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FEDERAL RESERVE'S FIRST MONETARY POLICY REPORT FOR 2007

HEARING

BEFORE THE

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

ONE HUNDRED TENTH CONGRESS

FIRST SESSION

ON

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

FEBRUARY 14, 2007

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FEDERAL RESERVE'S FIRST MONETARY POLICY REPORT TO CONGRESS FOR 2007

WEDNESDAY, FEBRUARY 14, 2007

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

The Committee met at 10:07 a.m., in room SD–106, Dirksen Senate Office Building, Senator Christopher J. Dodd (Chairman of the Committee) presiding.

OPENING STATEMENT OF CHAIRMAN CHRISTOPER J. DODD

Chairman DODD. The hearing will come to order.

Let me thank all of our colleagues and others who have made it in this morning to participate in this hearing on our first true winter morning this year. Mr. Chairman, we thank you for being with us as well, and we appreciate your testimony before the Committee.

What I will do is open up with a brief opening statement. I will turn to my colleague, Senator Shelby, and then any of our other colleagues who would like to make some brief opening remarks. Your full statements, I will guarantee you, will be included in the record, as will yours and any supporting documentation, Mr. Chairman, you would like to be a part of this record this morning. We will try and move along so we can get to the question and answer period with you as quickly as possible.

This morning, the Committee is pleased to welcome Federal Reserve Chairman Bernanke to deliver the Fed's Semi-Annual Monetary Policy Report. I want to congratulate you, Mr. Chairman, for completing your first year as Chairman. Following in the footsteps of a very successful Chairman can be difficult, and it is something that I can certainly relate to, sitting in this chair and sitting next to my friend from Alabama. But I believe that you have done a very good job in gaining the respect and confidence of the markets and your colleagues on the Federal Reserve Board.

The Fed's monetary policy—most notably, its decision to stop rising interest rates in June—has played a very important role in some recent positive economic developments. During 2006, the economy grew at a sustainable rate and unemployment was kept to under 5 percent. While this is not quite as strong as it was in the late 1990's—when growth was higher and unemployment fell below 4 percent, with much higher labor force participation—this economic news is welcome. Long-term interest rates have remained at modest levels, despite a large Federal budget deficit, a historic

current account deficit, and the cumulative effect of the Fed's 2-year cycle raising the interest rates that ended in June.

While these developments are, as I said, positive, there are other facts that, in my view, raise some very important questions about our Nation's long-term ability to provide economic security, opportunity, and prosperity to the people of this country.

As I travel around these days and talk to many people from all walks of life, I am confronted by people who are concerned about the future, whether or not we will have the kind of stability and long-term growth necessary for our success. What I am hearing from people is that they are concerned about many of the same things.

Health care costs are rising at a rate that is unsustainable for businesses and employees. Over the past 6 years, health care costs have increased by 30 percent. More than 46 million Americans have no health insurance at all today, as we all know. That is an increase of 6 million people over the past 6 years. The price of gasoline, home heating oil, and other forms of energy has skyrocketed over the past years. This past summer, gasoline cost over $3 per gallon in many parts of the country. And while it is much lower today, it is still twice as high as it was 5 years ago. Families are concerned as well that they cannot afford to send their kids to college. My colleague from New York, Senator Schumer, has spent a lot of time on this issue. College tuition has risen by more than twice the rate of inflation over the past 20 years. Room, board, and tuition at many private universities now cost well over $50,000 a year.

As these costs rise, working Americans are experiencing more and more uncertainty about their future. People are wondering whether their home is losing value as they see houses in their neighborhood sell for less today than they did a year ago. And millions of Americans are in exotic and subprime mortgages while the potential for sharp increases in monthly payments is right around the corner. Several credible reports say that we are facing a tidal wave of defaults and foreclosures, which could strip these families of their major, if not their only, source of wealth and long-term economic security.

Despite some recent gains in household incomes, the real median family income, what a family right in the middle of the middle class earns in a year, is lower today than it was 6 years ago. People are working longer and harder, and many are not bringing home enough money to keep pace with what they need. And for those who lose their jobs, the prospect of falling out of the middle class is far greater today. Americans are more than twice as likely to experience a precipitous drop in income as Americans of a generation ago, according to a recent research study by Jacob Hacker at Yale University.

As we worry about some Americans falling out of the middle class, we must also be concerned about those working hard to climb into the middle class. Over 10 million Americans today do not have access to mainstream financial institutions, such as a bank, a credit union, or a thrift. For these entrepreneurs and workers, affordable credit and capital services are scarce, if not impossible to find. And as a result, millions of our fellow citizens lack the financial

tools that they need to build more secure and prosperous futures for themselves and their families.

Finally, Mr. Chairman, our Nation finds itself with trade policies that are unsustainable, as well, in my view. We have learned this week that last year, we ran a record trade deficit of $763 billion. Our Nation's current account deficit will approach 7 percent of our GDP. We are relying on over $2.4 billion a day from foreign investors, who are increasingly foreign governments, to finance our economic growth because of the lack of savings here at home.

The Administration has an official trade policy that is, in key respects, out of touch with reality. For instance, it is widely believed that China manipulates its currency. We had a very good hearing, as you may know, with Hank Paulson before this Committee a week or so ago on the exchange rate issue. Yet, the Administration refuses to officially recognize that fact. When Chairman Bernanke was in China, as part of the Strategic Economic Dialogue, he gave a speech that pointed out, "effective subsidy that an undervalued currency provides for Chinese firms that focused on exporting."

While this subsidy is not the sole cause of either our record international trade deficit or our loss of over 3 million manufacturing jobs, including about 1 million of those jobs in critical national defense-related industries, the distortion of Chinese currency manipulation is having a very significant negative impact on American manufacturing jobs.

As policymakers, I think we need to ask ourselves a very fundamental question: Are we satisfied with America's place in the world at the beginning of this new century? I do not think that any one of us can look at all the facts and reach any conclusion other than that we can do a lot better than I think we are. And for the sake of the people we serve and generations coming after them, I think all of us would agree we have to do better.

There are steps we can and should take, in my view, to build a stronger foundation for a more secure and prosperous future. Today's hearing provides the Committee with an opportunity to discuss some of these steps. We can start by keeping interest rates at modest levels, and, again, I congratulate the Fed on doing that since last June. Certainly, monetary policy is obviously an important component of our economic future. The Fed's dual mandate is to promote full employment and price stability. This is a vital and difficult mission, and we look forward to hearing from the Chairman about the steps the Fed has taken since its last report to fulfill that statutory mandate.

In addition, we need our Federal financial regulatory agencies to be vigilant in assuring not only the safety and soundness of our financial institutions, but also that those institutions are serving, not thwarting, the aspirations of Americans to build a more secure and prosperous life for themselves and those families.

I look forward to discussing the aspects of the Fed's mission as well as with you today, Mr. Chairman, and I will turn to my colleague from Alabama for any opening comments he may have and then to my colleagues here as well for any brief statements they want to make as we start this hearing.

Senator Shelby.

STATEMENT OF SENATOR RICHARD C. SHELBY

Senator SHELBY. Thank you, Chairman Dodd.

Chairman Bernanke, we are pleased to have you before the Committee again to deliver the Federal Reserve's Semi-Annual Monetary Policy Report. This hearing provides an important mechanism for assuring accountability over the Fed's policies and operations.

Chairman Bernanke, you have recently completed one year at the helm of the Federal Reserve System. When President Bush nominated you for this position, I noted at the hearing that you would have big shoes to fill, following in the footsteps of the distinguished Chairman Greenspan. I also noted my belief that the President made a superb choice in asking you to take on this responsibility. The Federal Reserve's conduct of monetary policy thus far under your leadership has given me further reason to applaud your service.

Chairman Bernanke, as 2006 began, there was much debate as to whether the Federal Reserve would prove successful in engineering a "soft landing," after many successive increases in the Fed funds target rate. Certainly the economic data in recent weeks tells us that the debate maybe all but over. Analysts and other Fed watchers are now giving you high praise for the manner in which you have handled your responsibilities, and I join them.

Real gross domestic product, GDP, increased at an annual rate of 3.5 in the fourth quarter of 2006. For all of 2006, GDP grew 3.4 percent compared with the 3.2-percent increase in 2005. Both numbers topped the 20-year average of 3.1 percent.

Along with this strong growth, we have seen positive news on the job front. The Labor Department reported that the economy created, Mr. Chairman, more than 2.2 million jobs last year, 400,000 more than previously estimated. We continue to enjoy a low unemployment rate, both historically and relative to other industrialized nations.

At its most recent meeting on January 31, Federal Open Market Committee kept the Federal funds target rate at 5.25 percent, the fifth consecutive meeting with no change. Fed watchers noted that the latest FOMC statement seemed more upbeat on growth prospects and keeping inflation in check. My colleagues and I, Mr. Chairman, will no doubt spend time this morning trying to figure out how long the FOMC intends to leave short-term rates unchanged.

I am certain that today's hearing will also include some discussions of the potential risks in the economy, such as the housing market slowdown, among others.

Mr. Chairman, while it is our responsibility to continue to examine the horizon for such risks, we must also note the strong performance of this economy. I hope that we will also take time today to discuss the very strengths and how to maintain and build upon them.

Chairman Bernanke, again, we welcome you back to the Committee, and we like the job you are doing.

Chairman DODD. He is not here, but Senator Schumer was next on our list, but, Senator Casey, this early bird rule applies here.

Senator Casey.

STATEMENT OF SENATOR ROBERT P. CASEY

Senator CASEY. Mr. Chairman, thank you very much for gathering us here. Chairman Bernanke, thank you for your time here today and for your service.

I do not have a long statement, but I just wanted to highlight a couple of things I know that you have touched on before and that I am sure we will speak to today, some of the long-term fiscal challenges that you outlined here in your previous testimony, I guess a week or so ago, with regard to Medicare, Social Security, and other demands that are being placed on the Federal budget into the future. I appreciate the fact that you are thinking about and focusing on that and building that into the planning that you do.

I think also the people that I represent in Pennsylvania are concerned about those costs. They are concerned about the deficit, which I guess last year was $248 billion. This year, the projection is for something less than that. But they are also concerned about the impact, as Chairman Dodd outlined, of the costs in their own lives, in their real lives, and you know the cost of health care and college tuition and housing and so many other areas. I hope that one of the things we have a chance to discuss today is the impact that those costs have, the impact not just on that family, the horrific impact it can sometimes have on their budgets, but also the impact that that has on overall long-term economic growth and stability.

So, I look forward to discussing that today with you, and we appreciate the time you are spending with us, and we appreciate the report.

Chairman DODD. Senator Bunning.

STATEMENT OF SENATOR JIM BUNNING

Senator BUNNING. Thank you, Mr. Chairman.

Chairman Bernanke, thank you for being here today. To repeat what I told you at the Budget Committee hearing a few weeks ago, the Federal Open Market Committee did the right thing by stopping the increases in the Fed fund rates after the June 2006 Fed meeting. By holding rates constant, you have done the right thing ever since. After the latest increase, the stock markets took off and the cost of credit leveled off. If the Fed had chosen to continue hiking rates, mortgages and other forms of credit would have become less and less affordable to the average American.

Over the last 2 years, the costs of credit, such as mortgages, student loans, and credit cards, have all increased. I am not sure how much more tightening consumers could have handled before serious harm was done to the economy. Higher interest rates accelerated the housing decline. We will not know the full extent of the damage for months, if not longer. If the Fed had not stopped when it did, we would have been in even more danger.

You have been at the helm of the Fed for a year now. My initial fears were that you would be a carbon copy of your predecessor, yet you have done some things I have never seen your predecessor do: Embrace open and full debate. There is an old saying that there is a reason we have two ears and one mouth: It is often more important to listen than to talk.

During your brief tenure at the Fed, you have made a serious effort to improve on how the Fed listens, but you know I am not going to let you off that easy, even though today is Valentine's Day. The people of my State and I have real concerns about the dangers that lie ahead for our economy. As this Committee discussed with Secretary Paulson last month, our constituents are nervous when they see more and more manufacturing jobs going to the Chinese. They are concerned about the future of the housing market. They are particularly concerned about the effects that the potential repeal of the Bush tax cuts will have on our economic recovery. You inherited an economy that was approaching a tipping point, and so far you have managed not to push it over. I urge you to act with caution and deliberation in the coming year.

Finally, soon there will be two vacancies on the Board of Governors. I hope the President moves quickly to fill these positions with people who have real experience in financial services and commercial banking, not just ivory tower academics. I look forward to your remarks.

Thank you, Mr. Chairman.

Chairman DODD. Thank you, Senator Bunning.

Senator Bayh.

COMMENTS OF SENATOR EVAN BAYH

Senator BAYH. Thank you, Mr. Chairman.

Chairman Bernanke, I suspect that most of the people here today have gathered to listen to you, not me, and I will, therefore, reserve my comments for the question period.

Chairman DODD. Very good.

Senator Martinez.

STATEMENT OF SENATOR MEL MARTINEZ

Senator MARTINEZ. I will almost resist the temptation.

Chairman DODD. That was a standard Senator Bayh set there.

Senator MARTINEZ. But I will be very brief, Mr. Chairman. Thank you very much.

Chairman Bernanke, welcome, and I again join in the high praise that you have been receiving for your first year on the job. I will simply look forward to hearing your comments as it relates to the housing market, a great concern to me, housing affordability; also, the issue that we dealt with last week in this Committee, which is subprime lending and the rate of defaults in that area; and just in general the effect of the hurricanes in the Gulf Coast, which continue to be an impact on the economies of the Gulf States.

So, I look forward to your comments, and thank you for being with us today.

Chairman DODD. Thank you very much.

Senator Menendez.

STATEMENT OF SENATOR ROBERT MENENDEZ

Senator MENENDEZ. Thank you, Mr. Chairman.

Chairman Bernanke, welcome. It is great to welcome a fellow New Jerseyan back again to the Committee.

Today, some people say the economy is solid due to some of the leading economic indicators appearing generally healthy, with unemployment below 5 percent, with moderate economic growth, with inflation stabilized, and I certainly want to commend you for the stewardship you have shown at the Fed in working on this economy. But at the same I also worry about who is benefitting from this economy and who is being left behind.

Indeed, there are serious limitations, I think, in judging a situation solely through looking at the big-picture numbers, as this view often hides the details of a situation, and specifically I am talking about the burden being placed on our middle class. So while some in this country might believe that our economy is chugging along quite well because our gross domestic product continues to grow, there seems to be an increasing gap between the average citizen and those at the top of our economic ladder. And the disparity that continues to grow, in my mind, is widening at an alarming rate.

When I am back in New Jersey, I hear more and more from New Jerseyans that our current economic policies are not working for them. The middle class continues to shrink, poverty is increasing, the gap between the rich and the poor is growing wider. We have a record-breaking national debt and a record-breaking trade deficit. The personal savings rate is now below zero, which has not happened since the Great Depression. Millions of Americans are seeing their wages stagnant and their pension and health care benefits slashed, while the wealthiest people in the country are doing better than ever.

So ultimately my concern is that our economy is not working for the broadest scope of Americans that we would hope. The middle class is shrinking instead of growing, and we seem far more concerned about boosting the incomes of the wealthiest Americans while denying our responsibility to those struggling to make ends meet. I do not think we can sustain that position over the long-term. We are borrowing to pay for tax cuts and the war effort. It is an unfair burden we are placing on our children and grandchildren.

So, I look forward to your testimony today and hearing your thoughts on some of these things I have mentioned, some of the other things I hope you will address, like the cooling off of the housing market, what that may mean; energy prices; the consequences of deficit and debt, from large budget deficits to record personal debt. And I understand that in your capacity as Chairman of the Federal Reserve, you are responsible for keeping inflation low and stable while maintaining economic growth, not economic equality. But I do hope either in your opening statement or subsequently in the questions that we will have an opportunity to ask to hear your views about how we get this economy working in a direction that it really helps middle-class families in this country.

Thank you, Mr. Chairman.

Chairman DODD. Thank you very much.

Senator Hagel.

STATEMENT OF SENATOR CHUCK HAGEL

Senator HAGEL. Mr. Chairman, thank you.

Mr. Chairman, welcome. We are glad you are here. I want to personally thank you for you taking time to address the Greater Omaha Chamber of Commerce at their annual meeting 2 weeks ago. It was a rather significant event, as it always is, and your speech matched the expectations that many had, and I appreciate you very much taking a day of your time to come to my State and deliver that speech and spend some time with our leaders in Nebraska. And I look forward to your testimony.

Thank you.

Chairman DODD. Thank you very much.

Senator Tester.

COMMENTS OF SENATOR JON TESTER

Senator TESTER. Thank you, Chairman Dodd.

Chairman Bernanke, I want to also welcome you here. This is one of those odd occasions where I do not have another committee. Thank God for snow. So, I look forward to your comments, and I will have questions when you are done.

Thank you.

Chairman DODD. Thank you very much.

Senator Bennett.

STATEMENT OF SENATOR ROBERT F. BENNETT

Senator BENNETT. Thank you, Mr. Chairman. I had planned to follow Senator Bayh's standard, but I have heard so many things being said here that I think at least one voice should rise in defense, if you will, of where certain things have been going.

Mr. Chairman, you know my personal affection for you, but it will not be a surprise that I disagree with your opening statement.

Chairman DODD. I am shocked to hear that.

[Laughter.]

Senator BENNETT. And, by coincidence, I suppose the best rebuttal is in a piece that appeared in this morning's paper by Brian Wesbury, who is the Chief Economist at First Trust Advisors, LP, in Illinois, "A Portrait of the Economy." I would ask unanimous consent that the entire piece appear in the record.*

Chairman DODD. Without objection.

He starts out, "It is the best of times. It is the scariest of times. Last year, U.S. exports, industrial production, real hourly compensation, corporate profits, Federal tax revenues, retail sales, GDP, productivity, the number of people with jobs, the number of students in college, airline passenger traffic, and the Dow Jones Industrial Average all hit record levels. For the third consecutive year, global growth was strong, continuing to lift and hold millions of people out of poverty. From 30,000 feet—heck, from 1,000 feet, it sure looks like the best of times. In relative terms, the first 5 years of the current recovery have been much better than the first 5 years of the 1990's recovery. But this has not softened the pessimism of many pundits and politicians who are either unimpressed or expect the whole thing to come crashing down any minute, unless the Government firmly grabs the rein of the global economy and steers it clear of disaster."

* Held in Committee files.

And then he goes on to outline the history of how badly things have gone every time the Government has tried to step in and steer it clear, starting with the 1930's and then the 1970's. He makes this comment about the 1970's, which I responded to, and it says, "Forgotten in the rush to pass judgment on capitalism is the fact that the last two times the Government seriously tried to control the economies in the 1930's and 1970's and made a terrible mess of it"—well, I will leave the rest of it for people to read, but the one thing I would say to you, Mr. Chairman, if he is right—and I think he is—in the year of your stewardship, the last year, exports, industrial production, real hourly compensation, profits, tax revenues, retail sales, all are at record levels, you must have been doing a pretty good job. And if you were running for office, you would take full credit for absolutely all of it.

Thank you, Mr. Chairman.

Chairman DODD. Thank you, Senator Bennett.

Senator Brown.

STATEMENT OF SENATOR SHERROD BROWN

Senator BROWN. Thank you, Mr. Chairman.

Chairman Bernanke, I appreciate your joining us today to share your thoughts on the direction of monetary policy in the months ahead. I also appreciate the comments you have made in Nebraska and other places before other groups and the steps you have taken toward greater transparency.

I am sure that you can appreciate for most of the families in my State of Ohio and elsewhere, many of the issues we discuss today are far removed from their day-to-day lives. As Senator Menendez said, the uncertainties that middle-class families face are not the uncertainties that the columnist that Senator Bennett mentioned and others and economists worry about as often perhaps as they should.

I know and appreciate your acknowledging the widening gap of income in our society. I commend you for adding your voice to that discussion. I agree with you that we should look at ways to improve education and training of our citizens, but I do not think that is nearly enough. Globalization has had a tremendous impact on workers in this country, on communities, on teachers, on firefighters, on cities' ability to deliver services to their constituents. There is no question that good-paying manufacturing jobs have gone offshore. Fourteen years ago, the trade deficit in this country was $38 billion. Today, announced just this week, it exceeds $760 billion. George Bush the First said that a $1 billion trade deficit translates into 13,000 lost jobs. You do the math.

Of course, we must trade with the world. The question is not if we will trade with other countries; rather, it is how we will trade with them and who will benefit. If the beneficiaries are limited to those with investment capital and the losers too often are workers and their communities across the country, we simply will not have a very sustainable trade policy. We devote substantial time and effort to protecting intellectual property in our trade negotiations and enforcement. We need to do this, but we exert almost no effort in protecting the rights of our workers and their counterparts overseas. That simply has to change.

Many in the media and some in Government label those of us who advocate for labor and environmental standards as "protectionist." Yet when our trade agreements protect the drug industry or Hollywood films, we call that simply "free trade." If we can protect an Ohio inventor, if we can protect pharmaceuticals, if we can protect copyrights, as we should, we can do a much better job protecting workers and the environment.

I thank you for your time.

Chairman DODD. Thank you very much, Senator.

Senator Allard.

STATEMENT OF SENATOR WAYNE ALLARD

Senator ALLARD. Thank you, Mr. Chairman. I would like to thank you and Senator Shelby for holding this important hearing. I always look forward to hearing from Chairman Bernanke. I think that you have started off very well in your tenure as Chairman of the Federal Reserve, and I want to congratulate you on that initial effort. I think you have gained the confidence of the markets, and I think you have gained the confidence of many Members of the Congress, although there are a few skeptics still among us.

I would like to emphasize that the economy is doing well. If we look at economic growth, this last year it is 3.4 percent; the previous year it was 3.2 percent. The average over 20 years is 3.1 percent. So we are above the average in economic growth. I think a lot of that is attributable to the economic growth package that we put in place in 2003 and the tax cuts that we had in 2001. We have heard a lot of comments here in this Committee about how it is going to impact the family. In my view, the hardest-working American is the small businessman, and those economic growth packages were targeted to the small businessman. That is where economic growth occurs. There are Members in Congress that are pushing hard to do away with those temporary tax reductions that we put in place to stimulate the economy.

My question to you is: I hope you will address this. If we let those temporary tax cuts go away, what kind of impact is it going to have on the average family? I think it is going to have a dramatic impact, particularly on the hard-working men and women of this country who are in business for themselves. And I hope that you can address that in your comments.

Thank you very much.

Chairman DODD. Thank you, Senator Allard.

Senator Reed.

STATEMENT OF SENATOR JACK REED

Senator REED. Thank you, Mr. Chairman, and thank you, Chairman Bernanke, for joining us today. Your task in setting the right course of monetary policy is complicated by fiscal policy and international imbalances. We no longer have the fiscal discipline that we had in the 1990's which allowed for a monetary policy that was more encouraging of robust investment and long-term growth.

The present large and persistent budget deficits have led to an ever-widening trade deficit that forces us to borrow vast amounts from abroad and puts us at risk of a major financial collapse if foreign lenders suddenly stop accepting our IOU's. Continued budget

and trade deficits will be a drag on the growth of our standard of living and leave us ill prepared to deal with the effects of the retirement of the baby-boom generation. Strong investment, financed by our own national saving, not foreign borrowing, is the foundation of a strong and sustained economic growth and rising standards of living.

One final issue that I would like to raise is the growing inequality of income earnings and wealth in the U.S. economy. Between 2003 and 2005, GDP grew at a rate of 3.5 percent per year. However, after adjusting for inflation, the typical weekly earnings of full-time wage and salary workers at the median of the earnings distribution went up only 0.6 percent between the end of 2000 and the end of 2006. Obviously, these median workers are not sharing in that robust GDP.

Data from the Federal Reserve Board Survey of Consumer Finances show that household wealth is very unevenly distributed. The wealthiest 1 percent of families held more of the country's wealth than the bottom 90 percent of families combined. Even more disturbing is the large number of families, particularly African-American and Hispanic communities, that have little or no net wealth.

Chairman Bernanke, I was heartened to read you comments in Omaha last week emphasizing the importance of education and training in reducing this economic inequality. And I know you share the concern that widening inequality is not good for our democracy and the fabric of the country. So, I hope you will agree there is an inconsistency at best in the Administration's pursuit of tax breaks for those who are already well off, including the permanent elimination of the estate tax, while continuing to propose cuts to elementary and secondary education, student aid and loan assistance for higher education, and job training for displaced workers. The challenges facing our economy are compounded by the disarray that characterizes our fiscal policy. We have been running unsustainable fiscal deficits, and in order to make the necessary investments in training and education, we must reverse this course. And I would be remiss if I did not note that the lead story today in most of the wire services is that Chrysler is cutting 13,000 jobs. I suspect that will probably raise the stock of Chrysler, make the investors happy, and investment bankers who are structuring the transformation of the company; it is necessary perhaps to do. But for 13,000 Americans who used to have good jobs with good health benefits, they are in a quandary, and our obligation is to them as well as it is to the shareholders of that company.

So, I think we have to do a lot more, and I think you do sense that, and I think together, hopefully, we can make some progress.

Chairman DODD. Thank you, Senator Reed.

Senator Sununu.

STATEMENT OF SENATOR JOHN E. SUNUNU

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

Senator Bennett, I thought, was somewhat eloquent in talking about the very positive trends we have seen in the economy: Record job creation and above average recovery period, record homeownership, rising income levels. It is fair to say, though, for any Member

who has spent a little time back home, there is a sense of insecurity that can be felt even in what are relatively strong economic times. And I think that is an issue or a set of issues dealing with their insecurity or uncertainty that we should deal with as policymakers and perhaps that at some level can even be addressed by the Fed. But I think it is important to understand that the role of the Fed is not to redistribute wealth, not to raise taxes, not to establish protectionist trade measures. And I think that is a good thing. I suspect maybe Chairman Bernanke thinks that is a good thing, because he has a tall enough order as it is.

The areas where the Fed can have a very positive impact within their mission are to deal with the uncertainties of inflation, the uncertainties of establishing a sustainable and steady record of economic growth, the security that comes from the establishment of safe and sound financial markets. And those are all responsibilities of the Fed, I think responsibilities that Chairman Bernanke takes very seriously. You have spoken very well to those issues in the past, and I look forward to hearing your comments on those and other issues this morning.

Thank you Mr. Chairman.

Chairman DODD. Thank you very much, Senator Sununu.

Mr. Chairman, we welcome you again to the Committee. We are anxious to hear your comments, and your full statement and supporting documents will, of course, be a part of the record.

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

Chairman BERNANKE. Thank you. Chairman Dodd, Senator Shelby, and other Members of the Committee, I am pleased to present the Federal Reserve's Monetary Policy Report to the Congress. Real activity in the United States expanded at a solid pace in 2006, although the pattern of growth was uneven. After a first-quarter rebound from weakness associated with the effects of the hurricanes that ravaged the Gulf Coast the previous summer, output growth moderated somewhat on average over the remainder of 2006. Real gross domestic product is currently estimated to have increased at an annual rate of about 2.75 percent in the second half of the year.

As we anticipated in our July report, the U.S. economy appears to be making a transition from the rapid rate of expansion experienced over the preceding several years to a more sustainable average pace of growth. The principal source of the ongoing moderation has been a substantial cooling of the housing market, which has led to a marked slowdown in the pace of residential construction. However, the weakness in housing market activity and the slower appreciation of house prices do not seem to have spilled over to any significant extent to other sectors of the economy.

Consumer spending has continued to expand at a solid rate, and the demand for labor has remained strong. On average, about 165,000 jobs per month have been added to nonfarm payrolls over the past 6 months, and the unemployment rate, at 4.6 percent in January, remains low.

Inflation pressures appear to have abated somewhat following a run-up during the first half of 2006. Overall inflation has fallen in large part as a result of declines in the price of crude oil. Readings

on core inflation—that is, inflation excluding the prices of food and energy—have improved modestly in recent months. Nevertheless, the core inflation rate remains somewhat elevated.

In the five policy meetings since the July report, the Federal Open Market Committee, or FOMC, has maintained the Federal funds rate at 5.25 percent. So far the incoming data have supported the view that the current stance of policy is likely to foster sustainable economic growth and the gradual ebbing of core inflation. However, in the statement accompanying last month's policy decision, the FOMC again indicated that its predominant policy concern is the risk that inflation will fail to ease as expected and that it is prepared to take action to address inflation risks if developments warrant.

Let me now discuss the economic outlook in a little more detail, beginning with developments in the real economy and then turning to inflation. I will conclude with some brief comments on monetary policy.

Consumer spending continues to be the mainstay of the current economic expansion. Personal consumption expenditures, which account of more than two-thirds of aggregate demand, increased at an annual rate of about 3.5 percent in real terms during the second half of last year, broadly matching the brisk pace of the previous 3 years. Consumer outlays were supported by strong gains in personal income, reflecting both the ongoing increases in payrolled employment and a pick-up in the growth of real wages. Real hourly compensation, as measured by compensation per hour in the nonfarm business sector deflated by the personal consumption expenditures price index, rose at an annual rate of around 3 percent in the latter half of 2006.

The resilience of consumer spending is all the more striking given the backdrop of the substantial correction in the housing market that became increasingly evident during the spring and summer of last year. By the middle of 2006, monthly sales of new and existing homes were about 15 percent lower than a year earlier, and the previously rapid rate of house price appreciation had slowed markedly.

The fall in housing demand in turn prompted a sharp slowing in the pace of construction of new homes. Even so, the backlog of unsold homes rose from about 4½ months' supply in 2005 to nearly 7 months' supply by the third quarter of last year. Single-family housing starts have dropped more than 30 percent since the beginning of last year, and employment growth in the construction sector has slowed substantially.

Some tentative signs of stabilization have recently appeared in the housing market. New and existing home sales have flattened out in recent months. Mortgage applications have picked up, and some surveys find that homebuyers' sentiment has improved. However, even if housing demand falls no further, weakness in residential investment is likely to continue to weigh on economic growth over the next few quarters as homebuilders seek to reduce their inventories of unsold homes to more comfortable levels.

Despite the ongoing adjustments in the housing sector, overall economic prospects for households remain good. Household finances appear generally solid, and delinquency rates on most types of con-

sumer loans and residential mortgages remain low. The exception is subprime mortgages with variable interest rates, for which delinquency rates have increased appreciably.

The labor market is expected to stay healthy, and real incomes should continue to rise, although the pace of employment gains may be slower than that to which we have become accustomed in recent years. In part, slower average job growth may simply reflect the moderation of economic activity. Also, the impending retirement of the leading edge of the baby-boom generation and an apparent leveling out from women's participation in the workforce, which had risen for several decades, will likely restrain the growth of the labor force in coming years. With fewer job seekers entering the labor force, the rate of job creation associated with the maintenance of stable conditions in the labor market will decline.

All told, consumer expenditures appear likely to expand solidly in coming quarters, albeit a little less rapidly than the growth in personal incomes, if, as we expect, households respond to the slow pace of home equity appreciation by saving more out of current income.

The business sector remains in excellent financial condition with strong growth and profits, liquid balance sheets, and corporate leverage near historical lows. Last year, those factors helped to support continued advances in business capital expenditures. Notably, investment in high-tech equipment rose 9 percent in 2006, and spending on nonresidential structures, such as office buildings, factories, and retail space, increased rapidly through much of the year, after several years of weakness.

Growth in business spending slowed toward the end of last year, reflecting mainly a deceleration of spending on business structures, a drop in outlays in the transportation sector where spending is notably volatile, and some weakness in purchases of equipment related to construction and motor vehicle manufacturing.

Over the coming year, capital spending is poised to expand at a moderate pace, supported by steady gains in business output and favorable financial conditions. Inventory levels in some sectors, most notably at motor vehicle dealers and in some construction-related manufacturing industries, rose over the course of last year, leaving some firms to cut production to better align inventories with sales. Remaining imbalances may continue to impose modest restraint on industrial production during the early part of this year.

Outside the United States, economic activity in our major trading partners has continued to grow briskly. The strength of demand abroad helped stir a robust expansion in U.S. real exports, which grew about 9 percent last year. The pattern of real U.S. imports was somewhat uneven, partly because of fluctuations in oil imports over the course of the year. On balance, import growth slowed in 2006 to 3 percent.

Economic growth abroad should further support steady growth in U.S. exports this year. Despite the improvements in trade performance, the U.S. current account deficit remains large, averaging about 6.5 percent of nominal GDP during the first three quarters of 2006.

Overall, the U.S. economy seems likely to expand at a moderate pace this year and next, with growth strengthening somewhat as the drag from housing diminishes. Such an outlook is reflected in the projections that the members of the Board of Governors and presidents of the Federal Reserve Banks made around the time of the FOMC meeting late last month. The central tendency of those forecasts, which are based on the information available at that time and on the assumption of appropriate monetary policy, is for real GDP to increase about 2.5 to 3 percent in 2007 and about 2.75 to 3 percent in 2008. The projection for GDP growth in 2007 is slightly lower than our projection last July. The difference partly reflects an expectation of somewhat greater weakness in residential construction during the first part of this year than we anticipated last summer. The civilian unemployment rate is expected to finish both 2007 and 2008 around 4.5 to 4.75 percent.

The risks to this outlook are significant. To the downside, the ultimate extent of the housing market correction is difficult to forecast and may prove greater than we anticipate. Similarly, spillover effects from developments in the housing market onto consumer spending and employment in housing-related industries may be more pronounced than expected. To the upside, output may expand more quickly than expected if consumer spending continues to increase at the brisk pace seen in the second half of 2006.

I turn now to the inflation situation. As I noted earlier, there are some indications that inflation pressures are beginning to diminish. The monthly data are noisy, however, and it will consequently be some time before we can be confident that underlying inflation is moderating as anticipated.

Recent declines in overall inflation have primarily reflected lower prices for crude oil, which have fed through to the prices of gasoline, heating oil, and other energy products used by consumers. After moving higher in the first half of 2006, core consumer price inflation has also edged lower recently, reflecting a relatively broad-based deceleration in the prices of core goods. That deceleration is probably also due to some extent to lower energy prices, which have reduced costs of production and thereby lessened one source of pressure on the prices of final goods and services. The ebbing of core inflation has likely been promoted as well by the stability of inflation expectations.

A waning of the temporary factors that boosted inflation in recent years will probably help to foster a continued edging down of core inflation. In particular, futures quotes imply that oil prices are expected to remain well below last year's peak. If actual prices follow the path currently indicated by futures prices, inflation pressures would be reduced further as the benefits of the decline in oil prices from last year's high levels are passed through to a broader range of core goods and services.

Non-fuel import prices may also put less pressure on core inflation, particularly if price increases for some other commodities, such as metals, slow from last year's rapid rates. But as we have been reminded only too well in recent years, the prices of oil and other commodities are notoriously difficult to predict, and they remain a key source of uncertainty to the inflation outlook.

The contribution from rents and shelter costs should also fall back following a step-up last year. The faster pace of rent increases last year may have been attributable in part to reduced affordability of owner-occupied housing, which led to a greater demand for rental housing. Rents should rise somewhat less quickly this year and next, reflecting recovering demand for owner-occupied housing as well as increases in the supply of rental units, but the extent and pace of that adjustment are not yet clear.

Upward pressure on inflation could materialize if final demand were to exceed the underlying productive capacity of the economy for a sustained period. The rate of resource utilization is high, as can be seen in rates of capacity utilization above their long-term average, and most evidently in the tightness of the labor market. Indeed, anecdotal reports suggest that businesses are having difficulty recruiting well-qualified workers in certain occupations. Measures of labor compensation, though still growing at a moderate pace, have shown some signs of acceleration over the past year, likely in part the result of tight labor market conditions.

The implications for inflation of faster growth in nominal labor compensation depend on several factors. Increases in compensation might be offset by higher labor productivity or absorbed by a narrowing of firms' profit margins rather than passed on to consumers in the form of higher prices. In these circumstances, gains in nominal compensation would translate into gains in real compensation as well.

Underlying productivity trends appear favorable, and the markup of prices over unit labor cost is high by historical standards, so such an outcome is certainly possible. Moreover, as activity expands over the next year or so at the moderate pace anticipated by the FOMC, pressures in both labor and product markets should ease modestly. That said, the possibility remains that tightness in product markets could allow firms to pass higher labor costs through their prices, adding to inflation and effectively nullifying the purchasing power of at least some portion of the increase in labor compensation. Thus, the high level of resource utilization remains an important upside risk to continued progress on inflation.

Another significant factor influencing medium-term trends in inflation is the public's expectations of inflation. These expectations have an important bearing on whether transitory influences on prices, such as those created by changes in energy costs, become embedded in wage and price decisions and so leave a lasting imprint on the rate of inflation. It is encouraging that inflation expectations appear to have remain contained.

The projections of the members of the Board of Governors and the presidents of the Federal Reserve Banks are for inflation to continue to ebb over this year and next. In particular, the central tendency of those forecasts is for core inflation, as measured by the price index for personal consumption expenditures, excluding food and energy, to be 2 to 2.25 percent this year and to edge lower to 1.75 to 2 percent next year. But as I noted earlier, the FOMC has continued to view the risk that inflation will not moderate as expected as the predominant policy concern.

Monetary policy affects spending and inflation with long and variable lags. Consequently, policy decisions must be based on an

assessment of medium-term economic prospects. At the same time, because economic forecasting is an uncertain enterprise, policymakers must be prepared to respond flexibly to developments in the economy when those developments lead to a reassessment of the outlook. The dependence of monetary policy actions on a broad range of incoming information complicates the public's attempts to understand and anticipate policy decisions.

Clear communication by the central bank about the economic outlook, the risks to that outlook, and its monetary policy strategy can help the public to understand the rationale that is behind policy decisions and to anticipate better the central bank's reaction to new information. This understanding should in turn enhance the effectiveness of policy and lead to improved economic outcomes. By reducing uncertainty, central bank transparency may also help anchor the public's longer-term expectations of inflation.

Much experience has shown that while anchored inflation expectations tend to help stabilize inflation and promote maximum sustainable economic growth, good communication by the central bank is also vital for ensuring appropriate accountability for its policy actions, the full effects of which can be observed only after a lengthy period. A transparent policy process improves accountability by clarifying how a central bank expects to attain its policy objectives and by ensuring that policy is conducted in a manner that can be seen to be consistent with achieving those objectives.

Over the past decade or so, the Federal Reserve has significantly improved its methods of communication, but further progress is possible. As you know, the FOMC last year, established a subcommittee to help the full committee evaluate the next steps in this continuing process. Our discussions are directed at examining all aspects of our communications and have been deliberate and thorough. These discussions are continuing, and no decisions have been reached.

My colleagues and I remain firmly committed to an open and transparent monetary policy process that enhances our ability to achieve our dual objectives of stable prices and maximum sustainable employment. I will keep Committee Members apprised of the developments as our deliberations move forward. I look forward to continuing to work closely with the Members of the Committee and your colleagues in the Senate and the House on the important issues pertaining to monetary policy and the other responsibilities with which the Congress has charged the Federal Reserve.

Thank you. I would be happy to take questions.

Chairman DODD. Thank you very much, Mr. Chairman, for a very comprehensive statement. What I am going to do is we will have 7 minutes per Member. I will not hold to that so tightly. I would just ask Members to be conscious of the time, and you have the clocks in front of you here so we can make sure everybody has adequate time to ask questions and give you an adequate time to respond to them as well.

Let me pick up, if I can, a number of my colleagues referred to your speech in Omaha. Senator Hagel talked about your reception there and the comments you made about income inequality, and I want to pick up on those comments, if I can as well.

I think all of us recognize here, I would say to my friend from Utah, we are all very conscious the tremendous wealth that has been created in certain sectors of our economy, that there are good things that are happening. None of us is suggesting all is bad.

There is a sense, as Senator Sununu has said, and others, of uncertainty that people are feeling across the country about the long-term economic growth and stability of the Nation. And I think those of us who are expressing those views to you here, Mr. Chairman, probably reflect your comments as well as I read them. Your quote in Omaha, "By many measures, inequality in economic outcomes has increased over time."

Your predecessor, Chairman Greenspan, was very concerned about the growth in income inequality as well. He testified, "I think the income distribution issue is very critical because we cannot have a significant inequality of income and expect to have support for the type of institutions that have been made this country great."

Do you share Chairman Greenspan's concern, Mr. Chairman, that continued economic growth of inequality is a significant threat to our Nation's fundamental promise of economic opportunity? Do you suggest by your comments here that we should have a balanced view? I just left a markup a few minutes ago before coming here, marking up a new Head Start bill that will hopefully deal with greater accountability, but serving about 900,000 to 1 million young people in this country in the past 41 or 42 years that has tried to give those children an opportunity to become active and successful members of our economy in the future.

I am concerned as we look at this that the decisions we make here will lack that kind of balance, and your comments seem to suggest a similar train of thought. And I wonder if you might just take a few more minutes this morning to expound on those comments in Omaha, and just a general observation. I am not asking if you endorse a specific spending program here and there, but just your general observation about this inequality issue and your concern that you obviously expressed in Omaha.

Chairman BERNANKE. Thank you, Mr. Chairman. The very important drivers of economic growth and prosperity in this country include free and open trade and technological progress. It is very important to allow those forces to continue to operate in our economy. However, we do have to recognize, as I discussed in Omaha, that the effects of these forces can be differential across the population. They may create greater income possibilities for some than others. They may create painful dislocations, for example, if the composition of industries changes or job skill requirements change.

I agree with Chairman Greenspan's general point that in order to support and retain support for policies of free trade, open borders, technological change, flexible labor markets, we need to make sure that the gains and benefits from these powerful, growth-producing forces are broadly shared and that people understand that these things are good for the American economy and good for people generally in the economy.

How to do that is very difficult. It is easy enough to say let us promote economic opportunity. I certainly support that idea. Doing it is not necessarily easy. I discussed in my speech some general

issues and approaches, including education, not only K–12 education but also training throughout the life span, from early childhood through adult retraining. We need to help people who are dislocated by these powerful dynamic forces to find new jobs, to find new opportunities. I think that is very important.

I would just say, though, that I am glad you did not ask me to endorse specific policies, because making that work in practice is difficult. We have to find ways to achieve these objectives. For example, retraining workers in ways that are effective, and are effective in terms of the spending that we put into it.

So it is a great challenge for us going forward to look among all the possible approaches and decide which types of programs, which types of initiatives will be most effective at achieving this objective.

That being said, again, I do agree that we need to spread the benefits widely and make people understand that open trade and technological change are beneficial for not only the economy in the aggregate, but also for the great majority of people in the economy.

Chairman DODD. Well, I do not know if you had the chance to read a report called "The Gathering Storm." It was prepared by a number of senior retired corporate executives along with some of our leading academicians in the country about a year and a half ago who took a month off and examined where we were in K–12 in science and math—again, without getting into the specifics of individual programs, but they were very cautious. In fact, they warned us, all of us, those of us who sit on this side of the dais, as well as others across the country, that if we did not make some investments in the quality of education, particularly in math and science, we could find abrupt changes occurring in our country very quickly in this century.

I do not know if you have had an opportunity to look at that report or not, whether or not you agree with their conclusions about your concerns over whether or not this inequality could be exacerbated by the failure of us to have a level of education, investments in education from that earliest early childhood area through the higher educational opportunity.

Chairman BERNANKE. Mr. Chairman, I did read that report. It had a lot of interesting things to say. I think if you look at it carefully, it suggests that the issues are different in different parts of the educational system. For example, our universities remain very strong. Our research universities lead the world. So in terms of research, development, innovation, and so on, the United States retains substantial leadership in the world. But in other parts of the educational system, perhaps in elementary school, for example, we are probably not doing what we should in terms of ensuring that all children have opportunities to learn math and science and the applications of those areas.

Again, my wife is a teacher, and I have been in education for a long time. I was on the school board for many years, so I am very sensitive to these issues. But I also appreciate from those particular positions that we have been worrying about educational quality for a long time, and it is a difficult thing to achieve. I encourage continued thought and continued efforts to improve these vital components of our economy without having any delusions about how difficult that really is to accomplish effectively.

Chairman DODD. I thank you for that.

I am going to turn to my colleague from Alabama, but I will probably send this as a written question, unless one of my colleagues raises it with you here.

Back in December, Senator Sarbanes, Senator Allard, Senator Reed, Senator Bunning, Senator Schumer, and myself sent you and other regulators a letter regarding these exotic mortgages. We had a hearing here the other day, and I have talked about this. I am a strong advocate of subprime lending. It has made a huge difference in accessibility to homeownership. I am also simultaneously very concerned about the predatory lending practices that go on. That concern about providing those subprime borrowers with the same kind of protections we do to the prime borrowers is a matter of concern to many of us here on this Committee.

The letter we got back, frankly, Mr. Chairman, was a little inadequate. The notion, "We are thinking about it," was nice to know, but I think many of us would like to know they are taking some additional steps. And, again, I will make this a written question to you, but I am very concerned about this issue, and some of the data we are receiving were as many as 2 million of our fellow citizens may be foreclosed out of their homes because of predatory practices.

Again, I will not ask you here. I want to turn to Senator Shelby, but I want to raise that issue with you and ask you to be thinking about it because it is an important concern for many of us.

Senator Shelby.

Senator SHELBY. Thank you, Chairman Dodd.

Chairman Bernanke, the Federal Open Market Committee has held the Federal funds rate target at 5.25 percent since June 2006. In the FOMC statement following your most recent meeting in January, the FOMC noted, "the high level of resource utilization has the potential to sustain inflation pressures. The Committee judges that some inflation risks remain."

Mr. Chairman, what data related to resource utilization will you be paying the closest attention to between now and the next FOMC meeting in March?

Chairman BERNANKE. Senator, a flip answer is, "Everything." I should be clear: Our concern is not about the labor market per se. Our concern is about the overall balance of spending and productive capacity.

Senator SHELBY. The whole picture.

Chairman BERNANKE. The whole picture. The Federal Reserve contributes to setting overall financial conditions, which in turn stimulates spending by consumers and businesses on the product of our companies.

If spending is growing more quickly than the underlying productive capacity for a sustained period, we risk creating inflation which will then make it more difficult to sustain a healthy expansion over a longer period of time.

So we are looking for evidence that consumption spending and other components of spending growth are exceeding the underlying capacity. In doing so, we look at a wide variety of indicators, including the strength of various spending components, measures of resource utilization, which include not only capacity utilization and

unemployment, but also many indicators in labor markets and capital markets.

We also look very much at prices because they are the canary in the coal mine. If prices begin to rise, that is indicative that there is too much demand given the amount of supply.

We do not have any fixed speed limit in mind when we think about the economy going forward. We do not have any fixed number for the unemployment rate. But rather, we are looking at the overall balance of supply and demand, looking at the evolution of inflation, and trying to ensure that there is a reasonable balance between demand and supply so that our economy can continue to grow at a sustainable, moderate pace going forward.

Senator SHELBY. Is your economic goal here basically price stability?

Chairman BERNANKE. Price stability consistent with strong employment as well.

Senator SHELBY. Productivity. The President's economic report noted that between 2000 and 2005, productivity growth in the United States accelerated to about 3 percent, Mr. Chairman, the fastest growth of any G–7 country, which includes Canada, France, Germany, Italy, Japan, and the United Kingdom. Most other major industrialized countries suffered a slowdown in productivity growth.

What factors do you believe explain the difference in productivity growth given that the other G–7 countries also have access to the same technological improvements and broad capital markets the United States has? And could you expand on these differences in productivity, what productivity implies for our standard of living and our long-term growth?

Chairman BERNANKE. Senator, you are quite correct that productivity began to grow more quickly in the United States about a decade ago, and that has been a very important factor in the strength of our economy.

In 1995, we saw a step-up in productivity growth from 1.5 to 2.5 percent, which seems to have been driven primarily by improved and more efficient methods of producing high-tech equipment—faster computers, stronger, better communications equipment, and the like.

Over the succeeding few years—and, in fact, we saw productivity growth step up further around 2000—those technological innovations had been diffused through the economy and helping industries across the economy manage their production and distribute their output more efficiently, and reduce costs and increase productivity. So in some sense, the underlying factor is the technological change, the investment in information and communications technologies, and the diffusion of those technologies throughout the economy.

Now, you ask, quite properly, why we have seen better results here in the United States than in some other countries, and I have given some speeches on that subject. I do believe that it is the interaction of the new technologies and our flexible dynamic economic system. That includes flexible labor markets that can adjust to changes in the market associated with technological change. That includes deep and liquid capital markets that can allocate

capital toward new ventures, toward new technologies. And I believe that flexibility has been essential in helping us take technological advances and create from them economic benefits. This relates to my answer to Chairman Dodd that we need to maintain that flexibility in our economy and that providing broad opportunity and education is one way to support that going forward.

Senator SHELBY. Mr. Chairman, I want to get to another part of your responsibilities, and that is, bank regulation. Regulation Z, Senator Dodd has already referred to this. The Banking Committee held a hearing on the credit card industry that was widely followed. Witnesses at the hearing highlighted a number of troubling industry practices, many of which are subject to Federal Reserve oversight. I understand that the Federal Reserve Board is currently reviewing its Regulation Z, which implements the Truth in Lending Act.

What is the status of the Board's Regulation Z review? And does the Board intend to use this review to address any of the questionable industry practices raised in the Committee's hearing?

Chairman BERNANKE. Senator, we have been putting a great deal of effort into our review of Regulation Z, with a particular focus on short-term revolving credit, like credit cards. One of the real challenges in improving disclosures for credit cards and other types of lending is to make the disclosures both compliant with legal requirements, but also sufficiently clear and understandable that people can understand what it is that they are getting into.

In order to improve the understandability and the clarity of disclosures, the Federal Reserve has conducted extensive consumer testing. We have not just done it in the ivory tower, as somebody mentioned. We have gone out into the public and conducted focus groups. We have done psychological testing to try to figure out how to structure disclosures in a way that people will notice them, pay attention to them, and understand them. So that has been a big part of our effort.

We are very close to the end of that effort. We expect to have a proposed rule out within a few months, by the middle of this year, and I believe and hope that it will address many of the appropriate concerns that people have had about disclosures and practices in the credit card industry and other short-term debt.

Senator SHELBY. Chairman Dodd, I know my time is up, but could I just ask the Chairman a question for the record? I think it would take some time.

We have been concerned for some time about the implementation of the Basel II Capital Accord and the impact that Basel II may have on safety and soundness of the U.S. banking system. I am worried that Basel II may lead to a sharp reduction in the amount of capital banks are required to hold, which would put U.S. taxpayers ultimately at risk of having to pay for expensive bank failures, if there are some. I believe that it is critical that Basel II be implemented with the utmost care and diligence.

Mr. Chairman, would you for the record update the Committee on the status of Basel II Capital Accords, the current time frame for implementing Basel II, and also comment on whether there is another time for banking regulators, including yourself, to finalize the rules in implementing Basel II so that banks adopting Basel

II can start the test run for Basel II presently scheduled to begin next year? If you care to, you can do it for the record.

Chairman BERNANKE. Should I answer, Mr. Chairman?

Chairman DODD. We will make that for the record, and let me add to that quickly before turning to Senator Schumer. Some of my bankers have raised the issue, too, about foreign acquisition of domestic banks and whether or not they are really meeting the capital requirements today. We have some real concerns raised by my bankers in Connecticut about this issue. They follow it very closely. And I would add that to the question that Senator Shelby has raised with you, whether or not that is something we should be looking more closely at. Are they actually meeting those criteria before those acquisitions occur?

Senator Schumer.

Senator SCHUMER. Thank you, Mr. Chairman, and it is your first year. You have completed a year. You are getting good grades everywhere, and I would concur. I think you are doing a fine job and have vindicated the support that you received almost unanimously from this Committee.

My first question deals with the issues of income inequality in the speech you gave yesterday where you pointed out that this has just been an ideas, almost instantaneous, economy and wealth agglomerates to the top. You talked about Manny Ramirez. I would like to talk about Henry Ford, his great idea. He deserved to become rich from it, but he needed a million people to carry it out, and each of them made $10,000 a year to make the cars, distribute the cars.

Bill Gates, maybe the Henry Ford of our generation, had another. He mass produced in a certain sense computer platforms, but he needed 10,000 people to carry it out, and they each made a couple million dollars.

Given that this is happening—and it is not the Government's doing. This is just the nature of our economy, as you pointed out in the speech. Doesn't it make sense, if this goes too far, to have a more progressive tax code, even though Government did not cause it, to keep a middle-class base, to keep too much wealth from agglomerating at the top? I am not asking you any specific policy, but just a general view that wouldn't progressivity, further progressivity in the tax code help be an antidote to the natural flow of money to the very top, to the few who create those new ideas and deserve to make money from that and not get in the way of doing that?

Chairman BERNANKE. Senator, your comparison of Henry Ford and Bill Gates was very telling, actually. Henry Ford developed the assembly line, and it allowed relatively low-skilled workers to be very productive in that context and generated high wages for those workers.

Bill Gates created a new model of operating systems in the high-tech industry. The kinds of workers he needed were much more skilled workers.

Senator SCHUMER. Exactly, and many fewer of them as well.

Chairman BERNANKE. And fewer of them, certainly. So, I think that one very important lesson from that comparison is that those who are going to benefit the most from globalization and tech-

nology are those who have the skills, who have the capabilities to benefit and to be productive in that context.

So, I would say whatever we do with tax policy and transfer policy, I hope that we will try to address the issues of skills and individual productivity.

Senator SCHUMER. I agree with you completely. But that is going to take a while.

Chairman BERNANKE. Senator, on the issue of progressivity, you will be unsatisfied. As the head of the nonpartisan central bank, I think it is very important for me not to take sides on issues where values are very important.

Senator SCHUMER. Talking about more money or more help for education is as much a policy decision as talking about the progressivity of the code. I am not asking you about a specific policy, and I think you should address it.

Chairman BERNANKE. Senator, I am sorry, I decline, because there really is a value judgment involved in trading off—I talked about this in my inequality speech. I said, on the one hand, you have the importance of promoting incentives. Senator Bennett mentioned entrepreneurs, people who take risks. We have to give them incentives to take risks. On the other hand, as you point out, correctly the tax code has an important role to play in generating more equality. But I am not an elected official, so I cannot comment.

Senator SCHUMER. Okay. I think you are ducking it, in all due respect, because you do talk about other policy issues, but let me move on.

Trade deficit. Are you happy with the size of the trade deficit, at the rate of its growth? And do you think stronger policies, particularly against those who we have huge balance of trade deficits with to open their markets, not particularly to close ours, would be helpful in reducing the trade deficit? Obviously, my focus is on China, but I would ask a more general question.

So, the first question, are you happy with the size of the deficit and its rate of growth?

Chairman BERNANKE. No, I am not happy with it.

Senator SCHUMER. Do you think policies that would not require, but importune other countries whose markets are not as open as ours to open theirs would be a salutary change and that we should emphasize that as a, if you will, pro-free trade way to deal with the trade deficit?

Chairman BERNANKE. Senator, I am entirely in favor of trying to open markets. We have the World Trade Organization, and China is a signatory. We should aggressively pursue attempts to open markets to foreign investment and——

Senator SCHUMER. Do you think the Chinese have done enough on their currency?

Chairman BERNANKE. They have moved in the right direction, but, no, I do not think they have done enough.

With respect to trade, though, I would like to add that trade policies alone are not going to resolve the trade deficit. There is also the issue of saving and investment, which we do need to address as well.

Senator SCHUMER. I think I agree with you on that.

Senators Graham, Baucus, Grassley, and myself are going to try to do a WTO-friendly way or compliant way of getting the Chinese to do more on currency, and I hope you will look at that carefully and be supportive.

A final question is on competitiveness of our financial institutions and industries. Coming from New York, I am obviously concerned, but so should my colleagues from many other States be. The Carolinas, South Dakota, New Jersey, so many other States have a stake here. And the problem we seem to be facing is this: That other regulatory and legal schemes—you know, regimens in other countries are looser than ours. And now that capital can flow quite freely, companies who are international and their loyalty to their stockholders means they are not going to be loyal to the United States or it will precede their loyalty to the United States may seek the lowest common denominator or a lower common denominator. And the pretty exquisite balance between regulation and entrepreneurialness that we have had over the last quarter of the last century seems to be in some trouble, that people are fleeing to go to less regulated places for their short-term gain, even if it creates problems in the system as a whole.

Could you comment on that problem? Do you think it is a real one? Do you think it is only caused by simply knowledge spreading and the Internet or is caused by some of these regulatory differences? And do you think we should look at that in a policy way to do something about it?

Chairman BERNANKE. Senator, to some extent, it is caused by the diffusion of knowledge and the growth of other markets, and to the extent that we are having a more competitive, deeper, broader capital market around the world, that is probably good for world growth. It is probably good for even our companies because they have more options for raising funds.

There is, though, I think, an issue of regulation, as has been pointed out in the two reports that you are quite familiar with. There is a subtle distinction to make. If you take Sarbanes-Oxley as an example, to the extent that Sarbanes-Oxley appropriately balances disclosures and governance against the cost of achieving those disclosures and governance, I think it is worthwhile to keep. Even if there is some short-run tendency for firms to run away from that, because the investor wants that protection, ultimately the investor will reward firms that list on exchanges that have appropriate, adequate protections such as a well-designed Sarbanes-Oxley.

That being said, there are always concerns about Sarbanes-Oxley, about Basel II, about the regulatory structure, about securities litigation, about CIFIUS, where legitimate questions can be raised whether the costs of those regulatory schemes exceed the actual benefits to investors and to others of implementing them. As a general matter, not just in the context of competitiveness of our exchanges, we should always be looking to restore that balance and make sure that the costs we are imposing from a regulatory side are justified in terms of the social benefits.

So, for example, it is a good step that the Public Company Accounting Oversight Board and the SEC have taken some steps in revising the audit standard to reduce the burden of SOX 404 while

maintaining, I believe, many of the benefits in terms of disclosure and controls that that law was intended to achieve.

Senator SCHUMER. Thank you, Mr. Chairman.

Chairman DODD. Thank you very much, Senator Schumer.

Senator Bunning.

Senator BUNNING. Thank you, Mr. Chairman.

Two of your predecessors, Paul Volcker and Alan Greenspan, always expressed great concern. I happen to have served on the House Banking Committee when Mr. Volcker was the head of the Federal Reserve and then Chairman Greenspan, both House Banking and now Senate Banking. And yesterday in the *Washington Post,* there was an article about the inversion of the yield curve for 8 straight months and how local banks and banking in general—and since that is the Fed's charge, to make sure that our banks are sound and secure—were having difficulty with the inverted yield curve.

I have questioned you about this before, and you have always said it is not very important in this day and time. I am going to ask you again: How long can we stand to have—we have had it 8 straight months now—an inverted yield curve, where short-term rates are higher than our 30-year bond rate?

Chairman BERNANKE. Senator, the usual context of this question is: Does an inverted yield curve presage a recession or a slowdown in the economy?

Senator BUNNING. Well, it also hurts our banks very badly.

Chairman BERNANKE. I will address that, sir. Just very quickly, though, on the forecasting power of the yield curve: There has been a good bit of evidence that declines in the term premium and perhaps a great deal of saving chasing a relatively limited number of investment opportunities around the world have led to a somewhat permanent flattening—or even inversion—of the yield curve, and that pattern does not necessarily predict slowing in the economy or a recession. Indeed, if you look at other measures of financial markets such as corporate bond spreads, you do not see anything that suggests anticipations of future stress.

The question you raise is a different one, of course, which is the effect on the banking system. Specifically, banks that do their traditional business of taking deposits and making loans are going to be put under pressure because the short-term deposit rates tend to be higher than the loan rates they can get. I recognize that is a problem for some banks. Other banks have been able to deal with it by hedging interest rate risk, by getting fees, and finding other ways of doing their business.

So, overall, I do not see the banking sector as being under tremendous pressure in terms of its profits and asset quality at the moment. But I recognize—particularly for smaller banks, which have fewer options in terms of raising funds and earning fees and income—that the inverted yield curve does produce some pressure.

From the Federal Reserve's point of view, we are entirely cognizant of that and hear about it from bankers. We have to set monetary policy, of course, to achieve overall price stability and maximum sustainable employment growth. So we sometimes find that in the context of various industries policy creates some pressure in individual industries. But we only have this one tool, and we try

to use it to achieve overall macroeconomic stability, while fully recognizing that it does create some problems for some sectors.

Senator BUNNING. You are telling us today that an inverted yield curve down the road will not affect the economy. Did I misunderstand that, or is that accurate?

Chairman BERNANKE. I think the yield curve could be inverted for a considerable period without significant implications for the economy as a whole, yes—possibly for some banks, but not for the economy as a whole.

Senator BUNNING. How does this economic cycle that we are in, and recovery and expansion, compare to previous recoveries and expansions? In other words, when we hit the wall in 1992 and then also in 2002, how does this recovery that we are involved in now compare to those recoveries?

Chairman BERNANKE. I would say that qualitatively it is fairly similar to the recovery that followed the 1991 recession, with many of the same features. There was weakness for some time after the recession ended, including a period of so-called "jobless growth."

Senator BUNNING. But we did not have a housing market that——

Chairman BERNANKE. Well, the housing market was actually quite weak during the recession itself. The decline in residential starts during 1991 was not quite as large, but in the same neighborhood, as what we have seen recently. During the recovery period, we did not have that particular pattern, but in many ways, it was a fairly similar expansion.

Senator BUNNING. Could you estimate how close we are to a full employment in the United States?

Chairman BERNANKE. It is very hard to say specifically, and I do not pretend to know an exact number or an exact estimate. But the economy has certainly been growing faster than potential for a number of years, and that can be seen in the tightening of labor markets and capacity utilization. So, clearly, we are much closer today, I think it is safe to say, to full employment, to the sustainable level of growth than we were a few years ago.

Senator BUNNING. And in your opening statement, you made the remarks to the effect that you have not seen any new evidence of inflation since your last Fed meeting in January or February?

Chairman BERNANKE. We have not had much information on inflation since just 2 weeks ago, but the recent readings on inflation have been encouraging.

Senator BUNNING. Encouraging?

Chairman BERNANKE. Yes.

Senator BUNNING. Okay.

Chairman BERNANKE. But as I indicated in my remarks, they are somewhat noisy, the data, and we do not want to draw a complete conclusion——

Senator BUNNING. Well, that is why we have Fed meetings, you know, every month or two.

Chairman BERNANKE. That is correct, Senator.

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

Chairman DODD. Thank you very much, Senator Bunning.

Senator Casey.

Senator CASEY. Thank you, Mr. Chairman, and the other Chairman in the room, thank you for your time and for your service. I have two general questions, one on debt and one on children.

With regard to debt, I was looking at the report that the Federal Reserve Board is submitting in connection with your appearance here today and your testimony. And, in particular, I wanted to direct your attention and the attention of others to the report.

I note here that in the section which deals with the Federal Government and expenditures and outlays by the Federal Government, it says, "Net interest payments increased 23 percent in fiscal year 2006 as interest rates rose and Federal debt continued to grow."

Then it goes on from there and talks about the outlays for Medicare Part D, Medicare itself up 10.5 percent. It talks about disaster relief, Medicaid spending, and then it gets to the next part of the paragraph. "Outlays for defense in fiscal year 2006 slowed to their lowest rate of increase since fiscal year 2001, although the rise was still about 6 percent." That is the first predicate of my question.

It goes on to talk about debt, the Federal debt subject to the statutory limit has increased, now we are at the $8.6 trillion level.

I guess with that as a predicate, let me tell you what I think about this. I think that that is unsustainable, and as much as we have talked, as important as it is to talk about the good sound bite, reducing our dependence on foreign oil, I think we need a lot more effort in this Congress and in this town on reducing our dependence on foreign debt. I think it is making us less safe in the fight against terrorism. I think it is making us less safe in terms of our ability to spend money on defense, not to mention our inability to spend money on good investments in the economy, as you talked about, education, training, and the rest.

So, I guess my basic question is: In light of that data, and any other data you want to factor into this question, are these numbers sustainable, an $8.6 trillion debt and a 23-percent increase in net interest payments? Is that sustainable over time?

Chairman BERNANKE. I recently testified before the Senate Budget Committee, and I pointed out—and it is not exactly a secret—that the long-term prospects for the U.S. fiscal situation are quite serious. In particular, we are going to start seeing—as the population ages—expanded costs of entitlements, Social Security and Medicare; those grow very quickly. And we will generate, if no action is taken, an increasing spiral of higher interest payments and debt.

I quoted in that testimony several interesting, useful simulations by the Congressional Budget Office. The intermediate simulation suggests that by the year 2030 the deficit will be 9 percent of GDP, and the debt-to-GDP ratio, which is currently about 37 percent, will be closer to 100 percent of GDP—a number which we have not seen since World War II.

So, obviously, there are a lot of issues that Congress will debate about short-term spending and tax proposals. But if you think about fiscal sustainability in a longer time frame, dealing with the fiscal implications of the aging population and rising health care costs are going to be dominant, and essentially there will not be any way to address fiscal sustainability without addressing that issue in some way.

Senator CASEY. I wanted to pick up, in the remaining time I have, on the issue of how we invest in children, pick up on what Chairman Dodd spoke of earlier.

There is a great organization out there that has as its moniker, as its message, "Fight crime, invest in kids." It is a great sound bite. Sometimes we need sound bites to make the point. I would also assert—and I would ask for your sense of this and your reflections on this—that you could use the same construct for the impact on how we invest in children and how we grow our economy. Instead of saying, "Fight crime, invest in kids," you could say, "Grow the gross national product" or "Grow GDP" or "Grow the economy, invest in kids."

Now, I ask you that because we are going to be making some critically important decisions in the next couple of months and certainly in this 110th Congress. Chairman Dodd talked about the issue of the Head Start program. There have been votes cast in the U.S. Senate in the last couple of years where the choice was clearly and unambiguously a choice between investing in Head Start or investing in education or investing in any other support for children and their economic future, not to mention our future, and tax cuts. Sometimes the votes have been that stark, and there are people here who voted for the tax cuts over Head Start and over some other priorities.

So, I would ask you about your opinion—and this is a policy question, but I think you can answer this—your opinion on the level of investment in children, whether it is with regard to education or Head Start, early learning, all of these initiatives to give kids a healthy and smart start in life, how you see that in the context of economic growth and GDP growth, and whether or not you think the investment currently is adequate.

Chairman BERNANKE. I think that investing in children is extremely important and has significant economic and social benefits. I hope that Congress will continue to look very carefully at that.

What I do not know is precisely how best to do that, and I think you are going to have to bring real experts here to talk about different approaches—what works and what does not. But I urge you to continue to do that.

In terms of priorities, to go back to Senator Schumer's question, clearly, there are always priorities. But you can weigh these things against tax cuts, you can weigh them against other kinds of spending. Clearly, you have to have an overall picture of what is important.

Again, I cannot speak to the overall combination of taxes and spending other than to say that they should be in balance. But I will go so far as to say that I think that there is a significant return to investing in young kids.

In my remarks in Omaha, I even cited some Federal Reserve research from the Federal Reserve Bank of Minneapolis, which showed the very substantial economic returns associated with early childhood education, and I do think that that is certainly worth investigating.

Senator CASEY. Thank you.

Chairman DODD. Thank you, Senator Casey. Very good questions. I appreciate your focusing attention on that.

I want to just mention, before turning to Senator Martinez, your response, Mr. Chairman, to Senator Schumer's questions about Sarbanes-Oxley and competitiveness. I appreciated your answer very much to that question. There are some things clearly that could be done to try and show some balance and making sure we are not overburdening smaller public companies, but your thrust was that this is working pretty well. And, frankly, anecdotally, I suspect most of us here ask the question of every business we talk to: How is this working? And I must tell you, overall the response I get is a good one.

I had one company the other day say to me that, "Even if Congress decided tomorrow to repeal Sarbanes-Oxley, we would decide to stay with all the things that have been required of us. We have found that it has been very worthwhile for our company." So, I appreciate your comments about that.

Senator Martinez.

Senator MARTINEZ. Mr. Chairman, thank you very much.

I hate to differ with the Chairman, but I must say that the experience that I hear on the competitiveness and Sarbanes-Oxley issue is far different from that. I hear a great deal of concern about the incredible cost and the burden of competitiveness that it has created. And, in fact, I will begin with this area because I intended to get into it, but our colleague from New York, Senator Schumer, and Mayor Bloomberg recently released a report that I found quite interesting detailing an analysis of market conditions in the United States and abroad and about the concern that there is about whether New York will continue to be the financial capital of the world or whether, in fact, there seems to be others competing for that title, which might include London. And there were some rather dramatic statistics of declines and increases in New York vis-á-vis London.

One of the things that was mentioned in the report was the U.S. regulatory framework being too complicated and the implementation of Sarbanes-Oxley having produced heavier costs than were expected at the beginning or when you initiated that effort. Also it was mentioned immigration policies which create problems for those abroad who might wish to come here to do business, to invest in America, and the difficulties that current immigration problems raise for that, and some of them coming to be educated, others coming just as business people and investors.

In any event, I wondered if you had an opportunity to see that report and whether its finding cause the same concerns to you that they raised to me.

Chairman BERNANKE. Senator, as I indicated, I do think that we should be trying to reduce regulatory burden, and in particular ensuring that the costs of the burden are commensurate with the benefits.

With respect to Sarbanes-Oxley, my intent was to say that I do believe that there are benefits from that legislation, including improved controls, improved disclosures, improved governance of corporations. So there are certainly some benefits.

It is important to decide whether we can reduce the costs and retain the benefits, and in that respect, I think that the proposed change in one audit standard being put forth by the SEC and the

PCAOB is a step in the right direction because it attempts to focus on the most materially important issues, and it also makes allowance for the size and complexity of a firm in setting up the audit standard.

So to try to summarize, Sarbanes-Oxley accomplishes some important objectives, but I do believe those objectives can be accomplished at lower cost, and I think the new audit standard moves in that direction. And in all other regulatory areas, including those the Federal Reserve is involved, we should continually be looking to find ways to accomplish the social or economic objectives of the regulation at a lower cost.

Senator MARTINEZ. Well, I agree that there are many good features to Sarbanes-Oxley. What I was speaking of is some of the excesses, particularly in the auditing arena and some of the areas that have caused such an overburden of costs. So, I appreciate your comment on that.

Shifting to the issue of home sales, I used to sit in that very chair when I was Housing Secretary before this Committee, and at times, I would be asked a question about a housing bubble and in the overheated housing market whether, in fact, we were headed for a collapse and a bubble that would burst. In fact, we have seen as significant decrease in housing starts. We have seen the market cool down significantly, but we have not seen a bursting bubble. I always said at the time that the fears of a bubble were misplaced and that the housing market is more regional than it is national, and there were many different features between that and a localized market.

But do you feel that the fear of a bubble has receded given the fact that the market cooled off, that it has done so in a fairly modest way without any cataclysmic consequences?

Chairman BERNANKE. Senator, as I indicated in my opening testimony, we think we see some tentative signs of stabilization in demand in the housing market, that nevertheless takes some time yet to work its way out because of the inventories of unsold homes that still exist on the market. I would emphasize that the signs of stabilization are tentative, and we do not want to jump to conclusions. It will be helpful to see what happens when the spring selling season begins and strong demand is at that time.

But it is interesting that so far the economy has done a good job of withstanding the slowdown in construction, which, although substantial relative to the last couple of years, is still similar to the late 1990's, for example. It is not that we have had a complete collapse in construction by any means. So the decline in construction, while it has slowed the economy, has obviously not thrown us into a much slower growth situation. And we have not seen substantial spillovers from the housing slowdown to consumer spending or to other parts of the economy.

So it is early to say that this problem is over. I think we are going to have to continue to watch it very carefully, and as I indicated, I think it is a downside risk to the economy going forward. But so far, the economy has reasonably adapted to this adjustment in the housing market.

Senator MARTINEZ. You mentioned in your remarks also that household finance appears solid and that delinquency rates on

most consumer loans, including residential mortgages, were low, but you did note the subprime mortgages with variable interest rates where delinquency rates have increases appreciably. And it is an issue that is of great concern to several of us on this Committee, the issue of predatory lending, the abuse of some of our most vulnerable consumers.

Any comments on that or any issues that you see there which could impact the overall economy?

Chairman BERNANKE. I think, first of all, that this distress in the subprime area is a significant concern. I am obviously following it very carefully, both in terms of the impact it has on the borrowers and lenders as well.

I do not think that it has at this point implications for the aggregate economy in terms of the ongoing expansion, but as I said, it is an important issue for those sectors.

I could certainly list a wide variety of things that we do to try to address predatory lending, which I do think is an important issue, and I think the subprime market, which is distinct from predatory lending, it is a legitimate market.

Senator MARTINEZ. Right. That is a good distinction to make.

Chairman BERNANKE. It also has some issues.

Just to note one action we have taken recently, along with the other Federal banking agencies, we have issued guidance on nontraditional mortgages, mortgages that involve interest-only or option ARM's that may not be amortizing mortgages. We have emphasized to the lenders that they should be, first, very careful in their underwriting—that is, they should ensure that the borrower is equipped to deal with payment shock if interest rates go up, that they have sufficient income to meet higher payments; and, second, that disclosures are adequate so that the borrowers are fully informed about the nature of the contract that they are getting involved in.

There are some loans that have been made that are not turning out well, and to the detriment of both the lenders and the borrowers. We will certainly be watching that carefully and trying to provide guidance and oversight to minimize that risk going forward.

Senator MARTINEZ. Thank you, Mr. Chairman.

Chairman DODD. Thank you very much, Senator Martinez.

Senator Bayh.

Senator BAYH. Mr. Chairman, I would like to ask you some questions about our national security interests and the role of the Fed in our financial system in protecting those interests.

As you probably have read, there are the tentative outlines of an agreement with North Korea to begin to get them to change their behavior with regard to their nuclear program. And one of the reasons that we were able to at least achieve a tentative understanding was because of pressure that we brought to bear on a bank in Macau that the North Koreans used to interact with the global banking system.

Iran, as you know, is pursuing nuclear ambitions as well. Several Iranian banks do business in Western Europe. We are currently attempting to do something similar with regard to a couple of Iranian banks.

My question to you is: What can the Fed do, what can the United States banking system do, to cut off Iranian access to the global banking system to exert some pressure on them to behave in a more responsible way with regard to their nuclear ambitions?

Chairman BERNANKE. Senator, the primary responsibility for initiating such measures and enforcing them is with the Treasury, the Financial Crimes Enforcement Network, for example, and OFAC. They have take the leadership in trying to ensure that American banks and, through negotiation, banks from other countries do not deal with the banks you are referring to in Iran and North Korea.

So we are not the leaders in that effort. However, we as bank regulators and overseers have an important responsibility to try to ensure that it is carried out as the rules dictate, and as a very extensive part of our oversight responsibility, we evaluate banks' compliance with the Bank Secrecy Act and other such rules.

Senator BAYH. I hope you will make this a priority and bring some sense of urgency to it. Iran is a tremendous problem. You know, the military option is obviously something that no one wants to have to resort to, and so we are looking for other levers that we can utilize to try and get them to do the right thing here. And this seems to have been effective in the North Korean context.

My investigations in this area tell me that it has, you know, increased the cost of doing business to the Iranians. It has made things more inconvenient for them, and perhaps if we continue to pursue this, we might encourage a change in behavior on their part as well. So, I would encourage you to be vigorous in this effort because it does affect our national security interests in a very important area.

Staying on the subject of Iran for a moment—and you are busy with many other things; you may not have noticed. But they have indicated publicly that their response, if we did get to the point of having to take some action against them because of their nuclear program, would be to try and cut off the flow of oil from the Persian Gulf by closing the Straits of Hormuz, so that not only they would suffer but also the Saudis and others, trying to maximize the pain on the global economy.

I hope that there is some contingency planning being undertaken, so my question to you is: If such an event were to occur, what would the impact be on the global economy, on the U.S. economy, obviously the price of oil? You mentioned the role that the cost of energy plays in our inflation expectations and that thing. So what would the effect of such an act be on the economy? And, second, are you aware of any steps that we can take to mitigate those consequences? The President in his State of the Union address has suggested doubling the Strategic Petroleum Reserve, for example. Are there other things that we could do to prepare for such an eventuality so that we would mitigate the consequences?

Chairman BERNANKE. Senator, you are pointing to an important problem. I am not really equipped to say what the impact of these actions would be on aggregate supply of oil and on the oil price. I assume it would be dramatic, but I do not know exactly how big the effect would be.

It would certainly have an impact on the world economy. There is no question about that. And I doubt that there is anything we can do in advance that would completely offset that impact.

In the short-run, one of the tools we have you already mentioned—the Strategic Petroleum Reserve—which does provide some protection for a certain number of months, anyway, against those kinds of disruptions. I think that would be helpful.

In the longer-term, as many people have noted, reducing our dependence on oil would be beneficial. If we could find ways to diversify our energy portfolio and, therefore, rely less on this particular source, that would be helpful from a national security perspective.

Senator BAYH. Well, I know your people are probably stretched to their limits, dealing with a variety of things, but I do think that some part of the Government—whether it is your shop or Treasury or working in concert with some of the national security agencies—we need to at least begin to some thinking about this. God willing, we have a number of years before we get to such an event, and God willing, it will never happen. But I am always a big believer in you start with the worst case, protect yourself from that, and you kind of work back from there.

When Secretary Paulson was before us a couple weeks ago, he reiterated the comments that had become routine by his predecessors, and that is the Treasury's belief that a strong dollar is in the interest of the United States of America. Do you agree with that point of view?

Chairman BERNANKE. Senator, I do agree with it, and I would add that I defer to the Secretary of the Treasury in all matters related to currency policy.

I would only add that the Federal Reserve, to the extent that we can keep our economy strong and attractive to foreign investment, will help keep a strong dollar.

Senator BAYH. Well, I agree with that, and this relates in some regard to what Senator Casey was asking about. You may recall that previously there had been—oh, there was a rumor in Seoul at one point that they were going to diversify in dollar-denominated assets, and that caused a run on their currency. A similar rumor went through Japan not long thereafter.

What would be the impact on the value of the dollar in our economy if the Chinese were to, for example, announce that they were going to either diversify out of dollar-denominated assets or were to, in fact, begin a precipitous sale of such assets?

Chairman BERNANKE. Well, Senator, first, I think it is important to understand that that is not a very likely scenario, and China own interests would not be well-served by such actions. They would take portfolio losses themselves and——

Senator BAYH. Forgive me for interrupting. That is something similar to what the Treasury Secretary said, and the reason for my question, Chairman, is this: You are right, it might not be in their pecuniary best interests, but nation states do have interests other than their financial concerns. Let's just say hypothetically, you know, bringing pressure to bear on Taiwan and Taiwan's allies might be worth the loss of some money to the Chinese at some point in time.

So my concern is simply this: Global interdependence is one thing, but the dependency is another. And it puts us in the position of being somewhat vulnerable to another country's view of their own best interests. And I have real concerns about whether that is in our best interest.

Chairman BERNANKE. I will answer your question, but I just wanted to reiterate that I think the costs to them of doing this would be greater than the costs to us.

That being said, I think a substantial move on their part would be disruptive in the market in the short-term. In the longer-term the dollar, the Treasury yield and so on, would largely recover. Part of the reason is that Chinese holdings of United States fixed-income securities—which, of course, include not only Treasury but also GSE's and corporate debt and other instruments as well—amount to something less than 5 percent of the outstanding dollar fixed-income securities in the global market—which is a very significant amount, but is not by itself enough to be a monopoly of some sort in this market.

So if they were to do that—which, again, I do not anticipate—it would have short-term disruptive effects. I think that most of those effects would be short term as the market, which is very deep and liquid, began to adjust to that shock.

Senator BAYH. Thank you, Chairman. My time has expired. Again, the reason for my question is simply, as a great power, I am reluctant to see us, even for a short duration, to be in a position of vulnerability to the actions of another government.

Thank you.

Chairman DODD. Senator Bayh, thank you. Those are excellent questions, and I appreciate your raising them.

Senator Allard.

Senator ALLARD. Thank you, Mr. Chairman.

We are currently working on our budget, and it is a 5-year budget, I assume, you have looked at 5-year projections as far as how our economy is going to be doing. If I remember correctly, you pretty much feel that we are going to have a pretty good economy for the next 5 years, certainly within the average. Is that correct?

Chairman BERNANKE. We have not released any forecasts of the economy beyond a couple of years. The projections I gave today suggest reasonable growth and inflation over the next 2 years. The underlying fundamentals of the economy in terms of productivity and so on look good to me, and so my expectation is that the economy will continue to be strong after that period. But we have not released any specific forecasts.

Senator ALLARD. Now, in 2009, our Social Security surplus begins to decline, and that is the projection that we are looking at now, where we have had the surpluses but now they begin to reduce. How does that get factored in? That is within the next 2 years. We will be working on the 2009 budget in a year from now. How does that factor into your economic growth projections? Or is it too early to begin to have much validity to that?

Chairman BERNANKE. It is a bit early to be thinking about that. From a macroeconomic point of view, if we focus on the cashflows of the deficits, current in, current out, it looks like the deficit will not be rising significantly and may even be declining for the next

few years for various reasons. So, I do not anticipate that fiscal policy will be a major force shaping the near-term growth pattern of the economy.

The concerns that I emphasized in my Senate Budget testimony were really the longer-term issues of solvency and fiscal responsibility in the context of the aging of the population and the large increase in entitlement spending.

Senator ALLARD. The deficit is going down. In my view, it is more attributable to revenues. It is not that we have done anything particular to hold down on spending. If we do something—and I do not know how you factor in the expiration of these temporary taxes that have been put in place. It looks to me like they have had a positive impact on the economy and the revenues that are coming in. When those expire, what kind of adjustments do you think we will have to make in our budget projections from that point on?

Chairman BERNANKE. Well, again, I am not going to take a position on whether they should be allowed to expire. I think if they do expire, it would probably increase revenues somewhat. It would have other effects on the economy in terms of incentives and growth potential as well.

From the Federal Reserve's point of view, we are simply going to look at the fiscal situation as it evolves and make our adjustments to try to maintain full employment as the economy goes forward. I think the considerations the Congress should have with respect to near-term tax policy should be less to do with maintaining short-term full employment—we will be able to address that—but, rather, think about the long-term trade-offs between the benefits of lower taxes and the costs of lower taxes, essentially.

Senator ALLARD. I am going to move over to the small business question. When you look at the economy, it seems as though—most of the figures I look at on the small business sector, they contribute about 50 percent, 52, 53 percent of the growth in the economy. Is that about what you look at?

Chairman BERNANKE. It is similar—small and large businesses are similar in magnitude, and so in that respect, you are correct, yes.

Senator ALLARD. You are saying that the small business sector would grow—you think it is 50–50, then, between economic growth from large business and economic growth from small business?

Chairman BERNANKE. I do not recall the exact data, but I believe I have heard that number for job creation as opposed to growth. But it would be similar, yes.

Senator ALLARD. Okay. Thank you for that. That was just a point of information. I wanted to see how you were looking at that.

Chairman BERNANKE. We can provide you with more detailed information.

Senator ALLARD. I would appreciate that, if you could.

The other question is Sarbanes-Oxley. Apparently, there is a rise in private equity firms, and they are increasingly acquiring some public companies and apparently taking them private. Does that phenomenon concern you?

Chairman BERNANKE. Not necessarily. It can be a good method of enforcing discipline on corporations and management. By taking the firms private, they essentially create a situation where the pri-

vate equity investors have a short period of time in which to create a more productive, more effective, and more profitable firm. They then usually try to bring the firm back into the public markets, so it is not in some sense an attempt to permanently escape Sarbanes-Oxley, because they do eventually want to come back into the public markets.

So, generally, it is a policy development in that it creates more competition for corporate control and should increase discipline among management. There may be some circumstances where the leverages are excessive or that there are other problems associated with it.

Senator ALLARD. When I was taking economics in college, I think full employment was considered 5 percent. Is there a figure like that that most people generally agree is a full employment figure? Or are there other variables you have to bring in, you cannot use a static number like that?

Chairman BERNANKE. The Congressional Budget Office uses, I think, 5.2 percent.

Senator ALLARD. Yes.

Chairman BERNANKE. But the Federal Reserve does not have a fixed number that we use. Again, as I indicated earlier, we try to look at a wide variety of indicators, both of the labor market and of the general economy in terms of prices, for example. In the past, we have found that the amount of employment the economy can sustain on a long-term basis changes over time. It changes within demographics, with the structure of the labor market, and with the structure of industry. It is not, I think, good policy to have a fixed number in mind. It is important to be flexible, look at all the information that is coming in, and try to make an ongoing judgment about how the capacity of the economy is adjusting.

Senator ALLARD. And do you think the unemployment is at a desirable place in the economy right now?

Chairman BERNANKE. Well, as I indicated earlier to Senator Bunning, we are certainly much closer to the capacity of the economy now than we were a few years ago, as we have seen unemployment come down and capacity utilization go up. Whether we are at that level or not, again, I cannot say. We will be looking at a wide variety of indicators and trying to make a judgment about where the economy should go.

Senator ALLARD. In addition to that, wages have gone up, haven't they?

Chairman BERNANKE. Nominal wages have gone up, and we have seen some increase in real wages as well, and that is a good development.

Senator ALLARD. Thank you, Mr. Chairman.

Chairman DODD. Thank you, Senator.

Senator Menendez.

Senator MENENDEZ. Thank you, Mr. Chairman.

Chairman Bernanke, I want to start where I started off in my opening comments to you. I am very concerned about the economic squeeze that has been put on the middle class, particularly since the turn of the 21st century. Since the beginning of 2001, middle-class families have experienced increased levels of debt, anemic growth in real wages, all the while essential costs for food, housing,

and medical services have increased at levels drastically higher than inflation.

As a result, the financial security of middle-class households has suffered, and more and more American families are unable to afford life emergencies such as an unexpected health problem or unemployment.

Employment opportunities are at their lowest level since the Great Depression. Since the recession ended in November 2001, job growth has averaged a mere eight-tenths of a percent per month, less than a third of the 2.7 percent average growth we experienced in previous recovery periods since World War II. For the first time since the 1950's, job opportunities have actually decreased from a 16-percent growth rate in the 1990's to a 14-percent decrease since March 2001.

I look at that and I add to that factor that families seems to me to be living on thin ice. I hear these stories of families in New Jersey that they are only one unexpected illness or lay-off away from sinking into perpetual debt. I think one measure of this economic insecurity is the percentage of middle-class families who have at least 3 months of their salary in savings. The percentage of middle-class families who had 3 or more months salary in savings rose 72 percent from 16.7 percent in 1992 to 28.8 percent in 2001. So middle-class families are becoming more secure year by year. But, unfortunately, in the span of less than 4 years, that percentage dropped by over 36 percent, down to 18.3 percent in 2004.

Finally, I noted with interest in your written statement, you said, "Consumer spending continues to be the mainstay of the current economic expansion." That is true, but when you add that reality to anemic growth in wages and sharp increases in the cost of necessities, household debt in America has risen to record levels over the past 5 years. By the third quarter of 2006, outstanding household debt was 130 percent relative to disposable income. That means that the average family is in debt of over $130 for every $100 it has to spend. And, additionally, the average household savings rate has actually been negative for the past seven quarters, averaging about a negative 1 percent rate for 2006.

So, I look at all of this, and I say to myself, you know, I have my friends and colleagues who are heralding this great economy. I do not get the sense that people back at home and in other parts of the country feel that good about it. You see it in every poll of the barometer of their feelings. They feel really squeezed and really put upon.

And so my question to you is: Aren't these indicators a real cause for concern as it relates to the struggle that the middle-class families in this country are facing? And how do we create an economy that is more inclusive and which the macro benefits end up being achieved by those who are the great center of those who keep this country afloat?

Chairman BERNANKE. Senator, in my remarks in Omaha, I did the usual economist's "on the one hand, on the other hand" approach. On the one hand, average living standards in the United States have risen very substantially since World War II—very substantially—and that is true for the majority of the population. Even in the last 10, 15 years, we have seen on average, or even at the

median, middle parts of the income distribution, pretty good overall growth, not year-to-year but over a period of time. So there has been a general improvement in living standards, which has affected a very large part of the population.

That being said, on the other hand, there are various issues, as I talked about in my remarks, that inequality has increased. We have seen more concerns about job security related to trade and technology. Health care remains a concern. People are concerned if they lose their job they will not be able to afford new health care or move their health care between their existing employer and a potential new employer.

You mentioned wealth. Wealth is very unequally distributed in the United States. A big challenge is to help people in the lower part of the wealth distribution begin to save and accumulate assets so they can have some reserve against the kinds of problems you referred to, like a health emergency or unemployment or some other problem that may arise.

So my broad answer is that I do think the economy has strengthened over time and the benefits have been felt by a large part of the population. But there are persistent issues that relate to people's sense of security or insecurity, and there is no single answer because each of these issues—wealth creation, health care, inequality—are all large issues, and they each require individual attention.

Senator MENENDEZ. I appreciate that. It seems to me that the policies both in the taxing side as well as in the incentive side and in the programmatic side that would go to narrow these divisions—you have mentioned education; I certainly agree with you on that. But we have seen educational outcomes rise, and yet we have still seen inequality rise.

We have challenges, as it relates to how families achieve health care. We have challenges maybe in policies that incentivize savings and find ways to help that segment of society save. It seems to me that this consumer-driven expansion of the economy at some point at the cost of debt has a consequence to it. And so it is a real concern.

One last question. In the written version of your remarks to the Chinese Academy of Social Sciences in December, you referred to China's currency policies as "an effective subsidy" for the country's exporting industries. I am just wondering why you omitted that reference in your presentation on December 15?

Chairman BERNANKE. I omitted it because I thought at the time that it would be more clear to my audience there in Beijing if I explained it a little bit differently. But I stand by my written comment. I think it is accurate.

Senator MENENDEZ. Thank you, Mr. Chairman.

Chairman DODD. Thank you very much, Senator.

Senator Sununu.

Senator SUNUNU. Thank you, Mr. Chairman.

I want to first begin by going back to a subject that was brought up, and I think inappropriately so, in a discussion about whether you, Chairman Bernanke, should be willing to talk about "policy" before this Committee. As most everyone has noted, you talked about education in your opening statement. And the suggestion

was made, by, I think, more than one Senator, that while education is policy and if you talked about education, therefore, you should be willing to talk about policy prescriptions on the tax side, and in particular talk about raising tax rates. And I think a lot of this discussion about income inequality, quite frankly, is a prelude to a policy recommendation from some on the other side of the aisle to raise tax rates on entrepreneurs and individuals in certain income brackets.

Well, I think that that sequence of conclusions is just flat wrong because it is entirely appropriate for the Fed Chairman to talk about education as an input, like productivity or technology. Education and technology affect productivity, productivity affects growth rates, and perhaps inflation. That is entirely appropriate.

But it is, of course, not appropriate for Chairman Bernanke to talk about or recommend specific policy prescriptions in the area of education at the State, the Federal, or the local level, spending on a particular program, school vouchers or issues that people on various sides of the aisle might support.

So, I think we need to make this distinction. I think it is unfair to the Chairman to suggest that because he talks about the value of education, generally speaking, to the workforce in terms of its flexibility that he should be willing to weigh in on education legislation or tax legislation that Members might be writing.

I guess that is the opinion piece, and now I will go on to my questions.

You noted that growth in the second half of 2006 was 2.75 percent. Was that higher or lower than you originally expected, or expected, say, a year prior, a year out? And why was it higher or lower than your expectations?

Chairman BERNANKE. It was close to our expectation. Our assessment was that the economy was making a transition to a more moderate and sustainable pace, which would be something in that general vicinity.

It does look that the fourth quarter GDP growth number is going to be revised down somewhat, and so the actual number will be a bit lower. But probably the implications will be slightly stronger first quarter, so it does not really change the overall picture, which is that we see the economy growing at a healthy pace, but it is one that is sustainable and not overheated.

Senator SUNUNU. Thank you, and I want to apologize for not presenting the option that you might have been correct in your projection. I suppose that should have been one of the choices.

You noted in your testimony that real incomes should continue to rise. At what rate do you project real incomes to rise over the next four to six quarters?

Chairman BERNANKE. Well, it depends on what your definition of "income" is. We have seen real wages growing the last half of 2006 by about 3 percent in real terms. I hope to see continued strong growth in real wages. I am not quite sure whether it will be quite that strong, but I think as long as energy prices do not rise quickly again, we should continue to see good growth in real wages.

Broader measures of income should grow broadly at the same pace as GDP, and our forecasts are for something between 2.5 and 3 percent.

Senator SUNUNU. And when you talk about broader measures of income——

Chairman BERNANKE. Including capital income and so on.

Senator SUNUNU. You talked about the fact that there was a 7-month supply in unsold homes in the third quarter of 2006. Where do you expect that inventory to go in the next 6 to 12 months? Has it peaked or do you expect the inventories to increase further?

Chairman BERNANKE. The predicate is that we have seen what we call "tentative signs of stabilization in demand for housing." If, in fact, the demand for housing is stabilizing—and, again, we will not know that for sure, I think, until we see sales figures in the spring—then we should see from here a gradual decline in the months for sale inventory. The normal, at least for the last 8 to 10 years, is 4½ months of homes for sale, and my anticipation would be that we would get back toward that general level by the end of next year, assuming that demand stabilizes.

Senator SUNUNU. By the end of 2008, not the end of 2007.

Chairman BERNANKE. Yes, 2008.

Senator SUNUNU. The last question. I guess the question is: Please explain this to me. It is one of the charts, and the monetary policy booklet is, I think, very well written and very informative, no surprise there because, as you know, you have very good staff. But there is the graph of the savings rate from 1983 to 2006.

From 1983 to 2006, we had two recessions, three bull markets, two market crashes. We had rising and falling deficits. We did have a relatively steady trend in improving employment numbers and a lowering of the rate of unemployment and a fairly strong record of dealing with and containing inflation. And yet the personal savings rate, you know, that chart is a steady downward trend through all of these things. And I am curious to know what the factors are that go into that steady decline in savings rate. We know it means that people are consuming more than they are earning or a greater proportion of what they are earning. But what is contributing to that trend? And is this something that the Fed is worried about?

Chairman BERNANKE. Well, you raise a question that a lot of people have weighed in on. It is a complicated question. I think several factors have been pointed to. One is demographics. Different cohorts or different generations have different propensities to save. The baby boomers have not been particularly impressive in that respect, and as they have become the biggest recipients of income their savings rates have shown through.

Senator SUNUNU. I apologize for interrupting, but has there been an evaluation of the propensities of different cohorts currently?

Chairman BERNANKE. Yes.

Senator SUNUNU. And how much of this declining savings rate can be attributed to that one cohort?

Chairman BERNANKE. Well, there have been a number of papers, and we would be happy to send you a few surveys or summaries of some of the research that has been done. A number of papers have looked at this demographic issue and viewed it as being important, although not necessarily the whole story.

The other important part of the story is that personal savings rates are out of current income, and they do not include capital

gains of any kind. So the general strength of the stock market and then more recently of the housing market has meant that people could increase their wealth without saving, and that has been, I think, an important factor in leading to a lower savings rate more recently.

The other technical point to make is that private saving actually consists of the sum of the household or personal savings together with the savings done by corporations. Savings by corporations has become a larger share of the private saving than overall, and in a sense, the corporations ultimately belong to the households, whether you are a small business owner who is keeping profits in your business or an investor who is enjoying capital gains in stocks. Some of that saving is not appearing in households because it is taking place in corporations. It is a measurement issue.

But I think it is an issue because the national savings rate has come down, and it contributes to issues like the current account deficit we have talked about. Our anticipation, as I mentioned in the testimony, is that the household saving rate should rise a bit in the next couple of years partly because housing prices are not rising as fast and people will turn back to saving from their current income. But we do not anticipate anything like the 12 percent in 1985 anytime soon. It is going to be a slow process.

Senator SUNUNU. Thank you very much. Thank you, Mr. Chairman, and I would note, since I am not a member of the baby-boom generation and you are, I look at every possible opportunity to blame something bad on your generation.

Thank you.

Chairman DODD. Well, you have not proven you are part of the Greatest Generation either yet.

[Laughter.]

Senator SUNUNU. And I would never make such a claim.

Chairman DODD. I was just going to note, I have been on this Committee some 25 years, and I recall with great fondness your predecessor appearing here on numerous occasions, and I cannot recall specifically the Members who may have raised, but the number of times Chairman Greenspan was asked to support specific tax cut policies was rather frequent on the Committee. So this is not a first-time occurrence that a policy question was raised to a Chairman of the Federal Reserve.

Senator SUNUNU. But my point is that he would never answer the question, and that was the right thing to do.

Chairman DODD. And I suspect my colleague from New Hampshire may have been one of the people to ask those questions.

I would just note as well on the savings rate issue here, I am told—and maybe you can correct me on this if I am wrong, Mr. Chairman—that the last time we had a negative savings rate of this magnitude, it was the Great Depression. Is that correct historically?

Chairman BERNANKE. I think that is correct.

Chairman DODD. Someone mentioned to me the other day as well that, of course, the consumer debt issues are staggering, and at least the revolving debt, a good part of which is probably credit card debt, on the average is around $9,300 per individual. Does that number ring true with you?

Chairman BERNANKE. I do not know the number for revolving debt specifically. The incidence of debt issues varies quite a bit across the population. For a good bit of the population, particularly those of higher incomes, there has been asset accumulation which offsets the debt.

Chairman DODD. Right.

Chairman BERNANKE. So, in particular, over the economy as a whole, the average loan-to-value ratio for homes is about 50 percent. That is, the mortgage companies own half the housing stock and the public owns half the housing stock. But there are certainly segments of the population who are facing very high debt loads, either through their mortgage borrowing or through credit card revolving debt, and for them it is obviously a hardship.

Chairman DODD. Thanks very much.

Senator Tester.

Senator TESTER. Yes, Mr. Chairman, I do have questions, and I do hope to ask them, but my comrade Senator Brown has a commitment, and I will defer to him for now.

Chairman DODD. Thank you.

Senator BROWN. I thank my friend from Montana. Thank you, Senator Tester.

Chairman Bernanke, in your remarks last week in Omaha, you noted that our policy responses to economic inequality must be informed by our ethics and our values and are ultimately political questions. You said a moment ago that inflation was the canary in the mine. I have for 5 or 6 years worn a depiction of a canary in a cage on my lapel to signify the Government's role in everything from mine safety to the environment to minimum wage to Medicare.

You also expressed—and I think that the ethics and values in our domestic economy, I think those ethics and values are reflected in what we do in our domestic economy, like the canary in the cage. It is minimum wage and it is Medicare and it is Social Security, and it is helping the middle class thrive, as it has done in the last 100 years. And there has been clearly a consensus in this country, differences on the edges perhaps, but a consensus that those ethics and values drive what we do in our domestic economy.

It seems to me those values and ethics do not stop at the water's edge, that as a Nation we should continue to propagate and promote those same ethics and values as we have done in our country in our domestic policies and our domestic economic issues. We should look at those internationally.

I know you expressed concern that inhibiting trade flows would do more harm than good, but I would argue that if our country is, in fact, going to live its values and going to live the ethics that we discuss and that we sometimes pat ourselves on the back about, we would look internationally in some of those cases.

I would just start by asking if—we have as a Nation our values say that we should not buy products manufactured by slave labor in China. Do you agree with that?

Chairman BERNANKE. Absolutely.

Senator BROWN. Okay. And would you say then that we should not import products made by child labor.

Chairman BERNANKE. Yes. I agree that we should not.

Senator BROWN. Okay. Then I guess that would be—the next step would be we should not import products produced in sweatshops, if we, in fact, can agree on a workable definition of "sweatshops."

Chairman BERNANKE. Well, that is a very difficult qualification you just added at the end. Just to get where you are going, I think it is probably not a good idea to try to enforce Western-level standards of worker benefits in emerging market countries. Since those workers have such low productivity, if we were to insist on the same standards we have in the United States in terms of benefits and the like, the workers would either have very low wages or no job at all. I think the way to get to the kinds of living standards we have in America is to allow people to participate in the market and to produce.

We in the United States, of course, have come a long way, starting from situations where workers did not have very good protections to a situation now where we have much better protections.

Senator BROWN. But, Mr. Chairman, if I could, we also did not have a foreign government implanting on us an economic structure with foreign investment and that international economic structure.

Let me take this in a little bit different direction. I agree we should not impose—we should not have imposed under NAFTA or CAFTA minimum wage—the minimum wage that we have in the United States, of course, we should not have imposed it in Guatemala. But these are not Western—when you talk about International Labor Organization standards, that is an arm of the United Nations, I believe, and that is not Western economic standards.

Does that mean then you would support, if you were looking more internationally, would you support International Labor Organization standards in these trade agreements that we negotiate?

Chairman BERNANKE. I believe those standards come in many different levels, and there are literally hundreds of them.

Senator BROWN. There are five central International Labor Organization provisions and standards, there are questions within those, but the right to organize and bargain collectively, the prohibition on forced labor, the prohibition on child labor, those kinds of general standards that we have not—we did in the Jordan Trade Agreement, but we have not in the last 6 or 7 years. Is that a policy question reflecting our ethics and values that we should pursue?

Chairman BERNANKE. I think it is. I think it would be reasonable to look to basic human rights, such as slave labor and forced labor. I think those are not something we want to countenance. When it becomes a question of whether we should require minimum wage, for example, it is a much difficult issue, and——

Senator BROWN. That is not one of the ILO standards.

Chairman BERNANKE. Okay.

Senator BROWN. Okay. Fair enough.

Let me shift for a moment to industrial loan companies briefly. As you know, the FDIC has extended for 1 year a moratorium on commercial firms like Wal-Mart owning a bank through and ILC charter. This Committee and this Congress have just a short time—a year—to address the important issues involved before the

moratorium expires. Do you have any concerns on the uneven regulatory structure between banks and what perhaps would be an unlimited number of commercial firms owning ILC's?

Chairman BERNANKE. The Federal Reserve is concerned about an unlimited expansion of the industrial loan company exception. We have two particular concerns, which we have talked about on a number of occasions. First is the mixing of banking and commerce. The Congress in Gramm-Leach-Bliley and other contexts has expressed its desire to keep banking and commerce separated. I agree with that, and I think that is an issue for the Wal-Mart acquisition, for example.

The other concern is about consolidated supervision. If there is an acquisition of an ILC by either a commercial or noncommercial firm, I think it is important that the oversight of that combined entity be done at the higher level to ensure that there is sufficient financial strength in the holding company to ensure the safety of the deposit insurance funds for the ILC itself.

So those two principles are important to keep in mind as we debate this question.

Senator BROWN. Thank you.

And, Chairman Dodd, Senator Johnson as you know has been very involved in the ILC issue.

Chairman DODD. Right.

Senator BROWN. And we clearly in this Committee need to pursue that.

Thank you, Senator Tester, very much.

Chairman DODD. Thank you very much, and I am sorry Senator Bennett was not here to engage. I know he has some strong interest in this subject matter. I was going to give you the opportunity—and I thank Senator Brown for raising the question—there has been some issue about whether or not this is—tough issues have been raised, and I want to give you a chance to respond to this. Some have suggested that the reason the Fed has taken the position it has is because it is an area of jurisdiction that they like to have.

I think I know the answer to this question, but what is your response to that particular concern?

Chairman BERNANKE. If the ILC exemption is limited and not allowed to expand indefinitely, we are perfectly comfortable with the FDIC doing the consolidated supervision, and we think they do a very good job.

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

Senator Crapo.

Senator CRAPO. Thank you very much, Mr. Chairman. And Chairman Bernanke, we appreciate you being here with us.

I want to return to the global competitiveness issue for a minute. I know that others have spoken to you about this already. First and foremost, I want to commend Senator Schumer for working with Mayor Bloomberg for the McKenzie report. There is also, as you know, the new interim report of the Committee on Capital Markets Regulation, and both of those reports I think add significantly to this debate and to the issue. I am working on a resolution, and talking with Senator Schumer about it as well, and hope to be working with him on a resolution to help highlight this and

to express the sense of the Senate about what steps we need to take in terms of better dealing with our global competitiveness.

Now what I want to focus my questioning on with you is derivatives and hedge funds. I will start by noting that in the McKenzie report this following quote occurs.

London already enjoys clear leadership in the fast-growing and innovative over-the-counter derivatives market. This is significant because of the trading flow that surrounds derivative markets and because of the innovation these markets drive, both of which are key competitive factors for financial centers. Dealers and investors increasingly see derivatives and cash markets as interchangeable, and are therefore combining trading operations for both products. Indeed, the derivatives markets can be more liquid than the underlying cash markets. Therefore, as London takes the global lead in derivatives, America's competitiveness in both cash and derivatives flow trading is at risk, as is its position as a center for financial innovation.

Would you agree with that portion of the McKenzie report?

Chairman BERNANKE. I agree that derivatives are an incredibly important part of our expanding financial market, part of financial innovation, and I would like to see the United States remain competitive in those areas.

Senator CRAPO. So you think it would be appropriate for us to focus in this Congress on things that we can do or not do to assure that we remain competitive or that we become more competitive in those arenas?

Chairman BERNANKE. Again, I think the best way to be competitive is to make sure that the regulatory structure has a minimal costs as needed to justify the benefits that are seen to be obtained from those regulations.

Senator CRAPO. One of the common themes that we are seeing in terms of the movement of business away from the United States to London and other capital markets is just that, the regulatory burdens and the regulatory regime that we impose here in the United States. I do not think anybody would say that we should simply take down our regulatory position, because we do have one of the strongest markets in the world. But the question is, are we over-regulating.

I want to go specifically to an issue that you and I have talked about many times before, and that is the regulation of energy derivatives. As you know, we have faced proposals in Congress and the Senate now for the last 4 or 5 years to increase the regulatory climate around the handling of energy derivatives. There has yet been another bill introduced just yesterday or day I think, to do the same thing, so we are back into the same issue.

You have expressed a position on this in the past. I have in front of me the last letter that was put out by the President's Working Group, of which you are a member. The last paragraph of that letter says, "several times in recent years the PWG has been asked for its views on various legislative proposals to expand regulation of energy derivatives. Most recently, in testimony before the Senate Banking Committee on September 8, 2005 representatives of the PWG agencies reaffirmed the position of the PWG that additional regulation of energy derivatives is not warranted."

Is that still the position of the PWG, and is it still your position that we do not need to further increase the regulatory regime surrounding energy derivatives?

Chairman BERNANKE. The PWG has not discussed it recently but I have no reason to think the position has changed. I believe it is a reasonable position, that we should be very careful about adding additional regulatory costs in this market. There are two reasons to regulate. Potentially one is investor protection. But in this market, of course, we have very large institutions, very sophisticated institutions who are, I think, able to take care of themselves.

The other would be a concern about price manipulation. There the CFTC does have, of course, ex post powers to investigate potential frauds or manipulation. But it seems unlikely that manipulation in most cases would come from the OTC markets since the exchanges provide a good venue for determining prices.

So, I have not changed the position I expressed before.

Senator CRAPO. Thank you. I appreciate you sharing that with us. I suspect that we will be asking the entire PWG to reevaluate this issue since we now have legislation yet again introduced on the issue. So, I would just give you that advance warning that we will be coming to you for some guidance as we once more enter into this debate.

Just one last question; moving a little bit to hedge funds. Can you explain what is involved in fostering market discipline in the hedge fund context? It is my understanding that you believe that that is a superior approach to direct regulation.

Chairman BERNANKE. That is correct, Senator.

The proposal of the President's Working Group, once again, in their report following the LTCM crisis focused on the so-called "indirect" or market-based regulation of hedge funds. That has essentially two components. The first is through the counterparties, that is, the investment banks or the banks, who lend money to the hedge funds or serve as their prime brokers. The supervision process requires that these large counterparties manage their counterparty risk effectively, that is, that they have good information about the risks being taken by the hedge funds, their financial positions, and so on. And it is both in the interest of those counterparties, obviously, since they do not want to lose money, that they pay close attention to what their counterparties are doing, and the supervisors give additional encouragement, incentive, for the counterparties to manage those risks effectively.

The other type of counterparty is the investor itself, particularly large institutions like endowments or insurance companies and the like, which also provide a good bit of market discipline on the hedge funds by gathering information as they make their investment decisions.

So we believe that is a very important, and so far, successful method of overseeing hedge funds. I would be very reluctant to get involved in heavy-handed direct regulation of hedge funds. They are a very diverse group of institutions. They have a wide variety of strategies, and one of their key characteristics is that they are very nimble. They change very quickly. And that is good for the economy because they help to create more liquidity in markets, they help to spread risks around more broadly. A regulatory regime that inhibited that flexibility and nimbleness would eliminate a lot of the economic benefits of the hedge funds and the other types of

private pools of capital that use sophisticated instruments to share risk.

That being said, it is always useful for regulators and supervisors to keep abreast of what is happening in the hedge fund market, to speak to hedge fund managers, to understand recent developments.

The G–7 meeting which I attended over the weekend, in the spirit of information gathering, proposed that the Financial Stability Forum, which is an international group consisting of central bankers and supervisors, update a report they did in 2000 about the status of this market. I think that is consistent with us simply trying to keep up our information base that we know enough so that we are keeping up with developments in that industry.

Senator CRAPO. Thank you very much, Mr. Chairman. I want to just say, personally, I appreciate your candor and the candor that we get from the President's Working Group as we face these kinds of issues. The expertise that you and the other members of the working group can bring to the issue to help us evaluate them is invaluable, so thank you for providing that.

Chairman DODD. Those are great questions, Senator. I appreciate you raising them as well. Very well done.

Senator Tester.

Senator TESTER. Thank you, Mr. Chairman.

I also want to thank Chairman Bernanke for being here today and being forthright in your answers. It is very nice.

The reason I want to stick around and ask these questions, quite frankly, is because I value your opinion. It is not for political reasons. It is not for anything other than I want to know your perspective. Because quite frankly, from my perspective of being a farmer in North Central Montana, there is a lot of things that are just flat backward in this country right now.

So the first question I wanted to ask is what is the number one factor that concerns you as a potential impediment for our economic growth here in this country?

Chairman BERNANKE. Well, over the medium-term, it is the demographic transition that we are going through. We are getting older, our society is aging. We are going to have a much larger share of the population in retirement age, or even in the oldest of the old, 80 and 90 years old. And we have not really made good preparation for that, either in terms of broader savings in the society, or in terms of fiscal policy, which I have discussed in previous context.

Senator TESTER. Does the $8.6 trillion debt fall into that issue then? Or is that somewhere else?

Chairman BERNANKE. Well, it is closely related because if we do not take some measures to address how we are going to deal with the fiscal implications of an aging society, the debt and deficits are going to grow, interest payments on those debt and deficits are going to grow, and we will be in an unsustainable fiscal situation.

So the fiscal picture is closely linked to the underlying demographic changes that are going on.

Senator TESTER. I have had a tough time struggling with, because quite frankly tax load is something I am very concerned

about, too, as I think everybody on this Committee is. But the debt load concerns me, too, very much.

Could you rank them as what could be the most severe impediment? Is it the debt load or is it tax policy that is flawed?

Chairman BERNANKE. I do not think I can rank those. The main concern would be that Congress has to decide how big the Government is going to be and what share of national resources are going to flow through the Government, either for Government spending or through entitlement programs.

The tax collections need to be commensurate with that, and that is the main decision. I am not qualified or in a position to tell you how big that share should be.

Senator TESTER. Foreign investment. I hear occasionally on TV, I hear from some of my constituents in Montana, that those people that are able to save some dough are being encouraged to put a certain percentage—I think 20, 25 percent is what I am hearing—into foreign markets. Is that a concern?

Chairman BERNANKE. No, not necessarily. Foreign markets have strengthened considerably in terms of their quality. Clearly, the world is experiencing a lot of growth and so there are a lot of opportunities out there. By investing broadly, an investor diversifies his or her portfolio and reduces the overall risk that they face.

Senator TESTER. How about from an economic growth standpoint here in this country? I think from an investor standpoint, I hear you. But what about an economic growth standpoint here? Is it a negative factor, positive factor, or no impact?

Chairman BERNANKE. I think it is probably slightly positive in the sense that it gives American investors greater diversification. And implicit in your question is where do we get the funds for domestic investment? Well, they flow in from abroad.

And so by swapping essentially between foreign and domestic investors, you get better diversification for everybody.

Senator TESTER. Sounds good.

Last question, and this deals with employment versus inflation. It has been talked about here a lot today, but when we get near full employment, does that necessarily drive inflation up?

Chairman BERNANKE. There is no specific level of employment or unemployment that is a trigger, in some sense, for inflation. The main concern is to make sure that the overall spending in the economy, which is driven in turn by financial conditions, does not exceed the underlying productive capacity for a sustained period. That seems to generate inflation.

But as I have mentioned a couple of times, it is not easy to determine exactly where that balance should be struck. And simply looking at the unemployment rate, for example, is not going to tell you. You need to look at a wide variety of indicators, including price indicators, to get a sense of when the economy is overheating and when it is more or less in balance.

Senator TESTER. That is great. And that is actually what I was hoping to hear.

So we should be continuing to strive to make employment complete, full to the best of our ability?

Chairman BERNANKE. Certainly. The Federal Reserve has a mandate for maximum sustainable employment, and we want to

achieve that. We do not want to achieve employment which is high for a short moment but then crashes.

Senator TESTER. No.

Chairman BERNANKE. We want something that is sustainable.

Senator TESTER. Exactly.

Once again I just want to go back, thank you, Mr. Chairman. I think this has been a great hearing. And I want to thank you, Chairman, for your honest forthright answers.

Thank you very much.

Chairman DODD. Thank you, Senator Tester. Very good.

Senator Reed.

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

Again, thank you, Chairman Bernanke, for your testimony.

I was very impressed, as so many of my colleagues were, with your speech in Omaha. I thought it was thoughtful, comprehensive, and balanced, which is typical of your leadership at the Fed.

At least one phrase or section struck me as interesting and that is you talked not only about technological change and international trade as causing this divergence between equality of incomes. But you also talked about institutional arrangements. The principal one you alluded to was labor unions.

You say in your speech whatever the precise mechanism through which lower rates of unionization affected the wage structure, the available research suggests that it can explain between 10 percent and 20 percent of the rise in wage inequality among men during the 1970's and 1980's. I would suspect if it is 10 percent and 20 percent in the 1970's and 1980's, it is at least that now, perhaps more, since unions have declined since that period of time.

And it begs the question is one of the responses to wage inequality a more robust representation in the labor unions in the United States.

Chairman BERNANKE. It is difficult to know the answer because, as I indicated in my remarks, there have also been structural changes—like changes in the share of manufacturing employment in the economy as a whole—which have affected the rate of unionization. It is a little hard to tell whether it is the decline of unionization itself or the structural reasons for that that are the causes of the inequality.

I do think that if workers want to be represented by a union, of course, they should be allowed to do that.

Senator REED. One of the issues here is that this is not just the hidden hand of the marketplace and technological change. There is Government policies. Policies which, until recently, one might say favored more, encouraged more participation in unions. Policies pursued by this Administration seem to go against it. The National Labor Relations Board, court decisions, Congressional activities.

So this is an area, too, I think, that should be on the table, I presume, in terms of at least consideration by the Congress, if we are really concerned about narrowing this gap in terms of the economic equality. Is that a fair statement?

Chairman BERNANKE. Well, again, there is the problem of deciding how much of the effect comes from the structural changes that underlie the changes in unionization patterns and how much comes

from changes in unionization propensity itself. So, I do not really know how much effect that would have.

Senator REED. Well, I think you have opened up a very serious line of inquiry, and I applaud you for doing that. Because once again, I think this is an issue that is there.

And maybe anecdotally, I grew up in a State where everyone seemed to be in a union and they seemed to make pretty good wages and had health benefits. And now that is declining dramatically. And that, I think, contributes to this anxiety we have all referred to.

Today, of course, I alluded in my opening statement, 13,000 workers from Chrysler presumably—I would guess with some sense of probability that they are union workers—are losing their jobs and probably will not find union employment again. So, I think this is something we should consider.

Again, I think mentioning it in your speech opens up a line of inquiry that is important.

There is another issue, too, that you talked about and we all talk about the average income being stagnant for many working Americans. There is something else that I am hearing, is that the volatility of incomes for individual Americans fluctuates so wildly and causes huge problems. You could be a vice president for sales in a jewelry manufacturing company in Rhode Island making a handsome salary of $100,000. The next year you are making $35,000 because you are working at a lumber yard.

That seems to be more common these days. And again, it gets lost in the aggregate, but for individuals we have to do something. Do you have any first thoughts about this phenomenon?

Chairman BERNANKE. Well, it is an issue that has been raised by Mr. Hacker and others, and I have a footnote in my speech about some of the impact it might have on measures of inequality. It is a little bit mysterious exactly what the source of this is. It could be more or less benign things, like job changes and so on. It could be less benign things like periods of unemployment or health problems.

There does not seem to be an increase in this pattern. The 1990's, if anything, seemed a little bit less volatile in that respect. There is no data that I know of for the most recent years. So it is a little bit of a black box, a little bit not clear what policy implications of that volatility should be.

Senator REED. By the way, anyone who has footnotes to his speeches should be commended, so you are commended on that.

Is this an area of inquiry, though, that you intend to pursue at the Federal Reserve, in terms of this volatility as well as the aggregate income levels?

Chairman BERNANKE. We looked at that in preparing the speech and we did discuss it. And we were not, again, able to come to a strong conclusion about what the policy implications might be, and so we did not highlight it in the remarks.

Senator REED. I know that you are—and I think you do this very well—wary of making endorsements of particularly policies. But in your speech you did allude to some policies that should be considered.

So in the spirit of what we should be considering, you talk about portability of health and pension benefits as one area. There are other areas, for example wage insurance proposals that have been made. Again, rather than taking a position, is that something that we should be considering?

Chairman BERNANKE. The general principle I was trying to address was the insecurity the people feel about job loss and job change. And I think it would be beneficial if we could reduce that insecurity.

One way to do that would be to increase portability of benefits across jobs. There are many ways to do that, so I am not taking a specific means. Wage insurance is an interesting idea that has been advocated by a number of economists. Again, I am not sure I can take a specific position on it.

One of the things I said, and I should reiterate, is that it is easy enough for me to say we should address these issues. The actual implementation is quite difficult. These are very complex problems. I just urge Congress to look at them and try to get as much good input and advice as they can in thinking about how to best address these issues.

Senator REED. A final issue, which is the Earned Income Tax Credit, which seems to me to be a very efficient way to deal with this issue that has been the constant source of our discussions this morning, inequality of wages, inequality of opportunity. Is that something that we should be looking at seriously, to expand it?

Chairman BERNANKE. Well, I was asked in the past about the minimum wage and, at that time, I said the Earned Income Tax Credit had some advantages compared to the minimum wage and that it was better targeted to the poor, to lower income people. And I still believe that to be the case.

Of course, it does not come without cost. But I think it does have some advantages.

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

Thank you.

Chairman DODD. Thank you.

Senator Carper.

Senator CARPER. Chairman Bernanke, I would like to say that we saved the best to the last. That is probably not true, but I might be the last. And for you, that is probably blessed relief.

Thanks for coming today. Thanks for sharing your thoughts with all of us, and responding to our questions.

Senator Reed mentioned an announcement earlier today by DaimlerChrysler, that they are taking steps to cut their work force, it sounds like, by as much as 13,000 across the country. Sometimes we listen to those announcements and they do not strike very close to home. In our case, in Delaware, they do. We have a DaimlerChrysler assembly plant we have had for over 50 years in Newark, Delaware, close to the university. And so this one is one that is troubling to us.

Having said that, I want to ask you a question. I telegraphed my pitch. And then I want to say a couple of other things.

I am going to come back and talk to and raise an issue that the leaders of the big three—GM, Ford, and Chrysler—raised with President Bush 2 months ago when they came to Washington.

Among the concerns that they raised was concerns about whether or not the Japanese are manipulating their currency in order to make their products more competitive in this country. So that is where I am going with this.

But with respect to our own State, we build all of the Dodge Durangos and Chrysler Aspens in our plant. We have a reputation for doing a good job, and have had for a long time. About 14 years ago, literally the month I was elected Governor of Delaware in November 1992, our friends at General Motors announced that they were going to close their assembly plant in Wilmington, Delaware, along with a bunch of other plants, assembly plants and parts plants, across the country.

They ended up closing, I think, just about all of them except this one in Wilmington, Delaware. It is one of two auto assembly plants that is still operating on the East Coast. I think the Ford Taurus plant down in Norfolk is going to close fairly soon. Then there will just be two plants, and one is the GM plant in our State. The other is the DaimlerChrysler plant.

Our friends at DaimlerChrysler have announced today that they were going to go back to one shift at our plant in Newark. They are going to prepare to idle the plant at the end of 2009 if they do not have a new product for the plant then, then the plant might close, which is worrisome to us all.

But we have seen this movie before and we did not just wait for the inevitable to happen. We fought very hard to make sure that it did not happen. The workers at GM, the labor and the management people, did a great job. I hope the State did, as well. And we averted what could have been a bad situation, not there is a very successful operation there.

There are a number of things, I think, that can be done. This question relates to how do we revitalize manufacturing in our country, particularly auto manufacturing, which I hope we can do and think we ought to. But there are a number of things, in my own view, that can be done and should be done. I will just start with Chrysler, and then I am leading up to monetary policy.

The people at Chrysler, they have to make vehicles that people want to buy. They have to make vehicles that are energy efficient, environmentally friendly, have good quality. The people at Chrysler, they have to go to what Toyota has done very well, flexible manufacturing where the people at Toyota make maybe three or four vehicles at a plant. And if the demand for product A is stronger than B, they make more A. If product C gets hot, they make more C. They usually have a fourth vehicle that is a pilot vehicle that they are getting ready to develop and to sell when it is time to launch it on the market. So there is a lot of things that DaimlerChrysler can do. Those are some.

There are things that we can do at the local level, in Delaware or any other State that is affected by announcements by this. You could take a page from what happened at our GM plant. It is being more committed to quality, more committed to productivity, more committed to good labor management relations, more committed to innovation, and willing to work and think outside the box. We did that 14 years ago and we need to do that again here, at our Newark plant.

The State can work even harder to provide a nurturing environment for manufacturing jobs. There is a lot that we have done and there is more than can still be done.

And at the Federal level, and I am finally coming to my question to you, but at the Federal level we do a fair amount with R&D. The President has proposed, in his budget, significant investments in research and development with respect to new battery technology, these lithium ion batteries that can be used to plug in hybrid vehicles, flex fuel/plug-in hybrid vehicles, which I think is a very promising technology.

We have an opportunity to use the Government's purchasing power on the civilian side and on the defense side, to help commercialize technologies that have a great deal of promise, whether they are variable fuel, flex fuel, plug-in hybrids, or next generation hybrids or low emission diesel.

We have tax credits in our law. We have a tax credit for people who buy highly energy efficient hybrids and it caps out at 60,000. After 60,000 units have been sold by a manufacturer, I think that tax credit begins to go away. But until it does, there is a tax credit that can incentivize people to buy high energy efficient hybrids.

We have a mirror tax credit that not many people know about but they are going to be learning about, that works on the diesel side, highly energy efficient low-emission diesel, which DaimlerChrysler is beginning to bring onto the roads here, also qualifies for a similar tax credit.

We can do better work on the health care costs, harnessing information technology, and all kinds of things to work on the health care side. Those are things for the people at DaimlerChrysler to do, State and local, at the plants themselves that are put here in harm's way. And there are opportunities for us at the Federal level.

Now to you. The people who run these three companies—GM, Ford, and Chrysler—suggested to the President that the Japanese were manipulating the currency. Secretary Paulson was there, he pushed back and said no, in fact, we talked about this here in the last month. And he said no, I do not think they are. Maybe they were at one time, but we do not think they are today.

There was a time not long ago when the Japanese economy was in such a fund, they were going through deflation. And we wanted them to take strong actions to change that.

But fast-forwarding to the present, what is going on? Are these concerns or allegations, are they baseless? Is there some basis to them? Is this something that we should be mindful of, concerned about, do something about?

Chairman BERNANKE. The Treasury and the Federal Reserve have expressed the view that exchange rates should be determined in free and open markets. As best as we can tell, the yen's value is being determined in a free, open, and competitive market. There is no evidence of any intervention going on. The last time the Japanese purchased dollars was in March 2004.

The behavior of the yen appears to be consistent with the monetary policies they are conducting which, in turn, are closely related to the state of their domestic economy. So we do not see any manipulation or intervention in the value of the yen.

Senator CARPER. How would we know if they were doing it?

Chairman BERNANKE. We can see it, for example, in the case of China where there is a very closely managed exchange rate. It moves very slowly and there are large capital inflows. In order to maintain the yuan within the range that they are trying to achieve, they have to acquire huge amounts of reserves and they have to sterilize the effects of those reserves on the domestic money supply. And so there is a very clear type of behavior that we can see.

Now it is true that there are many factors that affect the value of a currency. But to my knowledge there are no overt interventions or any such factors affecting the yen at this time.

Senator CARPER. My last, if I could, just in closing. If you are giving advice to domestic auto manufacturers on what to do to regain market share to return to profitability, what are some of the steps that you would suggest that they and we take?

Chairman BERNANKE. You made a number of good points. One of them, I think, is R&D. It is not really true that U.S. manufacturing is disappearing. That is not the case. The output of U.S. manufacturing has grown more quickly than almost any other industrial country in the last 10 years and it has been supported by enormous increases in productivity, which is one of the reasons why we need fewer and fewer workers. But the output continues to rise.

The other feature of U.S. manufacturing is that it has shifted very much from lower tech type production to the most high tech type production. We see that in airplane exports and sophisticated capital equipment, medical equipment, silicon chips and so on, things that we currently export.

And indeed, one more point, one effect of that has been that the demand for labor and manufacturing has shifted very dramatically from low-skilled workers to the highest skilled workers.

One of the things that has really supported those successful areas of manufacturing has been our leadership in R&D and technology. The Government can support that in various ways. Among them, helping to support basic research, which may not be in the interest of any specific company to undertake on its own, but with Government assistance or Government coordination the industry as a whole can undertake and find, in the case of automobiles, new fuel efficient technologies, for example, or other changes that make the cars more attractive.

Senator CARPER. Mr. Chairman, you have been good with your time.

Thank you, Chairman Bernanke. Thank you, Mr. Chairman.

Chairman DODD. Thank you.

Senator CARPER. That is probably good advice, not just for auto manufacturers, but for people running for President.

Chairman DODD. Or any office, for that matter.

Senator CARPER. There you go. Thank you.

Chairman DODD. The basic research point is an excellent one. I do not have the numbers on the top of my head here, but the decline of the U.S. Government's commitment to basic research has dropped precipitously. I think over the last number of years, it is not something that has occurred in the last couple of years. I am pleased to hear you say that. That is something we do not pay enough attention to, and how much we have benefitted over the

years for applied research to live off the basic research commitments we have made in the past, so it is worthwhile.

If I can, Mr. Chairman, just a couple of points I wanted to raise with you, and I thank my colleague from Delaware for his comments. Just a couple of cleanup things.

I mentioned earlier, the issue we had in the hearings on the predatory lending issue. We did not bring up GSE's today. My colleague from Delaware has a strong interest, as I do. And we are going to move fairly quickly here on a Senate bill. It is an important issue.

Although I think things are in pretty good control. It is not as if there is some immediate threat out there. There are a number of things we need to be doing and we intend to move in that direction.

One of the things I wanted to raise with you, because with Fannie Mae and Freddie Mac, is the purchasing of some of these ARM's that are pretty abusive. Understand in these things, the broker and the bank is out of it pretty quickly, 10 to 12 weeks. These things are bundled and then go off and are securitized.

And the fact that Fannie and Freddie are purchasing these at a pretty high standard, AA or AAA, whatever the standard is they are applying to them, concerns me in a sense. One good way to begin to try and reverse some of these practices, in addition to what regulators may be able to do, is to have some different requirements here in terms of the securitization of these products.

I wonder if you have any comment on that at all you care to share.

Chairman BERNANKE. I am not quite sure about how one distinguishes so-called "legitimate ARM products" from those which may be less legitimate. If you could do so, then that would be a direction to go.

I think more broadly that it would be a good thing for the GSE portfolios to be more consistent with their housing mission. According to OFHEO, the GSE portfolios are only 30 percent related to affordable housing. The rest is all different other kinds of things. So to match their mission with their portfolios would be, I think, very desirable.

The specific suggestion you make might be feasible, but it would require some way of determining which types of loans are to be acceptable or not.

Chairman DODD. I just wanted to raise that point with you.

Let me come back, if I can, to the points that Senator Carper was raising about trade and foreign governments. It was reported yesterday, you have heard this again from some other colleagues this morning, that our trade deficit has now reached a record $763 billion last year. That is the fifth straight year that we have had a record trade deficit.

The Wall Street Journal reported, "Following yesterday's report, economists on Wall Street said the Government, later this month, would likely lower its final growth estimate sharply for the fourth quarter."

In order to finance our trade budget and current account deficits, we are required to have an influx of something in the neighborhood of a little less than $2.5 billion of foreign capital on a daily basis,

as I am told. Now some have argued that this is all right and it is no great threat because it is coming from the private investors offshore.

But in your report the Fed states, "On net private foreigners purchased few U.S. treasuries."

The obvious question is then it is governments who appear to be buying them. I put that in the form of a question. I should not make the statement. Is it your conclusion that the decline in private investors here, it is governments then that are purchasing this?

Chairman BERNANKE. Are you referring to private foreign investors or private domestic?

Chairman DODD. Yes, private foreign investors.

Chairman BERNANKE. Private foreign investors are still holding significant U.S. assets, but it is true that acquisition of treasuries and other fixed income instruments for the purposes of foreign reserves are an important component of the in-flow.

Chairman DODD. The end of the line was, in fact, that foreign direct investment flows in the United States remains robust. So again, it is that public commitment that we are relying on at this particular junction. So it is not so much the private foreign investor, it is the governmental investor that we are——

Chairman BERNANKE. We can send you some numbers. It depends on the instrument. Foreign private investors are more likely to buy equities, for example, than central banks.

Chairman DODD. Going back to the issues raised earlier about China, and again the question is a good question Senator Carper was raising. He talks about the yen and I think you had—and I agree with your answer on the yen, based on what I have known. It is troubling, to some degree. We have the cost like a health care cost, I think at a GM automobile, is $1,500. I think someone has made that conclusion. At Toyota, it is $150.

So in addition to what other factors may exist out there, we have some built-in costs that I think have contributed to the lack of competitiveness, in some cases, in our American-produced automobiles.

But there is an issue of China's manipulation of their currency. What would recommend, if anything at all? I accept the fact that they are getting better. And I heard you say that is the case. But we get this all the time. When Senator Carper and I go back to our constituencies, one of the first questions that come up, if we get into any discussion of economics at all, is this issue. I am just wondering if we are not doing enough or there is something else we could be doing to take what you have said here and call it what it is. I agree with you, it is manipulation of their currency. There is no question about it.

Then what do we do about that? How do we respond to this?

Chairman BERNANKE. Senator, I did not use the word manipulation.

Chairman DODD. I thought I heard you say that?

Chairman BERNANKE. No, sir. If I did, it was a mistake.

Chairman DODD. I tried.

Chairman BERNANKE. I think a point to make, and this is, to some extent, recognized in Secretary Paulson's Strategic Economic dialogue, is that while the exchange rate is a very important issue

and one that we are continuing to press China on, we have many, many other issues of mutual concern in economics.

Just to talk specifically about the trade balance, another dimension besides the exchange rate is whether China can become more reliant on its own domestic demand, its own consumption spending as a source of growth, rather than relying on exports to the United States.

I think it is somewhat encouraging that the Chinese have officially recognized the problem of a growing trade surplus and both the economic and political risks that that poses. They have proposed a plan for trying to increase domestic consumption which, over time, should reduce the reliance of China on exports. It should reduce their trade surplus. So there are some other measures that they are taking, albeit ones that will take some time to work.

But again, rather than putting everything on that particular issue of the exchange rate, we should also note that we have common interests with the Chinese on matters of the environment, for example, on matters of energy, trade and investment, and immigration and visas.

So, I would hope that while we continue to press China to make progress on this very important issue of the exchange rate, it is not exclusive of all the other very important issues that we have in common and that we could collectively benefit from if we were to work with the Chinese to come to better arrangements than we have.

Chairman DODD. I appreciate that. Again, I know you appreciate the concerns we hear about and using your language in China, the subsidy notion here. And clearly, when you have lost your job because the company you work for can no longer compete because your competitor is able to adjust that currency to such an extent that it causes your job to disappear, that level of frustration is beyond just an intellectual exercise. If you are walking home that night to face your family because there is no longer the job there, and what it means.

I want to return last, if I can, to one point. Again, your candor has been terrific and your comments. The quote that Jack Reed raised in your Omaha speech, where too often this discussion about unionization falls on an ideological fault line. And I appreciate immensely here that you talked about it based on just data here, rather than drawing conclusions about whether you like or dislike unions.

But the important role they played, in terms historically of closing income gaps. This is not the first time we are talking about income gaps. In fact, income gaps were far more pronounced during the early part of the 20th century.

And what I read from your quote here is that, and I will ask the question here in a sense. You talk about these numbers back in the 1970's and 1980's, and I presume even earlier, some of those income gaps that closed up, you attribute to the fact that there was the ability of people to organize and to negotiate for better wages and working conditions for themselves.

I wonder if you might just expound on that a little bit, without getting involved in the ideological discussion. I am not asking you to do that. But it is a very important point, I think, as those of us

try to assist in this effort of closing that gap, to realize how important that particular element can play in making it possible for people to move up that economic ladder.

Chairman BERNANKE. I was reporting some research, which I think is good research.

Chairman DODD. I know you were.

Chairman BERNANKE. Again, I think that workers who wish to be represented by unions have every right to do, and we should not block that in any way. We should give them the opportunities to do that.

The implications of unionization for income equality or inequality, as I indicated before, are a bit difficult to tease out because there have been changes in union rates. But there have also been changes in the structure in the economy, the most notable one being the decline of manufacturing jobs and manufacturing employment, and the increase in international competition. There certainly was a time when GM, for example, had a certain amount of monopoly power and was able to charge probably a higher price than it otherwise could. And now, of course, GM is in very intense competition with other companies around the world.

So it is an open question, a very interesting question, to what extent that association between wage changes and unionization is causal—that the changes in unionization have changed the wage pattern—or to what extent they are both the product of a third force such as the change in manufacturing employment or the change in the extent of international competition.

The kinds of studies we have seen so far really cannot distinguish between those two hypotheses.

Chairman DODD. I appreciate your comments. This will be part of an ongoing conversation. But the comments here, based on just hard data I thought were very valuable to contribute to the debate and discussion as to what we need to be doing to move forward in closing that gap that you have spoken about so eloquently.

Thank you immensely. I thank my colleagues, they have had to leave here. But there were great questions that came up this morning and your answers were very candid and very straightforward and forthright, and we appreciate it immensely.

So we look forward to having an ongoing conversation with you and we thank you for your appearance here this morning.

This hearing will stand adjourned.

[Whereupon, at 1:18 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 14, 2007

Chairman Dodd, Senator Shelby, and other Members of the Committee, I am pleased to present the Federal Reserve's Monetary Policy Report to the Congress.

Real activity in the United States expanded at a solid pace in 2006, although the pattern of growth was uneven. After a first-quarter rebound from weakness associated with the effects of the hurricanes that ravaged the Gulf Coast the previous summer, output growth moderated somewhat on average over the remainder of 2006. Real gross domestic product (GDP) is currently estimated to have increased at an annual rate of about 2¾ percent in the second half of the year.

As we anticipated in our July report, the U.S. economy appears to be making a transition from the rapid rate of expansion experienced over the preceding several years to a more sustainable average pace of growth. The principal source of the ongoing moderation has been a substantial cooling in the housing market, which has led to a marked slowdown in the pace of residential construction. However, the weakness in housing market activity and the slower appreciation of house prices do not seem to have spilled over to any significant extent to other sectors of the economy. Consumer spending has continued to expand at a solid rate, and the demand for labor has remained strong. On average, about 165,000 jobs per month have been added to nonfarm payrolls over the past 6 months, and the unemployment rate, at 4.6 percent in January, remains low.

Inflation pressures appear to have abated somewhat following a run-up during the first half of 2006. Overall inflation has fallen, in large part as a result of declines in the price of crude oil. Readings on core inflation—that is, inflation excluding the prices of food and energy—have improved modestly in recent months. Nevertheless, the core inflation rate remains somewhat elevated.

In the five policy meetings since the July report, the Federal Open Market Committee (FOMC) has maintained the Federal funds rate at 5¼ percent. So far, the incoming data have supported the view that the current stance of policy is likely to foster sustainable economic growth and a gradual ebbing of core inflation. However, in the statement accompanying last month's policy decision, the FOMC again indicated that its predominant policy concern is the risk that inflation will fail to ease as expected and that it is prepared to take action to address inflation risks if developments warrant.

Let me now discuss the economic outlook in a little more detail, beginning with developments in the real economy and then turning to inflation. I will conclude with some brief comments on monetary policy.

Consumer spending continues to be the mainstay of the current economic expansion. Personal consumption expenditures, which account for more than two-thirds of aggregate demand, increased at an annual rate of around 3½ percent in real terms during the second half of last year, broadly matching the brisk pace of the previous 3 years. Consumer outlays were supported by strong gains in personal income, reflecting both the ongoing increases in payroll employment and a pickup in the growth of real wages. Real hourly compensation—as measured by compensation per hour in the nonfarm business sector deflated by the personal consumption expenditures price index—rose at an annual rate of around 3 percent in the latter half of 2006.

The resilience of consumer spending is all the more striking given the backdrop of the substantial correction in the housing market that became increasingly evident during the spring and summer of last year. By the middle of 2006, monthly sales of new and existing homes were about 15 percent lower than a year earlier, and the previously rapid rate of house-price appreciation had slowed markedly. The fall in housing demand in turn prompted a sharp slowing in the pace of construction of new homes. Even so, the backlog of unsold homes rose from about 4½ months' supply in 2005 to nearly 7 months' supply by the third quarter of last year. Single-family housing starts have dropped more than 30 percent since the beginning of last year, and employment growth in the construction sector has slowed substantially.

Some tentative signs of stabilization have recently appeared in the housing market: New and existing home sales have flattened out in recent months, mortgage applications have picked up, and some surveys find that homebuyers' sentiment has improved. However, even if housing demand falls no further, weakness in residential investment is likely to continue to weigh on economic growth over the next few quarters as homebuilders seek to reduce their inventories of unsold homes to morecomfortable levels.

Despite the ongoing adjustments in the housing sector, overall economic prospects for households remain good. Household finances appear generally solid, and delinquency rates on most types of consumer loans and residential mortgages remain low. The exception is subprime mortgages with variable interest rates, for which delinquency rates have increased appreciably. The labor market is expected to stay healthy, and real incomes should continue to rise, although the pace of employment gains may be slower than that to which we have become accustomed in recent years. In part, slower average job growth may simply reflect the moderation of economic activity. Also, the impending retirement of the leading edge of the baby-boom generation, and an apparent leveling out of women's participation rate in the workforce, which had risen for several decades, will likely restrain the growth of the labor force in coming years. With fewer jobseekers entering the labor force, the rate of job creation associated with the maintenance of stable conditions in the labor market will decline. All told, consumer expenditures appear likely to expand solidly in coming quarters, albeit a little less rapidly than the growth in personal incomes if, as we expect, households respond to the slow pace of home-equity appreciation by saving more out of current income.

The business sector remains in excellent financial condition, with strong growth in profits, liquid balance sheets, and corporate leverage near historical lows. Last year, those factors helped to support continued advances in business capital expenditures. Notably, investment in high-tech equipment rose 9 percent in 2006, and spending on nonresidential structures (such as office buildings, factories, and retail space) increased rapidly through much of the year after several years of weakness. Growth in business spending slowed toward the end of last year, reflecting mainly a deceleration of spending on business structures; a drop in outlays in the transportation sector, where spending is notably volatile; and some weakness in purchases of equipment related to construction and motor vehicle manufacturing. Over the coming year, capital spending is poised to expand at a moderate pace, supported by steady gains in business output and favorable financial conditions. Inventory levels in some sectors—most notably at motor vehicle dealers and in some construction-related manufacturing industries—rose over the course of last year, leading some firms to cut production to better align inventories with sales. Remaining imbalances may continue to impose modest restraint on industrial production during the early part of this year.

Outside the United States, economic activity in our major trading partners has continued to grow briskly. The strength of demand abroad helped spur a robust expansion in U.S. real exports, which grew about 9 percent last year. The pattern of real U.S imports was somewhat uneven, partly because of fluctuations in oil imports over the course of the year. On balance, import growth slowed in 2006, to 3 percent. Economic growth abroad should support further steady growth in U.S. exports this year. Despite the improvements in trade performance, the U.S. current account deficit remains large, averaging about 6½ percent of nominal GDP during the first three quarters of 2006 (the latest available data).

Overall, the U.S. economy seems likely to expand at a moderate pace this year and next, with growth strengthening somewhat as the drag from housing diminishes. Such an outlook is reflected in the projections that the Members of the Board of Governors and Presidents of the Federal Reserve Banks made around the time of the FOMC meeting late last month. The central tendency of those forecasts—which are based on the information available at that time and on the assumption of appropriate monetary policy—is for real GDP to increase about 2½ to 3 percent in 2007 and about 2¾ to 3 percent in 2008. The projection for GDP growth in 2007 is slightly lower than our projection last July. This difference partly reflects an expectation of somewhat greater weakness in residential construction during the first part of this year than we anticipated last summer. The civilian unemployment rate is expected to finish both 2007 and 2008 around 4½ to 4¾ percent.

The risks to this outlook are significant. To the downside, the ultimate extent of the housing market correction is difficult to forecast and may prove greater than we anticipate. Similarly, spillover effects from developments in the housing market onto consumer spending and employment in housing-related industries may be more pronounced than expected. To the upside, output may expand more quickly than expected if consumer spending continues to increase at the brisk pace seen in the second half of 2006.

I turn now to the inflation situation. As I noted earlier, there are some indications that inflation pressures are beginning to diminish. The monthly data are noisy, however, and it will consequently be some time before we can be confident that underlying inflation is moderating as anticipated. Recent declines in overall inflation have primarily reflected lower prices for crude oil, which have fed through to the prices of gasoline, heating oil, and other energy products used by consumers. After

moving higher in the first half of 2006, core consumer price inflation has also edged lower recently, reflecting a relatively broad-based deceleration in the prices of core goods. That deceleration is probably also due to some extent to lower energy prices, which have reduced costs of production and thereby lessened one source of pressure on the prices of final goods and services. The ebbing of core inflation has likely been promoted as well by the stability of inflation expectations.

A waning of the temporary factors that boosted inflation in recent years will probably help foster a continued edging down of core inflation. In particular, futures quotes imply that oil prices are expected to remain well below last year's peak. If actual prices follow the path currently indicated by futures prices, inflation pressures would be reduced further as the benefits of the decline in oil prices from last year's high levels are passed through to a broader range of core goods and services. Nonfuel import prices may also put less pressure on core inflation, particularly if price increases for some other commodities, such as metals, slow from last year's rapid rates. But as we have been reminded only too well in recent years, the prices of oil and other commodities are notoriously difficult to predict, and they remain a key source of uncertainty to the inflation outlook. The contribution from rents and shelter costs should also fall back, following a step-up last year. The faster pace of rent increases last year may have been attributable in part to the reduced affordability of owner-occupied housing, which led to a greater demand for rental housing. Rents should rise somewhat less quickly this year and next, reflecting recovering demand for owner-occupied housing as well as increases in the supply of rental units, but the extent and pace of that adjustment is not yet clear.

Upward pressure on inflation could materialize if final demand were to exceed the underlying productive capacity of the economy for a sustained period. The rate of resource utilization is high, as can be seen in rates of capacity utilization above their long-term average and, most evidently, in the tightness of the labor market. Indeed, anecdotal reports suggest that businesses are having difficulty recruiting well-qualified workers in certain occupations. Measures of labor compensation, though still growing at a moderate pace, have shown some signs of acceleration over the past year, likely in part the result of tight labor market conditions.

The implications for inflation of faster growth in nominal labor compensation depend on several factors. Increases in compensation might be offset by higher labor productivity or absorbed by a narrowing of firms' profit margins rather than passed on to consumers in the form of higher prices; in these circumstances, gains in nominal compensation would translate into gains in real compensation as well. Underlying productivity trends appear favorable, and the markup of prices over unit labor costs is high by historical standards, so such an outcome is certainly possible. Moreover, if activity expands over the next year or so at the moderate pace anticipated by the FOMC, pressures in both labor and product markets should ease modestly. That said, the possibility remains that tightness in product markets could allow firms to pass higher labor costs through to prices, adding to inflation and effectively nullifying the purchasing power of at least some portion of the increase in labor compensation. Thus, the high level of resource utilization remains an important upside risk to continued progress on inflation.

Another significant factor influencing medium-term trends in inflation is the public's expectations of inflation. These expectations have an important bearing on whether transitory influences on prices, such as those created by changes in energy costs, become embedded in wage and price decisions and so leave a lasting imprint on the rate of inflation. It is encouraging that inflation expectations appear to have remained contained.

The projections of the Members of the Board of Governors and the Presidents of the Federal Reserve Banks are for inflation to continue to ebb over this year and next. In particular, the central tendency of those forecasts is for core inflation—as measured by the price index for personal consumption expenditures excluding food and energy—to be 2 to 2¼ percent this year and to edge lower, to 1¾ to 2 percent, next year. But as I noted earlier, the FOMC has continued to view the risk that inflation will not moderate as expected as the predominant policy concern.

Monetary policy affects spending and inflation with long and variable lags. Consequently, policy decisions must be based on an assessment of medium-term economic prospects. At the same time, because economic forecasting is an uncertain enterprise, policymakers must be prepared to respond flexibly to developments in the economy when those developments lead to a reassessment of the outlook. The dependence of monetary policy actions on a broad range of incoming information complicates the public's attempts to understand and anticipate policy decisions.

Clear communication by the central bank about the economic outlook, the risks to that outlook, and its monetary policy strategy can help the public to understand the rationale behind policy decisions and to anticipate better the central bank's reac-

tion to new information. This understanding should, in turn, enhance the effectiveness of policy and lead to improved economic outcomes. By reducing uncertainty, central bank transparency may also help anchor the public's longer-term expectations of inflation. Much experience has shown that well-anchored inflation expectations tend to help stabilize inflation and promote maximum sustainable economic growth. Good communication by the central bank is also vital for ensuring appropriate accountability for its policy actions, the full effects of which can be observed only after a lengthy period. A transparent policy process improves accountability by clarifying how a central bank expects to attain its policy objectives and by ensuring that policy is conducted in a manner that can be seen to be consistent with achieving those objectives.

Over the past decade or so, the Federal Reserve has significantly improved its methods of communication, but further progress is possible. As you know, the FOMC last year established a subcommittee to help the full Committee evaluate the next steps in this continuing process. Our discussions are directed at examining all aspects of our communications and have been deliberate and thorough. These discussions are continuing, and no decisions have been reached. My colleagues and I remain firmly committed to an open and transparent monetary policy process that enhances our ability to achieve our dual objectives of stable prices and maximum sustainable employment. I will keep Members of this Committee apprised of developments as our deliberations move forward. I look forward to continuing to work closely with the Members of this Committee and your colleagues in the Senate and House on the important issues pertaining to monetary policy and the other responsibilities with which the Congress has charged the Federal Reserve.

Thank you. I would be happy to take questions.

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

Q.1. I have been concerned for some time about the implementation of the Basel II Capital Accord and the impact Basel II may have on the safety and soundness of the U.S. banking system. In particular, I am worried that Basel II may lead to a sharp reduction in the amount of capital banks are required to hold, which would put U.S. taxpayers at risk of having to pay for expensive bank failures. Accordingly, I believe that it is critical that Basel II be implemented with the utmost care and diligence. Would you please update the Committee on the status of the Basel II Capital Accords and the current timeframe for implementing Basel II? I would like you to comment on whether there is enough time for banking regulators to finalize the rules implementing Basel II, so that banks adopting Basel II can start the test run for Basel II presently scheduled to begin next year. What, if any, is the likelihood that the timeframe currently envisioned may need to be adjusted?

A.1. First, let me reiterate that the primary goal of the agencies in implementing Basel II in the United States is to enhance the safety and soundness of the U.S. banking system. Accordingly, we will not permit capital levels to decline under the Basel II framework so as to potentially jeopardize safety and soundness. We remain committed to ensuring that regulatory capital levels at all U.S. banking organizations remain robust. It is important to keep in mind that under Pillar II, banking supervisors will be reviewing total capital plans relative to risk at each Basel II bank, not just the minimum capital requirements calculated under Pillar I. We also continue to believe, subject to the receipt of comments on the outstanding Basel II notice of proposed rulemaking (NPR), that it is critical to move forward with Basel II implementation so that our largest and internationally active banking organizations have the most risk reflective regulatory capital framework and can remain competitive with other banking organizations that apply similar risk sensitive frameworks.

The Basel II NPR issued in September 2006 remains open for comment through March 26, 2007. As outlined in the NPR, the first opportunity for a bank to be able to begin a parallel run (that is, apply the Basel II framework and report results to the appropriate supervisor, but continue to use Basel I ratios for regulatory purposes) would be January 2008. The first opportunity for a bank to begin applying the Basel II framework subject to the proposed transition floors would be January 2009. We remain committed to this schedule; however, it will be challenging to meet the previously announced June 2007 date for a final rule. We are very interested in public comments submitted on the proposal. We will need to take sufficient time to fully consider comments and to make corresponding modifications to the proposed framework as the agencies deem to be appropriate. Because the comment period is still open, it is difficult to estimate how comprehensive the comments will be. While we already are aware of a number of issues raised by the industry, in complex rulemakings such as this one there are always unanticipated issues as well. The extent and complexity of the comments overall will have an impact on the ulti-

mate timing for issuing a final rule. We continue to believe that it is important to meet the previously stated first live start date of January 2009 and at this time do not anticipate that that start date will need to be adjusted.

Q.2. Your testimony noted that the U.S. current account deficit remains large, averaging about 6½ percent of nominal GDP. You also note that economic growth abroad should support further steady growth in U.S. exports this year. Do you anticipate much improvement in the current account deficit over the next year as a result of export improvement? Do you see any other economic factors changing over the next year that might lead to an improved trade deficit?

A.2. In the past year, U.S. exports have grown strongly, reflecting a number of factors, including solid foreign economic growth, increases in investment spending abroad that have boosted sales of capital goods produced in the United States, and the booming market for agricultural goods and other commodities. These developments have played out against the backdrop of continued innovation and productivity growth in the U.S. economy that, along with the decline in the foreign exchange value of the dollar since earlier in this decade, have buoyed the attractiveness of American-made products. As a result of strong export growth, in combination with sharp declines in the price of imported oil, the trade deficit has narrowed from 6 percent of U.S. GDP in the third quarter of last year to about 5¼ percent of GDP in the fourth, and the current account deficit has improved by a broadly similar extent. These movements, coming as they did toward the end of 2006, may well cause the trade and current account deficits for 2007 as a whole, measured as a share of GDP, to be smaller than those for 2006.

Focusing on their evolution from the current quarter onwards, however, it is uncertain whether our Nation's external deficits will narrow further over the next few years. On the export side, the extraordinary growth in overseas sales of some U.S. products during 2006 may be difficult to sustain; for example, exports of aircraft grew more than 20 percent last year. On the import side, the price of imported oil has bounced back from recent lows, and futures markets suggest that further increases may be in the offing. Another important determinant of U.S. trade flows, the foreign exchange value of the dollar, is volatile and extremely difficult to predict. Finally, even if the trade balance were to continue to improve, it is not clear that the current account balance—which is equal to the trade balance plus the balance on international income flows and transfers—would follow suit. The need to finance continued trade deficits, even if these deficits are smaller than in the past, puts upward pressure on the Nation's external debt and thus investment income payments to foreigners, thereby tending to expand the current account deficit.

Q.3. This Committee continues to have a great degree of interest in the Chinese economy, particularly currency practices. China's foreign exchange reserves now stand at over $1 trillion, creating excess liquidity in their banking system. Some financial experts have stated that the United States should not view China's large stock of foreign currency reserves as a problem. What is your view

of this level of reserves? Do you believe China's ratio of reserves to money supply is reasonable? To what extent do you believe that China's reserves are the result of speculation? Could this, in fact, result in an even lower value for the RMB should that currency become more flexible in the future?

A.3. For some time now, the monetary authorities in China have been resisting upward pressure on the value of the renminbi in foreign exchange markets by purchasing dollars and perhaps other foreign currencies. Even though these accumulated purchases have reached a value of more than $1 trillion, it is not certain that the accumulation has created excess liquidity in China's banking system. Reserves and liquidity do not move in lockstep in China, because Chinese authorities have policy tools available to drain liquidity, including issuance of official securities (so-called "sterilization bonds") and increasing banks' reserve requirements. At present, it does not appear that China has had any substantial difficulty using either of these tools to drain liquidity, although that may change in the future. Because the linkage between reserves and money need not be tight, it would be hard to determine a reasonable range for the ratio of reserves to the money stock appropriate for China's economy.

I do not believe China's substantial accumulation of reserves in itself represents a problem for the United States or for United States monetary policy. Official demand in China and other countries for United States assets reflects the dollar's role as preeminent reserve currency, which results in great part from the strength of our economy and the safety and liquidity of the United States financial system. Because foreign holdings of U.S. Treasury securities represent only a small part of total U.S. credit market debt outstanding, U.S. credit markets should be able to absorb without great difficulty any shift in foreign allocations. And even if such a shift were to put undesired upward pressure on U.S. interest rates, the Federal Reserve has the capacity to operate in domestic money markets to maintain interest rates at a level consistent with our domestic economic goals.

It is not easy to identify the portion of the upward pressure on the renminbi, and hence on the accumulation of reserves, that might be the result of speculation. It is also difficult to predict where the renminbi would settle were the currency to float freely. However, speculation in the renminbi would not occur if investors did not expect the Chinese currency to appreciate at some point. It seems reasonable to conclude that, at the present exchange rate with the dollar, the renminbi is undervalued.

RESPONSE TO A WRITTEN QUESTION OF SENATOR SUNUNU FROM BEN S. BERNANKE

Q.1. Does the arbitrary deposit cap, which bars any U.S. bank from an acquisition that would give it more than 10 percent of the Nation's total bank deposits, make American banks vulnerable to foreign acquisition?

A.1. Federal law currently prohibits a bank holding company or bank from acquiring an additional bank if, after the acquisition, the resulting banking organization would control more than 10 percent of all deposits held by insured banks and savings associations

in the United States. At the present time, it appears unlikely that this restriction makes U.S. banks materially more vulnerable to acquisition by a foreign entity than they would be if this deposit cap were not in place. Of course, as the banking and financial systems evolve, the impact of the current deposit cap also may change, and thus the Congress may wish to review the benefits and costs of the current restriction at regular intervals.

The deposit cap could potentially increase the likelihood of foreign acquisitions of U.S. banks if it prevented U.S. banks from reaching the size needed to achieve important economies of scale or scope. However, research overwhelmingly indicates that economies of scale in banking are achieved at sizes far below those of our largest banks. In addition, the landmark Gramm-Leach-Bliley Act significantly expanded the ability of U.S. banking organizations to achieve any important economies of scope that may exist within the broad financial services industry. Indeed, U.S. banks are among the most profitable, most efficient, and best capitalized in the world.

For use at 10:00 a.m., EST
Wednesday
February 14, 2007

Board of Governors of the Federal Reserve System

Monetary Policy Report to the Congress

February 14, 2007

Letter of Transmittal

BOARD OF GOVERNORS OF THE
FEDERAL RESERVE SYSTEM

Washington, D.C., February 14, 2007

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

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

Sincerely,

Ben Bernanke, Chairman

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Monetary Policy Report to the Congress

Report submitted to the Congress on February 14, 2007, pursuant to section 2B of the Federal Reserve Act

Monetary Policy and the Economic Outlook

The U.S. economy turned in another solid performance in 2006, although the pattern of growth was uneven. After rebounding in the early part of the year from hurricane-related disruptions in the autumn of 2005, the pace of expansion during the remaining three quarters averaged somewhat below that of the preceding two years, responding in part to the removal of monetary policy accommodation since 2004. The housing market cooled substantially, and, in the latter part of 2006, the production of light motor vehicles also stepped down. Elsewhere in the economy, activity remained strong. Consumer spending increased vigorously in 2006 as households' real income made strong gains. Business investment rose at a solid rate for the year as a whole, although it decelerated late in the year in part because of some softening in purchases of equipment related to construction and motor vehicle manufacturing. Demand for U.S. exports rose at a robust pace in 2006, supported by strong economic activity abroad. Against this backdrop, businesses continued to add jobs at a steady rate, and the unemployment rate decreased further.

Total consumer price inflation declined in 2006 from its elevated pace in 2005, as energy prices fell, on net, after rising rapidly over the preceding couple of years. Crude oil prices rose during the first half of 2006 but turned down sharply later in the year. As a result, consumer price inflation climbed in the first half of the year before slowing in the second half. The sharp movements in prices of crude oil appear to have affected not only prices of gasoline and other petroleum-based types of energy but also prices of a broader range of goods and services that use petroleum-based inputs. Partly as a result, consumer price inflation excluding food and energy—so-called core consumer price inflation—moved up during the first half of the year but eased subsequently. On balance, core inflation was a bit higher over the four quarters of 2006 than in 2005. Measures of long-term inflation expectations, however, remained well anchored.

The monetary policy decisions of the Federal Open Market Committee (FOMC) in 2006 were intended to foster sustainable economic expansion and to promote a return to low and stable inflation. In that regard, the economic outlook for this year and next appears favorable. Although the contraction in homebuilding has been a drag on growth, that restraint seems likely to diminish over 2007. Further gains in real wages as well as ongoing increases in employment should support a solid rise in consumer spending. In addition, at the beginning of 2007, households' balance sheets appeared to be in good shape. Whereas gains in home prices slowed last year, household net worth increased moderately as stock market wealth grew and households lessened their accumulation of debt. Delinquency rates on consumer loans and on most types of mortgages remained low, although they increased markedly for subprime mortgages with variable interest rates. As for businesses, balance sheets are quite liquid, credit quality is good, and most firms enjoy ready access to funds. These favorable financial conditions, along with further expansion in business output, user costs of capital equipment that remain attractive, and the potential for further gains in efficiency, should continue to spur business investment. In addition, sustained expansion in foreign economies ought to maintain demand for U.S. exports. On balance, growth of real gross domestic product in the United States appears likely to run slightly below that of the economy's potential over the next few quarters and then to rise to a pace around that of the economy's long-run trend.

Regarding inflation, increases in core consumer prices are expected to moderate, on balance, over the next two years. Along with inflation expectations that are well anchored, some of the factors that boosted inflation in recent years seem likely to lessen. In particular, the paths for prices of energy and other commodities embedded in futures markets suggest that the impetus to core inflation from these influences will diminish further. In addition, the outsized increases in shelter costs that boosted core inflation last year are not expected to persist. Although unit labor costs in the nonfarm business sector have been rising, the average markup of prices over such costs is high by historical standards. The relatively high markup suggests that further increases in costs could be absorbed,

at least to some extent, by a narrowing of firms' profit margins rather than by passing on the costs in the form of higher consumer prices, especially if pressures on resources ease modestly as anticipated.

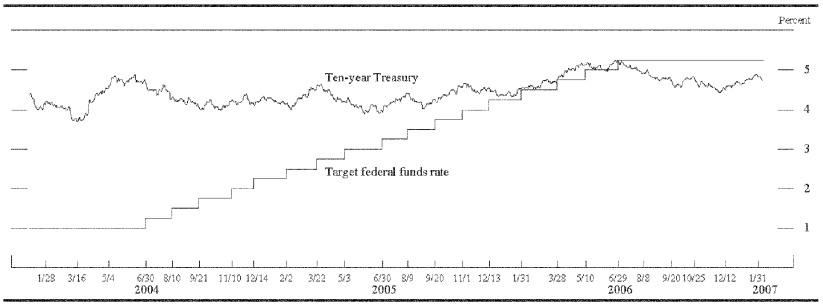
The outlook for real economic activity is uncertain. An upside risk is that consumer spending, which has been especially buoyant in recent months, may continue to expand at a pace that would ultimately lead to an escalation of pressures on resources and prices. Alternatively, prospects for residential construction, which are difficult to assess, may pose some downside risks. Although residential real estate markets have shown some recent signs of stabilizing, homebuilders' inventories of unsold homes remain elevated. Further cutbacks in construction to reduce inventories toward more-comfortable levels could become steeper and more persistent than currently anticipated. Moreover, if home values were to depreciate sharply, the resulting erosion of household wealth could impose appreciable restraint on consumer spending.

Whether inflation will moderate gradually as expected is also uncertain. On the one hand, the nation's potential to produce could increase more rapidly than anticipated, or product and input markets could work efficiently at higher rates of utilization, either of which could lead to a lower trajectory for inflation than currently forecast. On the other hand, expanding global demand and threats to supply from actual and potential disruptions pose upside risks for energy prices. In addition, brisk world demand for non-energy materials and commodities could lead to further upward pressures on business costs. Also, if inflation were to persist around the elevated average level of the past three years, longer-run inflation expectations could deteriorate, particularly if pressures on resources were to intensify. At recent meetings, the FOMC indicated that the risk that inflation will fail to moderate as expected is its predominant policy concern.

Monetary Policy, Financial Markets, and the Economy in 2006 and Early 2007

The FOMC firmed the stance of monetary policy 25 basis points at each of its four meetings over the first half of 2006. The Committee raised its target for the federal funds rate at its January and March meetings as available information pointed to accumulating pressures on inflation and solid economic growth. Although readings on core inflation had remained favorable, increases in energy prices and the relatively high level of resource utilization threatened to add to existing inflation pressures. Meanwhile, underlying aggregate demand, supported by robust consumer spending and accelerating business investment, appeared to be growing at a solid rate. By the time of the May and June meetings, data pointed to a moderation in the growth of consumer spending and a further cooling in the housing market. However, core consumer prices had risen more rapidly. Although the Committee judged inflation expectations still to be contained, it was mindful that the rising prices of energy and other commodities could impart greater inflationary momentum. Against this backdrop, the FOMC voted to increase the policy rate a further 25 basis points at both the May and June meetings, bringing the federal funds rate to 5¼ percent. In the statement accompanying its June decision, the FOMC indicated that it believed that the moderation in economic activity would help to limit inflationary pressures over time but also noted that some upside inflation risks remained. As

Selected interest rates, 2004–07



NOTE: The data are daily and extend through February 7, 2007. 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.

it had in its May statement, the FOMC made clear in June that the extent and timing of additional firming would depend on the evolution of the outlook for both inflation and economic growth as implied by incoming information.

In the second half of the year, a further slowdown in residential construction activity and a contraction in motor vehicle production created a significant drag on economic activity. However, consumer spending held up, and employment rose at a solid pace. Meanwhile, energy prices reversed much of their increases of the first half of the year, sending headline inflation lower. Core inflation also eased somewhat, albeit to a rate above its year-earlier level. Against this backdrop, the FOMC left the stance of policy unchanged at its final four meetings of 2006. Committee discussions in those meetings focused in part on developments in the housing market and their implications for the broader economy. Although the housing market was weakening throughout this period, the Committee judged that the downturn had not spilled over significantly to consumer spending. The economy was expected to expand over coming quarters at a rate close to or a little below its long-run sustainable pace. At the same time, FOMC members noted that, even though core inflation had slowed from the very rapid rates of the spring and summer, current rates remained undesirably high. Most members expected core inflation to moderate gradually, but they were uncertain about the likely pace and extent of that moderation. Thus, in statements accompanying each rate announcement over this period, the FOMC reiterated that inflation risks remained and that the extent and timing of any additional policy firming would depend on the outlook for both inflation and economic growth implied by incoming information.

Over the period between the December 2006 and January 2007 FOMC meetings, incoming data on inflation and economic activity were generally more favorable. Core inflation receded further from the elevated levels reached in early 2006, and some indicators suggested that the demand for housing might be stabilizing. Business investment had softened in the fourth quarter, and industrial production decelerated sharply in the fall, but consumer spending posted robust gains in the final months of 2006. At its January 2007 meeting, the Committee again decided to leave its target for the federal funds rate unchanged, reiterated concern about inflation risks, and again cited the role of incoming data in determining the extent and timing of any additional firming.

In recent years, the FOMC has worked to improve the transparency of its decisionmaking process, and the Committee continues to examine whether further changes would improve its communications with the public. In spring 2006, the Chairman appointed a subcommittee to help the FOMC organize the discussion of a broad range of communication issues. The FOMC began its consideration of these issues at its August meeting and has discussed them at several meetings since then.

Economic Projections for 2007 and 2008

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 2007 and 2008. The projections indicate that the participants expect sustainable expansion of real economic activity during the next two years, assuming an appropriate course for monetary policy. The central tendency of the FOMC participants' forecasts for the increase in real GDP is 2½ percent to 3 percent over the four quarters of 2007 and 2¾ percent to 3 percent over the four quarters of 2008. The central tendency of their forecasts for the civilian unemployment rate is 4½ percent to 4¾ percent in the fourth quarter both of this year and of 2008. For inflation, the central tendency of the forecasts anticipates an increase in the price index for personal consumption expenditures excluding food and energy—the so-called core PCE price index—of 2 percent to 2¼ percent over

Economic projections of Federal Reserve Governors and Reserve Bank presidents for 2007 and 2008

Percent

Indicator	Memo 2006 actual	2007		2008	
		Range	Central tendency	Range	Central tendency
Change, fourth quarter to fourth quarter[1]					
Nominal GDP	5.9	4¾–5½	5–5½	4¾–5½	4¾–5¼
Real GDP	3.4	2¼–3¼	2½–3	2½–3¼	2¾–3
PCE price index excluding food and energy	2.3	2–2¼	2–2¼	1½–2¼	1¾–2
Average level, fourth quarter					
Civilian unemployment rate	4.5	4½–4¾	4½–4¾	4½–5	4½–4¾

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

the four quarters of 2007 and 1¾ percent to 2 percent over the four quarters of 2008.

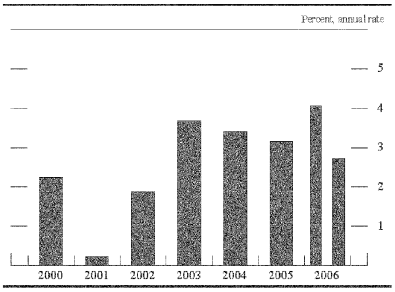
The economy is projected to expand at a moderate rate. Although the cooling of the housing market continues to damp economic activity, the drag on economic growth from declining construction activity is expected to diminish later this year. Household spending for goods and services should rise at a solid pace, in part as a result of ongoing gains in real wages and employment and of generally strong household balance sheets. Business outlays for new equipment and software are expected to increase at a rate consistent with a moderate expansion in business output and to be supported by continuing declines in the user cost of high-technology capital equipment and by favorable financial conditions. In addition, the solid expansion of economic activity abroad should maintain the rising demand for U.S. exports of goods and services.

Decreased pressures from the costs of energy and other commodities, in an environment of moderate economic expansion and well-anchored longer-run inflation expectations, are expected to contribute to further easing in inflation. In addition, increases in productivity should help to limit cost pressures.

Economic and Financial Developments in 2006 and Early 2007

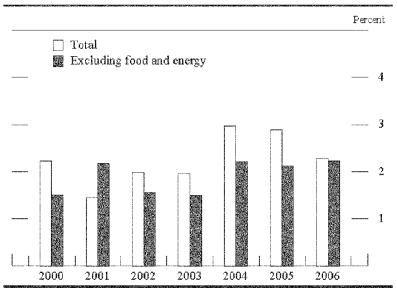
The especially brisk pace of economic activity in early 2006 primarily reflected a rebound after hurricane-related disruptions in the autumn of 2005. During the rest of the year, however, economic activity slowed to a pace somewhat below the average rate of recent years. Real GDP

Change in real GDP, 2000–06



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

Change in PCE chain-type price index, 2000–06



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

is reported to have increased at an average annual rate of 2¾ percent over the final three quarters of 2006, down from the average 3¼ percent pace in 2004 and 2005. The slowdown principally was the result of the contraction in residential construction, which intensified later in the year, and the marked decline in production of light motor vehicles in the second half of the year as manufacturers took steps to trim dealers' inventories. In other sectors of the economy, consumer spending remained strong as employment and income made further solid gains, and business outlays for new structures and equipment rose considerably over much of the year. Financial market conditions were generally supportive of economic expansion in 2006. Equity markets recorded sizable gains, and long-term interest rates rose only modestly from historically low levels. Risk spreads on corporate bonds remained narrow or declined further. Overall economic conditions were such that businesses maintained a steady pace of hiring, and the unemployment rate moved down further.

Consumer price inflation, as measured by the rise in the PCE price index, moved down in the second half of 2006 after having stepped up in the first half. Energy prices, which rose during the first half and turned sharply downward later in the year, played an important role in shaping the contour of total consumer price inflation. In addition, core PCE price inflation eased modestly over the second half of 2006. Apparently influenced by incoming data on inflation and economic activity, measures of long-term inflation expectations rose early in the year but ended the year slightly lower than at the beginning. Nonetheless, core PCE price inflation for the year as a whole—at 2¼ percent—was a bit higher than in the preceding year, which perhaps reflected in part the high level of resource utilization.

The Household Sector

Consumer Spending

The rapid increase in consumer spending in 2006 was supported by rising employment, gains in real income, increases in household wealth, and favorable financial conditions. Over the four quarters of 2006, real PCE rose 3¾ percent—faster than in 2005 and at roughly the same rate as in 2004. The rise in consumer outlays was particularly robust in the first quarter of 2006 but then moderated in the middle of the year, when households' gains in real income slowed and consumer sentiment softened. Consumer spending rose briskly again in the fourth quarter of the year as gains in real income picked up and consumer confidence improved.

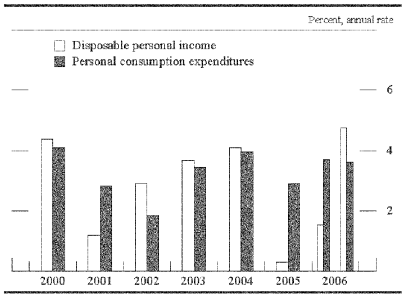
Household spending for new motor vehicles slowed in 2006; sales of 16.5 million new light vehicles (cars, sport-utility vehicles, and pickup trucks) were below the average of nearly 17 million sold in the preceding two years. Moreover, households' apparent concerns about elevated gasoline prices, particularly early in the year, shifted the composition of light vehicle sales toward more fuel-efficient autos and away from light trucks and SUVs. The shift helped boost the share of total sales captured by foreign producers because they tend to offer more fuel-efficient vehicles.

Real PCE for goods other than motor vehicles rose 4¾ percent over the four quarters of 2006, about in line with the brisk average pace in the preceding two years. Households increased their spending for a broad range of consumer goods, though the rise was particularly strong for electronic equipment and other durables. Real spending on gasoline remained about constant in the first half of the year but increased in the second half as prices fell. Consumer spending for services maintained a moderate pace of growth; expenditures in this category rose 2¾ percent in 2006, about the same average pace as in 2004 and 2005.

In 2006, real household income was boosted by gains in wage and salary income and the increased purchasing power resulting from the deceleration in overall consumer prices. Labor income received by households rose both because of gains in real hourly wages and because of sustained increases in employment. However, the pickup in real after-tax income was damped because tax payments made by households increased at a rate greater than that for income. The acceleration in tax payments likely reflected, at least in part, several factors: tax payments on larger capital gains realizations, which are excluded from income in the national income and product accounts (NIPA); gains in real income that moved some households into higher tax brackets; and possibly a further shift in the distribution of income toward high-income households that typically face higher tax rates. All told, real after-tax income rose 3 percent over the four quarters of 2006, up from the negligible gain posted in 2005 but a little below the average rate of increase in 2003 and 2004.

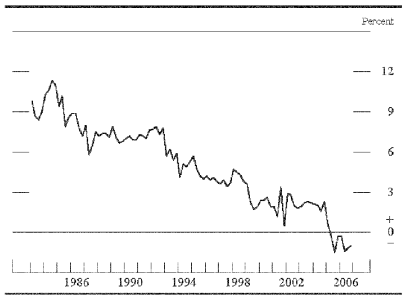
The rise in after-tax income in 2006 was outpaced by increases in household spending. As a result, the personal saving rate declined further in 2006 and averaged negative 1 percent for the year as a whole. Households apparently were inclined to increase their spending further above their disposable income, at least in part, because their wealth continued to rise. The ratio of household net worth to income, which has been trending higher since 2003, inched up further in 2006. Although increases in the value of homes slowed significantly, the value of corporate equities held by households both indirectly—such as in mutual funds and retirement accounts—and directly appreciated considerably.

Change in real income and consumption, 2000–06



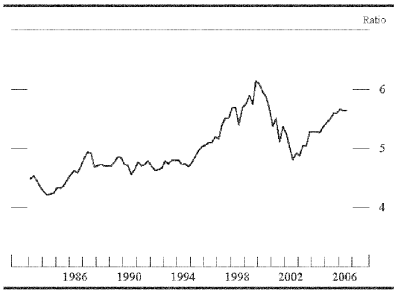
SOURCE: Department of Commerce, Bureau of Economic Analysis.

Personal saving rate, 1983–2006



NOTE: The data are quarterly and extend through 2006:Q4.
SOURCE: Department of Commerce, Bureau of Economic Analysis.

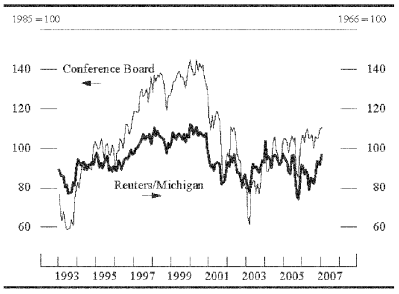
Wealth-to-income ratio, 1983–2006



NOTE: The data are quarterly and extend through 2006: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.

Consumer sentiment deteriorated in the first half of 2006, according to the Reuters/University of Michigan Surveys of Consumers (Reuters/Michigan). In the spring, consumer confidence had moved to its lowest level for the year, probably in part because energy prices had surged. The subsequent decline in energy prices, along with the rise in the stock market and reductions in the unemployment rate, boosted consumer confidence in the second half of the year. On net, the Reuters/Michigan index of consumer sentiment was a shade higher at the end of 2006 than at the beginning of the year; sentiment moved up further in early 2007 to near the upper end of its range since 2003.

Consumer sentiment, 1993–2007



NOTE: The data are monthly and extend through January 2007.
SOURCE: The Conference Board and Reuters/University of Michigan Surveys of Consumers.

Residential Investment

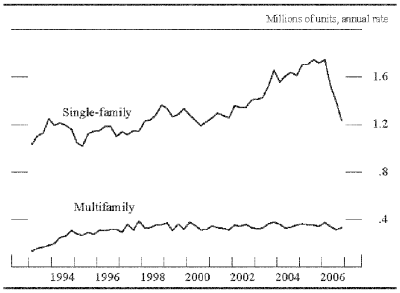
The deterioration of conditions in the housing market played a significant role in restraining the pace of economic expansion in 2006. The demand for new and existing homes began to weaken in the middle of 2005, and the subsequent decline steepened through the first half of 2006. As a result, the inventory of unsold new homes relative to sales rose sharply. Apparently prompted by lower demand and excessive inventories, homebuilders began to cut back on the pace of new construction near the beginning of 2006, and the decline in activity continued throughout the year. Later in the year, however, some indicators were hinting that the demand for housing was starting to stabilize.

By the middle of 2006, sales of both new and existing homes had fallen dramatically to a pace that was about 15 percent below that of a year earlier. Concurrently, inventories of unsold homes relative to sales rose considerably above the level that had prevailed during the period of robust housing demand from the late 1990s into 2005. By the third quarter of 2006, the backlog of unsold new homes had reached 6¾ months' supply, and the stock of existing homes for sale had risen to about 7 months' supply—both well above the average of about 4½ months' supply of new and existing homes in 2005. By the end of 2006, however, there were tentative signs that the demand for homes was stabilizing. The decline in sales of new and existing homes appeared to bottom out in the summer, and sales were roughly constant over the later part of the year. In the fourth quarter, builders' inventories of unsold new homes were reported to have edged down a bit from their third-quarter level, while the stock of existing homes for sale remained about the same as in the third quarter. Despite these developments, the extent of any improvement in the inventories of unsold homes is obscured by the failure of these figures to account for recorded sales of new homes that are subsequently canceled.

The drag on new residential construction in 2006 imposed by the contraction in home sales and the buildup of inventories was significant. Both the number of permits issued for new single-family homes and the number of home starts dropped sharply. As of the fourth quarter of 2006, new single-family homes were started at an annual rate of 1.23 million units, almost 30 percent below the average pace in 2005; permits were down by a similar amount. In contrast to the marked slackening in construction of new single-family homes, the rate of starts of new multifamily homes in 2006, at 337,000 units, was about the same as in the preceding several years.

Housing activity, as measured by real expenditures on residential structures in the NIPA, trimmed ¼ percentage point from the rate of real GDP growth in the first half of 2006, but the drag intensified to subtract about

Private housing starts, 1993–2006

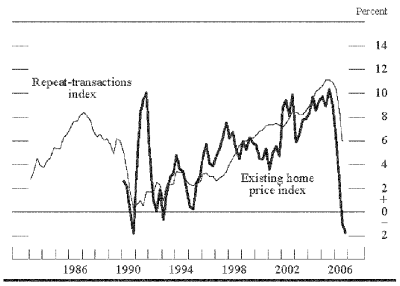


NOTE: The data are quarterly and extend through 2006:Q4.
SOURCE: Department of Commerce, Bureau of the Census.

1¼ percentage points from the annual rate of increase in real GDP in the second half. For 2006 as a whole, the contraction in real residential investment lowered the annual rate of growth in real GDP ¾ percentage point after having added ½ percentage point, on average, to the rate from 2003 through 2005.

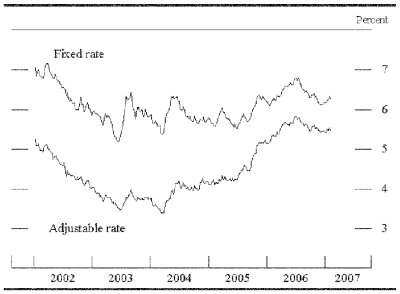
The rate of house-price appreciation slowed substantially in 2006 after several years of very rapid gains. The repeat-transactions index of home prices published by the Office of Federal Housing Enterprise Oversight (OFHEO) increased at an annual rate of only 1½ percent in the third quarter of 2006, down substantially from average gains of about 10 percent in 2004 and 2005. The OFHEO index attempts to control for the quality of existing single-family homes sold by using prices of homes involved in repeat

Change in prices of single-family houses, 1983–2006



NOTE: The data are quarterly, and change is from one year earlier. The repeat-transactions index extends through 2006:Q3. For the years preceding 1991, that index includes appraisals associated with mortgage refinancings; beginning in 1991, it includes purchase transactions only. The existing home price index extends through 2006:Q4.
SOURCE: For repeat transactions, Office of Federal Housing Enterprise Oversight; for existing home prices, National Association of Realtors.

Mortgage rates, 2002–07



NOTE: The data, which are weekly and extend through February 7, 2007, are contract rates on thirty-year mortgages.
SOURCE: Federal Home Loan Mortgage Corporation.

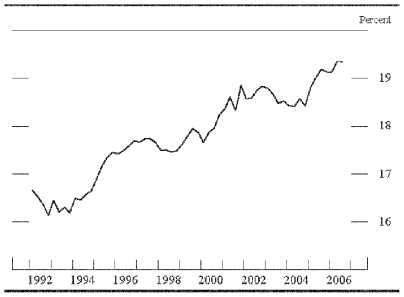
transactions. The increase in the OFHEO house-price index over the four quarters ending in the third quarter of 2006 (a calculation that smoothes through some of the quarterly volatility in the data) was 6 percent, the smallest four-quarter increase since the late 1990s. The average price of existing single-family homes sold, which is published by the National Association of Realtors (NAR) and does not control for the types of homes sold, declined about 2 percent over the four quarters of 2006, compared with average gains of roughly 9 percent in 2004 and 2005. The outright decline in the NAR index of home prices relative to the deceleration in the constant-quality OFHEO home-price index suggests that the composition of existing homes sold shifted toward lower-priced homes.

The cost of mortgage financing increased in the first half of 2006, but rates decreased in the second half. The average rate for a thirty-year fixed-rate mortgage was 6¼ percent at the end of 2006, about the same as at the beginning of the year. The average for a one-year adjustable-rate mortgage declined also in the second half and stood at 5½ percent at the end of 2006, about ¼ percentage point above the level at the start of the year. According to respondents to the Reuters/Michigan survey, relatively low mortgage rates and the perception that purchase prices were more favorable improved their assessment of homebuying conditions in the second half of 2006.

Household Finance

Household sector debt is estimated to have slowed from the robust 11¾ percent increase posted in 2005 to a still-vigorous 8¼ percent in 2006. The deceleration reflected a drop in the pace of mortgage debt growth from about 14 percent in 2005 to less than 9 percent in 2006. Despite

Household financial obligations ratio, 1992–2006

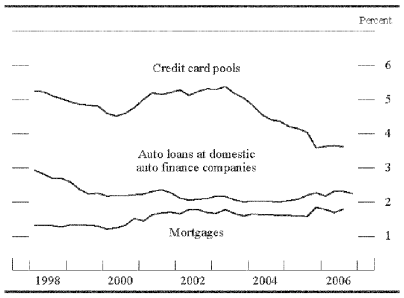


NOTE: The data are quarterly and extend through 2006:Q3. The financial obligations ratio equals the sum of required payments on mortgage and consumer debt, automobile leases, rent on tenant-occupied property, homeowner's insurance, and property taxes, all divided by disposable personal income.
SOURCE: Federal Reserve Board.

the reduction in mortgage borrowing, home equity lending remained active, and the gross volume of cash-out refinancing exceeded 2005 levels. Meanwhile, consumer debt expanded only moderately in 2006.

Although household indebtedness increased less rapidly in 2006 than in 2005, it still outpaced the growth of disposable personal income. In addition, the rise in interest rates contributed to higher debt service payments, and the household financial obligations ratio continued its upward trend of the past decade to reach a record high. Evidence to date suggests that most households have been able to meet their debt service obligations, although there are indications of growing strains among some borrowers. Delinquency rates on subprime residential mortgages with variable interest rates have increased markedly; still, delinquency rates on other mortgages and consumer loans have remained low. Household bankruptcy filings during 2006 ran at a pace well below the average of the preceding several years. Bankruptcies likely were damped in 2006 by the decisions of some households to file before the implementation of more-stringent bankruptcy requirements in October 2005. However, even allowing for such an effect, the recent pace is low relative to pre-reform norms.

Delinquency rates on selected types of household loans, 1998–2006



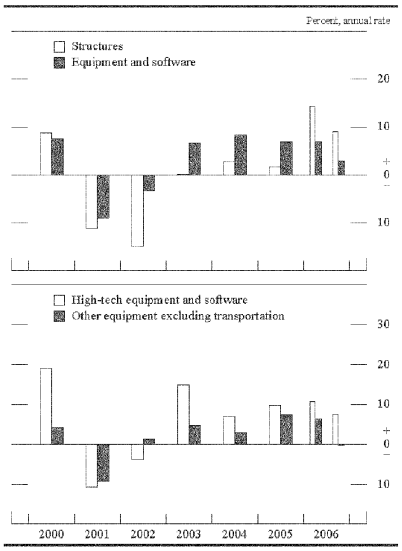
NOTE: The data are quarterly. The data for credit card pools and mortgages extend through 2006:Q3; the rate for auto loans extends through 2006:Q4.
SOURCE: For credit cards, Moody's Investors Service; for auto loans, the financing subsidiaries of the three major U.S. automobile manufacturers; for mortgages, Mortgage Bankers Association.

The Business Sector

Fixed Investment

Total real business fixed investment rose 6¾ percent over the four quarters of 2006, up from a 5½ percent increase in 2005 and about the same pace as in 2004. In general, the fundamentals supporting business capital

Change in real business fixed investment, 2000–06



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

spending remained favorable in 2006: The strong rise in profits continued to help firms maintain substantial liquid assets, user costs for equipment declined further, and interest rates and credit spreads remained relatively low. Although the pace of real business outlays for equipment and software slowed somewhat in 2006, investment in nonresidential structures rose 11¾ percent. Capital spending was quite robust during most of the year, adding about 1 percentage point to the annual rate of increase in real GDP over the first three quarters, but it decelerated sharply in the fourth quarter. The deceleration reflected, in part, a slowing in spending for business structures from its brisk pace earlier in the year, a drop in outlays for transportation equipment, and some weakness in purchases of equipment related to construction and motor vehicle manufacturing.

Real investment in high-technology equipment rose 9 percent in 2006, about the same average annual pace as in the preceding two years. Further decreases in the prices of high-technology equipment continued to reduce the user cost of this type of equipment. Real business spending for computing equipment increased 14½ percent, and software spending posted an 8 percent gain, both roughly comparable to their average rates of increase in the previous two years. Business outlays for communications equipment rose almost 7 percent in 2006. Spending for communications equipment was particularly robust in the early part of the year and was likely boosted in part by spending to replace equipment damaged by the hurricanes in the autumn of 2005. Investment in communications equipment last year continued to be supported by demand from telecommunications service providers that were expanding their broadband networks.

Real business investment in transportation equipment—typically a volatile category of investment—was about unchanged on net in 2006. For motor vehicles, business spending increased less than 1 percent over the year. Purchases of light vehicles weakened, partly because of cutbacks in sales to rental companies. In contrast, business outlays for medium and heavy trucks accelerated in 2006, reportedly in anticipation of new emissions regulations by the Environmental Protection Agency that went into effect at the beginning of 2007. New orders for medium and heavy trucks reached new highs early in 2006, and production and sales remained strong through the end of the year. Outlays for new aircraft were brisk in early 2006, but they were depressed over the remainder of the year; all told, aircraft investment declined more than 15 percent for the year as a whole.

Real investment in equipment other than high-tech and transportation goods—a broad category that represents about half of total nominal business spending for equipment and software—rose at an average annual rate of 5½ percent during the first three quarters of 2006. However, spending for these capital goods softened in the final quarter of the year. Although the declines in the fourth quarter were generally broad based, they were led by decreases in spending for equipment related to construction and motor vehicle manufacturing. However, the backlog of orders for capital goods such as industrial machinery and other types of heavy equipment remained substantial at the end of 2006, and it should sustain production and shipments of these items in early 2007.

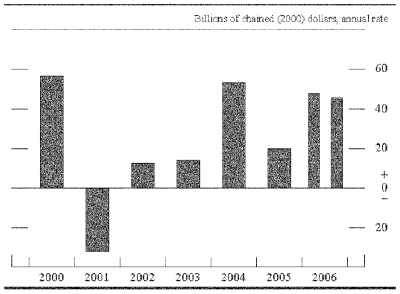
Real outlays for nonresidential construction increased 11¾ percent in 2006 after having been little changed since 2003. However, the rise in business construction spending slowed near the end of 2006 from its rapid pace earlier in the year; outlays increased at an annual rate of only about 3 percent in the fourth quarter. For 2006 as a whole, sizable gains were posted for office, retail, and industrial buildings. In addition, outlays for drilling and mining structures associated with energy exploration were strong. At the end of 2006, forward-looking indicators for nonresidential construction activity appeared to be favorable: Vacancy rates for buildings in both the office and industrial sectors, which peaked a few years ago, continued to drift down, and the vacancy rate for retail buildings remained at the low level that has prevailed since 2000.

Inventory Investment

In the first half of 2006, dealer stocks of motor vehicles rose noticeably as sales slowed, particularly for light trucks. The increase in the prices of gasoline earlier in the year appeared to have reduced consumers' demand for light trucks and SUVs, which tend to be less fuel efficient. Dealers' inventories of these vehicles reached an elevated 90 days' supply at the end of the second quarter. As a result, motor vehicle manufacturers scaled back the production of light trucks over the second half of 2006, which helped to reduce dealers' inventories during that period. Nonetheless, at the end of 2006, inventories of light vehicles still appeared to be above desired levels. Manufacturers cut production further in January of this year, helping them make additional progress in reducing the stock overhang.

Excluding motor vehicles, inventories held by businesses in the manufacturing and trade sectors appeared generally to be well aligned with sales in the first half of 2006. However, later in the year, a variety of indicators suggested that some businesses accumulated an undesired level of stocks. The book value of manufacturing and trade inventories (excluding motor vehicles) rose relative to sales from September through November. The increases were particularly noticeable for firms that supply the construction and motor vehicle sectors, although increases

Change in real business inventories, 2000–06



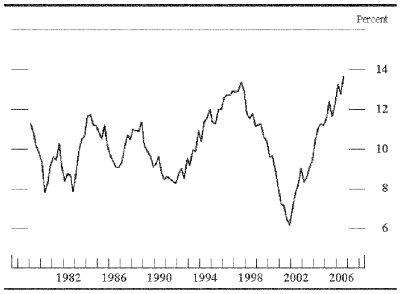
SOURCE: Department of Commerce, Bureau of Economic Analysis.

were apparent in a few other sectors as well. Survey data also suggested that inventories for some businesses were viewed as too high. However, manufacturers outside of the motor vehicles sector appear to be making relatively prompt adjustments to their production, which to date seem to be limiting the extent of undesired stockbuilding.

Corporate Profits and Business Finance

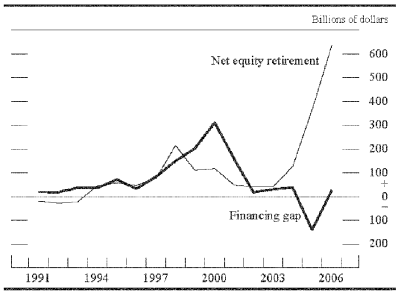
Profits of nonfinancial corporations extended their upward move, pushing the ratio of before-tax profits to income in this sector to nearly 14 percent, the highest level reached since 1969. In the third quarter, operating earnings per share for S&P 500 firms came in 20 percent above levels

Before-tax profits of nonfinancial corporations as a percent of sector GDP, 1979–2006



NOTE: The data are quarterly and extend through 2006:Q3. Profits are from domestic operations of nonfinancial corporations, with inventory valuation and capital consumption adjustments.
SOURCE: Department of Commerce, Bureau of Economic Analysis.

Financing gap and net equity retirement at nonfinancial corporations, 1991–2006



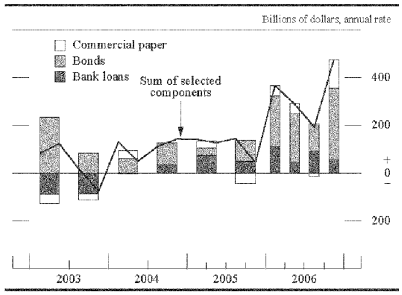
NOTE: The data are annual; the observations for 2006 are based on partially estimated data. The financing gap is the difference between capital expenditures and internally generated funds, adjusted for inventory valuation. Net equity retirement is the difference between equity retired through share repurchases, domestic cash-financed mergers, or foreign takeovers of U.S. firms and equity issued by domestic companies in public or private markets. Equity issuance includes funds invested by private equity partnerships and stock option proceeds.
SOURCE: Federal Reserve Board, flow of funds data.

of a year earlier. About two-thirds of firms in the S&P 500 have reported earnings for the fourth quarter. Current market estimates of earnings per share for S&P 500 firms call for roughly 10 percent growth in the fourth quarter over year-earlier levels. Earnings growth was widespread across sectors in 2006 but was particularly strong for financial firms.

Firms' capital expenditures exceeded internal funds raised in 2006, an indication that businesses funded investments not only with current cash flow but also with external funds and liquid assets. Borrowing by nonfinancial firms picked up in 2006 in association with increased real investment as well as with extensive retirements of equity, which resulted from record share repurchases and heavy merger and acquisition activity. Net bond issuance proceeded at a faster clip than in the past several years. Similarly, commercial paper issuance was the strongest it had been since 2000, and commercial and industrial lending by banks was rapid as well. The Federal Reserve's Senior Loan Officer Opinion Survey on Bank Lending Practices revealed that a significant net fraction of respondents to that survey eased credit standards and terms on commercial and industrial loans during 2006. Bankers indicated that they were responding to more-aggressive competition and greater liquidity in the secondary market for such loans. Loan officers also reported that a contributing factor was an increased tolerance for risk.

The expansion of commercial mortgage debt in 2006 remained rapid by historical standards but fell off from the swift pace of 2005. The deceleration likely reflected

Selected components of net financing for nonfinancial corporate businesses, 2003–06

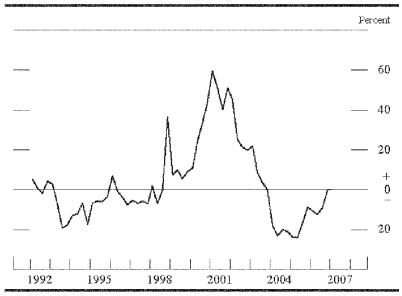


NOTE: The data for the components except bonds are seasonally adjusted. The data for the sum of selected components are quarterly. The data for 2006:Q4 are estimated.
SOURCE: Federal Reserve Board; Securities Data Company; and Federal Financial Institutions Examination Council, Consolidated Reports of Condition and Income (Call Report).

the rise in mortgage rates and a net tightening of credit standards for these loans—an explanation consistent with responses to the loan officer survey.

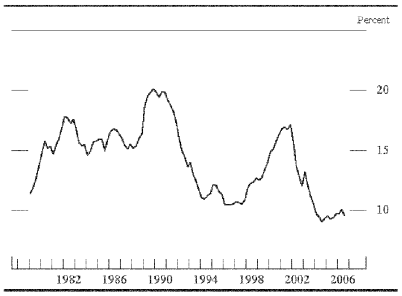
Gross public issuance of equity by nonfinancial corporations in 2006 roughly maintained the moderate pace of the past couple of years, and private equity issuance appears to have risen a bit to finance buyouts and other restructurings. Still, net equity issuance turned more negative as equity retirements from cash-financed

Net percentage of domestic banks tightening standards on commercial and industrial loans to large and medium-sized borrowers, 1992–2007



NOTE: The data are drawn from a survey generally conducted four times per year; the last observation is from the January 2007 survey, which covers 2006: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.

Net interest payments of nonfinancial corporations as a percent of cash flow, 1979–2006

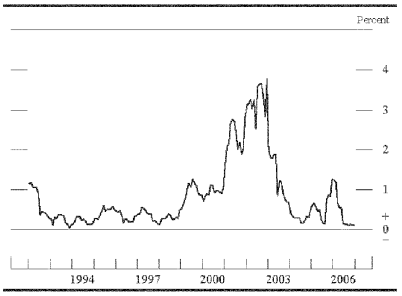


NOTE: The data are quarterly and extend through 2006:Q3.
SOURCE: Department of Commerce, Bureau of Economic Analysis.

mergers and acquisitions and share repurchases increased considerably.

On balance, despite increased borrowing and net equity retirements, the strength of corporate earnings growth has left the credit quality of nonfinancial firms solid. Balance sheet liquidity remains high, and corporate leverage is near historical lows. In addition, net interest payments relative to cash flow remained near the low end of the range seen over the past two decades. The six-month trailing bond default rate fell during the first half of the year as defaults by some large firms in the troubled airline and automobile sectors in late 2005 dropped out of the series, and it was near zero throughout the second half of 2006. Delinquency rates on business loans remained quite low.

Default rate on outstanding corporate bonds, 1992–2006



NOTE: The data are monthly and extend through December 2006. The rate for a given month is the face value of bonds that defaulted in the six months ending in that month, multiplied by two to annualize the defaults and then divided by the face value of all bonds outstanding at the end of the calendar quarter immediately preceding the six-month period.
SOURCE: Moody's Investors Service.

The Government Sector

Federal Government

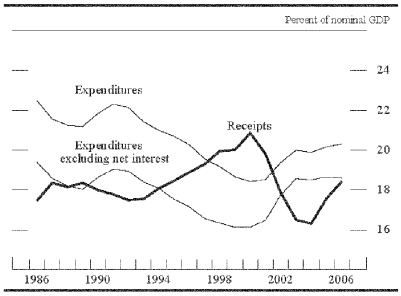
The deficit in the federal unified budget narrowed further during the past year. The unified budget recorded a deficit of $248 billion in fiscal year 2006—$70 billion smaller than in the previous fiscal year. The federal deficit in fiscal 2006 was a bit less than 2 percent of nominal GDP, significantly lower than its recent fiscal year peak of more than 3½ percent of GDP in 2004. In fiscal 2006, outlays rose about in line with nominal GDP, but receipts increased at a faster pace. From October through December—the first quarter of fiscal 2007—the federal deficit was almost $40 billion less than in the same period a year earlier, as the rise in receipts continued to outpace the growth in outlays. The latest projections from the Congressional Budget Office and the Administration anticipate that the unified deficit in fiscal 2007 will be smaller as a percentage of nominal GDP than it was in fiscal 2006. Although the unified deficit has improved recently, the federal budget will face the mounting pressures of providing Social Security and health benefits to a rapidly growing number of beneficiaries as the baby-boom generation ages in coming years.

In fiscal 2006, nominal federal receipts rose 11¾ percent and were equivalent to almost 18½ percent of nominal GDP, substantially higher than their recent fiscal year low of 16¼ percent of GDP in 2004. Income tax receipts from individuals outpaced the rise in taxable personal income (as measured in the NIPA), while surging corporate tax payments about matched the robust growth in profits. As noted above, the increase in individual income tax liabilities relative to taxable income in the NIPA appears to have reflected, at least in part, taxes on larger capital gains realizations (which are excluded from NIPA income), the effect of some taxpayers moving into higher tax brackets as their real incomes increased, and possibly a further shift in the distribution of income toward high-income households that typically face higher tax rates. In the first quarter of fiscal 2007, revenues were more than 8 percent greater than in the same period a year earlier, as both individual and corporate tax payments continued to rise briskly.

Nominal federal outlays increased about 7½ percent in fiscal 2006 and were about 20¼ percent of nominal GDP, well above their most recent fiscal year low of less than 18½ percent of GDP in 2000. Net interest payments increased 23 percent in fiscal 2006, as interest rates rose and federal debt continued to grow. Outlays for Medicare increased 10½ percent, reflecting in part new benefits payments associated with the Part D prescription drug program, which started in January 2006. At the same time, outlays for Medicaid declined a bit, to some extent because of a shift of some Medicaid payments to Medicare Part D. Spending for disaster relief and national flood insurance was almost $28 billion greater in fiscal 2006 than in the previous fiscal year, primarily owing to the federal government's response to the hurricanes in the autumn of 2005. Outlays for defense in fiscal 2006 slowed to their lowest rate of increase since fiscal 2001, although the rise was still about 6 percent. In the first quarter of fiscal 2007, total federal outlays were only 1 percent greater than those in the same period a year earlier; in this period, defense spending was 12 percent above its year-earlier level, but outlays related to disaster relief and flood insurance were markedly lower than they were a year earlier.

As measured in the NIPA, real federal expenditures on consumption and gross investment—the part of federal spending that is a direct component of real GDP—

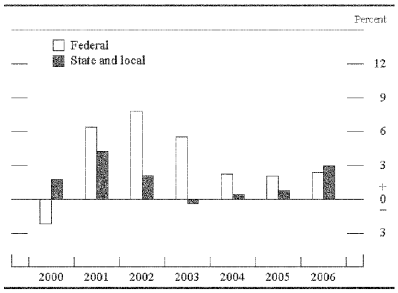
Federal receipts and expenditures, 1986–2006



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.

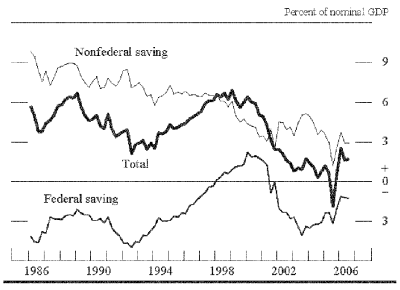
SOURCE: Office of Management and Budget.

Change in real government expenditures on consumption and investment, 2000–06



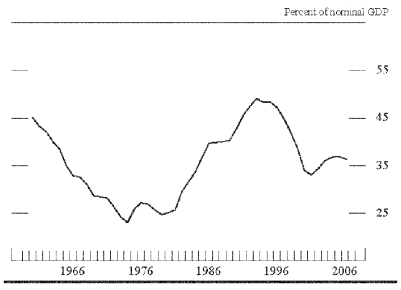
SOURCE: Department of Commerce, Bureau of Economic Analysis.

Net saving, 1986–2006



NOTE: The data are quarterly and extend through 2006: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.

Federal government debt held by the public, 1960–2006



NOTE: The final observation is for 2006: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.

increased 2½ percent over the four quarters of calendar year 2006 and contributed about ¼ percentage point to the growth rate of real GDP in that year. The increase was the result of a pickup in real defense purchases, which rose more than 4 percent during calendar 2006 after two years of smaller increases. At the same time, real nondefense purchases declined more than 1 percent after having risen, on average, about 2 percent per year over the preceding two years.

The reduction in the unified deficit in the past two years implies that the federal government required less national saving to finance its operations. However, nonfederal saving, which excludes borrowing by the federal government from total net national saving, remained relatively low. Although the saving rate for private business and state and local governments has increased in recent years, the improvement has been offset by declines in the personal saving rate. Total national saving, net of depreciation, was 2 percent of nominal GDP in the third quarter of 2006. The recent national saving rate is an improvement from the lows of a few years ago, but it has been insufficient to avoid an increasing reliance on borrowing from abroad to finance the nation's capital spending.

Federal Borrowing

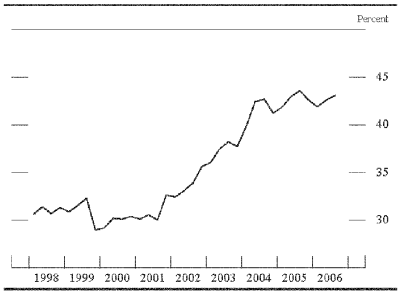
The Treasury responded to the reduction in the federal deficit in 2006 by paying down Treasury bills over the course of the year and by trimming the gross issuance of marketable Treasury coupon securities. As of the third quarter of 2006, the quantity of federal debt held by the public as a percentage of nominal GDP had declined about ½ percentage point, to about 36 percent.

Early in the first quarter of 2006, federal debt subject to the statutory limit reached the then-current ceiling of $8.2 trillion. The Treasury employed various methods to avoid breaching the limit until the Congress increased it to nearly $9 trillion in March. As of the end of December, the total amount of federal debt subject to the limit was $8.6 trillion.

In February, the Treasury auctioned thirty-year bonds for the first time since 2001. The offering was apparently well received, as was the reopening of the issue in August. The Treasury announced in August that it would issue thirty-year bonds on a quarterly basis beginning in 2007.

The acquisition of Treasury debt by foreigners slowed further in 2006 from its peak in 2004. However, out-

Treasury securities held by foreign investors as a share of total outstanding, 1998–2006



NOTE: The data are quarterly and extend through 2006:Q3.
SOURCE: Federal Reserve Board, flow of funds data.

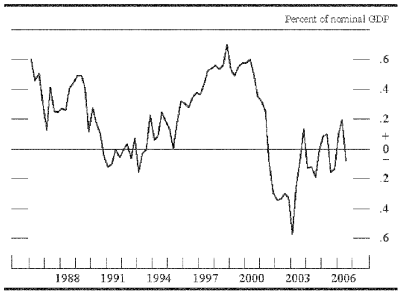
standing Treasury debt also grew more slowly, leaving the share of outstanding debt held by foreign investors little changed, on balance, from its average level over the preceding two years. According to Treasury data on international capital flows, foreigners (official and other) purchased considerably fewer U.S. Treasury coupon securities in 2006 than in 2005. The average proportion of nominal coupon securities purchased by foreign and international investors at auctions in 2006 about matched the average from the previous year at 16 percent, but it was down noticeably from an average level of 25 percent in 2004.

State and Local Government

The fiscal positions of state and local governments improved further in 2006. Apart from federal grants-in-aid, revenues rose at an annual rate of 7 percent over the first three quarters of 2006 after posting relatively strong gains in the preceding two years. Receipts from taxes on retail sales and on individual and corporate incomes continued to rise at a brisk pace; however, decreasing gains in house prices slowed the rise in property tax revenues in the third quarter of 2006 from the rapid pace in the previous two years. The sustained strength in total revenues, along with the efforts of states and localities to restrain spending for health care, has enabled these jurisdictions to step up spending on other programs and still rebuild their reserve funds. As measured in the NIPA, net saving by state and local governments excluding social insurance funds—a measure that is broadly similar to the surplus in an operating budget—was almost $4 billion during the first three quarters of 2006. States and localities generally have seen improvement in their fiscal positions recently, but in coming years most governments will have to face the budget pressures of providing pension and health benefits to an expanding number of retired employees, and the states' costs for Medicaid are expected to rise substantially as the baby-boom generation ages.

Real expenditures by state and local governments on consumption and gross investment, the component of these governments' spending that enters directly into the calculation of real GDP, rose 3 percent over the four quarters of 2006. That increase was the largest since 2001 and contributed about ¼ percentage point to the change in real GDP during the year. Real expenditures for investment rose 4¾ percent, largely because of a strong increase in real construction spending in the first half of the year. Spending for current consumption in real terms increased 2½ percent over the four quarters of 2006. Hiring by state and local governments stepped up last year. Of the cumulative increase in employment of 254,000 in 2006, about two-thirds of the jobs were in education.

State and local government net saving, 1986–2006



NOTE: The data, which are quarterly, are on a national income and product account basis and extend through 2006:Q3. Net saving excludes social insurance funds.
SOURCE: Department of Commerce, Bureau of Economic Analysis.

State and Local Government Borrowing

Borrowing by state and local governments dropped below its rapid 2005 pace amid improved fiscal positions and fewer advance refunding issues. Nonetheless, bond issuance for new capital expenditures, particularly for education and transportation, boosted long-term borrowing. Credit quality in the state and local sector rose substantially in 2006, as the number of credit-rating upgrades far exceeded the small number of downgrades.

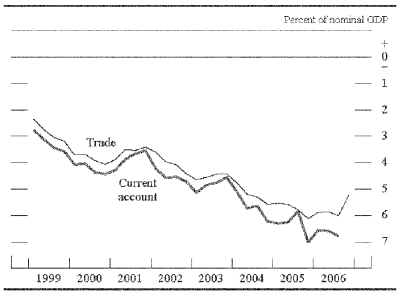
The External Sector

The U.S. current account deficit averaged $875 billion at an annual rate, or about 6½ percent of nominal GDP, in the first three quarters of 2006 (the latest available data). The deficit was wider than in 2005, partly because of a larger deficit on trade of goods and services. In addition, net investment income, which turned negative in the fourth quarter of 2005, remained negative in the first three quarters of last year, further expanding the current account deficit.

International Trade

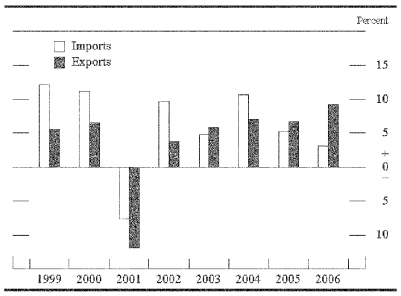
After widening through most of 2005, the nominal trade deficit leveled out in the first half of 2006, rose to a record high in August, and then narrowed noticeably through November (the latest available data). On average, the

U.S. trade and current account balances, 1999–2006



NOTE: The data are quarterly. For the trade account, the observation for 2006:Q4 is estimated. The data for the current account extend through 2006:Q3.
SOURCE: Department of Commerce.

Change in real imports and exports of goods and services, 1999–2006



SOURCE: Department of Commerce.

nominal trade deficit was wider in 2006 than in the previous year. Nominal imports of goods grew more slowly than exports did early last year and, after reaching late-summer peaks, dropped because of declines in both the price and volume of imported oil. Meanwhile, imports of services decelerated sharply in the second half of last year. In contrast, nominal exports of goods and services pushed upward steadily throughout the year and grew significantly faster than did nominal imports. Given that the level of exports was smaller than the level of imports, the faster export growth during 2006 was not enough to narrow the nominal trade deficit. Although the nominal trade deficit last year (through November, annualized) was wider in dollar terms, the trade deficit as a share of GDP, at just under 6 percent, was about the same as in 2005.

Real exports of goods and services grew a robust 9¼ percent last year. In the first quarter, growth was boosted by a catch-up of exports affected by hurricane damage in late 2005. Throughout the year, exports were supported by strong foreign economic activity. Real exports of goods rose 10¼ percent last year, a little faster than in the previous year. Export growth was spread fairly evenly across all major end-use categories, though exports of computers and semiconductors expanded noticeably more slowly than in 2005. By destination, exports to China and other emerging Asian economies grew very rapidly, as did those to South America. Exports to Mexico and western Europe rose at a more modest pace. Real exports of services were up a solid 6¾ percent for the year, double the pace of 2005.

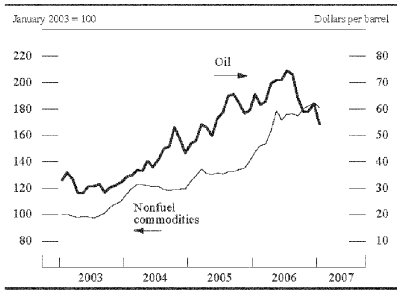
Prices of exported goods rose at a 3½ percent rate last year, a little faster than their pace in 2005. Reflecting the effects of very large jumps in prices of industrial supplies, particularly fuels and metals, export prices moved up sharply in the second and third quarters; they decelerated toward the end of the year as prices of exported fuels retreated from their high levels and as prices of exported metals moved up more slowly.

Real imports of goods and services rose 3 percent last year, more slowly than in the previous year. As with the growth in real exports, real import growth got off to a quick start last year amid robust domestic growth. But import growth slowed, on average, in the middle quarters of the year, along with U.S. real GDP growth, and real imports fell in the fourth quarter as a result of a sharp drop in oil and natural gas imports. Despite some fourth-quarter declines, for the year imports increased in every major end-use category except petroleum and natural gas. Imports of services rose more than 5 percent last year, a step-up from the previous year's sluggish pace.

Prices of imported non-oil goods increased less than 1 percent, on balance, in 2006 despite some wide gyrations. After falling in the first quarter, prices reversed course, surged upward, and then cooled in the fourth quarter. The quarterly pattern was driven by movements in nonfuel commodity prices, which soared in the second and third quarters before leveling off in the fourth quarter.

Metals figured prominently among the nonfuel commodities that boosted trade prices last year. Prices for a variety of metals—including copper, aluminum, nickel, and zinc—skyrocketed in the second quarter. Factors contributing to the surge in prices included growing demand, particularly from developing countries, low levels of inventories for some metals, and perhaps increased speculative demand. Prices for nickel and zinc continued to move up throughout the year. In the second half of the year, aluminum prices trended sideways, and copper prices moved down from their peaks as inventory and supply conditions improved somewhat. For most of these metals,

Prices of oil and of nonfuel commodities, 2003–07



NOTE: The data are monthly and extend through January 2007. 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.

those price trends have continued this year. An exception is zinc, the price of which has plummeted.

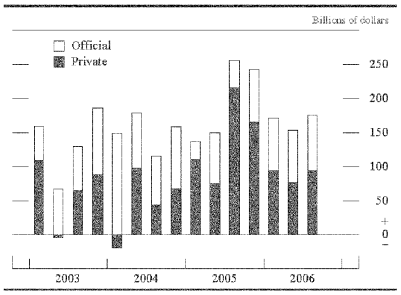
The spot price of West Texas intermediate crude oil averaged $66 per barrel in 2006, nearly $10 per barrel higher than in 2005; moreover, crude oil prices were especially volatile last year. The spot price climbed from around $61 per barrel at the end of 2005 to a peak of $77 per barrel in August as violence in the Middle East, a shutdown of the Prudhoe Bay oil field in Alaska, and forecasts of an active hurricane season led to increased demand. In the event, oil supply was affected far less than anticipated by these factors, and oil prices declined over the next few months as demand dropped and elevated petroleum inventories were drawn down. Oil demand for heating was depressed by above-average temperatures in the Northern Hemisphere in the fourth quarter and in the early weeks of 2007, and the spot price fell further, to around $50 per barrel in mid-January, before moving back up to $58 per barrel at the end of the month. Far-dated futures prices began last year at about $60 per barrel, moved in a pattern similar to spot prices throughout most of the year, and averaged just over $61 per barrel in January 2007.

Notwithstanding the decrease of global oil prices since August, several factors continue to support these prices at historically elevated levels. Ongoing violence has diminished oil production in Iraq and Nigeria. The continuing dispute with Iran over its nuclear program threatens a possible curtailment of Iranian exports. Energy investment by international oil companies has been hampered in some countries, such as Russia and Venezuela, by increased government control of domestic energy industries. Moreover, in response to the recent decline in oil prices, OPEC has reduced its crude oil production to the lowest level since 2004. Oil demand over the past year has also increased modestly in developing countries despite high prices.

The Financial Account

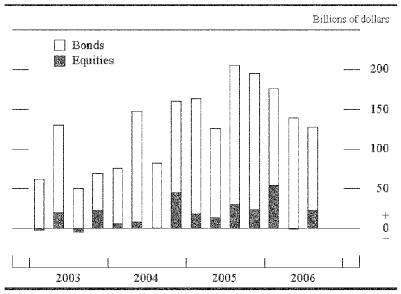
Foreign official inflows in the first three quarters of 2006 were above their 2005 pace but remained below the record levels of 2004. Most of these official inflows were attributable to Asian central banks and took the form of purchases of U.S. government securities, primarily bonds and mortgage-backed securities issued by government-sponsored enterprises (GSEs). Preliminary data indicate a slight easing of official purchases in the fourth quarter of 2006. Net private inflows slowed in the first quarter but have changed little since then.

U.S. net financial inflows, 2003–06



NOTE: The data are quarterly and extend through 2006:Q3.
SOURCE: Department of Commerce.

Net private foreign purchases of long-term U.S. securities, 2003–06



NOTE: The data are quarterly and extend through 2006:Q3.
SOURCE: Department of Commerce.

Foreign private purchases of U.S. securities in the second and third quarters of 2006 slowed slightly from the extraordinary pace set in the second half of 2005 and early 2006, but preliminary fourth-quarter data show recent demand to have been strong. More than half of private flows last year took the form of purchases of corporate bonds, and most of the remainder went toward investment in GSE bonds and corporate equities. On net, private foreigners purchased few U.S. Treasuries. Foreign direct investment flows into the United States remained robust.

Net purchases of foreign securities by U.S. residents, a financial outflow, set a record pace in the first three quarters of 2006. Preliminary data show a further surge in net purchases in the fourth quarter. Demand for foreign bonds by U.S. residents slightly exceeded that for foreign equities. After the expiration of the partial tax holiday implemented in the Homeland Investment Act of 2004, U.S. direct investment abroad dropped back to more normal levels.

The Labor Market

Employment and Unemployment

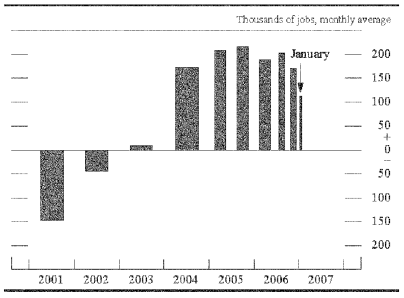
Labor markets remained strong in 2006. Nonfarm payroll employment increased 186,000 per month, on average, during the second half of 2006, a rate essentially the same as in the first half of the year. Employment rose 111,000 in January of 2007. The unemployment rate in the fourth quarter of last year—4½ percent—was at its lowest quarterly level since 2001, and it was little changed in January 2007.

In response to the contraction in homebuilding, hiring in the construction sector slowed considerably in the second and third quarters of 2006, and this sector shed workers in the fourth quarter. Although hiring for nonresidential building construction remained brisk for most of the year, the steep decline in housing starts curtailed the overall demand for construction workers. Employment in the manufacturing sector, which rose in the first half of 2006, declined in the second half as factory output slowed. From July to December, many of the factory layoffs were at makers of motor vehicles and parts and at producers closely tied to the construction industry. Outside of the construction and manufacturing sectors, employment generally increased at a solid pace in the second half of 2006, and hiring was particularly rapid in a number of service industries—especially those providing education and health services, professional and technical business services, and financial services.

As a result of the continued expansion of labor demand in 2006, the unemployment rate fell further. After remaining around 4¾ percent in the first three quarters of 2006, the unemployment rate edged down to 4½ percent in the fourth quarter. The tighter labor market was associated with a noticeable increase in employment among individuals who had not been participating in the labor force. In line with this cyclical tightening of the labor market, the labor force participation rate ticked up during 2006, from 66 percent in the first quarter to 66¼ percent in the fourth quarter, after a ¼ percentage point rise during 2005. The recent rise in the participation rate follows a period of decline beginning in the late 1990s that in part reflected some longer-term secular trends in labor force behavior. Those trends included a leveling off in the participation rate of women and an increase in the proportion of the workforce in older age groups, which have lower average participation rates.

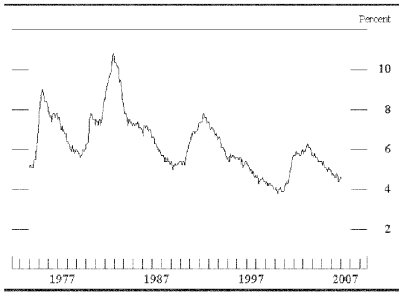
Other indicators also suggest that labor market conditions remained generally favorable during the second half

Net change in payroll employment, 2001–07



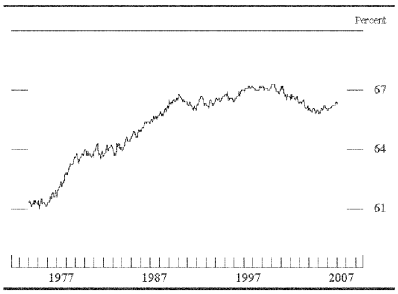
NOTE: Nonfarm business sector.
SOURCE: Department of Labor, Bureau of Labor Statistics.

Civilian unemployment rate, 1974–2007



NOTE: The data are monthly and extend through January 2007.
SOURCE: Department of Labor, Bureau of Labor Statistics.

Labor force participation rate, 1974–2007



NOTE: The data are monthly and extend through January 2007.
SOURCE: Department of Labor, Bureau of Labor Statistics.

of 2006. Layoffs remained low as new claims for unemployment insurance fluctuated around a relatively subdued level of 315,000 per week. In addition, data reported by the Bureau of Labor Statistics showed a further increase during the later part of the year in the rate of job openings as a percentage of private-sector employment.

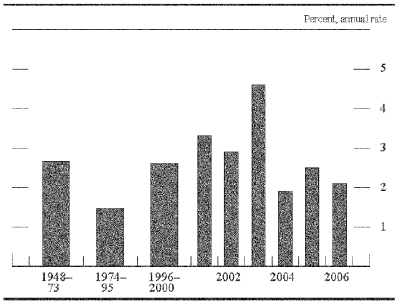
Productivity and Labor Compensation

The growth rate of labor productivity in the nonfarm business sector, which had slowed in 2004 and 2005 from an exceptionally rapid pace earlier in the decade, remained relatively subdued in 2006. Over the four quarters of 2006, output per hour of work in the nonfarm business sector increased 2 percent, compared with about a 3 percent average annual rate of increase during the first half of this decade and the second half of the 1990s. During that earlier period, productivity gains were spurred by the rapid pace of technological change, the growing ability of firms to use information and other technology to improve the efficiency of their operations, and increases in the amount of capital per worker. Despite the recent slowing in productivity growth, these underlying factors do not appear to have waned. Accordingly, the recent slowdown in labor productivity may be at least in part a temporary cyclical response to the moderation in the pace of economic activity in 2006 rather than a meaningful downshift in the longer-run trend.

As the labor market tightened in 2006, the rise in hourly labor compensation, which includes both wages and employer payments for employee benefits, stepped up for workers in the nonfarm business sector. In nominal terms, compensation per hour increased almost 5 percent over the four quarters of 2006, compared with an average 4 percent rise in the preceding two years. After adjusting compensation for increases in the PCE price index, real compensation per hour rose 3 percent in 2006, up from an average gain of about 1 percent in 2004 and 2005.

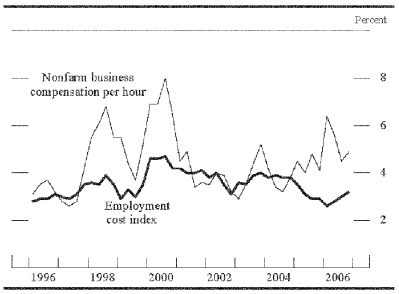
An alternative measure of employee compensation is the employment cost index (ECI) for private nonfarm businesses, which is based on a survey of firms conducted by the Bureau of Labor Statistics. According to this measure, nominal hourly compensation increased 3¼ percent in 2006, ¼ percentage point faster than in 2005. In real terms, the ECI for hourly compensation rose 1¼ percent last year after averaging a ½ percent increase over the

Change in output per hour, 1948–2006



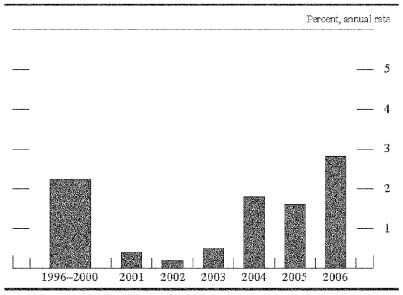
NOTE: Nonfarm business sector. Change for each multiyear period is measured from the fourth quarter of the year immediately preceding the period to the fourth quarter of the final year of the period.
SOURCE: Department of Labor, Bureau of Labor Statistics.

Measures of change in hourly compensation, 1996–2006



NOTE: The data are quarterly and extend through 2006:Q4. For nonfarm business compensation, change is over four quarters; for the employment cost index (ECI), change is over the twelve months ending in the last month of each quarter. The nonfarm business sector excludes farms, government, nonprofit institutions, and households. The sector covered by the ECI used here is the same as the nonfarm business sector plus nonprofit institutions. A new ECI series was introduced for data as of 2001, but the new series is continuous with the old.
SOURCE: Department of Labor, Bureau of Labor Statistics.

Change in unit labor costs, 1996–2006



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

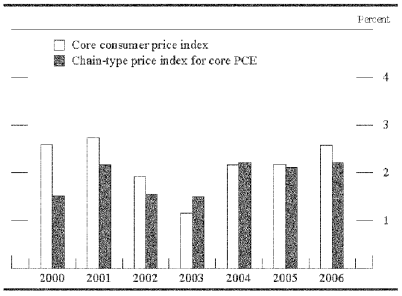
preceding two years. The nominal wages and salaries component of the ECI rose 3¼ percent in 2006, while the benefits component advanced 3 percent.

From the perspective of employers, the acceleration in hourly compensation in the nonfarm business sector last year boosted the average labor costs associated with producing a unit of output 2¾ percent, up from increases of about 1¾ percent in both 2004 and 2005. Although the rise in unit labor costs increased, firms' profit margins appeared to remain elevated in 2006 relative to longer-run standards.

Prices

Headline inflation slowed in 2006. The PCE chain-type price index rose 2 percent over the four quarters of

Change in core consumer prices, 2000–06



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, 2004–06

Percent

Price measure	2004	2005	2006
Chain-type			
Gross domestic product (GDP)	3.2	3.1	2.5
Gross domestic purchases	3.7	3.6	2.2
Personal consumption expenditures (PCE)	3.0	3.1	1.9
Excluding food and energy	2.2	2.1	2.3
Market-based PCE excluding food and energy	1.7	1.8	2.0
Fixed-weight			
Consumer price index	3.3	3.7	1.9
Excluding food and energy	2.1	2.1	2.6

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.

2006, a step-down from the 3 percent increase recorded in 2005. The drop in energy prices in the latter part of 2006 accounted for the deceleration in the headline number. Core inflation moved higher in the first part of 2006 but then eased toward the end of the year. On balance, core PCE prices rose about 2¼ percent over the four quarters of 2006, a little faster than the 2 percent increase in 2005. The market-based component of the core PCE price index—which excludes imputed prices that are not observed in market transactions and that often change irregularly—increased 2 percent in 2006, about ¼ percentage point more than in the previous year.

Energy prices recorded dramatic swings during 2006. PCE energy prices increased at an annual rate of about 15 percent in the first half of the year and declined at an annual rate of almost 17 percent in the second half. The sharp movements in consumer energy prices in 2006 were associated primarily with fluctuations in prices for crude oil. The changes in energy prices also were amplified by a widening in the margin of the retail price of gasoline over the associated cost of crude oil in the first half of the year and by some narrowing of that margin in the second half. On balance, the PCE energy price index decreased 4 percent over the four quarters of 2006.

Food price inflation remained fairly moderate in 2006. The PCE index for food and beverages increased 2¼ percent, roughly the same pace as in the preceding year. Retail prices of meat and poultry rose modestly for 2006, as robust demand was met by ample supplies of meat. Prices of wheat rose over the course of the year, and prices of corn and soybeans spiked at the end of the year in the wake of downward revisions to estimates of crop production. Prices of corn also were boosted during the year by increased demand for corn to produce ethanol. But the small share of wheat, corn, and soybeans in the total value of food production limited their effect on retail food prices. Prices for food consumed away from home, which are

influenced importantly by the costs of labor, energy, and other business inputs, increased 3¼ percent in 2006, a more rapid pace than that for prices of food consumed at home.

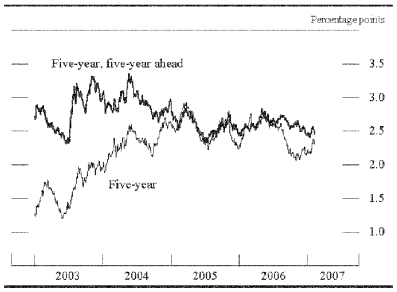
The core PCE price index accelerated to an annual rate of about 2½ percent in the first half of 2006 on the strength of pickups in the price indexes for both goods and services. In the spring, increases in housing rents were particularly sharp. The rise may have reflected in part a shift in demand toward rental housing as rising mortgage rates and lofty home prices made home purchases less affordable. The pass-through of higher energy costs to a broad range of goods and services also probably contributed to the acceleration in core consumer price inflation in the first half of 2006.

In the second half of 2006, core PCE price inflation edged down to an annual rate of just below 2¼ percent. The deceleration was the result of a decrease in core goods prices, which likely reflected in some measure the waning influence of energy prices. In contrast, core services inflation in the second half of the year remained at about the same pace as in the first half. Although housing rents rose more slowly in the second half of the year, their effect on the PCE for core services was mostly offset by faster price increases for medical care and a number of other services.

The swings in energy costs in 2006 were apparent in the prices of inputs used in the production and sale of final goods and services, especially of items for which energy costs represent a relatively large share of total production costs, including industrial chemicals, plastics, fertilizer, and stone and clay products. In addition, the prices of some commodities, such as a variety of metals, rose significantly in 2006 in response to strong worldwide demand. As a result, the core producer price index for intermediate goods, which excludes food and energy, rose 5¼ percent in 2006, up from the 4¾ percent increase in 2005. The index increased at an annual rate of 7¼ percent in the first half of 2006, but it decelerated to an annual rate of about 3¼ percent in the second half as energy costs declined.

For the year as a whole, measures of long-term inflation expectations remained well anchored, although short-term expectations were heavily influenced by fluctuations in energy prices. The Reuters/Michigan survey measure of the median expectation of households for inflation over the next twelve months was about 3 percent in December, down from its peak of 3¾ percent in August. Longer-term inflation expectations recorded in the Reuters/Michigan survey showed less variability. The median survey respondent in December expected the rate of inflation during the next five to ten years to be 3 percent, down from its peak of 3¼ percent in August. Other indicators

TIPS-based inflation compensation, 2003–07



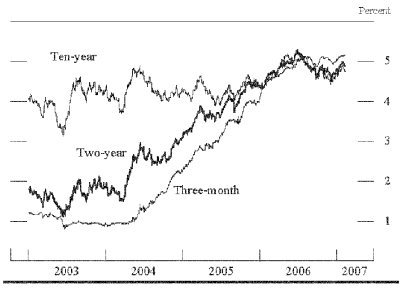
NOTE: The data are daily and extend through February 7, 2007. Based on a comparison of the yield curve for Treasury inflation-protected securities (TIPS) with the nominal off-the-run Treasury yield curve.
SOURCE: Federal Reserve Board calculations based on data provided by the Federal Reserve Bank of New York and Barclays.

likewise suggest that longer-run inflation expectations have remained 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 2006, a level that has been essentially unchanged since 1998. In addition, inflation compensation implied by the spread of yields on nominal Treasury securities over their inflation-protected counterparts stayed within the relatively narrow range of 2 percent to 2¾ percent during the year.

U.S. Financial Markets

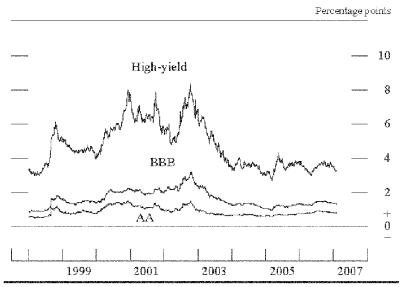
Financial conditions in the United States supported economic growth in 2006. Yields on long-term Treasury securities climbed a bit, on balance, but stayed low by historical standards, while strong corporate profits helped fuel substantial gains in equity markets. Liquid corporate balance sheets and low corporate leverage helped keep risk spreads on corporate bonds narrow. Meanwhile, business borrowing picked up to a rapid pace, spurred in part by a rise in merger and acquisition activity. In the residential real estate sector, mortgage borrowing slowed markedly, as house prices decelerated, especially in the second half of the year. Consumer credit expanded at a moderate pace. Nonetheless, household debt growth outpaced the growth of disposable personal income, and the financial obligations of households inched higher. Although households generally appeared able to meet their obligations, signs of financial strain were apparent in subprime variable-rate mortgages. The M2 monetary aggregate expanded at a moderate pace in 2006.

Interest rates on selected Treasury securities, 2003–07



NOTE: The data are daily and extend through February 7, 2007.
SOURCE: Department of the Treasury.

Spreads of corporate bond yields over comparable off-the-run Treasury yields, 1998–2007



NOTE: The data are daily and extend through February 7, 2007. The ten-year high-yield, ten-year BBB, and ten-year AA indexes are compared with the ten-year Treasury yield.
SOURCE: Derived from smoothed corporate yield curves using Merrill Lynch bond data.

Interest Rates

Market interest rates rose modestly, on balance, in 2006—yields on two- and ten-year nominal Treasury securities increased about 40 and 30 basis points respectively. Changes in interest rates seemed largely tied to changes in the outlook for economic growth and inflation. Rates across the maturity spectrum increased notably over the first half of the year, as incoming data on activity and inflation came in higher than markets had expected and as the FOMC raised the target federal funds rate 25 basis points at each of its first four meetings. At the time of the June FOMC meeting, interest rate futures market quotes indicated that market participants perceived considerable odds of an additional rate tightening by year-end. However, market interest rates declined, on net, over subsequent months in response to incoming data suggesting that inflation pressures were moderating and that economic growth was slowing. Market expectations for the trajectory of the federal funds rate over the next several years shifted down considerably during the second half of the year. More recently, market participants have backed away from expectations of a substantial easing of monetary policy as incoming data on economic activity have been stronger than expected. Investors now expect the FOMC to ease policy only slightly over the next two years. Although investors modestly revised their medium-term policy expectations over the course of the year, the Committee's interest rate decisions were largely anticipated in financial markets by the time of each meeting. Throughout the year, forward-looking measures of uncertainty about monetary policy inferred from interest rate options remained near the low end of historical ranges.

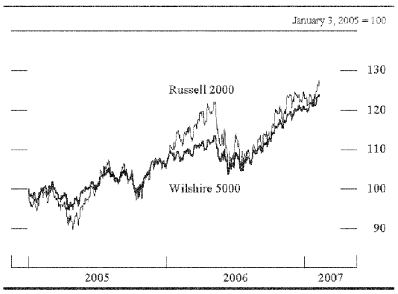
Yields on inflation-indexed Treasury securities increased about as much as those on their nominal counterparts in 2006. Medium- and long-term inflation compensation—measured from spreads between yields on nominal and inflation-indexed securities—were about unchanged to a little lower, on net, and during the year these measures exhibited only modest swings in response to incoming inflation data and oil price movements.

In the corporate bond market, yields on investment-grade securities moved about in line with those on comparable-maturity Treasury securities. In contrast, yields on speculative-grade securities fell slightly, pulling risk spreads lower in that segment of the market. The narrowness of investment- and speculative-grade spreads seems to reflect investors' sanguine perceptions of corporate credit quality over the medium term, which likely reflect in large part the strength of business balance sheets and a benign economic outlook. The term structure of forward risk spreads for corporate bonds supports this view, as forward spreads one and two years ahead are low, while the spreads further out the curve are more in line with historical norms.

Equity Markets

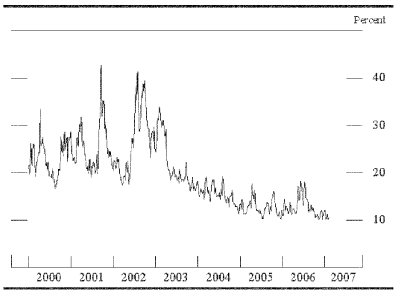
Broad equity indexes soared 10 percent to 20 percent in 2006, boosted by strong growth in corporate earnings. Share prices rose across a wide range of sectors, but increases in telecommunications and security brokerage stocks were especially noteworthy. The difference between the twelve-month forward earnings–price ratio for the S&P 500 and the long-term real Treasury yield—a crude measure of the premium that investors require for holding equity shares—was little changed on balance. The

Stock price indexes, 2005–07



NOTE: The data are daily and extend through February 7, 2007.
SOURCE: Frank Russell Company; Dow Jones Indexes.

Implied S&P 500 volatility, 2000–07



NOTE: The data are weekly and extend through February 9, 2007. 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.

implied volatility of the S&P 500 calculated from options prices spiked temporarily in the late spring in connection with a period of strain in several markets but remained near historical lows for the remainder of the year. Net inflows into domestic equity mutual funds were quite modest in 2006, while inflows into international equity funds were exceptionally strong.

Market Functioning and Financial Stability

Overall, financial markets functioned smoothly over the year and proved resilient to several shocks. Equity markets in the United States and currency and fixed-income markets in several emerging-market economies experienced heightened volatility late in the second quarter, but the turbulence was short lived. The liquidation of a few sizable hedge funds attracted considerable attention for a time but had little discernible effect on the broad functioning of markets. Even the liquidation of Amaranth—a hedge fund that was wound down in the fall after reporting a loss in excess of $6 billion, mostly in energy trades—left little imprint on financial markets, although it raised some concerns about risk-management practices. Implied volatilities, risk spreads, and various other potential measures of financial stress generally stayed at very low levels throughout the year, suggesting that investors were comfortable taking on risk, likely in part because they were confident about the economic and financial outlook.

Throughout the year, bid–ask spreads on the most actively traded Treasury securities remained within narrow ranges. Some instances of questionable trading activities occurred in the secondary market for Treasury securities over the course of the year. The Interagency Working Group for Treasury Market Surveillance monitored these situations closely.[1] In November, the Federal Reserve Bank of New York arranged a meeting with all primary dealers to discuss developments in Treasury markets and to encourage the firms to review their internal oversight of trading operations. Subsequently, a private-sector group sponsored by the Federal Reserve Bank of New York released a draft report laying out a set of best practices for firms active in the Treasury market on topics such as appropriate trading strategies and internal controls.

In July, the Federal Reserve Board implemented a revision to the treatment of GSEs and certain international organizations under its Policy on Payments System Risk. Under the change, interest and redemption payments on securities issued by these institutions are now released only when the issuer's Federal Reserve account contains sufficient funds to cover the payments; that is, these institutions no longer may employ daylight credit to fund such payments. The Board of Governors determined that the change represents an appropriate risk-management policy for the central bank and is consistent with the general practices of private issuing and paying agents. In addition, GSEs and international organizations are now subject to a penalty fee for daylight overdrafts resulting from general corporate payment activity (activity other than interest and redemption payments). This change aligns the policy for GSEs and international organizations with that for other Federal Reserve account holders that do not have regular access to the Federal Reserve's discount window and thus are not eligible for intraday credit. The transition to the

1. The group was established in 1992 and includes representatives from the Board of Governors of the Federal Reserve System, the Treasury, the Securities and Exchange Commission, the Commodity Futures Trading Commission, and the Federal Reserve Bank of New York.

new policy occurred smoothly with minimal effects on the functioning of the payments system and no notable adverse effects on short-term funding markets.

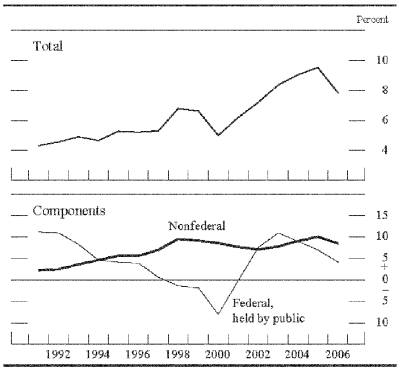
Following up on a meeting with the Federal Reserve Bank of New York in the fall of 2005, the largest participants in the fast-growing market for credit derivatives agreed to a series of steps to strengthen that market's infrastructure. Over the course of 2006, credit derivatives dealers phased out the practice of transferring positions to a different counterparty without first obtaining the consent of the original counterparty. They also reduced by 85 percent the number of trade confirmations outstanding more than thirty days; they doubled the share of trades that are confirmed via an electronic platform, to 80 percent of total trade volume; and they agreed upon a new protocol for the settlement of such derivatives after a credit event.

Debt and Financial Intermediation by Banks

Total debt of the domestic nonfinancial sectors expanded an estimated 7¾ percent in 2006, well below the pace in 2005 but still faster than that of nominal income. Debt growth slowed markedly in the household and government sectors, but business debt accelerated.

About 30 percent of the growth in nonfinancial sector debt in 2006 was intermediated by the banking sector. This share is about even with the average over the past ten years and is about 5 percentage points above the average observed in the 1980s and early 1990s. Commercial bank credit expanded 9½ percent in 2006, supported by brisk growth in loans to businesses. Bank credit also was boosted in the autumn by a consolidation of a substantial volume of thrift assets onto a commercial bank's balance sheet that had resulted from an internal reorganization at a large bank holding company.

Change in domestic nonfinancial debt, 1991–2006



NOTE: For 2006, change is from 2005:Q3 to 2006: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.

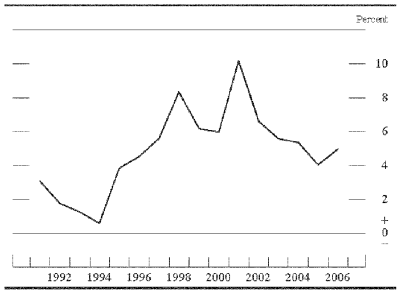
Bank lending to businesses through commercial and industrial loans increased at a rapid pace last year. The growth was fueled by vigorous merger and acquisition activity, rising outlays for investment goods, ongoing inventory accumulation, and an accommodative lending environment. Bank loans secured by commercial real estate, though strong, decelerated over the course of the year. The moderation in commercial real estate lending was consistent with responses by large and medium-sized banks to the Senior Loan Officer Opinion Survey on Bank Lending Practices, which pointed to slowing demand and a net tightening of credit standards for such loans in the second half of the year. Consumer loans and residential mortgages held by banks grew at a moderate rate for the year as a whole. However, excluding the effects of the thrift consolidation, residential real estate lending slowed considerably in the fourth quarter, no doubt reflecting in part the downturn in the housing market.

Commercial bank profits as a percentage of average assets were strong in 2006 and rose slightly above 2005 levels. Net interest margins declined a bit further, likely in response to continued competitive pressures and a modest inversion of the yield curve, but bank profitability was supported by growth in non-interest income and by well-contained costs. Continued strong asset quality also helped to support profitability in 2006 by allowing banks to reduce their loan-loss provisioning. Robust asset quality was reflected in loan delinquency and charge-off rates that remained at low levels through the end of 2006.

The M2 Monetary Aggregate and Reserves

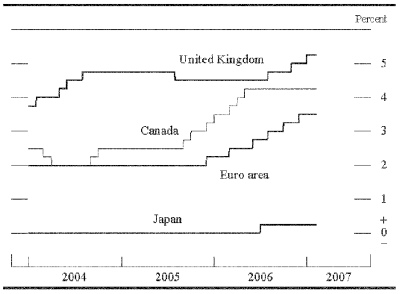
M2 expanded at a 5 percent rate last year, somewhat faster than in 2005. Typically, as short-term interest rates rise, deposit rates lag somewhat, increasing the opportunity cost of holding money. In 2006, this effect apparently slowed money growth less than would have been expected on the basis of historical norms, and the velocity of M2 rose only about ¾ percent. Retail money market mutual funds and small time deposits, components of M2 whose yields move most closely with market rates, grew rapidly. However, liquid deposits, which constitute the largest component of M2, and whose yields adjust more gradually, were about flat on net. Currency expanded a modest

M2 growth rate, 1991–2006



NOTE: The data are annual on a Q4 over Q4 basis. M2 consists of currency, traveler's checks, demand deposits, other checkable deposits, savings deposits (including money market deposit accounts), small-denomination time deposits, and balances in retail money market funds.
SOURCE: Federal Reserve Board, Statistical Release H.6, "Money Stock Measures."

Official or targeted interest rates in selected foreign industrial countries, 2004–07



NOTE: The data are daily. The last observation for each series is February 7, 2007. The data shown are the overnight rate for Canada, the refinancing rate for the euro area, the call money rate for Japan, and the repurchase rate for the United Kingdom.
SOURCE: The central bank of each area or country shown.

3½ percent, an increase similar to that in 2005, reflecting weak, possibly negative, net demand from overseas.

Part of the Financial Services Regulatory Act of 2006 gave the Federal Reserve authority, beginning in October 2011, to pay interest on reserve balances and to further reduce or eliminate reserve requirements. At the October FOMC meeting, the Chairman asked the staff to prepare for the implementation of this legislation.

International Developments

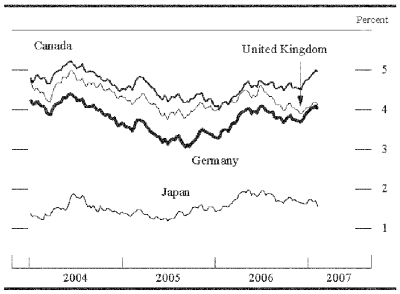
Foreign economic growth was generally strong in 2006, as expansion continued in all major regions of the world. The Japanese economy decelerated somewhat but maintained positive growth, and the pace of activity in the euro area picked up. Labor market conditions in both areas improved. Emerging-market economies also recorded solid growth last year and experienced no apparent lasting ill effects from the brief period of financial market volatility that hit some of them particularly hard in the late spring. Although there are signs that steps taken to slow growth of investment in China have been effective, the Chinese economy continued to grow rapidly. Rising energy prices boosted consumer price inflation in many areas of the world early last year, but monetary tightening appears to have prevented inflation from moving significantly higher, and the effects of higher energy prices on core prices were modest.

Industrial countries tightened monetary policy in 2006. Some countries paused around the same time as the Federal Reserve, and others continued to tighten throughout the year. After ending its policy of quantitative easing in the spring, the Bank of Japan (BOJ) raised its policy rate 25 basis points in July. Weak consumer spending and low inflation have apparently deterred the BOJ from tightening since then. With growth in the European economies firming, concerns over inflationary pressures prompted the European Central Bank to raise its policy rate five times last year, to 3.5 percent. The Bank of Canada tightened 75 basis points in several steps over the first half of the year but has left the overnight rate unchanged since then. After keeping its policy rate constant in the first half of the year, the Bank of England tightened policy 25 basis points in August and November 2006 and in January 2007. The statements accompanying each tightening cited the upside risks to inflation posed by low levels of spare capacity.

During the first half of 2006, ten-year sovereign yields in the euro area, Canada, and Japan rose sharply on balance: Increases ranged from 45 basis points in Japan to 75 basis points in Germany. Yields on inflation-protected long-term securities in these economies also rose during the first half of 2006 but not as much as nominal yields and thus implied a noteworthy rise in inflation compensation. These developments occurred largely in reaction to continuing upward pressures on inflation, which stemmed from a further run-up in energy prices and indications that global economic growth remained robust.

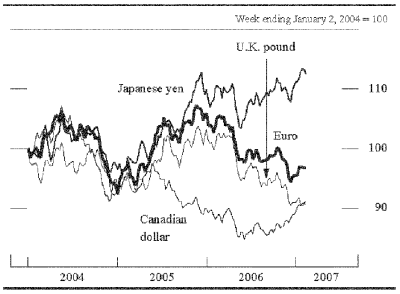
From their midyear highs, nominal government benchmark bond yields fell noticeably until about the beginning of December in most major advanced economies, as investors reacted to moves in U.S. rates and evaluated the implications for the global economy of the economic slowdown that seemed to be under way in the United States. Over this period, yields on ten-year nominal bonds declined by amounts that ranged from about 25 basis

Yields on benchmark government bonds in selected foreign industrial countries, 2004–07



NOTE: The data are for ten-year bonds and are weekly. The last observation for each series is the average for February 5 through February 7, 2007.
SOURCE: Bloomberg L.P.

U.S. dollar exchange rate against selected major currencies, 2004–07



NOTE: The data are weekly and are in foreign currency units per dollar. The last observation for each series is the average for February 5 through February 7, 2007.
SOURCE: Bloomberg L.P.

points in the United Kingdom to about 70 basis points in Canada. Yields on inflation-indexed securities declined less; modest declines in inflation breakeven rates were attributed in part to lower energy prices in the second half of the year.

Since the beginning of December, however, nominal and indexed government bond yields have risen once again in most advanced economies, partly because new data releases appeared to alleviate investors' concerns that global economic growth might slow appreciably. Yields on both ten-year nominal and indexed securities have risen 15 basis points in Japan and 25 to 50 basis points in the euro area, the United Kingdom, and Canada since their December lows. As a result, inflation breakeven rates have been little changed.

U.S. dollar nominal exchange rate, broad index, 2004–07

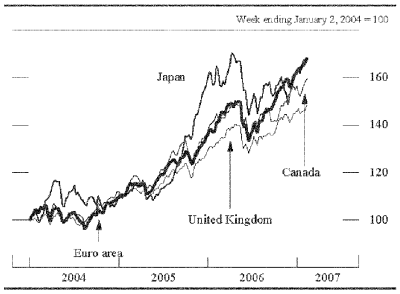
NOTE: The data are weekly and are in foreign currency units per dollar. The last observation is the average for February 5 through February 7, 2007. The broad index is a weighted average of the foreign exchange values of the U.S. dollar against the currencies of a large group of the most important U.S. trading partners. The index weights, which change over time, are derived from U.S. export shares and from U.S. and foreign import shares.
SOURCE: Federal Reserve Board.

The Federal Reserve's broadest measure of the nominal trade-weighted exchange value of the dollar declined 3¾ percent from the beginning of last year through early February of this year. Over that period, the dollar appreciated 2¼ percent against the yen and 1½ percent against the Canadian dollar, but it depreciated about 9 percent, on net, against the euro, almost 13 percent against sterling, and 4 percent against the Chinese renminbi. The renminbi's rate of appreciation stepped up in late 2006 and early 2007, but daily fluctuations in the dollar–renminbi exchange rate were very small.

Most of the dollar's overall decline in 2006 occurred between mid-April and early May. During this period, market participants reportedly sensed that the FOMC was approaching the end of its series of policy tightenings, and interest rate differentials moved against the dollar. Traders also refocused on the large and persistent U.S. current account deficit, which was further boosted by crude oil prices that had moved above $70 per barrel. To date in 2007, the dollar's broad nominal exchange value has risen 1 percent on balance.

In the wake of strong advances in 2005, major global equity indexes posted solid gains, on balance, in 2006 and in early 2007. After rising 5 percent to 10 percent in the first quarter of 2006, most global indexes fell sharply beginning in early May to reach intra-year lows in mid-June. Market participants attributed the drops in share prices to increased uncertainty about prospective inflation, caused in part by the run-up in energy prices, and to a retreat from risk-taking. Broad-based gains in stock prices since midsummer appear to be associated with a scaling

Equity indexes in selected foreign industrial countries, 2004–07



NOTE: The data are weekly. The last observation for each series is the average for February 5 through February 7, 2007.
SOURCE: Bloomberg L.P.

back of expectations for future tightening of monetary policy in several countries and with declines in energy prices. Since mid-June, broad stock market indexes have gained 10 percent to 20 percent in Europe, Japan, and Canada.

Industrial Economies

After increasing at an annual rate of roughly 2 percent in the first half of 2006, Japanese real GDP grew only ¾ percent in the third quarter, largely because of slower growth of consumption. Capital spending was an important contributor to growth of output throughout the year, supported by strong corporate profitability. Labor market conditions continued to improve; the unemployment rate was about 4 percent in December, its lowest level since 1998, and the ratio of job offers to applicants remained close to a thirteen-year high. However, wage growth was very subdued, as firms controlled cost increases, and unit labor costs continued to fall. In 2006, consumer prices started to rise again, posting small twelve-month increases after June, and land prices in Japan's six largest cities rose for the first time since 1991. However, the GDP deflator continued to decline slowly.

Real GDP in the euro area accelerated somewhat in 2006, posting average growth of 3¼ percent at an annual rate over the first three quarters. Output growth was supported in part by strong consumer spending, which grew substantially faster than in 2005. The stronger performance of the economy was reflected in improving labor market conditions: The unemployment rate in the euro area fell 0.8 percentage point during the year to reach 7.5 percent in December, continuing a downward movement that began in 2004. Wages and salaries in the manufacturing and services sector grew at an average annual rate of 2¼ percent in the first three quarters of the year—a bit lower than their rate of growth in 2005. Higher energy prices boosted euro-area consumer price inflation, which rose to about 2½ percent in the first half of 2006; late in the year, it dropped below the European Central Bank's target ceiling of 2 percent. Core inflation remained near 1½ percent.

Real GDP in the United Kingdom grew 3 percent last year, and real GDP in Canada grew 3 percent, on average, through the first three quarters. Despite declining consumer confidence in the United Kingdom, the pace of consumption growth over the year was slightly higher than in 2005, and consumer spending in Canada, supported by moderate employment growth, also remained robust. Declines in energy prices brought Canadian consumer price inflation down after the middle of the year to a twelve-month change of about 1½ percent in December, below the Bank of Canada's 2 percent inflation target. Inflation in the United Kingdom edged up throughout the year, partly because of increases in electricity and natural gas prices that were implemented in the fall.

Emerging-Market Economies

Real GDP growth in China remained strong but moderated a bit in the second half. The mild slowdown suggests that the administrative measures put in place by the Chinese authorities to cool investment have had an effect. The trade surplus recorded a substantial increase in 2006. Four-quarter inflation picked up near the end of last year to over 2 percent, reflecting higher food prices.

Elsewhere in emerging Asia, economic performance was generally solid in 2006. In Korea, GDP growth slowed from the strong pace registered in 2005, partly because of monetary tightening, and consumer price inflation remained modest. The pace of growth in other countries stayed strong throughout 2006 as a result of robust exports and, in some cases, strengthening domestic demand. Four-quarter inflation moderated across the region. That moderation resulted from the waning effects of earlier reductions or removals of domestic fuel subsidies, but the previous tightening of monetary policy in the region and an appreciation of exchange rates also made a contribution. Capital inflows into several Asian emerging-market economies—particularly Thailand—in late 2006 and early this year put upward pressure on local currencies. Measures taken by Thai authorities seemed to succeed in limiting upward movement of the baht, but share prices in the Thai stock market fell sharply. Financial markets in other countries in the region were less affected

Equity indexes in selected emerging-market economies, 2004–07

NOTE: The data are weekly. The last observation for each series is the average for February 5 through February 7, 2007. The Latin American economies are Argentina, Brazil, Chile, Colombia, Mexico, Peru, and Venezuela. The Asian economies are China, India, Indonesia, Malaysia, Pakistan, the Philippines, South Korea, Taiwan, and Thailand; each economy's index weight is its market capitalization as a share of the group's total.
SOURCE: Morgan Stanley Capital International (MSCI) index.

and showed no noticeable spillovers from events in Thailand.

Output growth in Mexico was exceptionally strong in the first half of last year, especially in the manufacturing, construction, and services sectors. Growth stepped down in the second half; construction activity remained robust but was offset by a slowdown in exports of manufactured goods to the United States. Mexican consumer price inflation was elevated during the second half by higher food prices and reached rates above the 4 percent upper limit of the central bank's inflation target range; at year-end, inflation was still at the top end of the range.

Brazilian output growth was solid in the first quarter but slowed noticeably later in the year, partly because of weak manufacturing performance. Brazilian four-quarter inflation fell markedly, from almost 6 percent at the end of 2005 to just over 3 percent in December. In Argentina, steady growth in investment and consumption kept real GDP on a solid uptrend throughout 2006. The Argentine government continued to attempt to bring down inflation through voluntary price agreements with producers in several sectors; although inflation had edged down to the single-digit range by year-end, it was still high.

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BEN S. BERNANKE
CHAIRMAN

February 26, 2007

The Honorable Christopher J. Dodd
Chairman
Committee on Banking, Housing,
and Urban Affairs
United States Senate
Washington, D.C. 20510

Dear Mr. Chairman:

Enclosed is the information you requested during the Senate Banking Committee's hearing on monetary policy regarding the financial flows to and from the United States on a balance of payments basis between 2004-2006.

Please let me know if I can be of further assistance.

Sincerely,

Enclosure

Insert page 138, following line 11:

Chairman Bernanke subsequently submitted the following information for the record:

The attached table reports the financial flows to and from the United States on a balance of payments basis for the period 2004-2006. (Data for 2006 are not complete; the missing components are indicated by NA in the column for 2006Q4.)

Private foreign investors did reduce their acquisition of U.S. Treasury securities in 2006, as can be seen on line 12 of the table. However, such acquisitions rebounded in the fourth quarter of the year. Furthermore, private foreign investors did add to their holdings of total U.S. securities (line 11) by an amount in 2006 ($670 billion) that was nearly equal to the amount they acquired in 2005 ($674 billion). They increased or maintained their pace of acquisition of U.S. government agency bonds, corporate bonds, and corporate equities. They also increased their acquisition of other liabilities reported by banks (mostly interbank liabilities) (line 16). The sum of foreign direct investment into the United States for the first three quarters of 2006 exceeds that for the full year of 2005 (line 18).

Foreign official assets in the United States (line 2) also increased last year. The increase in these holdings of U.S. Treasuries (line 4) was up from 2005 but below the pace of 2004. The increase in other categories of securities rose as well.

It is noteworthy that acquisition of foreign assets by U.S. residents (line 20) rose sharply in 2006. The size of acquisition rose for all categories other than foreign equity. The sharp rebound in U.S. direct investment abroad reflects the ending of the tax advantage of repatriating income provided by the Homeland Investment Act that resulted in net return of funds in this category to the United States in the third and fourth quarters of 2005.

Attachment

Foreign-Owned Assets in the U.S. and U.S.-Owned Assets Abroad
(Billions of U.S. Dollars)

February 21, 2007

	2004	2005	2006*	2005 Q1	2005 Q2	2005 Q3	2005 Q4	2006 Q1	2006 Q2	2006 Q3	2006 Q4*
1. Total foreign assets in the US, net increase (=line 2 + line 10)	1,450	1,212	1,653	224	346	389	253	527	365	400	361
2. Foreign official assets in the US, net increase	388	199	266	19	75	34	72	76	76	81	34
3. Total securities, net foreign official purchases	319	176	245	36	40	33	67	76	33	87	48
4. US Treasury securities	263	72	104	9	17	8	37	42	-9	47	23
5. US govt agency bonds	42	85	107	24	19	18	24	24	30	33	20
6. Corporate bonds	11	18	28	3	4	6	6	8	6	6	9
7. Corporate stocks	2	1	6	-0	-0	1	0	2	6	1	-3
8. Other liabilities to foreign official institutions reported by banks	69	24	20	-16	34	1	5	-1	42	-7	-14
9. All other	-0	-0	2	-1	0	0	-0	0	1	1	NA
10. Foreign private assets in the US, net increase	1,062	1,013	1,387	205	272	355	181	452	289	319	327
11. Total securities, net private purchases	484	674	670	164	126	190	194	181	137	132	220
12. US Treasury securities	103	199	52	86	14	37	62	-5	10	-7	55
13. US govt agency bonds	67	72	120	2	20	34	17	42	28	26	24
14. Corporate bonds	255	316	395	58	78	89	91	90	101	91	113
15. Corporate stocks	60	86	103	18	13	30	24	54	-1	22	28
16. Other liabilities reported by banks	337	180	424	-70	153	95	2	149	80	89	107
17. Liabilities reported by non-banks	93	30	154	80	-20	20	-50	75	25	53	NA
18. Foreign Direct Investment in US	133	110	135	31	8	44	27	45	46	44	NA
19. All other	15	19	4	1	5	5	9	2	1	1	NA
20. Total US-owned assets abroad (- is a net increase)	-868	-427	-1,017	-87	-196	-132	-11	-356	-211	-224	-225
21. Total securities, net US purchases (-)	-147	-180	-283	-50	-46	-37	-47	-54	-54	-53	-122
22. US acquisitions of foreign bonds	-62	-38	-147	-10	-21	-2	-4	-13	-37	-45	-53
23. US acquisitions of foreign stocks	-85	-142	-135	-40	-25	-35	-43	-41	-17	-8	-69
24. Claims reported by US banks	-362	-213	-466	53	-174	-103	10	-196	-81	-86	-103
25. Claims reported by US non-banks	-120	-44	-101	-67	57	-29	-5	-46	-31	-23	NA
26. US Direct Investment abroad	-244	-9	-171	-31	-34	30	26	-61	-47	-63	NA
27. All other	5	20	4	8	0	6	5	2	1	1	NA

U.S. Department of Commerce, Bureau of Economic Analysis.

* Where reported, data for 2006 Q4 are preliminary estimates derived from partial data from the Treasury International Capital System. Aggregates for Q4 and year 2006 are sums of reported data and do not include estimates for entries with "NA".

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BEN S. BERNANKE
CHAIRMAN

February 26, 2007

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

Dear Senator:

This letter follows up on your question during my appearance before the Senate Banking Committee on February 14 about the reasons for the decline in the personal saving rate.

One important factor appears to have been what economists call "the wealth effect." Capital gains on households' assets, such as houses and equities, are not counted as part of saving, which is defined as current disposable income less consumption. When wealth increases, people tend to increase their consumption relative to their current income, and thus the saving rate declines. The chart on page 6 of the *Monetary Policy Report to the Congress* shows that household wealth relative to income has risen, on net, over the past two decades, which has likely contributed to the decline in the personal saving rate. Corroborating this view, a Federal Reserve Board working paper entitled "Disentangling the Wealth Effect: A Cohort Analysis of Household Saving in the 1990s" by Michael Palumbo (on the Board staff) and Dean Maki (formerly on the Board staff) provides evidence that higher-income households, which tend to hold a greater share of aggregate wealth, markedly reduced their saving rates when wealth rose in the late 1990s. A copy of this paper is enclosed.

A few studies of household saving have attempted to estimate rates of saving by different age groups. I should note that this is a difficult exercise because the available data are not detailed enough to exactly apportion aggregate consumption and income to households by age. In general, this line of research has found that saving rates for all age groups have been declining for at least the past decade, with the largest decreases apparently occurring among older households. A number of factors may have contributed to this larger falloff in the saving rate for older households, including the wealth effect since older households tend to hold a larger portion of aggregate wealth than younger

households. One example of this research is a recent paper (also enclosed) by Alicia Munnell (Center for Retirement Research at Boston College and formerly the Director of Research at the Federal Reserve Bank of Boston) and two coauthors entitled "How Much is the Working-Age Population Saving?"

I hope you find this information helpful.

Sincerely,

Enclosures

Attachments held in Committee files.