer Opinion Surveys indicated that their institutions had further eased standards and terms for lending to businesses and that the demand for such loans had continued to strengthen. Most respondents attributed the stronger demand to borrowers' increased need to finance inventories, accounts receivable, and investment in plant and equipment; a substantial fraction of respondents to some surveys also pointed to a pickup in merger and acquisition activity. By contrast, outstanding commercial paper declined last year.

Financing gap and net equity retirement
at nonfinancial corporations, 1990–2005



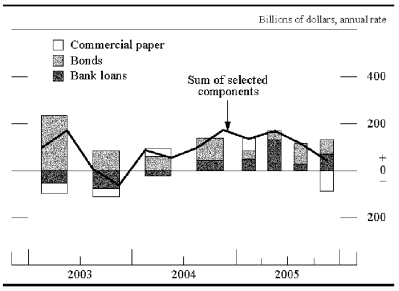
NOTE: The data are annual; the observations for 2005 are based on partially estimated data. The financing gap is the difference between capital expenditures and internally generated funds. Net equity retirement is the difference between equity retired through share repurchases, domestic cash-financed 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.

Before-tax profits of nonfinancial corporations
as a percent of sector GDP, 1978–2005



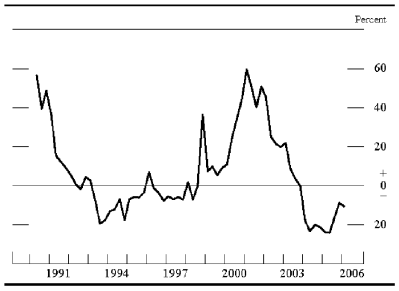
NOTE: The data are quarterly and extend through 2005:Q3. Profits are from domestic operations of nonfinancial corporations, with inventory valuation and capital consumption adjustments.
SOURCE: Department of Commerce, Bureau of Economic Analysis.

Selected components of net financing
for nonfinancial corporate businesses, 2003–05



NOTE: The data for the components except for bonds are seasonally adjusted. The data for the sum of selected components are quarterly; 2005:Q4 is estimated.
SOURCE: Federal Reserve Board; Securities Data Company; and Federal Financial Institutions Examination Council, Consolidated Reports of Condition and Income (Call Report).

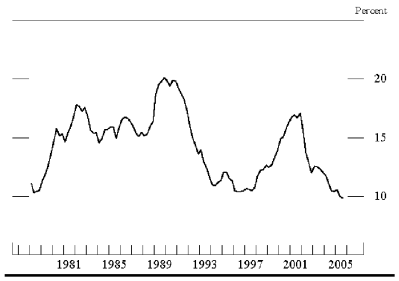
Net percentage of domestic banks tightening standards on commercial and industrial loans to large and medium-sized borrowers, 1990–2006



NOTE: The data are drawn from a survey generally conducted four times per year; the last observation is from the January 2006 survey, which covers 2005:Q4. 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.

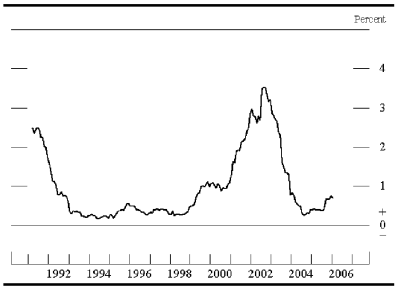
Readings on credit quality for nonfinancial companies generally remained favorable in 2005 despite some pockets of distress. The amount of corporate debt that was downgraded by Moody's Investors Service last year exceeded the amount that was upgraded, mainly as a result of the high-profile downgrades of the debt of General Motors and Ford. After trending down over the first three quarters of last year, the six-month trailing bond default rate moved up in the fall, most notably because of the bankruptcies of Delta Air Lines, Northwest Airlines, Delphi, and Calpine. However, these bankruptcies were widely anticipated and had little effect on other measures of aggregate credit quality. The credit quality of commercial mortgage debt also appeared to remain robust during 2005; delinquency rates on commercial mortgages held by banks and on those pooled into securities trended down on balance over last year, while delinquencies on mortgages held by insurance companies remained low.

Net interest payments of nonfinancial corporations as a percent of cash flow, 1978–2005



NOTE: The data are quarterly and extend through 2005:Q3.
SOURCE: Department of Commerce, Bureau of Economic Analysis.

Default rate on outstanding corporate bonds, 1991–2006



NOTE: The data are monthly and extend through January 2006. 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.

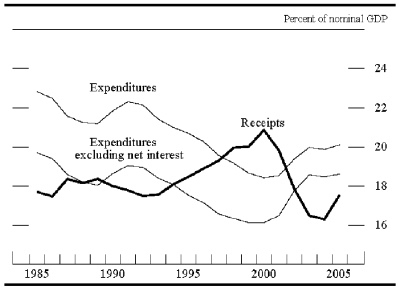
The Government Sector

Federal Government

The deficit in the federal unified budget narrowed appreciably in fiscal year 2005. Although outlays continued to rise rapidly, receipts rose even faster; as a consequence, the deficit fell to $318 billion, roughly $100 billion less than the deficit in fiscal 2004. The latest projections from the Administration and the Congressional Budget Office, however, point to a deterioration in the unified budget position in fiscal 2006, in part because of the start of the Medicare drug benefit and the need to pay for post-hurricane reconstruction and relief.

Nominal federal spending rose nearly 8 percent in fiscal 2005 and stood at about 20 percent of GDP—virtually the same as in 2003 and 2004 but 1½ percentage points above the recent low in fiscal 2000. Defense spending rose 8½ percent after three years of double-digit increases; outlays for nondefense discretionary programs moved up further as well, in part because of higher spending for education and for disaster relief. (Spending on disaster relief in fiscal 2005, which ended on September 30, was primarily for needs that emerged before Hurri-

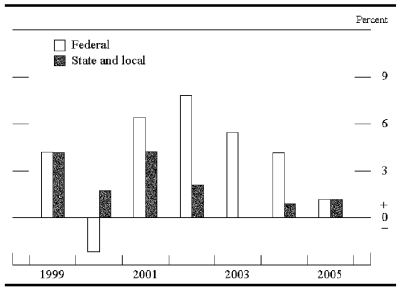
Federal receipts and expenditures, 1985–2005



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

cane Katrina.) As for the major health programs, Medicare outlays continued to climb. Medicaid spending rose relatively slowly, mainly because it had been boosted during much of fiscal 2004 by the temporary increase in the federal share of the program's costs included in the Jobs and Growth Tax Relief Reconciliation Act of 2003 (JGTRRA). Net interest payments, which had declined steadily from 1998 to 2003 and had increased only moderately in 2004, were up significantly in fiscal 2005 as short-term interest rates rose. Thus far in fiscal 2006, outlays have continued to rise rapidly, in part because of heavy spending for flood insurance payouts and other hurricane-related disaster relief. According to the NIPA, real federal expenditures on consumption and gross investment, the part of government spending that is a component of real GDP, increased 1¼ percent over the four quarters of calendar year 2005.

Change in real government expenditures on consumption and investment, 1999–2005

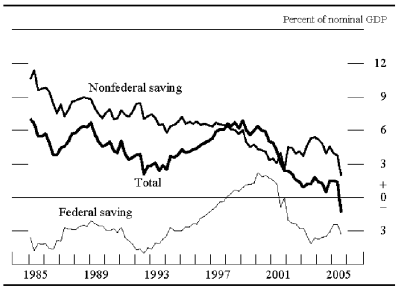


SOURCE: Department of Commerce, Bureau of Economic Analysis.

Federal receipts rose 14½ percent in fiscal 2005; as a ratio to GDP, they stood at 17½ percent—more than 1 percentage point higher than in 2004. Corporate payments rose nearly 50 percent, lifted by the robust profits of 2004 and 2005 and the termination of the partial-expensing tax incentive at the end of calendar 2004. Individual income taxes increased nearly 15 percent; nonwithheld taxes rose especially rapidly because of both substantial strength in nonwage taxable incomes (including capital gains) and certain features of JGTRRA that altered the timing of tax payments in a way that temporarily reduced the level of collections in 2004. Social insurance taxes rose in line with wages and salaries.

Mirroring the narrowing of the unified deficit, federal saving (essentially, the unified surplus or deficit adjusted to conform to the accounting practices followed in the NIPA) improved from negative 3½ percent of GDP in calendar 2004 to negative 2½ percent in the first half of 2005. However, the beneficial effect of the smaller deficit in terms of national saving was essentially offset by a sharp decline in personal saving. Measured net of estimated depreciation, national saving in the first half of 2005 was equal to just 1½ percent of GDP, about the same as in 2004 and well below the recent highs of more than 6 percent of GDP in the late 1990s. In the third quarter, net saving was dragged down by sizable hurricane-related reductions in both federal and nonfederal net saving; excluding these one-time factors, net saving in the third quarter would have been roughly the same as it was in the first half of the year. If not reversed over the longer haul, persistent low levels of saving will necessitate either slower capital formation or continued heavy borrowing from abroad, either of which would hamper the ability of the nation to cope with the retirement needs of the

Net saving, 1985–2005



NOTE: The data are quarterly and extend through 2005:Q3. Nonfederal saving is the sum of personal and net business saving and the net saving of state and local governments.
SOURCE: Department of Commerce, Bureau of Economic Analysis.

baby-boom generation and would retard the growth of the standard of living.

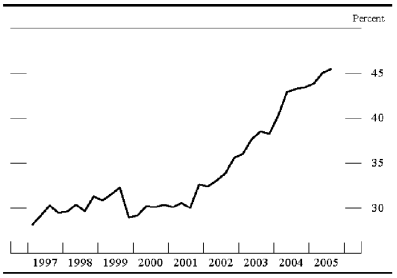
Federal Borrowing

Borrowing by the Treasury moderated somewhat in calendar year 2005—federal debt rose 7 percent last year after increasing 9 percent in 2004. Much of the improvement reflected the surge in tax receipts noted earlier. As a result, the amount of Treasury bills outstanding contracted on net in 2005, and Treasury sales of coupon securities declined. As was widely anticipated, the Treasury announced in August that it would resume regular semiannual issuance of a thirty-year nominal bond. The first such auction, held on February 9, 2006, was well received, with a high level of participation from indirect bidders. The Treasury expects issuance of the thirty-year bond to help stabilize the average maturity of outstanding marketable Treasury debt, which declined from a high of about seventy months at the end of 2000 to fifty-three months at the end of 2005.

Federal debt held by the public as a percentage of nominal GDP was steady during 2005 and stood at about 36 percent at the end of the third quarter. The federal debt ceiling did not need to be raised last year, but the Treasury has announced that it expects that the debt will reach its statutory ceiling in February 2006.

The appetite for Treasury securities among foreign investors remained strong in the aggregate in 2005. The proportion of outstanding Treasury securities held by foreign investors is estimated to have climbed to slightly more than 45 percent in the third quarter of 2005, a record. Data from the Treasury International Capital reporting system suggest that net purchases of Treasury securities by foreign private investors jumped last year, whereas such purchases by foreign official institutions slowed significantly amid upward pressure on the foreign exchange value of the dollar.

Treasury securities held by foreign investors as a share of total outstanding, 1997–2005

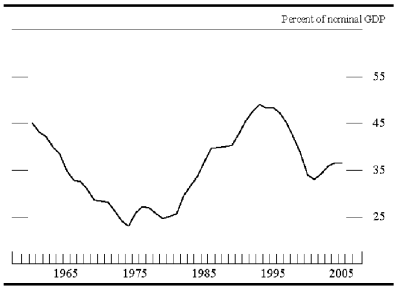


NOTE: The data are quarterly and extend through 2005:Q3.
SOURCE: Federal Reserve Board, flow of funds data.

State and Local Governments

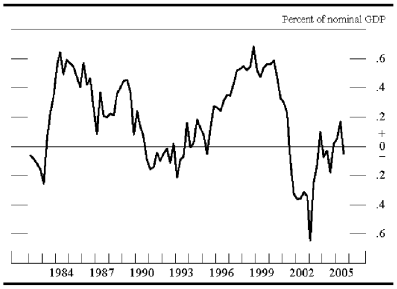
The fiscal positions of state and local governments continued to improve in 2005. Strong growth in income and retail sales boosted revenues, as did rising property values. And although the sector continued to grapple with

Federal government debt held by the public, 1960–2005



NOTE: The final observation is for 2005:Q3. 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.

State and local government net saving, 1982–2005



NOTE: The data, which are quarterly, are on a national income and product account basis and extend through 2005:Q3. Net saving excludes social insurance funds.
SOURCE: Department of Commerce, Bureau of Economic Analysis.

higher medical costs and pressures to restore funding to programs that had been cut back earlier in the decade, states and localities generally kept a tight rein on current outlays. On a NIPA basis, net saving by state and local governments—which is broadly similar to the surplus in an operating budget—turned positive in the first half of 2005 after having been negative between 2002 and 2004, and it would have remained positive in the third quarter in the absence of the hurricanes. The sizable revenue gains reported by many states in fiscal 2005, which ended on June 30 in all but four states, appear to have extended into fiscal 2006. Even so, some governments are still struggling with strained fiscal situations, and some face significant structural imbalances in their budgets that likely will be exacerbated in coming years by the need to provide pensions and health care to a growing number of retired employees. In addition, the jurisdictions in the Gulf Coast region confront the dual challenge of substantial post-hurricane demands and diminished flows of tax revenues.

According to the NIPA, real expenditures on consumption and gross investment by state and local governments rose 1¼ percent in 2005. Real outlays for current consumption were up only about 1 percent for a second year, in part because of the relatively slow pace of hiring. Real investment expenditures also registered a small gain.

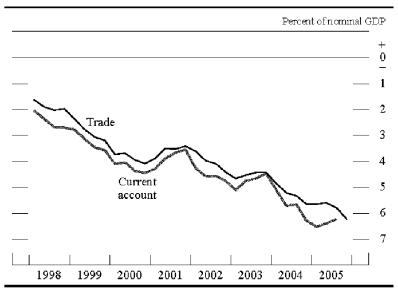
State and Local Government Borrowing

Borrowing by state and local governments picked up in 2005. Gross issuance of municipal securities was brisk, as the relatively low level of longer-term market interest rates spurred advance refundings of outstanding securities. The bulk of new capital issues last year reportedly was earmarked for education-related projects. Credit quality in the state and local sector generally remained favorable in 2005. Notable exceptions were the obligations of numerous municipal issuers in Michigan, which were downgraded last year largely as a consequence of the difficulties of GM and Ford. In addition, the obligations of a number of issuers in the regions that were hit by last year's hurricanes were downgraded in the fourth quarter, and some bonds from these areas remain on watch. Despite these isolated troubles, rating upgrades of municipal bonds slightly outpaced downgrades in 2005.

The External Sector

The U.S. current account deficit widened further in 2005. At an annual rate, it came in at just under $800 billion, or about 6¼ percent of nominal GDP, in the first three quarters (the latest available data). As in the past, a substantial portion of the widening of the current account deficit came from a larger deficit on trade of goods and services, but a decrease in net investment income also worsened the external account. Net investment income edged into negative territory in the second quarter of 2005 for the first time in the post–World War II period. Unilateral transfer payments to foreigners dropped sharply on net in the third quarter because of a surge in receipts from foreign insurance companies for damage caused by the hurricanes, leading to a slight narrowing of the deficit from the previous quarter. The trade data through December showed that the U.S. trade deficit widened further in the fourth quarter of 2005, to about $790 billion at an annual rate. This increase suggests that the fourth-quarter current account deficit, yet to be reported, will also widen substantially.

U.S. trade and current account balances, 1998-2005

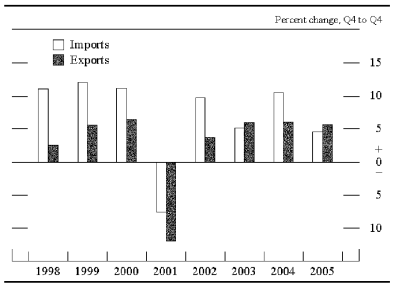


NOTE: The data are quarterly. The current account data extend through 2005:Q3, and the trade data extend through 2005:Q4.
SOURCE: Department of Commerce.

International Trade

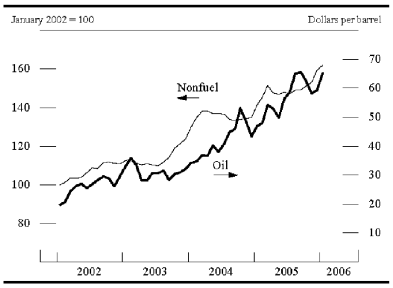
Real exports of goods and services continued the solid pace of expansion registered in both 2003 and 2004; they rose an estimated 5¾ percent in 2005, supported by robust foreign economic activity. Export growth was rapid in the first half of the year, spurred by the depreciation of the dollar in previous years; it then slowed in the second half of the year, in part owing to the dollar's appreciation since the beginning of 2005. For the year as a whole, exports of capital goods posted solid growth. Exports of aircraft performed especially well despite an interruption of their production in September because of a strike at Boeing. Exports of industrial supplies were hampered late in the year by the effects of the hurricanes on production and shipping in the Gulf Coast region. By destination, exports to Canada and Mexico grew rapidly in

Change in real imports and exports of goods and services, 1998-2005



SOURCE: Department of Commerce.

Prices of oil and of nonfuel commodities, 2002-06



NOTE: The data are monthly and extend through January 2006. The oil price is the spot price of West Texas intermediate crude oil. The price of nonfuel commodities is an index of forty-five primary-commodity prices.
SOURCE: For oil, the Commodity Research Bureau; for nonfuel commodities, International Monetary Fund.

2005, those to Western Europe also increased, but exports to Japan were relatively weak. Exports of services rose about 3 percent in 2005 in real terms.

Prices of exported goods increased at an annual rate of 2¾ percent in 2005, a bit below the rate of increase in 2004. Prices decelerated in the second and third quarters as the dollar strengthened and as pressures on prices of agricultural exports and other nonfuel commodities ebbed. Prices accelerated again in the fourth quarter, when a sharp rise in the prices of oil and metals drove up prices for many nonagricultural industrial supplies.

After expanding at a double-digit pace in 2004, real imports of goods and services decelerated to about 4½ percent in 2005, even as U.S. GDP growth remained robust. Although overall growth of non-oil imports was slower last year than in 2004, capital goods imports continued strong. The hurricanes affected several categories of imports. Despite a contraction of domestic oil consumption, real imports of oil expanded to offset reduced production in the Gulf Coast region. Chemicals imports also registered strong gains toward year-end amid hurricane-related losses in domestic production. Real imports of services moved up only 2¼ percent in 2005, a substantial cooling from their 2004 pace.

Prices of imported goods excluding oil and natural gas increased at an annual rate of 1½ percent in 2005, down from a rate of 2¾ percent in 2004. Prices decelerated in midyear as the dollar appreciated and nonfuel commodity prices steadied. However, import prices accelerated in the fourth quarter of 2005, led by higher prices for chemicals, metals, and building materials. In global commodity markets, prices of metals increased an average of 30 percent in 2005, a surge that reflected both robust global demand and limited increases in supply.

A key event in 2005 was the substantial increase in the price of crude oil. The spot price of West Texas intermediate (WTI) crude oil climbed from about $43 per barrel at the start of 2005 to a peak of about $70 per barrel in late August, at the time of Hurricane Katrina. The spot price then edged down as production revived in the Gulf of Mexico and as above-average temperatures in the United States reduced oil demand. After falling to below $60 per barrel by late November, oil prices moved up to an average of about $65 per barrel for January, in part on concerns about possible disruptions of foreign supply. However, oil prices have declined so far in February. Growing conviction among traders that oil-market conditions would remain tight in future years pushed the price of the far-dated NYMEX oil futures contract (currently for delivery in 2012) from an average of $38 per barrel for January 2005 to about $61 per barrel for January 2006.

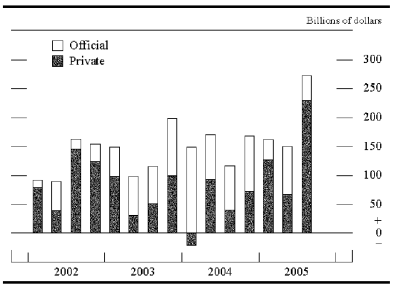
Although the rate of growth in world oil consumption slowed in 2005 from its torrid pace of 2004, spare production capacity among OPEC members remained limited, at an estimated level of only about 1 million barrels per day. With the perception that additional capacity would be slow to come on line, oil markets were highly sensitive to news about fluctuations in supply and demand. Market participants' concerns about crude oil supply were heightened by production difficulties in Iraq and by the resumption of nuclear activities in Iran, both posing risks to the stability of Middle East supply. Elsewhere, production problems in Nigeria stemming from social unrest and a marked slowdown in the growth of Russian production also kept upward pressure on oil prices throughout the year.

Domestic crude oil supply was severely hampered by last year's hurricanes, which were the most damaging in the history of the U.S. energy industry. At the peak of the disruption, all U.S. crude oil production in the Gulf of Mexico (about 28 percent of total U.S. production) and 88 percent of U.S. natural gas production there (about 17 percent of total U.S. production) were shut in. At the end of January 2006, 25 percent of Gulf oil production remained shut in, and cumulative lost production in the Gulf stood at about 22 percent of the average annual output from that region. Refinery outages, which peaked after Hurricane Rita at more than one-fourth of total U.S. refining capacity, caused sharp increases in the prices of refined products. Retail gasoline prices in the United States jumped to more than $3 per gallon in early September, briefly crimping gasoline demand and, in turn, demand for crude oil. Petroleum product prices returned to pre-hurricane levels within a few weeks as imports soared and refineries resumed operations, but they began to rise again in December and January.

The Financial Account

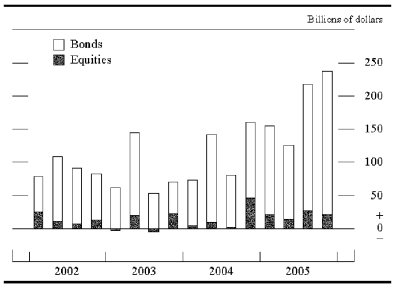
In 2005, foreign official financial inflows slowed from their extraordinary pace of 2004 but remained sizable. Most of these official inflows took the form of purchases of U.S. long-term government and private securities for reserve accumulation, primarily by Asian central banks. The slowdown in foreign official inflows last year was more than offset, however, by an increase in foreign private purchases of U.S. securities. Most of this pickup was concentrated in bonds, as in 2004, but foreign private purchases of U.S. equities also increased somewhat. Foreign direct investment flows into the United States continued to be strong in 2005, with the average pace during the first three quarters a bit higher than in 2004.

U.S. net financial inflows, 2002-05



NOTE: The data are quarterly and extend through 2005:Q3.
SOURCE: Department of Commerce.

Net private foreign purchases of long-term U.S. securities, 2002-05



NOTE: The data are quarterly and extend through 2005:Q4.
SOURCE: Department of Commerce and the Treasury International Capital reporting system.

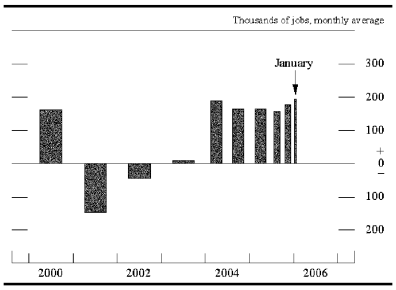
U.S. residents' net purchases of foreign securities remained brisk last year, near the levels recorded in 2003 and 2004, with smaller purchases of foreign bonds offset by larger purchases of foreign equities. By contrast, U.S. direct investment flows abroad slowed markedly during the first half of 2005 and turned negative in the third quarter. This unusual pattern reflected responses to the partial tax holiday provided in the 2004 Homeland Investment Act, which allowed firms to repatriate at a preferential tax rate previous years' earnings that had been reinvested in their foreign affiliates.

The Labor Market

Employment and Unemployment

Conditions in the labor market continued to improve, on balance, in 2005, although many individuals lost jobs in the aftermath of the hurricanes. Nonfarm payroll employment rose 175,000 per month, on average, through August, the same as the average monthly increase in 2004. Net hiring then slowed sharply in September and October, as job losses in the Gulf Coast region largely offset moderate increases in payrolls elsewhere in the nation. In November and December, monthly job growth was uneven, but it averaged 250,000, and hiring remained brisk in January. The reemployment of many of those who lost jobs because of the hurricanes appears to have provided a modest lift to overall hiring in recent months. However, others affected by the storms apparently have not found new jobs yet, and the unemployment rate among evacuees seems to have remained quite high.

Net change in nonfarm payroll employment, 2000–06



SOURCE: Department of Labor, Bureau of Labor Statistics.

Employment gains were widespread by industry in 2005. As in 2004, hiring was especially strong at firms supplying professional and business services and in health care. The construction industry also continued to exhibit a good deal of vigor, spurred by the booming housing sector. Employment in retail trade and in food services rose fairly briskly in the first half of the year, but it was held down in the second half by job losses in the Gulf Coast region. In the manufacturing sector, employment was essentially flat for a second year after three years of steep declines. In the government sector, state and local payrolls continued to rise modestly, while civilian employment in the federal government was about unchanged.

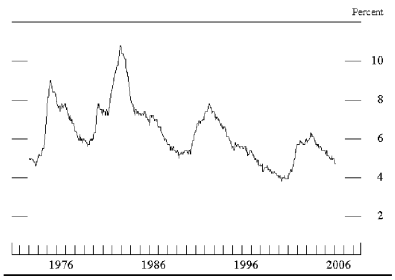
After hovering around 5½ percent during the second half of 2004, the unemployment rate fell, on net, over the first three months of 2005. During the remainder of the year, it fluctuated in a narrow range around 5 percent. In January 2006, it decreased to 4.7 percent. The labor force participation rate, which had dropped noticeably between 2000 and 2004, edged up, on net, in 2005. The participation rate in January 2006 was 66 percent, well below the high of 67¼ percent reached in early 2000 but not far from its trend, which has been declining in recent years as a consequence of demographic forces.

Other indicators also pointed to a gradual improvement in labor market conditions over the course of 2005. Initial claims for unemployment insurance drifted lower, and the job openings rate moved up. At year-end, the Conference Board reported that a larger proportion of respondents to its monthly survey thought that jobs were plentiful than thought that jobs were hard to get.

Productivity and Labor Costs

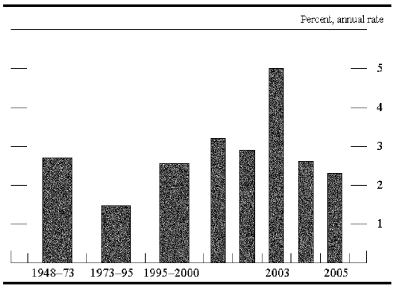
Labor productivity in the nonfarm business sector continued to advance in 2005. Last year's increase in output per hour of 2¼ percent was noticeably below the average annual gain over the preceding four years. But taking the longer view, growth in labor productivity over the past five years has averaged 3¼ percent per year, nearly ¾ percentage point faster than the already impressive gains posted between 1995 and 2000. Productivity appears to have received considerable impetus in recent years from a number of factors, including the rapid pace of technological change and the growing ability of firms to use information and other technology to improve the efficiency of their operations. Increases in the amount of capital per worker, especially high-tech capital, have also helped to spur productivity growth over the past few years, although apparently by less than was the case during the capital spending boom in the late 1990s.

Civilian unemployment rate, 1973–2006



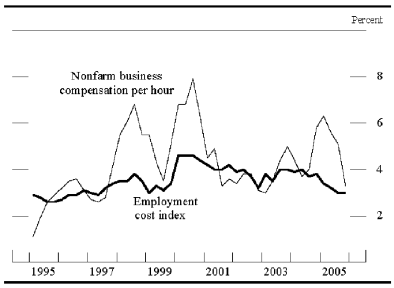
NOTE: The data are monthly and extend through January 2006.
SOURCE: Department of Labor, Bureau of Labor Statistics.

Change in output per hour, 1948–2005



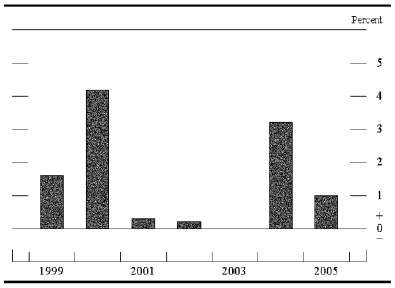
NOTE: Nonfarm business sector.
SOURCE: Department of Labor, Bureau of Labor Statistics.

Measures of change in hourly compensation, 1995–2005



NOTE: The data are quarterly and extend through 2005:Q4. For nonfarm business compensation, change is over four quarters; for the employment cost index (ECI), change is over the twelve months ending in the last month of each quarter. The ECI is for private industry excluding farm and household workers.
SOURCE: Department of Labor, Bureau of Labor Statistics.

Change in unit labor costs, 1999–2005



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

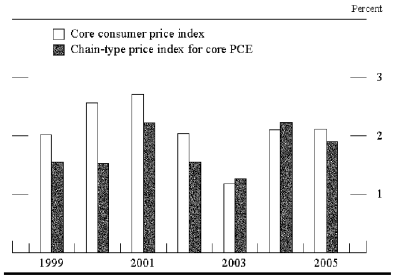
Increases in hourly labor compensation were moderate in 2005 even though overall consumer prices rose relatively rapidly for a second year and the downward pressure on wages from labor market slack diminished. As measured by the employment cost index (ECI) for private nonfarm businesses, hourly compensation increased 3 percent last year, ¾ percentage point less than in 2004. The wages and salaries component of the ECI rose just 2½ percent, the same as in 2004, while the cost of providing benefits rose 4 percent after two years of increases in the area of 6½ percent to 7 percent. Much of the deceleration in benefits costs was in employers' contributions to retirement plans, which had increased markedly in 2003 and 2004 as firms ratcheted up their contributions to defined-benefit plans to cover earlier declines in the market value of the plans' assets. Health insurance costs rose 6½ percent in 2005, the smallest increase since the late 1990s.

According to preliminary data, compensation per hour in the nonfarm business (NFB) sector—an alternative measure of compensation developments derived from the data in the NIPA—rose 3¼ percent in 2005, about the same rise as in the ECI. In 2004, NFB compensation had risen nearly 6 percent; a fourth-quarter surge in the value of stock option exercises, which are excluded from the ECI, likely contributed to that increase. The preliminary estimate for NFB compensation in 2005 reflects the apparent reversal of some of the late-2004 upswing in compensation, though it is subject to revision when more-detailed information becomes available later this year. In any event, the deceleration in hourly compensation last year held the increase in unit labor costs to 1 percent. Unit labor costs had risen more than 3 percent in 2004 after having been close to flat over the preceding three years.

Prices

Headline inflation continued to be boosted by soaring energy prices in 2005, while core inflation—which excludes the direct effects of movements in food and energy prices—remained subdued. The PCE chain-type price index rose 3 percent for the second year in a row. The increase in core PCE prices, which in 2004 had ticked up to 2¼ percent, remained high in early 2005 by recent standards. Core PCE inflation subsequently subsided and came in a shade below 2 percent for the year as a whole. The market-based component of the core PCE price

Change in core consumer prices, 1999–2005



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

Alternative measures of price change, 2003–05

Percent

Price measure	2003	2004	2005
Chain-type			
Gross domestic product (GDP)	2.0	2.9	3.0
Gross domestic purchases	2.0	3.4	3.4
Personal consumption expenditures (PCE)	1.7	3.1	3.0
Excluding food and energy	1.3	2.2	1.9
Market-based PCE excluding food and energy	1.0	1.7	1.7
Fixed-weight			
Consumer price index	1.9	3.4	3.7
Excluding food and energy	1.2	2.1	2.1

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.

index—which excludes prices that must be imputed because they cannot be observed in market transactions and that often move erratically—rose 1¾ percent in 2005, unchanged from its pace in 2004. A similar pattern is evident in the core consumer price index, which rose about 2 percent in both 2004 and 2005, and in broad NIPA price measures such as the price index for GDP, which was up about 3 percent in both years.

The PCE price index for energy rose roughly 20 percent in 2005 for the second year in a row. The nearly 25 percent increase in gasoline prices in 2005 largely reflected the effects of the continuing surge in crude oil prices on retail energy prices. Gasoline prices recorded some dramatic spikes—notably in the spring and after the hurricanes—when disruptions at refineries depleted inventories and pushed up the margin of the retail price over the already-elevated cost of the associated crude oil. After peaking at more than $3 per gallon in early September, gasoline prices fell sharply over the balance of 2005 as demand moderated, refinery capacity in the Gulf Coast region came back on line, and imports surged. In January 2006, gasoline prices turned up in response to higher crude oil costs, and they are now running about 50 cents per gallon higher than they were in January 2005.

Consumer prices for natural gas rose more than 35 percent in 2005, with most of the increase coming in the second half of the year. Prices started to move up around midyear and then skyrocketed in September and October after Hurricanes Katrina and Rita curtailed production in the Gulf of Mexico. Most of the shut-in production was restored by late 2005, and inventories remained ample for a normal heating season, but spot natural gas prices held at elevated levels through mid-December. They have since plummeted in response to unseasonably warm weather in much of the nation but are still far above their levels of a year ago. Reflecting higher input costs, PCE electricity prices rose 10 percent in 2005 after a much smaller rise in 2004.

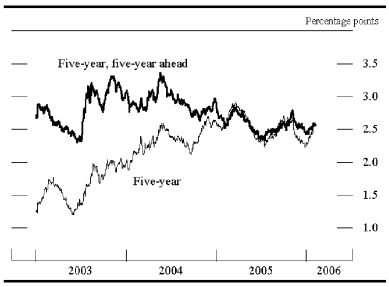
Consumer food prices rose about 2 percent in 2005 after slightly larger increases in 2003 and 2004. Food prices received some upward pressure late in the year. Crop damage from Hurricane Wilma temporarily pushed up the prices of some fruits and vegetables, and beef prices were boosted by the resumption of some exports to Pacific Rim countries after the lifting in early December of an extended ban (which was subsequently reinstated in January 2006). But, in general, the higher production of several livestock products and a bumper harvest of grains helped to limit increases in retail food prices to about the rate of core inflation.

The broad contours of core inflation in 2005 were about the same as those in 2004. Prices of core goods, which had declined in 2002 and 2003, were about flat for a second year. Prices of core services decelerated a bit—from about 3 percent in 2004 to 2¾ percent in 2005. The deceleration was concentrated in some nonmarket categories—in particular, prices of financial services provided by banks without explicit charge, foreign travel by U.S. residents, and life and motor vehicle insurance—that had posted large increases in 2004. With the notable exception of airfares, which picked up in 2005 after having fallen in 2004, prices in other market-based categories of services rose about as fast as they had in 2004.

The run-up in energy prices in 2005 boosted the cost of producing other goods and services—especially for energy-intensive items, including chemicals, plastics, and nitrogenous fertilizers. In addition, prices of other commodities such as lumber and a variety of metals, which had soared in 2004 in response to the strengthening of economic activity worldwide, moved up further in early 2005. Many of those prices slackened in the spring and summer as industrial production softened, but they turned up again in the fall. All told, however, the higher input costs left only a small mark on the prices of core goods and services. A major reason is that the robust upward trend in labor productivity helped to hold labor costs in check and gave firms scope to absorb cost increases.

Near-term inflation expectations have come under some upward pressure over the past year, but recent readings have been close to those at the beginning of 2005. Apart from an energy-related spurt to 4½ percent in early autumn, the Michigan SRC measure of households' median expectation for inflation over the next twelve months has been in the neighborhood of 3 percent to 3¼ percent since March 2005 after hovering in the area of 2¾ percent to 3 percent in late 2004 and early 2005. In January 2006, it stood at 3 percent. The Michigan SRC measure of the median expectation for inflation over the next five to ten years was also running a bit above 3 percent in late 2005, but it dipped to 2.9 percent in January of this year, a reading similar to those in 2004 and in the first eight months of 2005. Other indicators likewise suggest that

TIPS-based inflation compensation, 2003–06



NOTE: The data are daily and extend through February 8, 2006. Based on a comparison of the yield curve for Treasury inflation-protected securities (TIPS) with the nominal off-the-run Treasury yield curve.
SOURCE: Federal Reserve Board calculations based on data provided by the Federal Reserve Bank of New York and Barclays.

longer-run inflation expectations have remained well contained. According to the Survey of Professional Forecasters, conducted by the Federal Reserve Bank of Philadelphia, expectations of inflation over the next ten years remained at 2½ percent in 2005, as they have since 1998. In addition, inflation compensation, as measured by the spread of yields on nominal Treasury securities over their inflation-protected counterparts, fell a bit, on balance, in 2005.

U.S. Financial Markets

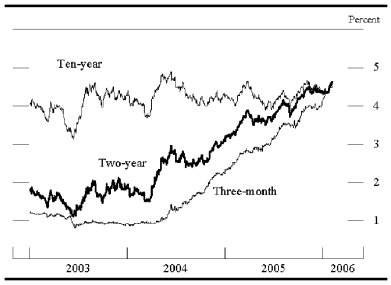
U.S. financial markets withstood some strains in 2005, most notably a large cumulative upward revision to the expected path of monetary policy, sharp increases in energy prices, troubles in the auto and airline sectors, and three major hurricanes. Longer-term market interest rates remained low, corporate risk spreads stayed relatively narrow by historical standards, and equity prices advanced modestly. Banks continued to ease standards and terms on loans to businesses, and bank lending to businesses surged. Overall, debt growth in the business sector picked up, and the expansion of household debt remained quite brisk, but federal borrowing dropped back. The M2 monetary aggregate grew moderately.

Interest Rates

The FOMC lifted the target federal funds rate a total of 2 percentage points in 2005, nearly 1 percentage point more than market participants had anticipated at the start of the year. Over the first half of 2005, short- and intermediate-term interest rates rose in line with the gradual firming in the stance of monetary policy, but longer-term interest rates moved lower on balance. For a time early in the year, rising oil prices and incoming data showing higher-than-expected inflation appeared to lift policy expectations as well as interest rates at intermediate- and longer-term horizons. The minutes of the December 2004 FOMC meeting, released on January 4, 2005, and the FOMC's conditioning of its risk assessment on "appropriate monetary policy action" after its March 2005 meeting were read as indicating more concern among Committee members about inflation pressures than investors had anticipated. The ten-year Treasury yield moved up after Chairman Greenspan's semiannual congressional testimony in February 2005, as investors reportedly focused on his remark that the low level of long-term interest rates at that time was a "conundrum." However, the subsequent release of weaker-than-expected data on consumer spending, consumer sentiment, and output led investors to mark down again their anticipated path for monetary policy and caused intermediate-term Treasury yields to retreat somewhat on balance during the second quarter, while the ten-year Treasury yield declined sharply.

On balance over the second half of the year, investors became more confident that the economic expansion had substantial momentum, and the expected path of policy and nominal Treasury yields moved considerably higher. Economic data that came in over the summer months suggested more strength in spending and output than investors had been anticipating. However, in response to the devastation caused by Hurricane Katrina in August and the subsequent landfall of two additional major storms, investors marked down sharply their expectations for the path of monetary policy, predominantly at longer horizons, and nominal Treasury yields dipped. Those declines

Interest rates on selected Treasury securities, 2003–06



NOTE: The data are daily and extend through February 8, 2006.
SOURCE: Department of the Treasury.

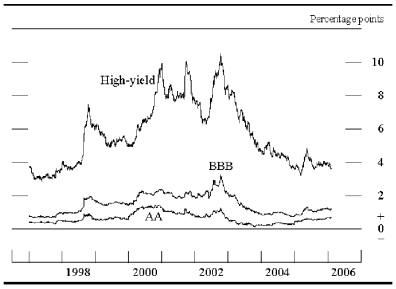
in yields proved temporary, though, as incoming data in the weeks after the hurricanes indicated that output had been expanding briskly before the storms hit and that the resulting disruptions to economic activity would probably be less severe than investors had initially feared. In addition, a drop in some energy prices might have contributed to an upgrading of the economic outlook. Over the remaining three months of the year, data on spending and production generally appeared robust, and investors raised their expectations for the path of monetary policy a bit more.

On net in 2005, the yield on the two-year nominal Treasury note rose about 135 basis points, whereas the yield on the ten-year Treasury note increased only about 15 basis points. As a result, longer-horizon forward rates extended their decline that had begun around the middle of 2004, the onset of the current tightening cycle. Although the reasons for this large cumulative drop are not entirely clear, this general pattern was also evident last year in other major industrialized economies, where longer-term interest rates mainly declined. One possibility is that higher energy prices might have led investors to trim their assessment of the cumulative amount of monetary policy restraint required over the longer run that would be consistent with sustainable economic growth. Investors also appeared to become less uncertain about the outlook and so might have become more willing to accept smaller risk premiums on long-term securities. Another possible explanation is that long-term inflation expectations have fallen and have become more firmly anchored. As measured by the spread between yields on nominal Treasury securities and their inflation-protected counterparts, inflation compensation fell a bit more than 30 basis points at the ten-year horizon over 2005. Finally, it is possible that an excess of global saving over planned investment has lowered real longer-term interest rates.

In the corporate bond market, risk spreads widened modestly in 2005, but the generally healthy state of corporate balance sheets and the robust growth of profits kept spreads low by historical standards. Spreads in the auto sector were an exception, however, as the troubles that emerged in the spring at GM and Ford and the bankruptcy of Delphi last fall boosted spreads sharply in this sector. The bankruptcies of two major airlines and the revelation of apparent accounting fraud at Refco, a large derivatives broker, did not appear to have a material effect on broad corporate risk spreads.

To date in 2006, amid uneven incoming economic data, investors' expectations for the path of the target federal funds rate have edged up, as have intermediate- and longer-term nominal Treasury rates. However, spreads on investment-grade corporate securities have changed little, whereas those on speculative-grade issues have declined somewhat.

Spreads of corporate bond yields over comparable off-the-run Treasury yields, 1997–2006

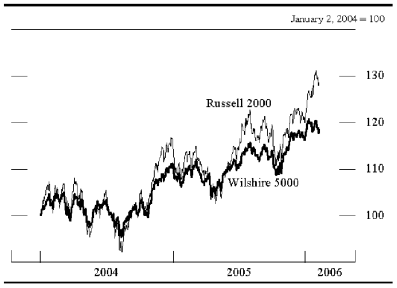


NOTE: The data are daily and extend through February 8, 2006. The high-yield index is compared with the five-year Treasury yield, and the BBB and AA indexes are compared with the ten-year Treasury yield.
SOURCE: Merrill Lynch AA and BBB indexes and Merrill Lynch Master II high-yield index.

Equity Markets

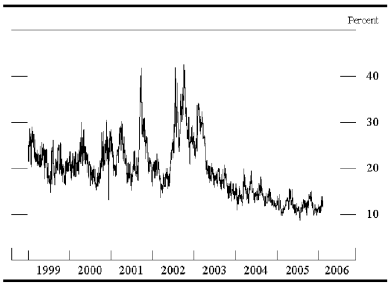
Share values, as measured by the Wilshire 5000 index, rose about 4½ percent in 2005. Higher energy prices and expectations for tighter monetary policy damped equity prices at times during the year, but these downward pressures were offset by continued strong corporate earnings growth and largely upbeat news on the economy. The response of stock prices to the hurricanes was generally muted—low longer-term interest rates and the prospect of additional fiscal stimulus apparently offset concerns that yet-higher energy prices might trim economic growth. On net last year, energy-related stocks registered substan-

Stock price indexes, 2004–06



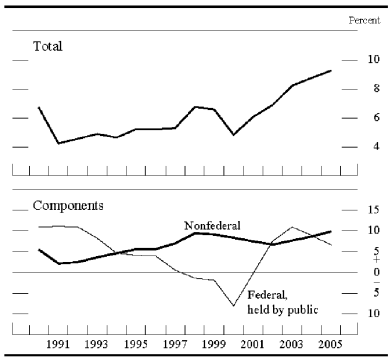
NOTE: The data are daily and extend through February 8, 2006.
SOURCE: Frank Russell Company; Dow Jones Indexes.

Implied S&P 500 volatility, 1999–2006



NOTE: The data are daily and extend through February 8, 2006. 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.

Change in domestic nonfinancial debt, 1990–2005



NOTE: For 2005, change is from 2004:Q3 to 2005:Q3 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 components shown. 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.

tial gains in response to the rise in the price of oil. To date in 2006, major equity indexes have risen modestly amid largely positive news about fourth-quarter earnings.

Volatilities of equity prices implied by prices on options contracts on both the S&P 500 and Nasdaq 100 indexes remained low over most of 2005, apparently owing to perceptions of only modest near-term macroeconomic risk. However, the spread between the twelve-month forward earnings–price ratio for S&P 500 firms and an estimate of the real long-term Treasury yield—a measure of the long-term equity risk premium—widened a bit last year and is now in the upper part of its range of the past two decades. Arithmetically, the widening in this spread can be attributed to a decline in the measure of the real long-term Treasury yield; the measure of the earnings yield on the S&P 500 changed little on balance last year.

Debt and Financial Intermediation

The total debt of the domestic nonfinancial sectors expanded an estimated 9 percent in 2005, about the same pace as in 2004. However, the composition of debt growth differed somewhat from the previous year: Borrowing by nonfinancial businesses picked up in 2005 while federal borrowing dropped back. The growth of debt of the household sector remained brisk, driven by the rapid expansion of mortgages.

Commercial bank credit expanded 10½ percent in 2005, a bit faster than the brisk pace registered in 2004. Growth of commercial and industrial loans jumped to 13½ percent, the fastest pace in more than two decades. As noted, senior loan officers reported in quarterly surveys that they had eased terms and standards on such loans last year. They attributed the easing to an improved economic outlook and more-aggressive competition from other banks and nonbank lenders. They also reported that loan demand had strengthened. Real estate lending by banks was brisk again last year, though it cooled somewhat in the fourth quarter in the wake of the backup in longer-term interest rates. Consumer loans on banks' books expanded rapidly during the first quarter of 2005 but then less so over the balance of the year, in part because some households substituted lower-cost mortgage credit for consumer loans.

Measures of bank profitability in 2005 fell back a bit from the very high levels posted in 2003 and 2004 but remained robust by historical standards. Profitability was restrained by vigorous competition and downward pressure on net interest margins from increases in market interest rates, but it was supported by excellent asset quality and reductions in noninterest expenses relative to assets. Banks' provisioning for loan losses over the first three quarters of last year was lower, on average, than in 2004, even with the increase in provisioning in the third quarter owing to the prospective surge in personal bankruptcies and to the hurricanes.

Mortgage market assets held by government-sponsored enterprises declined in 2005, as Fannie Mae reduced its mortgage portfolio about 20 percent and the rate of portfolio increase by Freddie Mac was somewhat below the rate of growth of residential mortgage debt in general.

The reduction at Fannie Mae occurred partly in response to regulatory concerns about the adequacy of its capitalization. These concerns increased substantially after the company revealed in late 2004 that it had improperly accounted for certain derivative transactions. Fannie Mae's share price dropped about 30 percent last year, and Freddie Mac's declined about 10 percent. Yield spreads on both firms' debt over comparable-maturity Treasury securities were little changed on net.

The M2 Monetary Aggregate

M2 rose 4 percent in 2005, a pace significantly slower than the growth in nominal income and the lowest annual rate of expansion in about a decade.[1] As is typical in a period of rising rates, the opportunity cost of holding M2 assets increased significantly over the course of the year, as changes in rates on liquid deposits lagged those in market yields. Consequently, growth in liquid deposits almost came to a halt following double-digit expansion during the previous several years. Some offset was provided by a rapid increase in small time deposits, rates on which remained better aligned with short-term market rates. After having contracted sharply in the past couple of years, shares of retail money market mutual funds were about flat, on net, as the return on such balances improved in line with short-term interest rates. Hurricane relief efforts likely added a little to the growth of M2 last year: Funds provided by the federal government to displaced households and funds advanced by insurance companies probably buoyed M2 over the last four months of 2005, as did a rise in the use of currency in the affected areas.

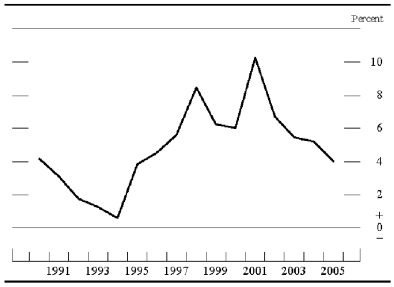
1. The Board announced in November that in March 2006 it would cease compilation and publication of data on the M3 monetary aggregate; publication of M3 was judged to be no longer generating sufficient benefit in the analysis of the economy or of the financial sector to justify the costs of publication.

International Developments

Foreign economic activity remained strong in 2005, as the global economy displayed resilience in the face of sizable increases in energy prices. Manufacturing and trade expanded in most industrial and emerging economies. As in 2004, global economic growth in 2005 was driven importantly by strong demand from the United States and China, but domestic demand picked up in a number of other countries as well. The run-up in prices of crude oil and other commodities over 2005 appeared to have had only a modest effect on measures of inflation in most countries.

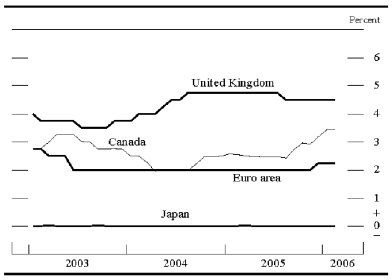
Cumulative changes in monetary policy in foreign industrial economies during 2005 varied in direction and, in contrast to the United States, were mostly small. The European Central Bank, which had maintained its main policy interest rate at 2 percent since the middle of 2003, tightened 25 basis points late in 2005, citing a need to keep inflation expectations in check. The Bank of England, after tightening 100 basis points in 2004, lowered its policy rate 25 basis points in August 2005, as the U.K. housing market had cooled and as the growth of household spending and business investment had slowed. The Bank of Canada raised its target for the overnight rate a total of 100 basis points in the latter part of 2005

M2 growth rate, 1990–2005



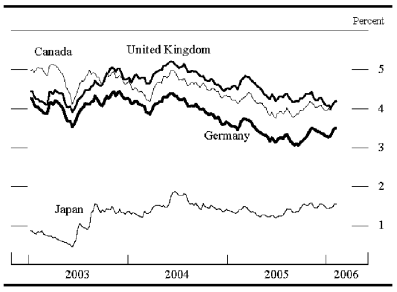
NOTE: The data are annual and extend through 2005. M2 consists of currency, traveler's checks, demand deposits, other checkable deposits, savings deposits (including money market deposit accounts), small-denomination time deposits, and balances in retail money market funds.
SOURCE: Federal Reserve Statistical Release H.6, "Money Stock Measures."

Official interest rates in selected foreign industrial countries, 2003-06



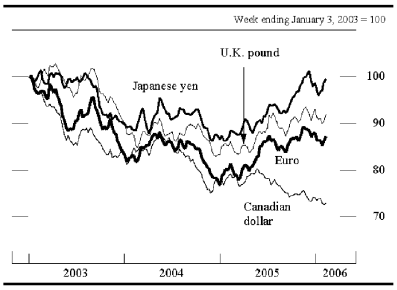
NOTE: The data are monthly. The last observation for each series is for February 8, 2006. The data shown are the call money rate for Japan, the overnight rate for Canada, the refinancing rate for the euro area, and the repurchase rate for the United Kingdom.
SOURCE: The central bank of each area or country shown.

Yields on benchmark goverment bonds in selected foreign industrial countries, 2003-06



NOTE: The data are for ten-year bonds and are weekly. The last observation for each series is the average of February 6 through February 8, 2006.
SOURCE: Bloomberg L.P.

U.S. dollar exchange rate against selected major currencies, 2003-06

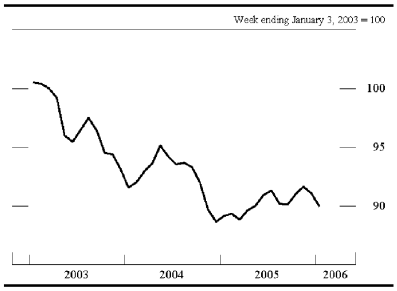


NOTE: The data are weekly and are in foreign currency units per dollar. The last observation for each series is the average of February 6 through February 8, 2006.
SOURCE: Bloomberg L.P.

and the beginning of 2006, stating that the Canadian economy was operating again at full capacity. The Bank of Japan did not depart in 2005 from its policy of quantitative easing, as it continued to provide large amounts of bank reserves to keep short-term interest rates near zero. However, in the second half of the year, amid growing evidence that an end to consumer price deflation might be near, Bank of Japan officials began to discuss publicly the possibility of ending the policy in 2006.

Ten-year sovereign yields in the euro area and Canada have declined 15 to 20 basis points on net since the beginning of 2005, and ten-year U.K. sovereign yields have dropped 35 basis points. Over the same period, Japanese ten-year sovereign yields have risen about 15 basis points, somewhat less than U.S. Treasury yields of the same maturity. Despite higher energy prices, long-term inflation expectations appear to have remained well contained abroad. In Europe, Canada, and Japan, the differences between ten-year nominal and inflation-indexed bond yields currently are little changed from their levels at the start of 2005.

U.S. dollar nominal exchange rate, broad index, 2003-06

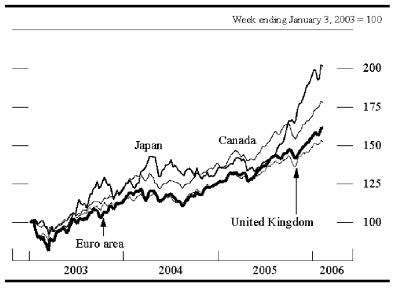


NOTE: The data are weekly and are in foreign currency units per dollar. The last observation is the average of February 6 through February 8, 2006. The broad index is a weighted average of the foreign exchange values of the U.S. dollar against the currencies of a large group of major U.S. trading partners. 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.

Our broadest measure of the nominal trade-weighted exchange value of the dollar has risen 2½ percent on net since the beginning of 2005. The dollar likely was supported by the FOMC's significant cumulative policy tightening, only part of which had been anticipated by market participants at the start of 2005. The dollar's overall appreciation was driven by its sharp gains against the currencies of several major industrial countries; the dollar depreciated on average against the currencies of the United States' other important trading partners. Since the start of 2005, the dollar has appreciated about 15 percent versus the euro and the Japanese yen, and 10 percent against the British pound. A notable exception to this pattern is the Canadian dollar, against which the U.S. dollar has depreciated 4 percent since early 2005. With respect to currencies of other important trading partners, the dollar has depreciated 6 percent against the Mexican peso, 17 percent versus the Brazilian *real*, and 7 percent against the Korean won.

Equity prices have risen substantially in most foreign industrial and emerging-market countries since early 2005; these prices have been supported by the continued global economic expansion and by interest rates that, in most countries, have remained well below historical averages. Rising commodity prices have buoyed share

Equity indexes in selected foreign industrial countries, 2003-06



NOTE: The data are weekly. The last observation for each series is the average of February 6 through February 8, 2006.
SOURCE: Bloomberg L.P.

prices of firms in the energy and mining sectors, and share prices in the technology sector have also increased sharply. Since the beginning of 2005, headline equity indexes, measured in local currencies, have risen about 20 percent on net in the United Kingdom, 30 percent in the euro area, and 45 percent in Japan. In the United States, by contrast, equity prices have increased only modestly over the same period.

Industrial Economies

After expanding at an annual rate of 5¼ percent in the first half of 2005, Japanese real GDP growth declined to 1 percent in the third quarter, largely because of slower inventory accumulation. Throughout the year, the most important source of support to economic growth was domestic demand, which was lifted by improvements in corporate profitability and labor market conditions. The unemployment rate declined sharply during 2005, ending the year at just under 4½ percent. The rate of deflation in core consumer prices subsided considerably in 2005; in fact, from December 2004 to December 2005, core prices posted a 0.1 percent increase. However, the GDP deflator continued to fall at a slow rate.

Economic growth in the euro area remained weak in the first half of 2005, at around a 1½ percent annual rate. Growth picked up to 2½ percent in the third quarter, spurred by stronger exports, especially by Germany. However, weakness in household spending persisted. The area-wide unemployment rate fell slightly over the year, to 8¼ percent near year-end, although employment only edged up. For the sixth straight year, euro-area inflation remained just above the ECB's medium-term goal of less than (but close to) 2 percent.

The rate of growth of real GDP in the United Kingdom slowed from 3¼ percent in 2004 to 1¾ percent in 2005. The slowdown was marked by a substantial deceleration of both private and government consumption. Labor markets remained tight, however; the unemployment rate of 2.9 percent in December was up only slightly from the twenty-year low of 2.6 percent recorded in January 2005. Consumer price inflation over the twelve months ending in December 2005 was 2 percent, in line with the central bank's official target. In contrast to the substantial run-up in real estate prices of 2004, housing price increases in 2005 were small.

Canadian economic growth was solid again in 2005. Recovering from a slow first quarter that featured a sharp but temporary pullback in exports, real GDP growth rebounded to around 3½ percent in the second and third quarters. For a second straight year, strong domestic demand underpinned growth, but net exports also made a positive contribution to growth late in the year. Employment made gains, although not as large as in the previous three years, and the unemployment rate touched a thirty-year low of 6.4 percent at year's end. After spiking in the third quarter on rising gasoline prices, consumer price inflation settled back toward 2 percent, the midpoint of the Bank of Canada's inflation target range.

Emerging-Market Economies

Growth of real GDP in China remained vigorous in 2005, supported again by robust domestic demand and exports. Both personal consumption and investment expenditures continued to grow rapidly during the year. Export growth also remained strong through most of the year, while import growth slowed. As a result, the Chinese trade surplus more than tripled and exceeded $100 billion. Consumer price inflation in 2005 was low in comparison with the previous year, when higher food prices had caused inflation to surge; the twelve-month change in consumer prices finished the year at just over 1½ percent.

On July 21, China revalued the renminbi 2.1 percent versus the dollar and announced that henceforth it would manage the value of its currency with reference to a basket of foreign currencies. Since the July revaluation, the exchange value of the renminbi versus the dollar has risen about ½ percent. Chinese authorities also have implemented some reforms of the financial system that are intended to facilitate further exchange rate flexibility, including the introduction of an over-the-counter trading system in the domestic foreign exchange market. China's foreign exchange reserves increased more than $200 billion in 2005; the pace of reserve accumulation did not

change appreciably after the revaluation of the renminbi in July.

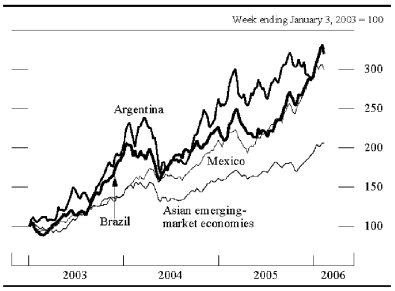
In other emerging-market nations in Asia, economic activity also picked up substantially in 2005, driven by the growth of domestic demand and exports. Despite the global rise of energy costs, consumer price inflation generally remained contained. Equity indexes registered large increases in a number of Asian countries, led in many cases by gains in share prices of technology firms. In particular, Korean equity prices have risen about 45 percent since early 2005. Several countries in the region added to their holdings of foreign exchange reserves over the period, but in all cases far less than China did.

After a solid performance in 2004, the Mexican economy slowed in the first quarter of 2005 and contracted in the second quarter because of weaker exports to the United States and a sharp drop in agricultural production. However, the Mexican economy recovered in the second half of the year, as agricultural and manufacturing production bounced back. Aggressive tightening of monetary policy from early 2004 to March 2005 seemed to be successful in restraining inflationary pressures: Consumer price inflation declined from more than 5 percent at the end of 2004 to a bit less than 4 percent in January 2006, within the central bank's target range of 2 percent to 4 percent. The soft economy and an improved outlook for inflation led the Bank of Mexico to begin easing policy in August 2005, and the central bank has continued to ease since then. High oil revenues boosted the public-sector surplus, and yield spreads of Mexican sovereign debt over U.S. Treasuries declined to record lows.

In Brazil, growth in economic activity was moderate in the first half of 2005, and some indicators point to a slowing over the second half. Nonetheless, risk spreads of Brazilian sovereign debt declined over the course of the year to their lowest levels since 1997, the *real* appreciated strongly, and stock prices rose sharply. Concerns over inflation kept monetary policy very tight for most of the year, but the central bank began easing in September, and the policy rate was reduced a total of 250 basis points, to 17¼ percent, by January. In late December, Brazil paid in full its debt to the International Monetary Fund (IMF), using a portion of its foreign exchange reserves.

In Argentina, the economic recovery continued last year, driven in part by increases in consumption and investment. After more than three years in default, the government completed a debt swap, restructuring $80 billion in bonds and obtaining a participation rate of 76 percent. Early this year, Argentina also paid in full its IMF obligations out of its foreign exchange reserves.

Equity indexes in selected emerging-market economies, 2003-06



NOTE: The data are weekly. The last observation for each series is the average of February 6 through February 8, 2006. The Asian emerging-market economies are China, Hong Kong, India, Indonesia, Malaysia, Pakistan, the Philippines, Singapore, South Korea, Taiwan, and Thailand; each economy's index weight 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.

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

ALAN GREENSPAN
CHAIRMAN

January 3, 2006

The Honorable John E. Sununu
United States Senate
Washington, D.C. 20510

Dear Senator:

Thank you for inquiring about my views concerning supervision and regulation of government-sponsored enterprises (GSEs) and about how best to focus the GSEs on their public mission without destabilizing the economy. I also appreciate your kind words about my public service on the Federal Reserve Board.

Fannie Mae (Fannie) and Freddie Mac (Freddie) essentially run two lines of business: securitization of mortgage credit and holding of mortgage and other assets for investment purposes. The first line of business provides substantial benefits for affordable housing through the process of using credit guarantees to turn mortgages into marketable securities that trade in public debt markets. This process creates a wide variety of liquidity benefits, some of which flow to homeowners and mortgage originators. Moreover, creating securities from the mortgages extended to nontraditional homeowners is an important step to making mortgage credit more widely available. Focusing Fannie and Freddie on this type of securitization activity can promote affordable housing without creating significant risks to the financial system.

In contrast, once a mortgage has been securitized and sold into the public markets, Fannie's and Freddie's purchases of their own (or each other's) mortgage-backed securities (MBS) for their investment portfolios creates substantial systemic risk while yielding negligible additional benefit for homeowners, renters, or mortgage originators.[1] Under normal circumstances, GSEs are able to easily maintain and grow their large portfolios of mortgage and non-mortgage assets without the significant market checks or balances faced by other publicly traded financial institutions. These large portfolios, while enriching GSE shareholders, do not meaningfully benefit homeowners and do not facilitate secondary market liquidity. They do add systemic risk to our financial system, which normal market forces are unable to resolve.

[1] For further details, please see my April 2005 testimony before the Senate Committee on Banking, Housing and Urban Affairs, my May 2005 speech under the auspices of the Federal Reserve Bank of Atlanta, and my letters to Senators Bennett and Sununu during the summer of 2005.

In the current system of mortgage financing, the prepayment and interest rate risks associated with mortgages are concentrated in Fannie's and Freddie's large portfolios rather than being more widely dispersed across a broad range of market participants, including the overwhelming number of financial institutions that are significantly less leveraged than the GSEs (such as commercial banks and insurance companies). As Fannie and Freddie increase in size relative to the counterparties for their hedging transactions, their ability to quickly respond to changing market conditions and correct the inevitable misjudgments inherent in their complex hedging strategies becomes more difficult, especially when vast reversal transactions backed by their thin capital holdings are required to rebalance portfolio risks.[2] Furthermore, 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 the GSEs' mortgage portfolio.

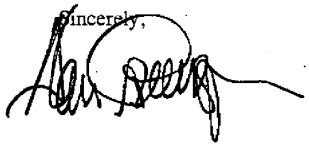
Also, as I have testified earlier, the GSEs and their government regulator need specific and unambiguous Congressional guidance about the intended purpose and functions of Fannie's and Freddie's investment portfolios. Often, this proposal is referred to as "portfolio limits." The purpose of this guidance, however, is not just to limit the GSEs' portfolios, but to firmly anchor the GSEs' investment portfolios to their public purpose. Strong portfolio guidance by Congress is needed because GSEs are an unusual government intervention in private markets; such institutions lack the typical financial market discipline that is commonplace for other publicly traded firms.

The bill approved by the Senate Banking Committee in July 2005 (S. 190) provides this much-needed anchor and would refocus Fannie and Freddie on their important public policy mission. In addition, S. 190 appropriately strengthens the capital authority of the regulator and establishes a clear and credible receivership process for handling a failed or failing GSE.

In contrast, as I observed during my July 2005 appearances before Congress on monetary policy, the bill that passed the House of Representatives in October 2005 neither takes the steps needed to create an effective GSE regulator nor addresses the systemic risks posed by Fannie's and Freddie's investment portfolios. In the first instance, the House bill fails to sufficiently strengthen the capital authority of the regulator and does not establish a clear and credible receivership process for handling a failed or failing GSE. But, more importantly, the House bill fails to comprehensively address the problem of

[2] For mortgage portfolios in particular, misjudgments are inevitable mainly because of the inherent difficulties in forecasting households' prepayment behavior.

systemic risks presented by the GSEs' investment portfolios. Improved regulation by itself may be insufficient and could exacerbate the potential systemic problems associated with the GSEs' large portfolios if financial markets infer from such regulation that the government is more strongly backing GSE debt.

Moreover, the Federal Reserve Board believes that any legislative approach that relies mainly on the future regulator to oversee the GSEs' investment portfolios without providing that regulator with specific and unambiguous Congressional guidance is unlikely to succeed in directing these portfolios toward their important public purposes. Faced with trillions of dollars of assets and the large profits and capital gains created by the perception of government backing, the current GSE regulators have proved unable in recent years to thwart expansionary behavior and focus the GSEs on their important housing mission. The new GSE regulator needs a precise and clear statement from the Congress about the purpose of the GSEs' portfolios in order to assure these portfolios achieve their public mission in a manner that does not run the risk of destabilizing the housing finance markets or the financial system more generally.

Sincerely,