

**FEDERAL RESERVE'S SECOND MONETARY POLICY  
REPORT FOR 2004**

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**HEARING**  
BEFORE THE  
**COMMITTEE ON**  
**BANKING, HOUSING, AND URBAN AFFAIRS**  
**UNITED STATES SENATE**  
**ONE HUNDRED EIGHTH CONGRESS**

SECOND SESSION

ON

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

—————  
JULY 20, 2004  
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## **FEDERAL RESERVE'S SECOND MONETARY POLICY REPORT FOR 2004**

**TUESDAY, JULY 20, 2004**

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

The Committee met, at 2:31 p.m., in room SH-216 of the Hart Senate Office Building, Senator Richard C. Shelby (Chairman of the Committee) presiding.

### **OPENING STATEMENT OF CHAIRMAN RICHARD C. SHELBY**

Chairman SHELBY. The hearing will come to order. I am very pleased this afternoon to welcome Chairman Greenspan before the Committee on Banking, Housing, and Urban Affairs, to testify on the Federal Reserve's Semi-Annual Monetary Policy Report to the Congress.

Chairman Greenspan, the U.S. economy is continuing its expansion with real GDP increasing 3.9 percent in the first quarter of 2004. I hope we can now also point to strong job growth with payroll employment increasing for 10 straight months with an average of 200,000 jobs per month in the first half of this year. I think overall this is good news for the American worker and we hope to see even better numbers on jobs and wages in the months ahead.

When this Committee heard from you in February of this year, the Federal Open Market Committee had just stated that the Committee could be "patient" in changing its accommodative monetary policy. The FOMC then indicated in May that changes in its policy were "likely to be measured." At its June meeting, the Federal Open Market Committee raised its target for the Federal funds rate by 25 basis points to 1¼ percent—the first increase since May 2000. This move was widely anticipated by financial markets, and I think overall it has helped ease inflationary fears.

Some Fed watchers have expressed the concern that the FOMC waited too long to increase its target Federal funds rate target. However, last week's report on retail sales and industrial production seemed to indicate that the Fed's actions have been prudent. Also, since the FOMC's June action, the markets have responded by a reduction, as you well know, in the long-term interest rate.

This afternoon, I think we will have ample opportunity to discuss the Federal Reserve's views on the economy and how we might interpret the FOMC statement on changes in monetary policy which are "likely to be measured." And, perhaps we will even garner some insight as to the FOMC's consideration at its upcoming August meeting.

Mr. Chairman, as I had indicated to you a minute ago, there is a vote going on. Some of us voted early, and we will have a lot of Members to join us. We look forward to your remarks, but first, Senator Dole, any statement?

**STATEMENT OF SENATOR ELIZABETH DOLE**

Senator DOLE. Thank you, Chairman Shelby.

Today, we welcome Chairman Greenspan back to this Committee for our fourth and final Semi-Annual Monetary Policy Report of the Federal Reserve for this Congress. I appreciate the Chairman's willingness to visit with us so often, and explore areas of concerns with regard to our economy and monetary policy.

Last month, Chairman Greenspan assured us that he has observed real wages increasing for Americans in the past 4 months. This, in turn, has helped increase disposable income, a trend that I understand Chairman Greenspan expects to continue as the natural course of the recovery and growing strength of our economy. I cannot overstate the importance of this trend for our men and women in the workforce, and appreciate Chairman Greenspan's continued optimism in the American economy. I was very pleased with the release last week of the June industrial production data, indicating the growing strength in the manufacture of durable capital goods. North Carolina has been hit very hard by the loss of manufacturing jobs over the past years. Any reversal of this trend is indeed welcome news.

There have been some excellent numbers for North Carolina—according to figures released today from the Bureau of Labor Statistics—North Carolina has created 35,400 new jobs in the month of June. This positive news highlights the transition which is occurring in North Carolina with the loss of low-skilled manufacturing jobs and the creation of jobs in service sectors which require a good education with a demand on computer skills. Continuing education must continue to be a top priority for us to respond to this demand.

I have spoken before about the work that Senators Enzi, Alexander, and I are undertaking to write the Higher Education Access, Affordability, and Opportunity Act of 2004. It will provide additional assistance to our community colleges and other institutions of higher learning for training and retraining students in high-growth job markets. We hope to introduce this bill shortly.

In addition, I remain concerned about a number of factors such as high energy prices, the rise in steel prices, and the size of our trade deficit. Despite these concerns though, I am confident that through increased trade, hard work, global communications, and continuing education of our workforce, we will achieve new levels of opportunity for all Americans and global security.

I, again, thank Chairman Greenspan for joining us here today, and I will look forward to his testimony.

Thank you, Mr. Chairman.

Chairman SHELBY. Senator Bunning.

**STATEMENT OF SENATOR JIM BUNNING**

Senator BUNNING. Thank you, Mr. Chairman.

I am glad that we get you first this time, Chairman Greenspan—the House usually shares that opportunity with us—because given

the June economic figures, especially the housing figures that came out today, I know many want to know what you make of these figures, and that is especially true of this Committee.

When the FOMC raised rates 25 basis points on June 30, it was a move that was largely expected. Many in the economic talking heads class said the market had already built in this rate adjustment. However, since that raise, as of last night's close, the Nasdaq market has lost 164 points, and the Dow has lost 341 points. It has not been a very good 3 weeks for our stock markets. I am not sure the June economic figures were what the FOMC had in mind when it made its decision to raise rates. I do not think any of us like the figures we have seen. We can do better on all fronts. We did have another jobs increase, but I still think we can do better. We need to make sure those who want a job can find one.

I am also concerned with some of the recent corporate earnings that have been reported, especially in the airlines industry. Delta Airlines has been a major presence in Northern Kentucky and in Kentucky in general. Their Northern Kentucky hub has been an economic engine for all of Kentucky. It is a major reason why companies such as Toyota, Fidelity, Citigroup, to name a few, have built facilities in Kentucky. Delta also has a great many employees in my State, about 8,000 in the Northern Kentucky area. Delta's health is a very large concern to my State.

I do not know what the answer is, but I know other Members of this Committee have similar concerns about airlines with major operations in their States. I also think many are concerned about the new housing starts figures that were released today. As you know, the housing sector helped carry our economy during the last recession. Obviously, at some point this would have to cool down, just a little I hope, but it was a pretty dramatic drop both in May and in June. That came as a surprise to me. I would like to hear your take on this. Is this so-called housing bubble bursting? Is it something we need to be concerned with, or was it inevitable that the housing market would have to slow some?

I am concerned with how our economy is faring right now, especially with the June figures coming in. Energy prices were falling, but they are back on the rise. The stock market is down and housing is down. It seems that our recovery had a definite hiccup in June. I guess the \$64,000 question, was it a hiccup or something that we should be more concerned about?

Also, as I mentioned earlier, most of the economic talking heads stated that the FOMC rate raise was built into the market. They seem to have been proven wrong. They also stated that a second rate increase was pretty much a done deal for August. I hope the Fed is not on automatic pilot. I would like you to look closely at the June figures, and I know you will, before a decision is made in August. I do not want a hiccup to turn into the flu.

Thank you, Mr. Chairman.

Chairman SHELBY. Senator Carper.

#### **COMMENT OF SENATOR THOMAS R. CARPER**

Senator CARPER. I have no prepared remarks, Mr. Chairman.

Chairman Greenspan, welcome. I look forward to hearing your testimony.

Chairman SHELBY. Senator Reed.

**COMMENTS OF SENATOR JACK REED**

Senator REED. Thank you, Mr. Chairman.

Thank you, Chairman Greenspan, for attending.

It does look like we are recovering jobs, but those jobs seem to not have the same wages and earnings of previous jobs that were lost, and that is a significant issue. We have had a chance to talk about this before, but until we can really establish wage and earning growth among a broad sector of American workers, I do not think we are going to see a robust economic recovery, and we are going to continue to have families that are trying to make ends meet by borrowing. And as interest rates go up—and you have already raised them and you might contemplate raising again—that will put additional pressure on families. So there is perhaps some encouraging news, but there is also a very different reality we have to cope with, and I am looking forward to your testimony.

Thank you.

Chairman SHELBY. Senator Crapo.

**COMMENTS OF SENATOR MIKE CRAPO**

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

Chairman Greenspan, it is a pleasure to welcome you back here.

I am going to say at the outset my duty is to preside over the floor in about 18 minutes, so I will not be here too far into your testimony. In fact, I may miss your testimony. I am going to read it very carefully, however, and I do share some of the questions that you have already heard. The main question, of course, that we want to see, is whether the expansion that we are now seeing is capable of sustaining itself, what the numbers from June meant, and how we can look forward now in terms of gauging the strength of the expansion and what is going to happen with inflation. I do appreciate your careful attention to the inflation in our economy.

I do want to pose one question for you to consider either during your testimony or perhaps in follow up if it does not come up there. That is, as you know, a divided SEC voted 3 to 2 last Wednesday to seek comments on a proposal for mandatory registration of hedge funds advisers with the SEC. My question is whether you are concerned with this SEC proposal for mandatory registration of hedge fund advisers with the SEC, and whether you think it would be advisable for the President's Working Group on Financial Markets to become involved in issues relating to the regulation of the hedge fund industry.

With that, again, I welcome you here, and I look forward to your testimony.

Chairman SHELBY. Senator Bayh.

**COMMENT OF SENATOR EVAN BAYH**

Senator BAYH. Thank you, Mr. Chairman. I look forward to hearing from Chairman Greenspan, and I will reserve other comments until the question period.

Chairman SHELBY. Senator Sununu.

**COMMENT OF SENATOR JOHN E. SUNUNU**

Senator SUNUNU. I have no opening statement. Welcome, Mr. Chairman.

Chairman SHELBY. Senator Sarbanes.

**STATEMENT OF SENATOR PAUL S. SARBANES**

Senator SARBANES. Mr. Chairman, thank you very much. I am pleased to welcome Chairman Greenspan back before our Committee to testify on the Federal Reserve's Semi-Annual Monetary Policy Report to Congress.

This was a requirement put into law by this Committee with actually the support of the Fed, and I think it has worked very well over the years.

As we all know, of course, at the last meeting of the Federal Open Market Committee, they decided to raise the target for the Federal funds rate by 25 basis points to 1¼ percent, the first change in interest rates by the Fed in about a year's time.

In a statement released after the meeting—and I want to commend Chairman Greenspan and his colleagues for this shift in practice, whereby after the FOMC makes decisions, they seek to explain them, however briefly, to the public. The FOMC said they “perceive the upside and downside risks to the attainment of both sustainable growth and price stability for the next few quarters are roughly equal. With underlying inflation still expected to be relatively low, the Committee believes that policy accommodation can be removed at a pace that is likely to be measured. Nonetheless, the Committee will respond to changes in economic prospects as needed to fulfill its obligation to maintain price stability.”

The final sentence of that paragraph has generally been read to suggest that the FOMC will take a more aggressive stance toward monetary policy if economic conditions warrant. But, I would just like to note, in light of the recent economic indicators that have been released, that the sentence could also be read to suggest that the FOMC may tilt in the other direction if, in fact, it is necessary.

While the outlook for economic growth remains positive, most forecasts are being revised downward. GDP growth for the first quarter of the year was revised downward to 3.9 percent. Last week, the Commerce Department reported an unexpectedly large decline in retail sales for June of 1.1 percent. The Fed reported a 0.3 percent decline in industrial production. And just this morning, the Commerce Department reported that housing construction fell 8½ percent in June, the sharpest drop since February 2003.

While these are all just monthly numbers, they raise questions about the strength of the economic outlook. That is particularly true when taken together with a continuing weakness in the labor market.

Job growth in May declined from the 300,000 figure of March and April to 250,000, and in June was cut in half to 112,000. As a result of the prolonged labor market weakness, the economy remains 1.2 million jobs below the level when the recession began 39 months ago. Compared to the average economic recovery of the post-war era, today's economy is nearly 6 million jobs short.

Further, in June, 1.7 million of the unemployed, 21.6 percent of the total, had been unemployed an average duration of 20 weeks.

The long-term unemployed have made up over 20 percent of the unemployed for the past 21 months, surpassing the record set from 1982 to 1984.

As *The New York Times* reported on Sunday, the slack labor market is resulting in the failure of hourly pay in the United States to keep pace with inflation. The article points out that the Bureau of Labor Statistics reported last Friday, that hourly earnings of production workers fell 1.1 percent over the past 12 months, after accounting for inflation. The decline is the steepest since the recession of 1991.

And only this morning, *The Wall Street Journal* had an article entitled, "So Far, Economic Recovery Tilts to Highest-Income Americans," and goes on to note that, "The recovery's primary beneficiaries have been upper-income households."

Finally, Mr. Chairman, in closing I simply want to take note that Virgil Mattingly, who had served as General Counsel for the Federal Reserve Board and the Federal Open Market Committee for the past 15 years, and who served a total of 30 years at the Federal Reserve, just retired on June 30.

Virgil Mattingly worked closely with the Members and staff of this Committee on every major piece of banking legislation enacted over the past 20 years. He always provided not only exceptionally intelligent and competent technical assistance to the work of this Committee, but also wise counsel and wise advice. He was, in my view, an extraordinarily able and dedicated public servant, and upheld, and indeed in some measure helped to define, the tradition at the Federal Reserve of an outstanding career of service. He made very significant contributions to our Nation and to the formulation of public policy. I simply wanted to take this opportunity to wish him well in his retirement, and to express appreciation for the fine work he did over the years.

I also want to take this opportunity to congratulate Scott Alvarez, who has been Associate General Counsel for the Federal Reserve, and has been appointed to succeed Virgil Mattingly as the Fed's General Counsel. Scott Alvarez is also well known and highly regarded by the Members and staff of this Committee, and we look forward to continuing to work closely with him in his new capacity.

Thank you, Mr. Chairman.

Chairman SHELBY. Senator Hagel.

#### **COMMENT OF SENATOR CHUCK HAGEL**

Senator HAGEL. I have no statement, Mr. Chairman.

Chairman SHELBY. Senator Dodd.

#### **COMMENT OF SENATOR CHRISTOPHER J. DODD**

Senator DODD. Mr. Chairman, I will wait, and I will just ask unanimous consent that my statement be included in the record.

Chairman SHELBY. Without objection, so ordered.

Chairman SHELBY. Senator Allard.

#### **COMMENT OF SENATOR WAYNE ALLARD**

Senator ALLARD. Mr. Chairman, I would like to thank you for holding this hearing, and I always look forward to hearing from the Chairman, and I will submit my full statement to the record.

Chairman SHELBY. Without objection, it will be made part of the record.

Chairman SHELBY. Senator Schumer.

**COMMENTS OF SENATOR CHARLES E. SCHUMER**

Senator SCHUMER. Thank you, Mr. Chairman. I would ask that my full statement be submitted to the record.

Chairman SHELBY. Without objection, so ordered.

Senator SCHUMER. The only observation I would make is there are two wings to our economic policy here. There is fiscal policy and monetary policy. The thing you are here to report on and the thing you are in charge of, monetary policy, I think you are doing a superb job. I think the quarter-inch steps that you have made is just about perfect for our situation. But I do worry about our fiscal policy, and sometimes, as you well know, much of the time, lower interest rates are better for the economy than lower taxes, and that will be the line of my questions.

Chairman SHELBY. Thank you, Senator Schumer.

Senator Corzine.

**COMMENTS OF SENATOR JON S. CORZINE**

Senator CORZINE. I will submit a statement for the record.

Chairman SHELBY. Without objection, your opening statement will be made part of the record.

Chairman Greenspan, if you will abide us a few minutes, we have established a quorum and would like to move the Committee to Executive Session and ask for a vote on our nomination for the Department of the Treasury and the Department of Housing and Urban Development.

Chairman Greenspan, you proceed as you wish. Thank you.

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

Chairman GREENSPAN. Mr. Chairman, if I may before I start, I would like to thank the Senator for his very thoughtful remarks with respect to Virgil Mattingly's tenure at the Federal Reserve. We will miss him, and we certainly concur in how you evaluated his service and his contributions, I must say, to this Committee, and assisting in innumerable pieces of legislation, for which, for some reason or other, he always had the right balanced insight.

We know Scott Alvarez, who worked closely with him over the years, will not become a Virgil clone, but we would not mind if he did.

Mr. Chairman, with respect to Federal Reserve's Monetary Policy Report to the Congress, I cannot remember how many times I have been here, but it is always a fascinating experience because it gives us a chance, in this requirement, to review every 6 months what is going on in the economy and our interfacing with it. As Senator Sarbanes said, it has probably been a major element in our generalized communications policy, and I know that we always look forward to meeting with this Committee.

Economic developments in the United States have generally been quite favorable in 2004, lending increasing support to the view that the expansion is self-sustaining. Not only has economic activity

quickened, but the expansion also has become more broad-based and has produced notable gains in employment. The evident strengthening in demand that underlies this improved performance doubtless has been a factor contributing to the rise in inflation this year. But inflation also seems to have been boosted by transitory factors such as the surge in energy prices. Those higher prices, by eroding households' disposable income, have accounted for at least some of the observed softness in consumer spending of late, a softness which should prove short-lived.

When I testified before this Committee in February, many of the signs of the step-up in economic activity were already evident. Capital spending had increased markedly in the second half of last year, no doubt spurred by significantly improving profits, a low cost of capital, and the investment tax incentives enacted in 2002 and enhanced in 2003. The renewed strength in capital spending carried over into the first half of 2004. Orders and shipments of nondefense capital goods have been on the rise, and backlogs of unfilled orders for new equipment continue to build.

A key element of the expansion that was still lacking in February, however, was evidence that businesses were willing to ramp up hiring to meet the stepped-up pace of sales and production. Businesses' ability to boost output without adding appreciably to their workforces likely resulted from a backlog of unexploited capabilities for enhancing productivity with minimal capital investment, which was an apparent outgrowth of the capital goods boom of the 1990's. Indeed, over much of the previous 3 years, managers had seemed to pursue every avenue to avoid new hiring despite rising business sales. Their hesitancy to assume risks and expand employment was accentuated and extended by the corporate accounting and governance scandals that surfaced in the aftermath of the decline in stock prices and also, of course, by the environment of heightened geopolitical tensions. Even now, following the pattern of recent quarters, corporate investment in fixed capital and inventories apparently continues to fall short of cashflow. The protracted nature of this shortfall is unprecedented over the past three decades. Moreover, the proportion of temporary hires relative to total employment continues to rise, underscoring that business caution remains a feature of the economic landscape.

That said, there have been much clearer indications over recent months that conditions in the labor market are improving. Most notably, gains in private nonfarm payroll employment have averaged about 200,000 per month over the past 6 months, up sharply from the pace of roughly 60,000 per month registered over the fourth quarter of 2003.

The improvements in labor market conditions will doubtless have important follow-on effects for household spending. Expanding employment should provide a lift to personal disposable income, adding to the cuts in personal income taxes over the past year. In addition, the low interest rates of recent years have allowed many households to lower the burdens of their financial obligations. Although mortgage rates are up from recent lows, they remain quite attractive from a longer-term perspective and are providing solid support to home sales. Despite the softness of recent retail sales, the combination of higher current and anticipated future income,

strengthened balance sheets, and still-low interest rates, bodes well for consumer spending.

Consumer prices excluding food and energy, so-called core prices, have been rising more rapidly this year than in 2003. For example, the 12-month change in the core personal consumption expenditures price index stood at 0.8 percent in December of last year and climbed to 1.6 percent by May of this year. Core inflation, of course, has been elevated by the indirect effects of higher energy prices on business costs and by increases in non-oil import prices that reflect past dollar depreciation and the surge in global prices for primary commodities. But the acceleration of core prices has been augmented by a marked rise in profit margins, even excluding domestic energy companies.

This surge in profits reflects, at least in part, the recent recovery of demand after a couple of years during which weak demand led to relatively heavy price discounting by businesses. Profits of non-financial corporations, as a share of sector output, after falling to 7 percent in the third quarter of 2001, rebounded to 12 percent in the first quarter of 2004, a pace of advance not experienced since 1983. Half of this rise in profit share occurred between the first quarter of 2003 and the first quarter of 2004, a period during which costs were unusually subdued. In fact, consolidated unit costs of business for the nonfinancial corporate business sector actually declined during this period. The increase in output per hour in the nonfinancial corporate business sector of more than 6 percent accounted for much of the net decline in unit costs. The remainder was due to the effects of rising output in reducing nonlabor fixed costs per unit of output. Hence, at least from an accounting perspective, between the first quarter of 2003 and the first quarter of 2004, all of the 1.1 percent increase in prices of final goods and services produced in the nonfinancial corporate sector can be attributed to a rise in profit margins rather than rising cost pressures.

However, businesses are limited in the degree to which they can raise margins by raising prices. An increase in margins should affect mainly the level of prices associated with any given level of unit costs but, by itself, should not prompt a sustained pickup in the rate of inflation going forward. In a market economy, any tendency for profit margins to continue to rise is countered largely by the entry of new competitors willing to undercut prices and by increased labor costs as more firms attempt to exploit the opportunity for outsized profits by expanding employment and output. That increase in competitive pressure, as history has amply demonstrated, with time, returns markups to more normal levels.

The profit share in the first quarter of this year, at about 12 percent, was well above normal. The gap suggested that the growth of unit profits would eventually slow relative to increased unit costs. This outlook had accorded with analysts' expectations for earnings growth over the next year, which are substantially below the realized profit growth of profit in recent quarters.

Indeed, some leveling or downward pressure on profit margins may already be in train, owing to a pickup in unit labor costs. And, although advances in productivity are continuing at a rate above the long-term average, they have slowed from the extraordinary

pace of last summer and are now running below increases in hourly compensation. The available information suggests that hourly compensation has been increasing at an annual rate of about 4½ percent in the first half of the year. To be sure, the increases in average hourly earnings of nonsupervisory workers have been subdued in recent months and barely budged in June. But other compensation has accelerated this year, reflecting continued sizable increases in health insurance costs, a sharp increase in business contributions to pension funds, and an apparently more robust rate of growth of hourly earnings of supervisory workers. The larger wage gains for supervisory workers together with anecdotal reports of growing skill shortages are consistent with earlier evidence of rising wage premiums for skilled workers relative to less-skilled workers.

For the moment, the modest upward path of unit labor costs does not appear to threaten longer-term price stability, especially if current exceptionally high profit margins begin to come under more intense competitive pressures at home and from abroad. Although some signs of protectionist sentiment have emerged, there is little evidence that the price-containing forces of ever widening global competition have ebbed. In addition, the economy is not yet operating at its productive capacity, which should help to contain cost pressures. But we cannot be certain that this benign environment will persist and that there are not more deep-seated forces emerging as a consequence of prolonged monetary accommodation. Accordingly, in assessing the appropriateness of the stance of policy, the Federal Reserve will pay close attention to incoming data, especially on costs and prices.

As always, considerable uncertainties remain about the pace of the expansion and the path of inflation. Some of those uncertainties, especially ones associated with potential terrorism, both here and abroad, are difficult to quantify. Such possibilities have threatened the balance of world supply and demand in oil markets in recent months, especially as demand has risen with the pace of world economic growth. Yet aside from energy, markets exhibit little evidence of heightened perceptions of risk. Credit spreads remain low, and market-based indicators of inflation expectations, after rising earlier this year, have receded.

With growth of aggregate demand looking more sustainable and with employment expanding broadly, the considerable monetary accommodation put in place starting in 2001 is becoming increasingly unnecessary.

If economic developments are such that monetary policy neutrality can be restored at a measured pace, as the FOMC expects, a relatively smooth adjustment of businesses and households to a more typical level of interest rates seems likely. Even if economic developments dictate that the stance of policy must be adjusted in a less gradual manner to ensure price stability, our economy appears to have prepared itself for a more dynamic adjustment of interest rates. Of course, considerably more uncertainty and hence risk surrounds the behavior of an economy with a more rapid tightening of monetary policy than is the case when tightening is more measured. In either scenario, individual instances of financial strain cannot be ruled out.

The protracted period of low interest rates has facilitated a restructuring of household and business balance sheets. Businesses have been able to fund longer-term debt at highly favorable interest rates, and by extending the maturity of their liabilities, have rendered net earnings and capital values less exposed to destabilizing interest rate spikes. Households have made similar adjustments.

Financial intermediaries are profitable, well-capitalized, and appear to be well-positioned to manage in a rising rate environment. In short, Mr. Chairman, financial markets along with households and businesses seem to be reasonably well-prepared to cope with a transition to a more neutral stance of monetary policy. Some risks necessarily attend this transition, but they are outweighed, in our judgment, by those that would be associated with maintaining the existing degree of monetary policy accommodation in the current environment. Although many factors affect inflation in the short-run, inflation in the long-run, it is important to remind ourselves, is a monetary phenomenon.

As we attempt to assess and manage these risks, we need, as always, to be prepared for the unexpected and to respond promptly and flexibly as situations warrant. But although our actions need to be flexible, our objectives are not. For 25 years, the Federal Reserve has worked to reestablish price stability on a sustained basis. An environment of price stability allows households and businesses to make decisions that best promote the longer-term growth of our economy and with it our Nation's continuing prosperity.

Thank you very much, Mr. Chairman. I have excerpted from my prepared remarks and request that they be included in the record in full, and I look forward to your questions.

Chairman SHELBY. Without objection, it will be. Thank you, Mr. Chairman.

Chairman GREENSPAN, your testimony, among other things, indicates that the economic expansion is self-sustaining, and that it has become broad based with strengthened demand and employment gains. You also indicate that financial markets, along with households and businesses, seem to be reasonably well prepared to cope with a transition to a more neutral sense of monetary policy.

Can we interpret those comments as indicating that the Federal Open Market Committee, FOMC, will be inclined to raise the Federal funds target by an additional 25 basis points in August, and would this be a measured pace?

Chairman GREENSPAN. I think we have very purposely refrained from defining what we mean by that term. Obviously, I try to raise two general scenarios as to how we would ultimately restore the Federal funds rate to neutrality, where we believe it will need to go. One is measured, which I guess the dictionary says means gradual; and the other is one which we do not perceive is the most likely, but still we are prepared for if necessary, if the economy shows signs of exhibiting significant inflationary pressures, in order to maintain the mandate which the Congress has given us to create price stability mainly for the purpose of maintaining and fostering maximum, sustainable long-term growth. Because that is our objective, we will do what is required to achieve that objective.

Chairman SHELBY. In February, the Fed's forecast for growth was between 4.5 and 5 percent for 2004. Today's forecast gives a range of 4.5 to 4.75 percent, or a slight reduction. It is close. At the same time we have seen evidence of higher inflation in recent months.

Others argue that the economy does not have as much excess capacity as utilization data would imply, with the implication there that the inflation threat may be stronger in the Fed's view.

What is your assessment, Mr. Chairman, of whether the economy is in any danger of moving into a slowdown characterized by higher inflation?

Chairman GREENSPAN. Mr. Chairman, this is always our concern. I should say most of us lived through the stagflation of the 1970's, and it was a very, I would say, disconcerting experience.

Chairman SHELBY. A bad situation.

Chairman GREENSPAN. And the concern that we have, obviously, in this context, is something that obviously occurred in that period, namely a sharp rise in oil prices. Now, obviously, the levels of oil prices in real terms are nowhere near today where they were back then. But we will always be confronted with issues of trying to maintain an economy in which low inflation exists in the context of strong growth in the economy and in employment.

We try to calibrate our policies to achieve that end as best we can. Sometimes the real world does not offer us the opportunities that we would like, but we work as expeditiously as we can to calibrate policy to achieve those ends.

Chairman SHELBY. Chairman, how comfortable are you with the data being gathered on production capacity, which seems to imply that there is still room to absorb additional production without generating significant inflation? You alluded to that earlier.

Chairman GREENSPAN. Mr. Chairman, these data are collected through surveys of plant managers who were asked at what level in their judgment at a certain period of time their plant is operating. And what we do is essentially collect, reweigh, and process those data and make a judgment as to what the facility's capacity and excess capacity is, recognizing that this is not necessarily the same thing as saying, what is the capability of these plants, because there may be shortages of skilled workers or surpluses of skilled workers, and obviously, capacity in any meaningful sense is an integration of the physical facilities and a workforce capable of effectively operating those facilities.

Chairman SHELBY. Chairman Greenspan, the House has been considering a bill that effectively blocks FASB from requiring the expensing of all employee stock options. Some of us here have grave concerns about the Congress becoming involved in such technical accounting issues. What message would the Congress send by intervening in FASB's rulemaking process? What would the implications have for the current standard-setting process?

Chairman GREENSPAN. I would be most concerned if the Congress intervened. Accounting, remember, is for the purpose of trying to get records which tell companies whether their strategies for success are succeeding or not. Accounting is difficult because a lot of it requires forecasts. FASB endeavors to obtain all of the various differing views on the way certain particular accounting procedures

should be implemented, and I think that they do a good job. It is a tough job. And if the Congress dictates what they can do or should do, I think it undercuts the ability of the business community to effectively measure what it is doing.

Chairman SHELBY. Thank you.

Senator Carper.

Senator CARPER. Thank you, Mr. Chairman.

Chairman Greenspan, this past weekend I flew out to Kentucky to visit my mother. Senator Bunning, she lives over in Ashland, Kentucky, real close to Huntington, West Virginia. While traveling there and back to Delaware I had some down time because our planes were delayed, and I had a chance to catch up on some of my reading.

Among the things that I read about were the competitive disadvantage that a lot of our manufacturers face because of the rising, still-high cost of natural gas compared with natural gas costs for a lot of our competitors around the world. I read about the competitive disadvantage that a number of our employers face in this country—I will call them legacy costs—which relate to pension costs for pensions that you are attempting to fund, and pension costs for those that are already retired. I read about the health care cost that we face in this country, double digit increases again in health care costs for employees and for those who are retired. And I read about the disadvantages that we face with respect to legal costs. We tried mightily earlier this month to pass class action reform legislation in the Senate, have not yet been successful, although I certainly hope we are not giving up. And another is with respect to costs growing out of asbestos, and the question whether or not we are going to be able to come to grips with a more rational approach for compensating those who have been damaged by exposure to asbestos.

I am going to ask you to maybe address a couple of those. First of all, if you will, just maybe a minute or two with respect to natural gas prices. I did not fully appreciate earlier how much higher our natural gas prices are to those in other parts of the world and how regionalized the prices are and what that means to us. If you could just dwell on that a little bit. As you know, we are supposed to be in conference with the House on a FISC ETI bill, so-called the Jobs Bill or Tax Bill. There are provisions in that legislation for energy conservation and production. Just a thought, if you will, to start off on natural gas prices and what these are doing to our competitiveness.

Chairman GREENSPAN. Senator, I think you are raising a very critical issue which I have addressed before this Committee in the past, and regrettably, things have not changed or improved much.

Our basic problem is that natural gas is essentially unlike crude oil or all of the oil products, where because we have a significant world trade, when we run into shortages here as we do, and indeed we are always short in the sense we are importing a very significant amount of our oil in this country, we have the capability from almost any part of the world to draw in additional supplies of crude oil and petroleum products. As a consequence, our prices tend to be, at least domestically, fairly close to those amongst our competitors around the world.

That is not true, as you point out, with natural gas. The basic reason is that as our demand for natural gas in this country has increased year-by-year in part because it is obviously the preferred fuel in so many applications, we have begun to run out of the ability to supply that from domestic sources or from Canada, which has historically supplied us with about a sixth of our needs. Because trade in natural gas is about half the size, relative to total consumption worldwide that oil is, we have very considerable difficulty importing. One of the reasons is that while we do import from Canada, we can no longer expand Canadian imports. What we have to do is very markedly increase our supplies of liquified natural gas, which means what we have to do is get gas which is put in liquified form for transport in a cryogenic state, and bring it in to terminals in the United States. Our terminal capacity is not at this stage large enough to fill our import needs, and I trust we will be moving fairly rapidly to increase our capacity to bring in foreign gas, but until that occurs, I am fearful, as I suspect you are from the remarks you were making, that we are going to erode our competitive advantage where natural gas is a key input into the production process.

And I trust we can expedite our ability to raise our import capabilities and bring gas prices, which now are close to \$6 per million BTU, well above the world competitive level, back to levels which enable our companies to be far more competitive.

Senator CARPER. Mr. Chairman, I mentioned earlier that we have been unsuccessful, at least this month, in passing class action reform legislation. Later today or maybe tomorrow Senator Frist is expected to meet with Senator Daschle and make a counter-proposal, if you will, to the offer Senator Daschle made maybe 4 weeks ago on asbestos litigation reform. We have about 70 to 75 companies that have gone bankrupt in this country. A number of others are threatened at this point in time. Could you take a minute and share with us your views of the importance of our trying to reach an accommodation in this area?

Chairman GREENSPAN. I am not someone who has looked at the details of the legislation, or in fact, the depth of the problem. In my early years, asbestos was something that was considered an exceptionally valuable product and—

Senator CARPER. Times have changed.

Chairman GREENSPAN. Times have definitely changed. And I cannot add terribly much to this, but hope that the obvious business uncertainty which the lack of a resolution of this question is creating can be expeditiously resolved.

Senator CARPER. Thank you, sir.

Chairman SHELBY. Senator Dole.

Senator DOLE. Mr. Chairman, I am concerned about how movement in the Chinese economy could affect us, and I would like to ask you about this. The Chinese, of course, have a very weak banking sector. Half of their loans are bad. There are signs of a growing bubble in their commercial real estate sector, a growing U.S. currency reserve at \$415 billion as of January.

Chairman Greenspan, while the Chinese economy is small compared to ours, how concerned are you about these and other potential problems in the Chinese economy? Recently, China appeared to

have realized that their growth is not sustainable, and have taken steps to slow down their rapid growth. One of the areas where they have pulled back is with steel production. Recently, I have been contacted by our transit authorities, both in Charlotte and Raleigh, North Carolina, because they are going to be starting soon on construction, and they have expressed deep concern on how this rise in steel prices is presenting real problems to their cost projections. I have to imagine that commercial real estate and other industries will be impacted and will suffer because of these cost increases.

Could these steps by the Chinese Government to slow down their economy potentially trigger inflation in the United States with continued globalization? Can China, in combination with other countries with high growth, export inflation to the United States, and if so, do we have any monetary tools to combat such a problem?

Chairman GREENSPAN. Senator, the Chinese economy is slowing down, and it is a deliberate effort on the part of what is a partial, centrally planned economy with an ever-growing market segment, and it is a very tricky policy that they have to implement to get it right.

The rate of increase in investment has gone down very materially on a year over year basis, and clearly through the second quarter, where their quarter-by-quarter rate of growth really slowed virtually to a halt, they exhibited considerable removal of very major elements of growth. However, they do not seem to be sinking much further. In fact, their exports look, frankly, a little bit better in June, and overall, it is very likely that, largely because of the nature of the central planning, they will try to calibrate it in a way which improves the outlook. But their economy, as you point out, is still relatively small in the areas which impact directly on us. I find it most unlikely that their contraction of steel product, as large a producer as they are, will induce any significant rise in steel prices.

There has been, as you know, some significant decline in steel prices in the United States, but judging from the scrap prices in recent weeks, it has come back a bit in part because the demand is still reasonably strong. I do not believe that the Chinese can export inflation to us. It is extremely difficult to do that, and they are not the type of economy which so interfaces with us that would create such a problem.

It is important that they move as quickly as they can to a market economy, and I think that they are trying to move in that direction. But until they have succeeded, they will still have the types of problems that you suggest.

Senator DOLE. The Bureau of Labor Statistics reported that in June that the U.S. economy created about 112,000 new jobs nationwide. I have been amazed that some have stated that since this number was less than half of that projected for new jobs, that somehow this is an indication that our economy is headed back into recession again.

For the record, how do you view these lower-than-expected job figures?

Chairman GREENSPAN. Senator, we have approximately 130 million people on payrolls in this country, and I am surprised that we

can estimate the change from month to month as accurately as we do. The range is really quite large.

I know a number of people looked at those data and took it as some indication that there is some significant weakness developing. If that were the case, I think we would have seen it in a marked pickup in initial claims for unemployment insurance, which of course we have not, and all of the other qualitative indicators we have currently in the third quarter suggest that employment is continuing to expand. And indeed, while there has been weakness in June, and a number of your colleagues mentioned this, I might say that July seems to be somewhat better, even though we are going through a soft patch.

Motor vehicle sales, which for example, were an important part of the weakness in the June retail sales data, as least so far as the first 10 days were concerned, shows a very significant snap-back largely because discounts have been expanded again. Our anecdotal data on new orders arriving during the month of July showed that the system is holding up. There is no real underlying evidence of any cumulative weakness here.

It is nonetheless the case that the little bulge in inflationary pressure seems to have created a soft patch here, and it is something obviously we are watching very closely.

Senator DOLE. Just one final question. Recently, some have suggested that most of the new jobs being created in the last year are paying an average \$1,500 to \$9,000 less than those jobs lost over the past few years. Obviously, often an unemployed person that finds a new job, they may be at a lower salary for a short time. But does your analysis show that the current jobs being created are basically lower-wage jobs with little or no benefits?

Chairman GREENSPAN. The answer is no. But let me say that there are several different statistics that I think are important. The one that you cite is an important fact, namely, that people who do lose their jobs tend to have difficulty restoring the level of their original wage for quite a while. And that is part of the process which goes on in the very significant churning in the labor market.

We have looked at this question in the broader sense of are we essentially downgrading the types of jobs that are being created, say, over the past year, and the answer is we find very little evidence of that.

There are essentially two ways to interpret how one should evaluate this. One, is to look at the question as to whether the growth in jobs is disproportionately in industries where the average wage rate is higher than average for the economy as a whole. There seems to be a slight indication of a decline in that regard, meaning more workers going into industries with slightly below nationwide average earnings.

And two, when we look at it in the context of occupation, where clearly one gets a sense of what is happening to particular types of job slots, the answer is exactly in the opposite direction.

Now, these are not contradictory. In other words, you can have an increasing spread within industries where there is a greater skill dispersion while still having the average of the industry go down. But the bottom line in all of this is these data are so marginal that the conclusion that there is anything going on other than

just average expectation of changes in jobs does not seem, in our judgment, to be supported by the underlying data which is broadly available.

Senator DOLE. Thank you, Mr. Chairman.

Chairman SHELBY. Senator Sarbanes.

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

Actually, Senator Dole touched on a couple of issues I wanted to address. One is the current account deficit, which is now at about 5.5 percent of GDP, the highest level, as I understand it, in U.S. economic history, at least according to Pete Peterson, who said in an article in *The Washington Post* on Sunday, "This deficit requires us Americans to borrow about \$2 billion from foreigners every working day. No expert I know believes that this is sustainable." And, Chairman Greenspan, if I recall correctly, you have stated before this Committee in the past that a current account deficit of this magnitude is not sustainable, as I recall.

Chairman GREENSPAN. That is correct, Senator.

Senator SARBANES. Now, I am concerned not only about the deficit but that the source of the foreign borrowing has shifted. In its February report, the Fed found, "The financing counterpart to the current account deficit experienced a sizable shift in 2003 as net private inflows fell while foreign official inflows increased. Foreign official purchases of U.S. assets surged to record levels in 2003, with the accumulation of dollar reserves particular high in China and Japan."

I have a chart here that I want to show this surge and which I think highlights that our dependence on foreign capital has increasingly been supplied by foreign governments, specifically, according to the Fed, China and Japan. And this is the foreign official assets in the United States. This is 1976. This is 1993. And then we see the steady pace—and then it is almost going up at a perpendicular rate now.

I find this troubling. I guess I find any chart that all of a sudden seems to leap out in some different direction from what we have generally been experiencing a matter of concern. What is happening here and what are its implications? Are China and Japan doing this to manipulate the currency in order to gain a trade advantage and help their export position? And what are the potential consequences for us in this scenario, particularly assuming it might continue?

Chairman GREENSPAN. Well, let me answer the second part of your question first. We have obviously been monitoring these flows very closely for precisely the reasons that you indicate. It is turning out that the impact on the international markets on the value of the dollar and, hence, on the value of the United States' internal economic system from these shifts between foreign private funding of our current account deficit to last year's very significant public funding, it is turning out that in 2004 we are beginning to see a reversal of that without any serious consequences, meaning that the shift between foreign public financing of the deficit and private financing is not a significantly large issue. The Japanese, for example, stopped intervening to accumulate American dollars in March of this year, after very heavy purchases earlier this year, and the Chinese purchases have flattened out. We see very little evidence

that the shift of that official financing to private financing is impacting on the economy in general.

Nonetheless, there is no question that, as I am sure you are aware, almost half of Federal marketable debt outstanding that we issue, is held abroad. And these trends are significant, and they do raise serious questions. But so far, the flexibility of our international financial system has been such that we have had very little problem in financing these very large deficits.

Now, as I have testified before this Committee on innumerable occasions, this cannot go on indefinitely because at some point we are going to reach a status where our net debt to foreigners—currently a little under a fourth of GDP—will get exceptionally large, and the holding of dollar assets as reserves for both the private and public sectors abroad will become abnormally large relative to their needs and they will stop purchasing dollars. That will have an obvious significant impact on us when it occurs.

I do not know when that date is. I know at some point in the future something of that nature has to occur, unless there are shifts in the world economy such that our trade deficit and, therefore, our current account deficit falls measurably. If that does not happen, then we are going to see a clear indication on the part of foreign investors in the United States to start to hold back and diversify, even if the rates of return here remain high. Since we are at unprecedented levels—and it could conceivably be higher, as I indicated in a speech earlier this year—at some point it has to shift.

Senator SARBANES. I want to touch on one other subject that Senator Dole raised, and that is the weakness of the labor market. The participation rate between the first quarter of 2001 and the second quarter of 2004 dropped to such an extent that actually we would have 2.5 percent more people in the labor force today if the participation rate was what it was just 3 years ago.

In June, 21.6 percent of the total of unemployed have been unemployed over 20 weeks. This is quite a change, as we can see here, in terms of having crossed above the 20-percent line and staying up there, which actually now it has been there for 21 months. It surpassed the record set from 1982 to 1984.

Finally, the job growth, although we have had some job growth in recent months, we still remain below where we were in the level of jobs 39 months ago when the recession began. In every economic recovery since the Depression, the economy has recaptured all of the jobs it lost well within the 39 months. So this is the longest job loss recovery. And, in fact, there is a very marked contrast between the current recovery and the average of post-war recessions. If we just match the average, we would have about 6 million more jobs currently.

Now, looking at all of this, and, of course, you know, we are getting a lot of comment in the newspapers and in the magazines about this very difficult problem, it seems to me we have not been able to bring jobs back online in a way that gives us encouragement in terms of putting people back to work. We still have this job gap, this slack in the labor market. How do we explain it? I mean, it is a very marked contrast—

Chairman GREENSPAN. It is.

Senator SARBANES. —where we are today with previous recoveries.

Chairman GREENSPAN. Senator, I think there are two basic forces at play here. The first is that productivity growth over this period has been extraordinarily large, far in excess of the rate of increase in output per hour that was experienced during other periods that you draw on the average of your chart. And so as production picked up, we were not hiring, basically for reasons which I indicate in my prepared remarks, and that has continued, not to the extent that it existed last year, but productivity is still running above the averages of a goodly part of the period which you have on your chart.

Second, we have had an exceptionally shallow recession—in fact, the shallowest recession in the post-World War II period—so that the normal rebound that we experienced in a lot of the recoveries which are part of the average that you show on your chart was not possible.

If, as I suspect is the case, the growth rate of productivity will slow down from the extraordinary levels of last year, growth will continue in payrolls, and at a fairly significant pace. I do not know that I can pinpoint the actual number. It will depend crucially on every tenth of a percent in the productivity numbers and obviously in the GDP. But it does not look as though the growth in employment is stalling, though there is no question that it is moving up at a pace far less rapid than you point out has been our history.

Chairman SHELBY. Senator Bunning.

Senator BUNNING. Thank you, Mr. Chairman.

Chairman Greenspan, how concerned should we be about the June housing figures, 8.4-percent reduction following a 3.5-percent reduction in May?

Chairman GREENSPAN. Senator, the figures for June came out below where we would have expected them to be, but not appreciably. The reason essentially is that as mortgage rates began to move up several months ago, we began to see a significant pick-up in housing sales, people endeavoring to get in under the wire, so to speak. The result was clearly a borrowing of housing starts from the future. And that I think is part of the June experience.

If that is the case, then we would expect some short-term recovery from the June decline, and, indeed, that is suggested in the detail that we get along with housing starts, which tries to measure the permit data that go along with the starts data, coupled with backlogs of unused permits. And those data indicate that a significant part of the drop, almost half, is not reflected in the decline in so-called adjusted permits, meaning for single-family dwellings it would be permits of single-family dwellings plus the number of starts in nonpermitted issuing areas. Those numbers are down roughly half what the actual starts figure is.

So the number is weak, there is no question about that, and definitely below where our expectations are. But we do not believe it is a cause for concern. Our general forecast, as it has been for quite a while, is that housing starts which have come up at an extraordinary pace in recent years are very likely to shade lower over the next couple of years. It is hard to maintain the pace that we are maintaining, but we do not expect that the fall-off will be abrupt

or significant. And as a consequence of that, we do not perceive the June figure to be a harbinger of worse to come.

Senator BUNNING. Does the June producer price index drop make you feel better about inflation or not?

Chairman GREENSPAN. Obviously somewhat better, but still, a number of the prices that are built into that index were rising recently at a somewhat faster pace than we expect in the context of maintaining long-term price stability. But it is the case that the modest slowdown in the inflation rate was welcome.

Senator BUNNING. Let me ask you, you talked productivity and how important it was for the job market and other things. What is the Fed's view as far as additional productivity gains as we look down through the third and fourth quarter of this year? Do you see an average gain of productivity? Or where are we?

Chairman GREENSPAN. It is one of the most difficult statistics to forecast, Senator. We can forecast aggregative demand reasonably well, plus or minus a half a percentage point annual rate, most of the time. We know that when we have profit margins at the levels they are now, there are very significant incentives on the part of business to expand their workforces and in the process be less focused on cost reduction, which is the major component of productivity growth.

So it is difficult for us to make judgments as to the path of productivity or exactly how the increase in the GDP will be distributed between that produced by increased employment and that produced by increased productivity. Our general judgment is that it is probably going to be average, but the truth of the matter is we have very little experience in dealing with productivity numbers as high as they have been, and our forecasting success in the last year or two in trying to judge where these numbers were likely to go has been one of our poorer set of projections.

Senator BUNNING. The last question, and this has to do with energy costs, the cost of crude oil, the cost of natural gas, and everything. How much more cost increase can this economy stand before it becomes a very significant factor in the overall well-being of the economy?

Chairman GREENSPAN. Senator, that is one of the most important questions that we focus on. It depends in part on what these oil prices or gas prices are going to rise from here. Their impact on the economy will depend on how fast they are moving, because what our data show, especially for oil, is that over the longer run, say a series of years, the elasticity of demand for oil with respect to price is pretty high. In other words, if prices stay high, after several years we will shift the structure of our economy to less oil-intensive structures. The nature of our light motor vehicle stock, for example, will shift significantly to types of cars and trucks which consume far less motor gasoline. And the same will hold true in lots of other areas of the economy.

If, however, prices spike in the short run, where those adjustments are not possible, then history tells us it has significant impacts. And, indeed, that is what happened to us in the latter part of the 1970's. So it depends very critically, if we are to run into a problem, whether it is a gradual change in price or whether it is a short-term change. But as I indicated earlier, even though we are

approaching record nominal prices of crude oil in the world, we obviously are well below where we were, for example, in 1979 in real terms.

Senator BUNNING. Thank you.

Chairman SHELBY. Senator Reed.

Senator REED. Thank you, Mr. Chairman.

Chairman Greenspan, one of the issues we have talked about on several occasions is this lack of growth in wages and earnings for workers, and that is a critical issue. Increases are necessary to meet increased obligations of housing, education, health care, but also there is a distributional effect which you have pointed out, where higher-skilled workers seem to do okay and lower-skilled workers seem to be falling behind, creating social tensions.

Senator REED. Looking at the numbers I have, over the last year average hourly earnings decline 1.1 percent in real terms. Average weekly earnings declined 1.4 percent. This is in a situation where the economy is recovering. We are seeing GDP growth and, as you point out, where productivity has been growing significantly, allowing, one presumes, increases of wages.

Can you explain the apparent contradiction between these falling wages and increased productivity and expansion?

Chairman GREENSPAN. Senator, I believe—I think it was the last time I was here—we had a fairly extensive discussion in the question-and-answer period on the issue of education. I believe you were participating in that.

Senator REED. That is right, and can I say, I think this is a slightly different question, because we are not talking about people entering the workforce with different skills. We are talking about apparently workers that are already employed within a year. I would think that factor would not be the most critical.

Chairman GREENSPAN. In a way it is, and the reason I say that is that, as I tried to define the problem back then, what has been happening to our labor force is that we have not been able to keep up the average skill level in our workforce to match the required increases of increasing technology. And what that has meant has been that rather than getting an ever increasing number of college graduates at a far faster rate than we have been getting them and, hence, higher skills, to create a surplus or at least a significantly large supply of skilled workers relative to the demand in order to keep skilled wages down and because you move up people from the lesser skilled areas to the skilled, you lower the number of surplus workers in those markets for lesser skilled and, hence, remove the downside pressure on wages.

In other words, this is an issue which has been regrettably going on for 15 years, or thereabouts, creating an ever increasing opening up of the skilled versus lesser-skilled gap. And as you point out, if you put the wage changes in nominal terms, for the lesser-skilled they have been growing in many parts of the last 15 years at less than the increase in the Consumer Price Index. That is, of course, not true for wages and salaries as a whole. Indeed, the ratio of average hourly earnings for supervisory workers that one can infer from the data systems that we have, have been rising relative to average hourly earnings, which you cite, for quite a considerable period of time, and they account for 40 percent of the aggregate

wage and salary totals. So we are getting a problem here which I think has got to be addressed, and as I had indicated last month, I think the effective increase in the concentration of incomes here, which is implicit in this, is not desirable in a democratic society.

Senator REED. We have several problems. One problem is training and retraining individuals and, you know, if you are starting off with high school or elementary children, you maybe can have an effect. That is 5 or 10 years out. The situation is: What do we do in this year, next year, and the following years to raise the wages of people whose skills cannot be—

Chairman GREENSPAN. I think the way you raise those wages is you remove the large number of younger people whose skills should be upgraded significantly from being an overhang on the job markets in which we have got, from as best I can see, an excess of supply over demand, and that has got to be changed.

Senator REED. I do not see a ready policy there, but I see a concept.

Chairman GREENSPAN. Whether you have a policy or not, I think it is right to get the analysis right. Because if we do not understand what is causing this, our policies are not going to address what is a significant problem.

Senator REED. What specific policies should we adopt today?

Chairman GREENSPAN. Well, I mean, if we can move—

Senator REED. Because that helps us understand.

Chairman GREENSPAN. First of all, we know that from the fourth grade to the twelfth grade, our children somehow are falling behind international standards.

Senator REED. Mr. Chairman, I accept that, but policies that are applied to people currently in the workforce today, adults who are working hard, they are seeing corporate profits go up dramatically. They are getting very little share of those corporate profits as the data indicates.

Chairman GREENSPAN. I think what you are going to find is that that share will now start to increase.

Senator REED. Now, one of the places that this share increases is labor costs, because employers will spend more for health care and for other benefits, which workers appreciate. That still does not increase the take-home.

Chairman GREENSPAN. I agree with that, and what I am saying is that, as I indicated I think the last time I was here, virtually all of the increase in productivity during the year starting in the first quarter of 2003 shows up not as real wages, but as increased profitability. That stopped some time in the last several months, and what history tells us is that the shift now goes in the other direction, and you get, with a delayed effect, the increased productivity showing up as real wages overall, and I would think that while certainly supervisory workers are going to contribute or share significantly, it will also be true of the 80 percent of payrolls which are nonsupervisory workers as well.

Senator REED. My time has expired. Thank you, Mr. Chairman.

Chairman SHELBY. Senator Allard.

Senator ALLARD. Thank you, Mr. Chairman. I want to pose a housing question to Chairman Greenspan.

Low mortgage rates I think for the last year have probably contributed substantially to increased sales of existing residences, helping to boost the national homeownership rate to the highest level ever. Could you please discuss your views on what lies in store for housing, particularly in terms of other factors such as consumer confidence, unemployment rates, as well as wage rate? And what trends do you see for the homeownership rate?

Chairman GREENSPAN. Senator, as you know, the homeownership rate in the United States has risen quite materially in the last decade. We went from about 64 percent to probably around 69 percent now. We are seeing that household growth is holding up reasonably, and indeed a significant part of that is actually the result of immigration. And with household growth holding up, and the inclination of renters to move into an owner-occupied status, we still seem to be getting a fairly pronounced growth in homeownership, and indeed the broad policies and effectiveness of our mortgage markets are clearly working in that direction.

To the extent, obviously, that homeownership becomes a critical continuing factor, it creates big demand for single-family dwellings, and that is the reason why we have had approximately a million and a half plus single-family dwellings annually for a number of years as homeownership has moved forward.

Now, obviously, as we get into ever higher numbers, there is some amount of desire to be a renter, not an owner. So at some point we will slow down, but I see no evidence at this stage that slowdown is occurring, and as a consequence I think the underlying demand for housing is going to remain reasonably solid, although presumably less than the peaks that we have seen in recent months.

Senator ALLARD. I also understand that the number of jobs coming from—to change the subject—other countries to the United States is growing at a faster rate than jobs lost overseas. According to the Organization for International Investment over the last 15 years, the numbers of manufactured jobs insourced, coming into the United States, have grown by 82 percent, while the number outsourced overseas grew by only 23 percent. This study indicated that these insourced jobs are offering higher pay than those outsourced. Furthermore, last month the Labor Department released the first official Government study that revealed only 2.5 percent of the 182,456 workers who lost their jobs in the first quarter of this year were due to jobs being sent abroad.

Would you please share your thoughts on these numbers, and is outsourcing really taking away as many American jobs as people are claiming it is?

Chairman GREENSPAN. Senator, I have not checked the specific numbers, but it does not seem different from what I am generally aware of, depending on how you define a lot of these categories.

We are in a global economy, and increasingly so, and it has been to the advantage of the United States to be in this global economy, and indeed in the position of leadership, which we have been in, and it has contributed, in my judgment, to a very significant increase in standards of living of the average American.

As the world becomes ever more complex and as we find we go to ever increasingly more sophisticated levels of specialization in

the division of labor, it necessarily means that we reach out to engage in trade with the rest of the world at an increasing rate, and indeed, the aggregate amount of trade worldwide has been growing almost every year relative to world GDP for the last half century. This means that you are getting imports as a share of domestic GNP's, on average, rising. And as a consequence of this, we are engaged in ever more insourcing and outsourcing, depending how you want to define it, and while it is certainly the case that outsourcing as estimated for the current period is quite small, I think it is going to be rising, and I do not think that is bad. I think that is going to be part of a broader expansion which will lead to higher standards of living in this country and an ability for our expertise to be most effectively applied in international markets.

Senator ALLARD. Mr. Chairman, may I follow with a question on protectionism?

Chairman SHELBY. Go ahead.

Senator ALLARD. You have cautioned repeatedly about the danger of protectionism, and that it could provide a barrier to the economic growth that has picked up in recent months. Could you elaborate on that for us, please?

Chairman GREENSPAN. Looking back at the post-World War II period, this very expansion of globalization which I have referred to is also capable of being viewed as an ever wider degree of international stimulus to the United States, and indeed, I think that our ability to engage the international community has significantly enhanced our standard of living, as I just indicated. But it depends on that expansion continuing, because it is the rate of change in expansion which creates the level of economic growth here, and I think that what one requires to recognize is that if the Doha Round, for example, fails to be completed—and there is some concern, as you know, about how that is evolving, especially this month—I would have a concern that we would find that losing this stimulus from the international system will work negatively on economic growth in the United States, and I, accordingly therefore, hope that we can continue our efforts to make sure that globalization continues if we are to reap the benefits of it.

Senator ALLARD. Thank you, Mr. Chairman.

Chairman SHELBY. Senator Bayh.

Senator BAYH. Thank you, Mr. Chairman.

Chairman Greenspan, I would like to follow up on Senator Sarbanes first line of questioning with regard to our growing dependence upon foreign borrowing and the consequences for our domestic economy. I think you indicated that at some point we will reach a position where the rest of the world's appetite for U.S. denominated assets has been satiated. We do not know when that point will arrive. Are there any studies under way to try and determine, using portfolio theory or other types of analysis, when that point might be reached?

Chairman GREENSPAN. Senator, it is very interesting because there has been a very considerable amount of work endeavoring to unearth where those points are. We do know that in developing countries in the past, as individual countries have gotten up to ever higher current account deficits, they turned around. In some cases they got to double digits before they turned around. But they usu-

ally, if the economies were flexible, adjusted without any real crisis occurring. But a number of us have been trying to figure out whether there are leading indicators as to when this type of thing turns. What has been examined are all the various different types of flows, private flows, equity flows, debt flows, flows of governments. What we find is that none of them work.

What that says is that the markets internationally are so efficient that the substitutability of various different instruments to finance, for example, our current account deficit, is extraordinarily high, and while it clearly affects prices of bonds and stocks and exchange rates in the process, the adjustments continue in a way which it is very difficult to determine when certain types of flows are occurring and when the aggregate deficit is about to turn around.

Senator BAYH. Let me follow up. I was concerned about part of your response to Senator Sarbanes, where I believe you indicated that when the satiation point arrives, that even a higher rate of return on U.S. denominated assets would not lead them to acquire more of our assets, which means that if the deficit has to be financed entirely domestically, the increase in interest rates and other adjustments that might flow from that would have to be even more severe. I find that potential to be rather alarming.

Chairman GREENSPAN. I think the way I put it, I said that even if rates of return stay high. I did not say necessarily "increase." The reason I put it that way, Senator, is that if you think about rates of return being high in the United States, and people therefore continually wish to invest here, you can conceive of a situation in which even though the rate of return does not change, they will eventually say, "I am over committed. I have too much. I want to diversify, even though I will get a lower rate of return."

Senator BAYH. Does that not imply more adverse consequences for us domestically?

Chairman GREENSPAN. If we get to the point where there is a cliff effect, obviously, it would, but I think we are so flexible and the markets are so flexible, and I assume we will keep them flexible, that the international system does not work that way. It works incrementally. But you are quite right. I mean ultimately if we cannot continue to attract investment at current interest rates or current rates of return, and we still are running very large trade, and therefore capital account deficits, all economic theory says that rates have to rise.

I am a little suspicious of that conclusion largely because of a lot of those conclusions are based on the way the markets functioned 30, 40, 50 years ago, when remember, they were not flexible. We had all sorts of capital controls and all sorts of rigidities. But I do not think we can readily dismiss it out of hand as a possibility.

Senator BAYH. Our focus as policymakers, when we are concerned about this issue, should be on maintaining the flexibility of the international financial system and hoping there is not an exogenous shock of some kind that would lead to a rapid readjustment.

Chairman GREENSPAN. Senator, I would generalize that. I say the experience we have had in the last decade has indicated that the most important thing we can do with respect to policy, both domestically and internationally, is to create flexibility, because it ob-

viously is a factor in the resilience of an economy to respond to shocks, and indeed, I do not think that we could have successfully gotten through September 11, for example, unless we had an exceptionally flexible financial and economic system domestically.

Senator BAYH. My final question, Mr. Chairman, and thank you for this discussion, it is something I am concerned about. I hope that the flexible nature of the markets will enable us to make a gradual adjustment but I am somewhat concerned.

I would like to just change the topic and ask my final question. A recent Fed study entitled "The Price and Quantity of Residential Land in the United States" was just completed, and concluded that over the next 3 years in the aggregate, housing prices on a cumulative basis, will go up, they predict, 2.6 percent, which is the lowest increase on record according to the report. Given the role that real estate values played in getting us through the recent softness and sustaining consumer demand, is that not the source of some concern?

Chairman GREENSPAN. It would be if it were an abrupt change. Remember that we have had a fairly significant rise in real residential prices in recent years, and historically if you look back, that is not unusual. But what does tend to happen is that we go up for quite a while, and then we flatten out, and I do not know what the actual number is. I have not read the details of the study, nor do I know whether the data are accurate in that regard, but I certainly do not—

Senator BAYH. If you are having a restless night and have trouble nodding off, I recommend it.

Chairman GREENSPAN. I find the best thing to do if I run into that occasion is to read some of my speeches.

[Laughter.]

Senator BAYH. Thank you, Mr. Chairman. The reason for my question was simply—by the way, that has been said about mine as well—is your sanguine view about the sustainability of the recovery, and it seems one of the legs that we have relied upon recently is—I may perhaps be ameliorating a little bit here going forward, but you think that will be more than offset by other things.

Chairman GREENSPAN. Yes, that is our forecast.

Senator BAYH. Thank you.

Chairman SHELBY. Senator Bennett.

#### **STATEMENT OF SENATOR ROBERT F. BENNETT**

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

One of the advantages of coming a little bit late is that you get to hear all of your colleagues ask your own brilliant questions before you can get to them, but you can also take notes on the things that people say.

You said in response to Senator Shelby, when he was talking about where interest rates should be, and you very appropriately and predictably did not give us a number. But you said you were hoping we could get back to neutrality. So let me take one more stab at it and ask what number is neutrality?

Chairman GREENSPAN. I knew you were going to ask that question, Senator. Actually, we do not know what neutrality is until we get there. The reason I say that is the notion of stability, or a state

where the financial markets are in some form of equilibrium, depends on a number of things. You can tell whether you are below or above, but until you are there, you are not quite sure you are there. We know at this stage that at 1¼ percent Federal funds rate, are below neutral. When we arrive at neutral, we will know it, and we can take whatever actions we consider desirable or not desirable at that time, but I think that estimates that people try to make as to where that so-called neutrality is, fall in a fairly broad range, and I would just choose not to speculate where it is.

Senator BENNETT. You said to Senator Allard that outsourcing is rising and that is good.

Chairman GREENSPAN. It is very low at this stage, but what I was saying is, as part of the globalization process, which I think is good for the American economy, and probably an inevitable component is increasing trade of all sorts, and therefore, outsourcing both into the United States and out is likely to rise. And as Senator Allard suggests, a number of studies say at this stage that the outsourcing into the United States may very well be larger than the outsourcing. I do not think this is a critical issue. I am really quite surprised at how big an issue this has become. I fully understand the real and serious problems that individuals have who lose their jobs in this process, and indeed, we should do whatever is required to make their lives better, but shutting off international trade as a means of doing that is essentially very counter-productive to everybody's standard of living.

Senator BENNETT. I happen to feel the same way. When you made the statement "that is good," I thought it is a good thing he is not Chairman of the Council of Economic Advisers, because if you were, tomorrow morning there would be calls for his resignation and attempts on the part of the political arm of White House to distance themselves from your testimony, because that is exactly what Greg Mankiw said to the Joint Economic Committee, and that is what happened when he said that.

Chairman GREENSPAN. I think the response to Greg Mankiw's remark was unfortunate.

Senator BENNETT. Yes, and you are not going to be invited to Lou Dobbs' show any time soon.

[Laughter.]

Let us talk for just a little bit about oil prices. Oil is traded in dollars. The dollar is losing its value vis-à-vis the euro, the British pound, and some other currencies. Is there a temptation therefore on the part of OPEC to get their real return back up to what it might have been by raising the denomination of a barrel of oil in dollars? In other words, is it in their interest to try to take the price of oil in dollars up to the point where they are getting as much real income as they used to get when the dollar and the euro were in parity?

Chairman GREENSPAN. Senator, I do not think that the particular denomination in which oil is priced affects the overall price. In other words, the way I would put it is we could trace oil prices in euros, for example, or in dollars or in yen, and while there are certain technical issues which are a slight problem here, if we were to officially switch the unit in which oil was denominated, I do not

think it would change the price patterns in dollars, yen or euros in any significant manner.

Senator BENNETT. I do not think it would either at the moment the switch were made, but if a dollar is seen as continuing to depreciate with respect to other world currencies, is there an incentive over time for an OPEC country—

Chairman GREENSPAN. Oh, I see. There obviously is a sense in which if a dollar purchases less in other currencies, that one could conceive that they might try to raise prices in order to offset that.

Senator BENNETT. Offset the declining value of the dollar. Do you see that in OPEC strategy?

Chairman GREENSPAN. Well, they are certainly not doing it now. They essentially have opened up the taps as best one can judge. Supply is increasing, but demand overall is increasing more, and that is what the difficulty is. I cannot say to you that I see any evidence that OPEC is constraining production for the purpose of raising price at this particular time.

Senator BENNETT. My observation of the current increase of the price of oil has more to do with uncertainty over the situation in Russia than it does with OPEC strategy. Do you have a reaction to that?

Chairman GREENSPAN. Let me say this. I am talking about short-term strategy obviously. There is a long-term strategy about the capacity of crude oil in OPEC producing countries, which is a different issue, but clearly, the problems in Russia involve a significant concern about a curtailment of crude oil production if Yukos went into bankruptcy and it was dismembered or something like that. That was clearly in the marketplace.

But also in the marketplace is something which is disturbing in the sense that the very long-term futures, that is, those for 2010, for example, have risen very substantially in recent years, which is unusual because in years past the so-called long-term supply price of crude oil in dollars was about \$20 a barrel, and irrespective of what the spot price was, the long-term price stabilized somewhere in that \$20 area. In the last several years, the long-term price has gone up very substantially, and it is not because of cost. It is basically fear of long-term supply in a number of the areas of the world where geopolitical concerns have risen.

Senator BENNETT. Thank you.

Chairman SHELBY. Senator Dodd.

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

Thank you, Mr. Chairman, for being here today. I was not here for your confirmation hearing, but let me once again say I think of how fortunate we are in this country that you are the Chairman of the Federal Reserve, and you have done a tremendous job over the past 16 years.

Chairman GREENSPAN. Thank you very much.

Senator DODD. I suspect the next 16 years are going to be difficult ones, and in your contribution to this discussion, debate is very much appreciated. Let me begin with those comments.

Senator Schumer, when he was speaking a little while ago, mentioned that these two wings, like a wonderful physical analogy, talking about monetary policy and fiscal policy. I know you are here to give a monetary policy report, but I cannot resist the oppor-

tunity to raise issues with you involving fiscal policy. We are policy setters up here. We have about 20 working days by my calculations, between now and the adjournment of this Congress, which is not a great deal of time left. Two issues that I would like to raise with you, both of which you have commented on in the past. In fact, you did again today in part. One has to do with the growing and dangerous gap between those who are more affluent and those who are not in the country. The second issue has to do with the Federal deficit.

I recall sitting here, it was about 42 months ago, when you were sitting in that very chair in January 2001, and we had this incredible conversation, that is, you did with the Committee, about the potential effects of eliminating the national debt and how we should respond to it, a conversation I suspect many of us only a few years earlier never would have imagined occurring.

Chairman GREENSPAN. Nor I.

Senator DODD. All of us have in our minds those clocks, whether it was in New York or Washington, that would tick off every nanosecond the accumulation of debt, and here we were, only 42 months ago, literally talking about the implications of eliminating the national debt. You spoke at that time about realistically getting to the level of Federal debt that is an effective irreducible minimum. I am quoting you from your testimony on that day in January 2001.

Let me begin if I can with the gap question and wealth, because some of the things we have heard today and some of the statistics you point to, indicate that that is going on. I do not know if you had the opportunity this morning to read an article in *The Wall Street Journal* entitled "So Far Economic Recovery Tilts to the Highest-Income Americans." The article quotes Dan Maki, M-a-k-i, a former member of the staff of the Federal Reserve and currently an economist.

Chairman GREENSPAN. Dean Maki, I believe.

Senator DODD. What is it?

Chairman GREENSPAN. Dean.

Senator DODD. Dean, yes. He is an economist today with JPMorgan. He says, "Today the recovery's primary beneficiaries have been upper-income households." Your own testimony of course mentions a similar point when you find that increases in average hourly earnings of nonsupervisory workers have been subdued in recent months and barely budged in June, while also find an apparently more robust rate of growth for hourly earnings of supervisory workers. I wonder if I can conclude from your testimony here today that you would in general agree with Dean Maki's findings, that the primary beneficiaries of this recovery have been upper-income households?

He goes on, by the way, in the article, to compare purchases that are occurring in some of the high end value stores. Nieman Marcus sales are up 13½ percent, whereas Payless Shoe Stores have seen sales fall by 1 percent, of low cost product. Putting that together, have we seen the wealthy, who were given huge tax cuts over the past 3 years, turn around and spend their tax cuts on these luxury items, while average workers of course have seen their wages stagnate? What are the implications? It worries me deeply. I think it

does you as well. If these trendlines continue, what happens to the social fabric of a country where those kind of gaps exist?

Chairman GREENSPAN. I am not concerned about what people spend money on. That is not an issue so much. But it is the resource issue.

Senator DODD. But as an evidentiary piece.

Chairman GREENSPAN. Yes. I agree with Dean Maki's conclusions. That is what our data show as well. That is the reason why I think, as I indicated earlier, that is very important to understand the process that is going on here and find a way to have public policy address it.

My own judgment, and I think the data strongly support the underlying forces, is that the problem is essentially an educational issue, plus I would suspect it may have something to do with immigration policy as well. But we have been unable to create a level of skills which would enable a significant part of our population to earn skilled wages. Unless we can do that, I am not sure how we get out of this bind.

Obviously, we could slow down the growth of the economy, stabilize our technology, try not to be innovative, and that will actually create a stabilization in the income shares. But that is scarcely an acceptable way to come at this. Rather than try to essentially curtail economic growth, we should determine why it is that the skills of our schoolchildren, which in the fourth grade internationally are above average, somehow deteriorate by the time they get to the twelfth grade to well in the lower echelons of children around the world.

It cannot be that our children are somehow inferior. The fourth graders are not. And if they are not inferior in the fourth grade, I do not know how they become inferior thereafter. So it is not the quality of the students. It is something we do wrong. I am not knowledgeable enough to know, but this is a crucial issue.

Senator DODD. It would be worthwhile to have maybe a longer conversation. One of the factors I think is we—I think the high rate at one point in the Nixon Administration is we were spending something close to 6 percent of the Federal budget on secondary and elementary education in this country, the Federal Government was. Today, I think the figure is less than 2 percent. And when you look at disparities that exist within school systems, even adjoining ones or neighboring ones where I think the average of a noncertified teacher in a poor rural and urban school is hovering around 35 percent of the teachers not certified to teach the classes they are teaching, class sizes being huge, there are factors there that make it difficult for students to learn.

I think we should look at our choices. We can come down to where we allocate resources and how we make choices between the issue of tax cuts for the top 1 percent of income earners versus investing in a No Child Left Behind bill, or special education funds and so forth that I think could contribute to that. But it is an interesting point and I appreciate your observation because I think it does contribute to it.

Let me jump to the deficit issue, because my colleague from New York is here and I suspect he may want to talk about the same subject matter. I want you to use a little bit if you can here the

bully pulpit of this chair have you. Again, we are here from monetary policy. We have no budget. Not likely to get one. Maybe we will, but I doubt it at this point. We are going to be asked later this week to vote for a tax cut which we are going to be asked not to pay for. No matter how much you may find it attractive politically to be for it, there is no provision apparently to accommodate for the cost of it. We may be asked to vote for an omnibus appropriations bill, because we have only passed one appropriations bills, the Department of Defense appropriation bill. Otherwise, 12 appropriations bills have not been enacted.

The House has done more, but nonetheless, not likely to reach some common agreement between the two.

We are going to be asked to increase the debt ceiling by some \$680 billion, therefore getting near \$8 trillion in debt figures. That is in 42 months going from a projected, I think it was in excess of \$3 trillion, surplus over 10 years to now \$8 trillion in deficit. I know you feel strongly about this and it just seems to me we need to hear your voice again on this subject matter. That our fiscal policies are out of control here and we need some voices of discipline warning members.

Again, I am not suggesting you come up with a policy solution, but I think we need to hear from you as often as we can. Along with the trend lines in the gap in wealth in this country are disturbing, the trend lines on Federal deficits are deeply alarming. And our inability or unwillingness to come to terms with them is a growing concern, it should be to all of us. I wonder if you might take a few minutes and express your views on this subject matter once again.

Chairman GREENSPAN. Senator, let me just say that I think we are, at the moment, reaping some of the consequence of the failure to extend PAYGO and discretionary cap legislation in September 2002. You are dealing with long-term budgets, which has been something novel in this country in the last 20 years. It was not all that long ago, in the 1960's and certainly in the 1950's, that there were very few long-term programs. The F-4, for example, was a project which took a number of years in the military, and we had certain agricultural programs which extended, but we did not have very long-term commitments as we have today.

The problem is that our ability to forecast what the budget will look like 15 years from today is extremely limited. We can estimate within a reasonable degree of accuracy where, for example, Social Security, a defined-benefit program, will ultimately come out because it is a defined benefit and forecasting only a limited number of variables will tell us where we are going to be. In contrast, we have extraordinarily limited understanding of the forces that are going to drive Medicare 15 to 20 years from now. We know that the recipient population is going to rise very sharply. But if we try to determine what benefit outlay per recipient is going to be, we would have a long list of things we needed to forecast. But the variance in every one of them is very large. As a consequence, the product of those variances creates huge uncertainty.

Unless we have a process which, for example, has a means to control the long-term projections, for example, to have triggers in the programs, both taxes and outlays, which go off, so to speak,

when a program is significantly off the originally expected path. We clearly should be looking at the issue of sunset legislation, automatically requiring reevaluations of programs. The vast majority of programs will probably be extended by voice vote on the floor. But there would be an awfully large number of individual programs which really should be looked at. And if you look at them, some of them require major change, or elimination.

We at the Federal Reserve, for example, have a process where every 5 years we scrub all of the regulations that we have built up over the years to determine which of them still are applicable. Had we not done that we would have had a huge number of regulations.

So, I think what is wrong at the moment is that we do not have process. It is very difficult to vote on individual bills without the context of everything else. And 30, 40 years ago we did not need triggers. We did not need PAYGO. We did not need sunset legislation, largely because the vast majority of what the Congress voted on was relatively short term and you could make some reasonably good forecasts and reasonably good judgments.

We can no longer do that. Unless we find that we can address process first and get the Budget Committees back in play and get the process by which the overall budget is constructed in the way we did prior to September 2002, I do not know how you figure out how to go forward. I do not think you can construct a Medicare program, or any amendments to Medicare, without some advertence to what the long-term fiscal outlook is, and I do not know how you do it without process.

Senator DODD. Thank you for that. I guess I can conclude, at least in the short term here, your view would be that on the various proposals we have before us in the budget that PAYGO at the very least is something the Congress to endorse; is that correct?

Chairman GREENSPAN. Indeed.

Senator DODD. Thank you, Mr. Chairman.

Chairman SHELBY. Thank you, Senator Dodd.

Senator SCHUMER.

Senator SCHUMER. Thank you, Mr. Chairman. And thank you, Chairman Greenspan, as well.

Hearing the summary of your statement and your answers to questions, I guess if I had to summarize it I would say, the recovery is sustainable. That seems to be the tone. The disparity I think some of us face as we go around our States and our country is there does not seem to be a tremendous amount of confidence about that. You can look at two measures. One, consumer confidence has been relatively flat. We have the oil prices, which you mentioned. And for the higher income people, since we have talked a lot about disparities, the stock market has actually gone down since the good numbers have started going up.

I guess the question I have, the first question I have is, why do you think that is? Does it have an effect on the economy? You mentioned terrorism in your statement. Obviously, that is something that is out there that is hard to quantify. Do disparate incomes create that? Does the deficit help create lower confidence? And how much effect, if this lower confidence that is not as optimistic—it does not seem that average people, the consumer end, whether it is higher end or lower end seem to have that kind of confidence.

Businesses seem to have a little more confidence these days. But even they are saying that profitability, which was enormously high in the last few quarters, is going to decline some.

Could you just talk a little bit about this phenomenon which is confusing in certain ways? Particularly the stock market. I am puzzled how the stock market has gone down. The Dow Jones has gone down 400 points as all these numbers are good.

Chairman GREENSPAN. Senator, this is not atypical of a recovery. If you go back historically and read the records of the time when you know that subsequently things got extraordinarily positive, people were glum. You have to put it in context. With regard to today's environment, for example, the June figures, and this soft patch we are going through, I do not recall a recovery in which there were not several soft patches. It's the way the markets work.

There is something different here, in a sense as you point out, that the level of confidence is less. The way we know that, or the way I would suggest is a indication of it, is we have for the first time in a quarter-century, or more than that I think, the aggregate of capital investment and inventory investment running less than cashflow. The typical pattern is that businesses when they are confident are expanding. They are borrowing, and capital investment expands way beyond cashflow.

If you look at the debt markets, the corporate debt markets, they are barely moving. In fact, I think in June, the preliminary estimate is that corporate debt on balance declined. In other words, repayments were greater than new extensions because cashflow is so high. I think the reasons for that are largely the aftermath of terrorism. I still think there are concerns out there. Corporate scandals have created a really serious issue of caution on the part of business who are terribly fearful of doing things which are perceived to be inappropriate. So that there is this sense of general lack of charging ahead, which clearly was the case in the latter part of the 1990's. It is likely that the mere aftermath of the 1990's themselves had some effect.

But it does not appear to be enough to hold back the gradual broadening we perceive to be going on. Some things go down, some things go up, but the markets and the economy continues to grow.

The stock market does not always respond to good news positively, and in fact in most instances where the perception is that a rising economy or a booming economy will somehow create increased interest rates in the context where long-term or short-term profitability no longer has the upside to move as fast as it has, markets will go down under those conditions. So, I would say that the weakness in the stock market is a perfectly typical type of pattern that one sees over the years, and more generally that the way this economy is behaving with its obvious idiosyncratic characteristics, as all recoveries have, is nothing that we perceive at the Fed as particularly surprising.

Senator SCHUMER. One more question, if I might, Mr. Chairman. Chairman SHELBY. Go ahead.

Senator SCHUMER. Although I would just make a comment I made in my opening statement, sometimes maybe for the stock market and maybe for the economy, lower interest rates are better than lower taxes. That is a debate on the fiscal side that we have

been having here, although it affects you. I take it you would not disagree with that necessarily as long as underline—

Chairman GREENSPAN. I can conceive of situations in which you could be accurate.

Senator SCHUMER. How about now?

[Laughter.]

Here is my other question. This is a bit off the topic but I had wanted to ask you this before. Last week, we had a very interesting hearing that the Chairman led on hedge funds. It was an interesting discussion and I, for one, have not made up my mind on this thing. I have a bent that regulation, if it is not heavy-handed, has been good for the markets. People complain about it, but it works, and it has led people's view that our markets are on the level.

The proposal made by Chairman Donaldson, who I know is your friend and whom I know you disagree with on this issue, he made a pretty good argument in saying, first of all, that 40 to 50 percent of the funds register now and there does not seem to be too many complaints. In fact, they voluntarily register. That he thought registration might increase because pension funds and other types of funds that are dealing with consumers and others might feel better with the registration. He mentioned that the financial cost was quite low. I think he said it would cost about \$45,000 or \$50,000 to do the registration, which for a large pension fund is a drop in the bucket, particularly given their profitability.

And he seemed to feel that the act of registering would not create any kind of systemic risk—sorry, you said the systemic risk. But he felt that the act of registering would not get in the way of any kind of thing that a hedge fund wanted to do in terms of its entrepreneurial zest, activity, risk taking, et cetera.

I am wrestling with issue and I think some of us on the Committee are, could you give us your views on this, particularly on the aspect of, does required registration cause—oh, one other point he mentioned, which made a difference to me since hedge funds are based in New York and I try to make sure businesses come to New York and not run away, that you would not have people go overseas. I had heard from some hedge funds, well, we will just go overseas. He said, it does not matter. If they had U.S. investors they would still have to be through the same—they would meet the same legal requirements and have to register anyway.

Could you comment on the issue in general, and specifically your view about how required registration would affect the entrepreneurial zeal and zest, risk-taking of the hedge funds?

Chairman GREENSPAN. Senator, I actually was writing down a few comments on this particular issue, not sure where I would use it, just to get my own thoughts. It will take a couple of minutes for me to read it. Let me read it to you, if you do not mind.

Senator SCHUMER. That would be great.

Chairman GREENSPAN. If you do not mind, with the Chairman's acceptance.

Chairman SHELBY. Yes, sir, go ahead.

Chairman GREENSPAN. Hedge funds have become major contributors to the flexibility of our financial system; an issue I raised earlier. That development proved essential to our ability to absorb so many economic shocks in recent years. Hedge funds seek out the

abnormal rates of profit often found where markets are otherwise inefficient. Taking positions in volume, as hedge funds do, tends to eliminate the abnormal profits and the inefficiencies by aligning prices across markets and provides liquidity to markets. Successful or not, when those profit opportunities are perceived to be eliminated, individual funds move on to address other inefficiencies.

But these above-normal profits have attracted a large number of new entrants seeking to exploit a possibly narrowing field of inefficiencies. Not surprising, the rate of return in this activity is reportedly declining. I would not be surprised if, with time, many of the new entrants exited, some presumably following large losses.

Chairman Donaldson, who as you mentioned has been a good friend of mine for 45 years, is certainly right in wanting to eliminate fraud by hedge funds and other financial institutions. Fraud undermines markets and the efficient functioning of our economy.

My problem with the SEC's current initiative is that the initiative cannot accomplish what it seeks to accomplish. Fraud and market manipulation will be very difficult to detect from the information provided by registration under the 1940 Act. Fraud is almost always uncovered through complaints of counterparties or by accident, such as our uncovering millions of dollars of the new U.S. currency in Federal Reserve wrappings in Iraq.

This is certainly true, namely the uncovering of fraud, in banking as we experience it, and I assume is also true for regulated broker-dealers as well. Even should SEC's proposed risk evaluation surveillance of hedge funds detect possible trading irregularities, which I doubt, those irregularities will likely be idiosyncratic and of mainly historic interest because by the time of detection hedge funds would have long since moved on to different strategies.

Should the existing proposal fail in achieving its goal, pressure will become irresistible to expand SEC's regulatory reach in an endeavor to accomplish it set out to do. Hedge fund arbitragers are required to move flexibly and expeditiously if they are to succeed. If placed under increasing restrictions, many will be leave the industry to the significant detriment of our economy.

Senator SCHUMER. So in other words, if I might, and I appreciate your statement. As I said, I am grappling with this issue and have not made up my mind, but you are saying registration in itself would not be detrimental. It might not accomplish what its advocates say, but could leave to other things that would become detrimental. Is that a fair summation?

Chairman GREENSPAN. That is correct.

Senator SCHUMER. Without the erudition that you have.

Thank you, Mr. Chairman.

Chairman SHELBY. Chairman Greenspan, it has been a long afternoon. I have a number of questions I am going to submit for the record. We appreciate your candor, your appearance as always, and we will be watching you and praying for our economy. It is doing well. Thank you.

Chairman GREENSPAN. Thank you, sir.

Chairman SHELBY. The hearing is adjourned.

[Whereupon, at 4:55 p.m., the hearing was adjourned.]

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

**PREPARED STATEMENT OF SENATOR WAYNE ALLARD**

Thank you, Chairman Shelby, for convening this important hearing. I always look forward to the opportunity to hear from Chairman Greenspan.

I believe that the U.S. economy is on the right track. The economy is growing, payroll employment is up, and new and existing home sales set new record highs in May. This is good news.

However, we cannot take the positive economic news for granted; Congress needs to do more to continue to promote a healthy economy. First, we need to address the looming problems in the various entitlement programs.

Second, we need to continue to provide economic incentives through tax cuts, including making the previous tax cuts permanent.

Finally, I believe the most important way that we can ensure the long-term economic vitality of our country is to control Government growth and spending. Congress will not spend the Nation into prosperity. Chairman Greenspan, you and I have discussed this point a number of times during your previous appearances before the Banking Committee, and I have always appreciated your comments in favor of Government restraint.

Chairman Greenspan, I know that you have a very busy schedule, so I appreciate you taking the time to appear before the Committee today. I look forward to your report and the opportunity to raise several questions with you.

**PREPARED STATEMENT OF ALAN GREENSPAN**

CHAIRMAN, BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM

JULY 20, 2004

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

Economic developments in the United States have generally been quite favorable in 2004, lending increasing support to the view that the expansion is self-sustaining. Not only has economic activity quickened, but the expansion has also become more broad-based and has produced notable gains in employment. The evident strengthening in demand that underlies this improved performance doubtless has been a factor contributing to the rise in inflation this year. But inflation also seems to have been boosted by transitory factors such as the surge in energy prices. Those higher prices, by eroding households' disposable income, have accounted for at least some of the observed softness in consumer spending of late, a softness which should prove short-lived.

When I testified before this Committee in February, many of the signs of the step-up in economic activity were already evident. Capital spending had increased markedly in the second half of last year, no doubt spurred by significantly improving profits, a low cost of capital, and the investment tax incentives enacted in 2002 and enhanced in 2003. The renewed strength in capital spending carried over into the first half of 2004. Orders and shipments of nondefense capital goods have been on the rise, and backlogs of unfilled orders for new equipment continue to build.

A key element of the expansion that was still lacking in February, however, was evidence that businesses were willing to ramp up hiring to meet the stepped-up pace of sales and production. Businesses' ability to boost output without adding appreciably to their workforces likely resulted from a backlog of unexploited capabilities for enhancing productivity with minimal capital investment, which was an apparent outgrowth of the capital goods boom of the 1990's. Indeed, over much of the previous 3 years, managers had seemed to pursue every avenue to avoid new hiring despite rising business sales. Their hesitancy to assume risks and expand employment was accentuated and extended by the corporate accounting and governance scandals that surfaced in the aftermath of the decline in stock prices and also, of course, by the environment of heightened geopolitical tensions. Even now, following the pattern of recent quarters, corporate investment in fixed capital and inventories apparently continues to fall short of cashflow. The protracted nature of this shortfall is unprecedented over the past three decades. Moreover, the proportion of temporary hires relative to total employment continues to rise, underscoring that business caution remains a feature of the economic landscape.

That said, there have been much clearer indications over recent months that conditions in the labor market are improving. Most notably, gains in private nonfarm payroll employment have averaged about 200,000 per month over the past 6 months, up sharply from the pace of roughly 60,000 per month registered over the fourth quarter of 2003.

The improvement in labor market conditions will doubtless have important follow-on effects for household spending. Expanding employment should provide a lift to personal disposable income, adding to the support stemming from cuts in personal income taxes over the past year. In addition, the low interest rates of recent years have allowed many households to lower the burdens of their financial obligations. Although mortgage rates are up from recent lows, they remain quite attractive from a longer-run perspective and are providing solid support to home sales. Despite the softness of recent retail sales, the combination of higher current and anticipated future income, strengthened balance sheets, and still-low interest rates bodes well for consumer spending.

Consumer prices excluding food and energy—so-called core prices—have been rising more rapidly this year than in 2003. For example, the 12-month change in the core personal consumption expenditures price index stood at 0.8 percent in December of last year and climbed to 1.6 percent by May of this year. Core inflation, of course, has been elevated by the indirect effects of higher energy prices on business costs and by increases in non-oil import prices that reflect past dollar depreciation and the surge in global prices for primary commodities. But the acceleration of core prices has been augmented by a marked rise in profit margins, even excluding domestic energy corporations.

This surge in profits reflects, at least in part, the recent recovery of demand after a couple of years during which weak demand led to relatively heavy price discounting by businesses. Profits of nonfinancial corporations as a share of sector output, after falling to 7 percent in the third quarter of 2001, rebounded to 12 percent in the first quarter of 2004, a pace of advance not experienced since 1983. Half of this rise in the profit share occurred between the first quarter of 2003 and the first quarter of 2004, a period during which business costs were unusually subdued. In fact, consolidated unit costs for the nonfinancial corporate business sector actually declined during this period. The increase in output per hour in the nonfinancial corporate business sector of more than 6 percent accounted for much of the net decline in unit costs. The remainder was due to the effects of rising output in reducing nonlabor fixed costs per unit of output. Hence, at least from an accounting perspective, between the first quarter of 2003 and the first quarter of 2004, all of the 1.1 percent increase in the prices of final goods and services produced in the nonfinancial corporate sector can be attributed to a rise in profit margins rather than rising cost pressures.

However, businesses are limited in the degree to which they can raise margins by raising prices. An increase in margins should affect mainly the *level* of prices associated with any given level of unit costs but, by itself, should not prompt a sustained pickup in the rate of inflation going forward. In a market economy, any tendency for profit margins to continue to rise is countered largely by the entry of new competitors willing to undercut prices and by increased labor costs as more firms attempt to exploit the opportunity for outsized profits by expanding employment and output. That increase in competitive pressure, as history has amply demonstrated, with time, returns markups to more normal levels.

Over the past three decades, the share of the profits of nonfinancial corporations in the total nominal income of that sector has fluctuated around a longer-run average of roughly 10½ percent. The profit share in the first quarter of this year, at about 12 percent, was well above that level. The gap suggested that the growth of unit profits would eventually slow relative to increases in unit costs. This outlook had accorded with analysts' expectations for earnings growth over the next year, which are substantially below the realized growth of profits in recent quarters.

Indeed, some leveling or downward pressure on profit margins may already be in train, owing to a pickup in unit labor costs. Although advances in productivity are continuing at a rate above the long-term average, they have slowed from the extraordinary pace of last summer and are now running below increases in hourly compensation. The available information suggests that hourly compensation has been increasing at an annual rate of about 4½ percent in the first half of the year. To be sure, the increases in average hourly earnings of nonsupervisory workers have been subdued in recent months and barely budged in June. But other compensation has accelerated this year, reflecting continued sizable increases in health insurance costs, a sharp increase in business contributions to pension funds, and an apparently more robust rate of growth of hourly earnings of supervisory workers. The larger wage gains for supervisory workers together with anecdotal reports of growing skill shortages are consistent with earlier evidence of rising wage premiums for skilled workers relative to less-skilled workers.

For the moment, the modest upward path of unit labor costs does not appear to threaten longer-term price stability, especially if current exceptionally high profit margins begin to come under more intense competitive pressures at home and from

abroad. Although some signs of protectionist sentiment have emerged, there is little evidence that the price-containing forces of ever-widening global competition have ebbed. In addition, the economy is not yet operating at its productive capacity, which should help to contain cost pressures. But we cannot be certain that this benign environment will persist and that there are not more deep-seated forces emerging as a consequence of prolonged monetary accommodation. Accordingly, in assessing the appropriateness of the stance of policy, the Federal Reserve will pay close attention to incoming data, especially on costs and prices.

What does seem clear is that the concerns about the remote possibility of deflation that had been critical in the deliberations of the Federal Open Market Committee (FOMC) last year can now be safely set aside. Those deflationary pressures were largely a consequence of the stock market slump, the capital goods contraction that commenced in 2000, and, as I noted earlier, the extreme business caution that followed from these events as well as from terrorist attacks, corporate scandals, and the lead-up to the war in Iraq. Both equity prices and capital goods spending have turned up over the past year, and the probability that economic activity might stagnate has receded.

As always, considerable uncertainties remain about the pace of the expansion and the path of inflation. Some of those uncertainties, especially ones associated with potential terrorism both here and abroad, are difficult to quantify. Such possibilities have threatened the balance of world supply and demand in oil markets in recent months, especially as demand has risen with the pace of world economic growth. Yet aside from energy, markets exhibit little evidence of heightened perceptions of risk. Credit spreads remain low, and market-based indicators of inflation expectations, after rising earlier this year, have receded.

With the growth of aggregate demand looking more sustainable and with employment expanding broadly, the considerable monetary accommodation put in place starting in 2001 is becoming increasingly unnecessary. In May, the FOMC believed that policy accommodation needed to be removed and that removal could be accomplished at a pace that is likely to be measured. At our meeting last month, the FOMC raised the target Federal funds rate from 1 percent to 1¼ percent, and the discount rate was raised commensurately. Policymakers reiterated that, based on our current outlook, the removal of accommodation would likely proceed at a measured pace. But in light of the considerable uncertainty surrounding the anticipated evolution of price pressures, the FOMC emphasized that it will respond to changes in economic prospects as needed to fulfill its obligation to maintain price stability.

If economic developments are such that monetary policy neutrality can be restored at a measured pace, a relatively smooth adjustment of businesses and households to a more typical level of interest rates seems likely. Even if economic developments dictate that the stance of policy must be adjusted in a less gradual manner to ensure price stability, our economy appears to have prepared itself for a more dynamic adjustment of interest rates. Of course, considerably more uncertainty and hence risk surrounds the behavior of the economy with a more rapid tightening of monetary policy than is the case when tightening is more measured. In either scenario, individual instances of financial strain cannot be ruled out.

The protracted period of low interest rates has facilitated a restructuring of household and business balance sheets. Businesses have been able to fund longer-term debt at highly favorable interest rates and, by extending the maturity of their liabilities, have rendered net earnings and capital values less exposed to destabilizing interest rate spikes. Households have made similar adjustments. Between mid-2002 and mid-2003, homeowners were able to refinance at lower interest rates almost half of total outstanding home mortgage debt and thereby to substantially reduce monthly debt service payments. Households also substituted mortgage debt for more-expensive consumer credit. Moreover, those households and businesses that held long-term investment-grade bonds in that year accumulated realized and unrealized capital gains as long-term rates declined.

The FOMC judged this extended period of exceptionally low interest rates to have been helpful in assisting the economy in recovering from a string of adverse shocks. But in the process of returning the stance of policy to a more neutral setting, at least some of the capital gains on debt instruments registered in recent years will inevitably be reversed.

Prices in financial markets have already adjusted in anticipation of a significant amount of policy tightening, engendering additional alteration of balance sheets in recent months. An unwinding of carry trades—that is, market positions premised on low short-term financing costs—seems to be under way, at least judging from a pronounced shift in the trading portfolios of primary dealers. In addition, investors classified as noncommercial have established net short positions in 10-year Treasury note futures in recent months. Indeed, the swing toward a net short position on 10-

year Treasury note futures has been the largest since the inception of the contract in the 1980's, likely offsetting a significant portion of the interest rate exposure of previously established carry trade positions.

Moreover, the recent increase in market interest rates has slowed the pace of mortgage refinancing and reportedly has precipitated some winding down of leveraged positions among major mortgage market participants. These circumstances are quite different from the situation prevailing at this time last summer. Then, record levels of refinancing in the second half of 2002 and the first half of 2003 had pushed the duration of mortgage-backed securities (a measure of the price sensitivity of fixed-income instruments to changes in interest rates) to exceptionally low levels. As mortgage and other long-term rates rebounded last summer, a consequence of rapidly improving economic conditions and the fading of deflationary concerns, refinancing fell sharply, removing most downward pressure on duration. Holders of mortgage-backed securities endeavoring to hedge the resulting shifts in interest rate gaps moved rapidly to shed Treasuries and receive—fixed interest rate swaps, and these actions magnified last summer's upturn in long-term interest rates. In the current environment, by contrast, it appears that the scope for such mortgage hedging effects to greatly amplify an increase in long-term rates is much diminished given the decline in the pace of refinancing and the associated increase in mortgage durations that have already occurred.

Last, very large fractions of the total outstanding obligations of businesses and households are long-term, fixed-rate debt. As a result, rising market interest rates will not have much immediate direct effect on business and household debt service burdens. Indeed, from early 1999 through early 2000, a period when interest rates on new home mortgage originations rose more than 150 basis points, the average interest rate on the total of home mortgage debt outstanding barely moved. Nonetheless, despite the lock-in of low interest rate costs on a substantial share of household and business liabilities, recent higher market interest rates will, in time, show through into increased charges against household and business income. To be sure, financial intermediaries and other creditors that extended loans or purchased securities in recent years at relatively low long-term interest rates will sustain capital losses as rates rise. In general, however, financial intermediaries are profitable, well-capitalized, and appear to be well-positioned to manage in a rising rate environment.

In short, financial markets along with households and businesses seem to be reasonably well-prepared to cope with a transition to a more neutral stance of monetary policy. Some risks necessarily attend this transition, but they are outweighed in our judgment by those that would be associated with maintaining the existing degree of monetary policy accommodation in the current environment. Although many factors may affect inflation in the short-run, inflation in the long-run, it is important to remind ourselves, is a monetary phenomenon.

As we attempt to assess and manage these risks, we need, as always, to be prepared for the unexpected and to respond promptly and flexibly as situations warrant. But although our actions need to be flexible, our objectives are not. For 25 years, the Federal Reserve has worked to reestablish price stability on a sustained basis. An environment of price stability allows households and businesses to make decisions that best promote the longer-term growth of our economy and with it our Nation's continuing prosperity.

**RESPONSE TO WRITTEN QUESTIONS OF SENATOR SHELBY  
FROM ALAN GREENSPAN**

**The Housing Sector**

**Q.1.** The semi-annual written report refers to activity in the housing sector remaining “torrid” in the first half of 2004. There have been some concerns expressed about a potential bubble in housing prices. Your report indicates that house price increases have outstripped gains in incomes as well as rents in recent years. In a recent speech, one member of the Board of Governors, Governor Kohn, indicated that “the odds have risen that these prices could be out of line with fundamentals.” Governor Kohn also indicated that “we still cannot be very confident about whether a significant misalignment exists, however.” What is your assessment of the continued rise in housing prices? Are there any particular geographic sectors that you are more concerned about than others?

**A.1.** As you note, the most recent *Monetary Policy Report to the Congress* indicated that house price increases have outstripped gains in income as well as rents in recent years. This observation raises the possibility that real estate prices, at least in some markets, could be out of alignment with the fundamentals. But as Governor Kohn notes, that conclusion cannot be reached with any confidence. For example, the rise in house prices relative to rents and incomes has, no doubt, been influenced by the low level of mortgage interest rates in recent years in ways that cannot be gauged precisely. Moreover, the available data are not fully adequate for a complete analysis of the issue; house prices are difficult to measure given the enormous heterogeneity of the U.S. housing stock—both within and across geographic regions—and available measures of residential rents do not match precisely with the units for which we have prices. Although taking a firm stand on the appropriateness of real estate prices is not possible, policymakers do need to take account of their influence on economic activity. As is the case with other asset prices, we monitor real estate prices closely in developing our economic outlook.

The data limitations that prevent a complete analysis of housing price developments at the national level are even more binding at the local level, making it especially difficult to detect asset price misalignments for specific markets.

**Improvements in the World Economy**

**Q.2.** The semi-annual report comments on solid gains in U.S. exports since mid-2003 due to the strong economic performance of many of the major trading partners. What is your view as to the continued economic strength of our trading partners? In particular, do you believe the improvements in Japan will continue?

**A.2.** Over the past year, the global economic recovery has become both stronger and more sustainable. Growth has strengthened in every major region compared with the sluggish performance during the first half of 2003, and recent indicators suggest that the foreign economies continue to put in a favorable performance. To be sure, average growth in emerging Asia appears to have braked sharply in recent months, as policy measures muffled the boom in the Chinese economy. However, continued strong export growth and recent

signs of an acceleration in consumer spending suggest that Chinese GDP growth will rebound in the second half of this year. Recovery in Canada and in Latin America also appears to be on track, and economic expansion in the United Kingdom continues unabated. The pace of recovery in the euro area has been sluggish, however, with particularly weak activity in Germany.

In Japan, the rebound that began last year has continued to broaden. Japanese exports have grown rapidly over the past couple of years, as exports to China and other emerging Asian economies have surged. The expansion in exports has contributed to a snap-back in corporate profits in the export-related manufacturing sector, and the revival in profits appears to be spreading to the more domestic-oriented nonmanufacturing sector. Rising profitability along with improving conditions in the corporate sector more generally have allowed investment to rebound from its recent trough. Labor markets have also revived, with employment rising and the unemployment rate declining from a peak of 5.5 percent early last year to 4.6 percent at present. Against this backdrop of strengthening activity, consumer price deflation has eased markedly since early 2002.

These positive developments suggest that Japan may finally be on its way to a self-sustaining recovery. However, there are several risks to the outlook. In particular, the recent run-up in oil prices, if sustained, may exert a significant drag on Japanese economic activity. Moreover, Japanese consumption has risen sharply over recent quarters, while employee compensation has fallen. The result has been a marked decline in the household saving rate. Most analysts expect the saving rate to move up as economic conditions improve. If this happens abruptly, consumption might lag the recovery even if compensation begins to rise. Also, the possibility of a hard landing in China carries significant risks for Japan as well as for other Asian economies. Finally, bank lending in Japan continues to contract, and more aggressive financial sector restructuring remains important for Japan's long-term growth prospects.

### **The President's Working Group & Hedge Funds**

**Q.3.a.** In 1999, the President's Working Group concluded that "requiring hedge fund managers to register as investment advisers would not seem to be an appropriate method to monitor hedge fund activity." In the intervening 5 years, have market conditions changed in order to justify a different conclusion?

**A.3.a.** No. The Working Group's report made two arguments in support of this conclusion. First, it argued that the provision of the Investment Advisers Act that exempts hedge fund managers from registration (Section 203(b)(3)) evidences a Congressional determination that clients of an adviser that has relatively few clients do not need the substantive protections of the Investment Advisers Act. Congress has not repealed Section 203(b)(3). Second, it argued that the sophisticated investors that typically invest in hedge funds are in a position to protect their own interests. There is no evidence that investors in hedge funds today are less sophisticated than they were in 1999. Indeed, institutional investors have accounted for a growing share of hedge fund investments, and they can and should protect their own interests rather than rely on the

limited regulatory protections that would be provided as a result of a registration requirement.

**Q.3.b.** What, if any, mechanism would be the appropriate method for monitoring hedge fund activity in light of their growth in recent years and the increased investor involvement while at the same time being mindful of liquidity concerns?

**A.3.b.** The case for monitoring hedge fund activity has not been made. Some have argued that monitoring of hedge funds is necessary to detect and deter market manipulation. However, the data collected from registered advisers is limited to total assets under management, which would provide no insight into any manipulative activities. Concerns about market manipulation, whether by hedge funds or others, can best be addressed by enhanced market surveillance. If there were a public policy reason to monitor hedge fund activity, the best method of doing so without raising liquidity concerns would be indirectly through oversight of those broker-dealers (so-called prime brokers) that clear, settle, and finance trades for hedge funds. Although the use of multiple prime brokers by the largest funds would complicate the monitoring of individual funds by this method, such monitoring could provide much useful information on the hedge fund sector as a whole.

**RESPONSE TO WRITTEN QUESTIONS OF SENATOR BUNNING  
FROM ALAN GREENSPAN**

**Q.1.** The Securities and Exchange Commission (SEC) has recently issued a proposed rule on the Gramm-Leach-Bliley push-outs provisions governing bank securities activities. It is this Senator's recollection that Congress intended to allow banks to continue their existing, limited securities activities that are part of their banking business, such as trust, fiduciary, and custodial activities. Do you believe that the SEC proposal accomplishes Congressional intent? Also, do you believe that this SEC proposal has complied with the intent of Congress not to impose unnecessary regulatory burdens on banks?

**A.1.** Prior to the Gramm-Leach-Bliley Act of 1999 (GLB Act), banks enjoyed a blanket exception from the definitions of "broker" and "dealer" in the Securities Exchange Act of 1934 (1934 Act). As part of the GLB Act, Congress replaced this blanket exception for banks with a series of 15 exceptions designed to allow banks to continue to conduct securities activities that are part of normal bank activities. When these activity-focused exceptions go into effect, a bank may avoid registration as a broker-dealer under the 1934 Act only if the bank limits its securities activities to those covered by one or more of the new activity-focused exceptions. Because banks cannot as a practical matter register as a broker-dealer, securities brokerage and dealer activities that do not fit within one of these activity-focused exceptions would have to be "pushed-out" of the bank to an SEC-registered broker-dealer.

The activity-focused exceptions that Congress adopted for banks in the GLB Act are broad and were intended to allow banks to continue to provide their customers securities services in connection with their normal banking activities without significant disruption. For example, Congress adopted important statutory exceptions for

the trust, fiduciary, and custodial activities of banks. In adopting these exceptions, Congress recognized that banks have long provided their customers securities services in connection with their trust, fiduciary, and custodial activities. Furthermore, Congress recognized that banks had provided these services for decades prior to the GLB Act without significant securities-related problems and under the effective supervision of the Federal and State banking agencies. The new activity focused exceptions were designed to complement the new authority granted by the GLB Act, which allowed banks to affiliate with full-service securities firms without the restrictions embodied in the Glass-Steagall Act, by restricting the ability of banks to significantly expand their securities services. In particular, these targeted exceptions were intended to prevent banks from operating a distinct retail brokerage business within the bank.

The Board and the other Federal banking agencies previously expressed concern that earlier SEC proposals to implement the securities provisions of the GLB Act were not consistent with the express terms or the Congressional purpose of the GLB Act. In June, the SEC requested comment on new rules to implement the "broker" exceptions for banks in the GLB Act, including the important exceptions for bank trust, fiduciary, and custodial activities. The public comment period on these rules currently is scheduled to expire on September 1, 2004. Board staff, in conjunction with the staffs of the other Federal banking agencies, currently is reviewing and analyzing the SEC's proposed rules to determine whether these rules, consistent with Congress's intent, would permit banks to continue to effect securities transactions in connection with their traditional bank activities and without significant disruption. The Board will provide you a copy of any comment letter that the Board decides to file with the SEC on the proposed rules.

**RESPONSE TO A WRITTEN QUESTION OF SENATOR CRAPO  
FROM ALAN GREENSPAN**

**Q.1.** A divided SEC voted 3–2 last Wednesday to seek comments on a proposal for mandatory registration of hedge fund advisers with the SEC. Are you concerned with the divided SEC's proposal for mandatory registration of hedge fund advisers with the SEC? Do you think the President's Working Group on Financial Markets should be involved in issues related to regulation of the hedge fund industry?

**A.1.** I am concerned with the proposal. The proposal seeks to deter fraud and market manipulation, but it is unlikely to accomplish those objectives. The information reported to the SEC by registered advisers is very limited and would be of little value for these purposes. Nor are examinations of advisers likely to uncover much fraud. Our experience with bank examinations indicates that examiners have great difficulty uncovering fraud. Most often it is uncovered through complaints by customers or disaffected employees rather than through exams. I believe this was also the case with the recent scandals in the regulated mutual fund industry. Should registration fail to achieve the intended objectives, pressure may well become irresistible to expand the SEC's regulatory reach from hedge fund advisers to hedge funds themselves. The application of

the Investment Company Act to hedge funds would greatly impede their important contributions to the flexibility and resiliency of our financial system.

Because of the critical role that hedge funds have come to play in our financial system, all of the members of the President's Working Group have an interest in what regulations, if any, apply to their activities. It was this shared interest that motivated the Working Group's April 1999 report on *Hedge Funds, Leverage, and the Lessons of Long-Term Capital Management*. More recently, it has motivated discussions within the Working Group of the SEC's adviser registration proposal. In that sense, the Working Group should be and has been involved in issues related to the regulation of the hedge fund industry. But decisions about the application of the Investment Advisers Act to hedge fund advisers fall squarely within the SEC's jurisdiction and must be made by the SEC.

**RESPONSE TO WRITTEN QUESTIONS OF SENATOR SUNUNU  
FROM ALAN GREENSPAN**

**Q.1.** I understand that in August 2003, the Federal Reserve proposed a rule to loosen the tying restrictions on bank holding companies—the proposal and the subsequent supervisory guidance would entail an interpretation of Section 106 of the Bank Holding Company Act Amendments of 1970. Can you describe the intent of the Fed proposal and comment on the status of the rule? Also, does the Federal Reserve Board view tying as a problem in large financial institutions?

**A.1.** The special antitying restrictions established by Section 106 of the Bank Holding Company Act Amendments of 1970 are quite complex. For example, these restrictions apply only to banks and do not apply to the nonbank affiliates of a bank or other nonbank entities. In addition, while Section 106 prohibits banks from imposing certain types of tying arrangements on their customers, there are several important exceptions to the statute. These exceptions, among other things, expressly allow a bank to condition the availability or price of a product on a requirement that the customer also obtain a “loan, discount, deposit, or trust service” from the bank or an affiliate.

These exceptions and the statute's complex structure can make applying the statute a challenging and fact-intensive process. In recent years, the Board has received a number of inquiries concerning the antitying prohibitions in Section 106 and the compliance of banking organizations with these restrictions. These inquiries indicated that there was some uncertainty, both among bankers and their customers, as to what types of bank actions are prohibited by Section 106.

To help address this uncertainty, the Board in 2003 requested public comment on a formal interpretation of the statute and related supervisory guidance. The interpretation was intended to provide banks and their customers a comprehensive guide to the statute and, thus, improve the public's understanding of the statute's restrictions. The proposed interpretation, for example, discusses the necessary elements of a prohibited tying arrangement, describes the statutory and regulatory exceptions to the statute's prohibitions, and provides examples of the types of bank actions

that are prohibited and permissible under the statute. The related supervisory guidance describes the types of internal controls that should help banks comply with the antitying restrictions in Section 106. The Board has received approximately 40 comments on the proposed interpretation and related supervisory guidance and we hope to finalize these documents in the near future.

Federal Reserve examiners review the antitying programs of bank holding companies and State member banks as part of the regular compliance reviews of these organizations. In 2002, examiners from the Federal Reserve and the Office of the Comptroller of the Currency also conducted targeted antitying examinations at several large banking organizations. The targeted exams indicated that the banking organizations reviewed generally have adequate policies and procedures to ensure compliance with the antitying restrictions of Section 106, and the agencies generally did not uncover unlawful tying arrangements in these examinations. The Government Accountability Office also recently conducted a review of bank compliance with Section 106 and found that the available evidence does not substantiate claims that banks are tying the availability or price of credit to the purchase of debt underwriting services from a securities affiliate of the bank.

Based on our supervisory experience, it appears that banking organizations generally have adequate internal controls to help prevent illegal tying. The Board, however, will take appropriate supervisory action against a bank within our supervisory jurisdiction if information developed through the supervisory process or provided by a customer indicates that the bank has imposed a tie on a customer in violation of Section 106. For example, in 2003, the Board took enforcement action against a foreign bank for violations of Section 106 after investigating a tying complaint received from one of the bank's customers.

**Q.2.** In November 2003, the DOJ's Antitrust Division submitted a comment letter to the Fed on its proposal to address tying. The letter stated that the prohibitions on tying within Section 106 are much broader than those found in Federal antitrust laws and that the Fed's proposed interpretation and supervisory guidance might continue to prohibit some pro-competitive practices, such as multi-product discounting. The DOJ expressed concern that Section 106 disadvantages banks as competitors in markets in which banks and nonbanks compete—lessening competition and ultimately harming consumers. The DOJ recommended that the Fed's interpretation of Section 106 be consistent with, and not broader than, the Federal antitrust laws.

It would appear that Section 106 was designed to protect small business customers or individual consumers from being forced to buy products they do not wish to purchase. The Division's letter further recommends that, at a minimum, Section 106 should be limited to ties involving small businesses and individual consumers.

What are your views regarding the DOJ's Antitrust Division's recommendations that Section 106 not be interpreted to prohibit conduct that is not found to be anticompetitive under the Federal antitrust laws? Also, what are your views on applying general anti-

trust standards when banks are dealing with large, sophisticated customers?

**A.2.** As you note, the Antitrust Division of the Department of Justice has submitted a comment letter to the Board concerning the Board's proposed interpretation of Section 106. In the letter, the Antitrust Division supported the Board's efforts to clarify that Section 106 does not prohibit banks from entering into tying arrangements with their customers when these arrangements are voluntarily entered into or sought by the bank's customer (so-called "voluntary ties").

The Division's letter also expressed concern that Section 106 may itself harm competition and consumers by limiting the ability of banks to provide their customers discounts on packaged offerings and by placing banks at a disadvantage in markets where both banks and nonbank entities compete. Accordingly, the Division recommended that the Board seek to interpret the antitying restrictions in Section 106 in a manner that is consistent with the tying restrictions that apply to all companies, including banks, under the Sherman and Clayton Acts. However, the Antitrust Division's letter also recognizes that the courts historically have interpreted Section 106 as imposing significantly more stringent antitying prohibitions on banks than apply to companies generally under the Sherman and Clayton Acts and that these precedents may constrain the ability of the Board to interpret Section 106 to be coterminous with the general antitrust laws.

The Board will carefully consider the views of the Antitrust Division as the Board moves forward with the proposed interpretation and related matters.

**RESPONSE TO A WRITTEN QUESTION OF SENATOR STABENOW  
FROM ALAN GREENSPAN**

**Currency Manipulation**

**Q.1.** As you are aware, there has been a lot of concern in the Senate with both China and Japan's monetary policy actions, particularly related to Japan's huge interventions in international currency markets to maintain an artificially weak yen, as well as China's dollar peg. The last time you and I discussed this, you referred to it as a "problem"—something the Bush Administration has been unwilling to do. I would argue that it has been an ongoing problem and requires Government action to end this unfair currency manipulation tax placed on American products.

I believe that Japan's long-standing and successful efforts in maintaining an artificially weak yen have been a major factor in the ongoing weakness of our manufacturing sector. It also has a very negative impact on the automotive sector.

Although, as you and I discussed recently, Japan had stopped its interventions in the last several months after spending over \$138 billion in the first quarter of this year and over \$330 billion since 2003, I would note that significant sums of money, perhaps as much as \$50 billion per month, have been budgeted for such future actions in Japan's current fiscal year budget. Financial markets are also clearly wary of statements from senior officials from Japan's Ministry of Finance that the government is not ruling out inter-

vening again in massive amounts again if they so choose. And this threat alone seems to be putting an artificial ceiling on the yen's move toward its appropriate value.

Given on-going concerns over Japan's currency actions in our last hearing and the ever-present threat of further massive interventions, should the United States and the G-7 make very clear to Japan that a resumption of such interventions would be unwelcome and disruptive to the global economy?

Also, can you provide an analysis of the impact to our economy of Japan's successful efforts to weaken its yen? Has it undermined the Federal Reserve's efforts to stimulate U.S. economic growth and create jobs, particularly in the manufacturing sector?

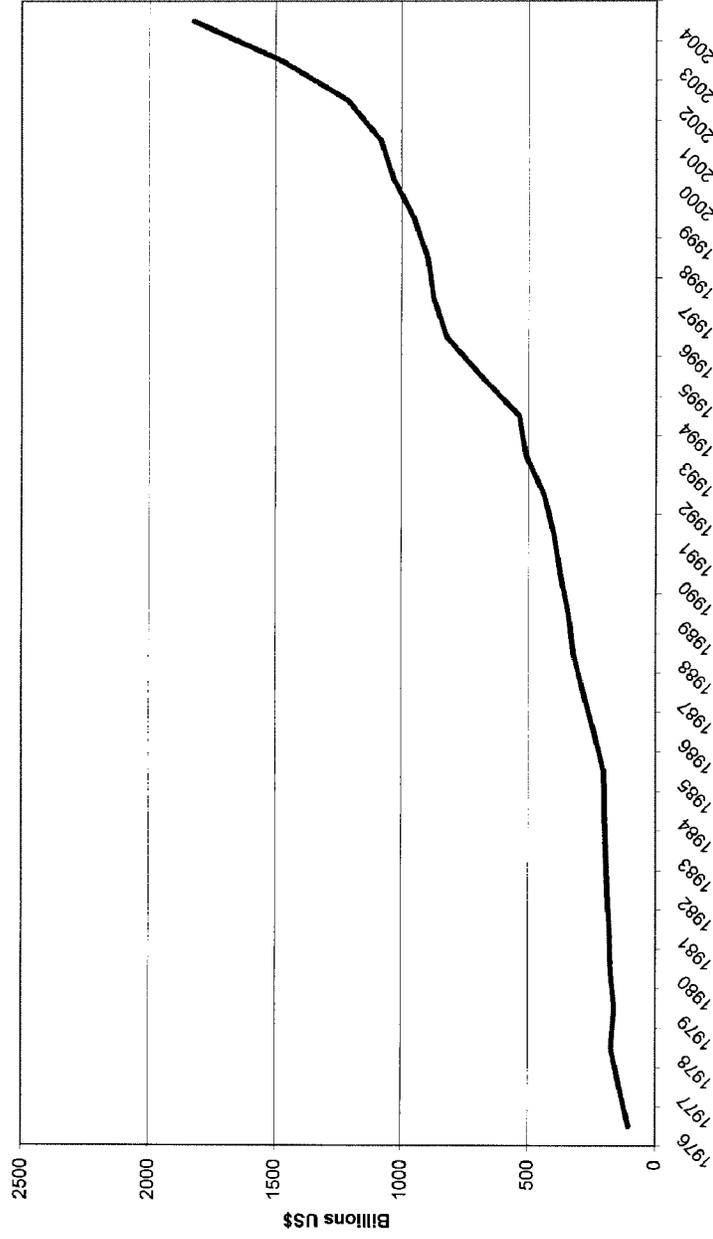
**A.1.** U.S. policy regarding the foreign exchange value of the dollar—against the yen or any other currency—is the province of the Secretary of the Treasury, who is also the chief spokesperson for the U.S. Government on these matters. I defer to the Secretary on any official U.S. response to the concerns you raise about Japanese policy operations with respect to the dollar's exchange value against the yen. G-7 finance ministers, central bank governors, and their respective deputies meet frequently to discuss exchange rates and related foreign exchange operations, such as those conducted earlier this year by Japan.

Japan's official intervention operations, in which the Japanese government purchased dollars in foreign exchange markets and sold yen, may have influenced some U.S. asset prices. One effect could have been on the foreign exchange value of the dollar against the yen. In principle, the Japanese operations would have weakened the yen against the dollar, and it is possible that the operations did so, although the size and persistence of any effects are difficult to judge. However, one should keep in mind that, despite the large scale of the Japanese operations in 2003 and 2004, the yen has strengthened against the dollar on balance, rising roughly 20 percent from its low point against the dollar in early 2002.

Because the Japanese authorities invested the proceeds of their dollar purchases in interest-earning, dollar-denominated assets, another effect of their operations on U.S. asset prices could have come through the potential effect of these operations on U.S. interest rates. In principle, the operations would have resulted in increased demand for U.S. securities and somewhat lower U.S. interest rates. While it is possible that these operations did have such an effect, the magnitude of any effect is likely to have been quite small. U.S. securities markets are the deepest and most liquid of any in the world, and the scale of the Japanese operations, while large by some standards, was arguably too small to have had a substantial effect on the general level of U.S. interest rates.

In any event, the operations of the Japanese have not hampered the Federal Reserve in its efforts to conduct monetary policy to achieve price stability and maximum sustainable growth for the U.S. economy.

Foreign Official Assets in the United States



Source: BEA; 2004 data on annualized rate.

For use at 2:30 p.m., EDT  
Tuesday  
July 20, 2004

Board of Governors of the Federal Reserve System



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Monetary Policy Report to the Congress

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July 20, 2004

Letter of Transmittal



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BOARD OF GOVERNORS OF THE  
FEDERAL RESERVE SYSTEM  
Washington, D.C., July 20, 2004

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,

A handwritten signature in black ink, appearing to read "Alan Greenspan".

Alan Greenspan, Chairman

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## Monetary Policy Report to the Congress

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*Report submitted to the Congress on July 20, 2004,  
pursuant to section 2B of the Federal Reserve Act*

### **MONETARY POLICY AND THE ECONOMIC OUTLOOK**

The economic expansion in the United States became increasingly well established in the first half of 2004, but the pace of inflation picked up from its very low rate in 2003. At the time of the February *Monetary Policy Report to the Congress*, considerable evidence was already in hand indicating that the U.S. economy had made the transition from a period of subpar growth to one of more-vigorous expansion. Nevertheless, job creation remained limited, and gains in investment, although sizable, still seemed restrained by a lingering caution on the part of some businesses. In the event, businesses stepped up their hiring in the spring, and capital spending seems to have continued apace.

Over the first half of this year, energy prices soared; moreover, inflation in core consumer prices—as measured by the price index for personal consumption expenditures excluding the direct effects of movements in food and energy prices—increased from an exceptionally low rate of 1 percent over the four quarters of 2003 to an annual rate of a little more than 2 percent. To some extent, the upturn in core inflation reflected the indirect effects of higher energy prices, but other forces also played a role. Strengthening aggregate demand both at home and abroad induced a surge in the prices of many primary commodities and industrial materials. In addition, the decline in the foreign exchange value of the dollar in 2003 put upward pressure on the prices of imported goods and services. With strong demand in the United States and increased utilization of the productive capacity of the economy, firms were better able to pass on the higher costs of imports, raise the prices of domestically produced items that compete with imports, and in many cases boost their profit margins. Likely in response to the faster rate of price increases experienced this year, surveys suggest that near-term inflation expectations have moved up somewhat; still, expectations for price inflation over the longer term have remained in their recent range.

Monetary policy was very accommodative at the start of 2004 as the Federal Open Market Committee (FOMC) sought to provide continuing support to an economic expansion that had yet to produce a sustained improve-

ment in the labor market and to ensure that the previous year's threat of an unwelcome disinflation would continue to recede. Although real GDP had accelerated sharply in the second half of 2003, the incoming data through the time of the March meeting suggested that employment was growing only slowly, as employers were relying on increased production efficiencies to satisfy considerable gains in aggregate demand. Surging oil prices were boosting overall inflation, while core inflation—though no longer declining—was still low. With subsequent labor market reports suggesting that hiring was on a stronger track, growth in output continuing at a solid pace, and core consumer price inflation possibly running higher, the FOMC announced in May that it saw the risks to the goal of price stability as having moved into balance. Even so, the Committee stated that it believed that the monetary policy accommodation then in place could be “removed at a pace that is likely to be measured.” Indeed, at its June meeting, the FOMC decided that sufficient evidence was in hand to begin moving the federal funds rate back toward a more neutral setting and raised the federal funds rate  $\frac{1}{4}$  percentage point to  $1\frac{1}{4}$  percent, a decision that was widely anticipated by market participants.

Although some of the recent data have been on the soft side, the available information on the outlook for the U.S. economy is, on balance, positive. Households are enjoying a generally improving job market, rising real incomes, and greater wealth, all of which are providing them with the confidence and wherewithal to spend. In the business sector, capital spending apparently is continuing to increase briskly, bolstered by expectations of strong sales as well as by booming profits and supportive financial conditions; investment should also continue to be buoyed by firms' adoption of productivity-enhancing technologies. Moreover, inventories appear to be lean relative to sales even after taking account of the substantial improvements firms have made in managing their stocks, suggesting that stockbuilding may provide some impetus to production in the near term. The brightening outlook for economic activity abroad suggests that demand for U.S. exports should grow and provide a further lift to domestic production.

The prospects also seem favorable for inflation to remain contained in the period ahead. For one reason, some of the forces that contributed to the upturn in core inflation in the first half of 2004 are likely to prove tran-

sitory. In particular, the upward impetus from the rise in energy and commodity prices is likely to lessen in coming quarters. For another reason, the evidence suggests that the productive capacity of the economy is still not being fully used and that the attendant slack is probably exerting some downward pressure on inflation. If—as seems likely—the economy approaches full utilization of its productive capacity only gradually, that downward pressure should persist for a time. Moreover, productivity remains on a solid uptrend and should continue to restrain costs. To date, the gains in productivity have helped to boost profit margins. As firms compete to take advantage of profit opportunities, they may eventually be forced to absorb a portion of any increases in labor and other costs that occur. But history suggests that the absorption of costs has limits. Indeed, unit labor costs have turned up of late, as productivity growth has slowed below the rate of increase in hourly compensation. If increases in those costs were to develop any upward momentum, the well-behaved nature of inflation in recent years could be jeopardized.

*Monetary Policy, Financial Markets, and the Economy over the First Half of 2004*

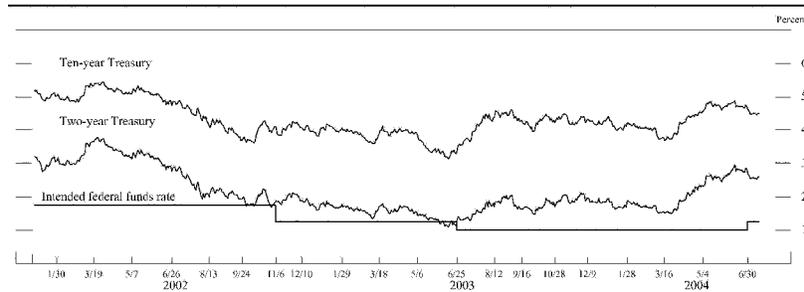
At the beginning of 2004, the FOMC was growing more confident that the economic expansion was likely to be self-sustaining, particularly in light of the significant firming of business outlays and the continued strength in household spending. Moreover, stimulative fiscal and monetary policies, in conjunction with receptive financial markets, appeared likely to provide substantial support to economic activity and to ward off any further

disinflation. However, the Committee remained concerned about the persistent weakness in the labor market. At its January meeting, the FOMC left the target for the federal funds rate at 1 percent. The Committee generally felt that the apparent slack in labor and product markets and continued strong productivity growth were likely to keep the underlying trend in inflation subdued, but it nevertheless was cognizant that a highly accommodative stance for monetary policy could not be maintained indefinitely. Given these considerations, the Committee modified the language of its policy statement to gain greater flexibility to firm policy should circumstances warrant. The Committee achieved this added flexibility by removing its assessment that monetary policy would be accommodative for “a considerable period” and instead saying that the Committee could be “patient” in removing its policy accommodation.

At the time of the March FOMC meeting, the Committee believed that conditions were mostly in place for further solid economic growth. Industrial production had picked up broadly, and consumer and business spending continued to expand briskly. However, the employment reports for January and February still painted a picture of subdued hiring. With financial markets quite accommodative, the Committee recognized that maintaining the current stance of policy could fuel inflation pressures and perhaps encourage excessive risk-taking by financial market participants. The Committee concluded that the low level of core consumer price inflation and continued evidence of weak hiring argued for the retention of both its 1 percent target for the federal funds rate and the wording in its statement that the Committee could be “patient” with respect to changes in monetary policy.

At the May FOMC meeting, members noted a distinct improvement in the economic outlook. The labor market

Selected interest rates



NOTE: The data are daily and extend through July 14, 2004. The dates on the horizontal axis are those of FOMC meetings.

figures reported for March had proved to be strong, and the reports for the two previous months had been revised upward significantly. Consumer price inflation in the first quarter of the year was faster than it had been in the previous quarter. Although much of this rise was due to escalating energy costs, core inflation also stepped up, and survey-based measures of near-term inflation expectations had edged higher. In response to the indications of rising aggregate demand and a strengthening job market, yields on Treasury securities had risen appreciably. Accordingly, the Committee was of the view that the expansion would be vigorous and believed that the odds of any further disinflation had been substantially reduced. On the basis of the evolving outlook for economic activity and prices, the Committee revised its assessment of risks to indicate that the upside and downside risks for inflation had moved into balance. To underscore its belief that policy would probably soon need to move toward a more neutral stance while emphasizing that this process was not expected to be rapid, the Committee stated its judgment that monetary policy accommodation “can be removed at a pace that is likely to be measured.”

At the time of the June FOMC meeting, incoming information tended to confirm that the economy was expanding at a solid pace but also indicated that inflation was higher than had been anticipated. Quotes on near-term money market futures and options suggested that market participants were nearly certain of an increase of 25 basis points in the target for the federal funds rate at that meeting and had priced in a cumulative increase of about 2½ percentage points in the federal funds rate over the next year. The Committee agreed that the current substantial degree of policy accommodation was no longer warranted and decided to increase its target for the federal funds rate 25 basis points. The Committee noted that it considered the risks to both sustainable economic growth and stable prices to be roughly balanced and maintained its appraisal that policy accommodation “can be removed at a pace that is likely to be measured” but also emphasized that it will “respond to changes in economic prospects as needed to fulfill its obligation to maintain price stability.”

#### *Economic Projections for 2004 and 2005*

In conjunction with the FOMC meeting at the end of June, the members of the Board of Governors and the Federal Reserve Bank presidents, all of whom participate in the deliberations of the FOMC, were asked to provide economic projections for 2004 and 2005. The central tendency of the FOMC participants’ forecasts for the increase in real GDP is 4½ percent to 4¾ percent over the four quarters of 2004 and 3½ percent to 4 percent in 2005.

#### Economic projections for 2004 and 2005

| Indicator   | Federal Reserve Governors and Reserve Bank presidents |                  |
|---|---|------------------|
|   | Range   | Central tendency |
| 2004  |   |                  |
| <i>Change, fifth quarter to fourth quarter<sup>1</sup></i>  |   |                  |
| Nominal GDP .....   | 6–7   | 6½–6¾            |
| Real GDP .....  | 4–4¾  | 4½–4¾            |
| PCE price index excluding food and energy .....             | 1½–2  | 1¾–2             |
| <i>Average level, fourth quarter</i>                        |   |                  |
| Civilian unemployment rate .....                            | 5¼–5½   | 5¼–5½            |
| 2005  |   |                  |
| <i>Change, fourth quarter to fourth quarter<sup>1</sup></i> |   |                  |
| Nominal GDP .....   | 4¾–6½   | 5¼–6             |
| Real GDP .....  | 3½–4  | 3½–4             |
| PCE price index excluding food and energy .....             | 1½–2½   | 1½–2             |
| <i>Average level, fourth quarter</i>                        |   |                  |
| Civilian unemployment rate .....                            | 5–5½  | 5–5¼             |

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

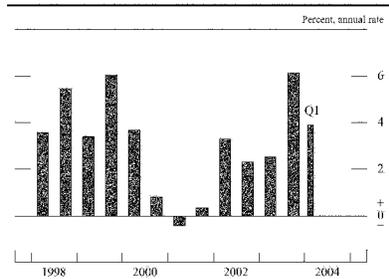
The civilian unemployment rate is expected to lie between 5¼ percent and 5½ percent in the fourth quarter of 2004 and to decline to between 5 percent and 5¼ percent by the fourth quarter of 2005.

Starting with this report, the Federal Reserve will provide projections for the price index for personal consumption expenditures excluding food and energy (core PCE), which the Committee believes is better as an indicator of underlying inflation trends than is the overall PCE price measure previously featured. Core PCE inflation appears to have run a little above an annual rate of 2 percent in the first half of 2004; for 2004 as a whole, most FOMC participants expect it to lie between 1¾ percent and 2 percent. For 2005, the central tendency of the projections for core PCE inflation is 1½ percent to 2 percent.

#### ***ECONOMIC AND FINANCIAL DEVELOPMENTS IN 2004***

After having surged in the second half of 2003, economic activity continued to expand at a solid pace in the first half of 2004. In the labor market, payroll employment started to increase last fall after a long string of declines and picked up further during the first half of this year. Headline inflation has been boosted significantly by the jump in energy prices this year, but core inflation has also moved up from the exceptionally low levels of late 2003.

Change in real GDP



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

*The Household Sector*

Consumer Spending

Consumer spending, which had gathered a good bit of steam in the second half of 2003, continued to move higher in the first half of 2004. The growth in spending was spurred by substantial gains in income. In addition, household wealth has risen sharply over the past year, and consumer surveys indicate that individuals are generally upbeat in their assessments of the economy's prospects and of their own situations.

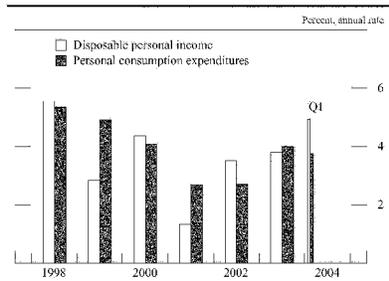
Personal consumption expenditures rose at an annual rate of 3 3/4 percent in real terms in the first quarter. Spending on light motor vehicles, which had been supported in late 2003 by aggressive price and financing incentives, slipped somewhat in early 2004. But outlays for goods

other than motor vehicles, which had risen 6 1/2 percent in real terms in 2003, posted another huge increase in the first quarter; spending on services also perked up after having advanced only modestly in 2003. The available data point to a much smaller increase in consumer spending in the second quarter; the deceleration mainly reflects a sharp slowing in the growth of outlays on goods other than motor vehicles.

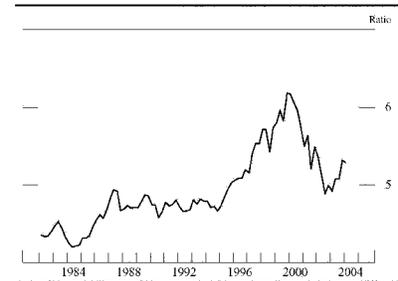
Real disposable personal income (DPI)—that is, after-tax income adjusted for inflation—rose at an annual rate of nearly 4 percent between the fourth quarter of 2003 and May 2004, a gain about in line with its rate of growth last year. To be sure, the rise in energy prices cut into the growth of real income in the first half of the year. However, aggregate wages and salaries, boosted by increases in both employment and earnings, rose appreciably in nominal terms. In addition, last year's tax legislation, which had already reduced withholding rates in mid-2003, added further to households' cash flow by increasing refunds and lowering final settlements this spring.

Household wealth increased only about in line with nominal DPI in the first quarter of 2004, and the wealth-to-income ratio was likely little changed in the second quarter as well. Nonetheless, the increase in wealth over the past year has been considerable—and probably large enough to more or less offset any lingering restraint on spending growth from the earlier declines in stock prices. Thus, with wealth approximately a neutral influence on the growth of spending of late, the personal saving rate has held fairly steady. In fact, the average saving rate over the first five months of the year—at 2 1/4 percent of DPI—was very close to the annual figures for 2002 and 2003.

Change in real income and consumption

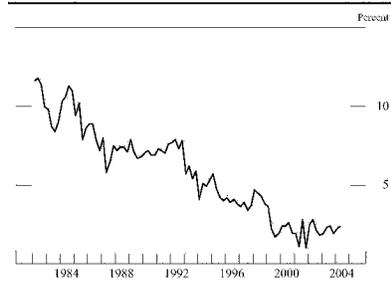


Wealth-to-income ratio



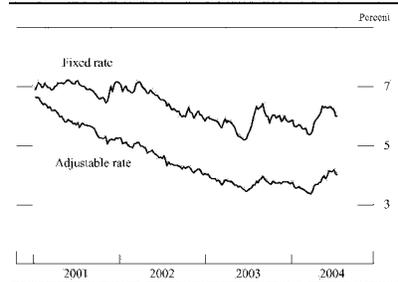
NOTE: The data are quarterly and extend through 2004 Q1. The wealth-to-income ratio is the ratio of household net worth to disposable personal income.

Personal saving rate



NOTE: The data are quarterly; the reading for 2004:Q2 is the average for April and May.

Mortgage rates



NOTE: The data, which are weekly and extend through July 14, 2004, are contract rates on thirty-year mortgages.

SOURCE: Federal Home Loan Mortgage Corporation.

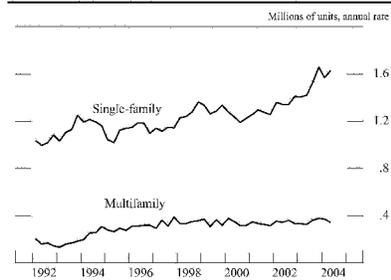
Residential Investment

Activity in the housing sector remained torrid in the first half of 2004. Although starts in the single-family sector faltered a bit early in the year, in part because of unusually adverse weather, they subsequently snapped back and reached an annual rate of more than 1.6 million units in April and May—8½ percent greater than the already rapid pace for 2003 as a whole. Sales of new and existing homes have also been exceptionally strong, and they hit record highs in May. In general, housing activity has been supported by the favorable developments regarding jobs and income and, especially early in the year, by low mortgage rates. Rates on thirty-year fixed-rate mortgages, which had dipped to 5½ percent in March, rose markedly in the spring; they have edged down in recent weeks and now stand at 6 percent, a level still quite low by historical standards.

Home prices have continued to rise rapidly. For example, the national repeat-sales price index from the Office of Federal Housing Enterprise Oversight—which partially adjusts for shifts in the quality of homes sold—rose 7¼ percent over the year ending in the first quarter (the latest available data), a rate similar to the average annual gain since late 2000. By this measure—and many others—house price increases have outstripped gains in incomes as well as in rents in recent years.

Starts in the multifamily sector averaged an annual rate of 360,000 units over the first five months of the year, a pace slightly faster than that of the past several years. Low interest rates have apparently helped maintain the profitability of apartment construction, given that other fundamental determinants of activity in the sector have been weak. In particular, rents have remained soft, and in the first quarter, vacancy rates for multifamily rental properties reached a new high.

Private housing starts

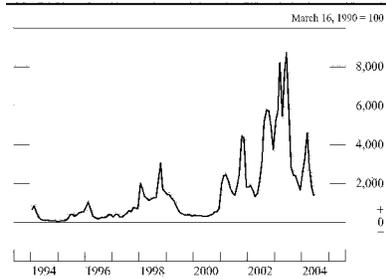


NOTE: The data are quarterly; the readings for 2004:Q2 are the averages for April and May.

Household Finance

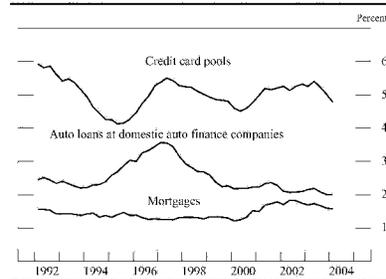
Household debt rose at an annual rate of about 10¼ percent in the first quarter of 2004. The especially rapid growth of mortgage debt was driven by the strong pace of activity in the housing market and the renewed wave of mortgage refinancing. However, the second-quarter rise in interest rates appears to have slowed the rate of refinancing and, consequently, the amount of equity being extracted from the value of homes through such transactions. Consumer credit—which constitutes the bulk of household debt aside from mortgage borrowing—expanded at an annual rate of about 6 percent over the first quarter of the year and at roughly a 4 percent pace in April and May. The growth of consumer credit likely has continued to be restrained by the substitution

Mortgage refinancing application index



NOTE: The data are monthly and extend through June 2004.  
SOURCE: Mortgage Bankers Association.

Delinquency rates on selected types of household loans

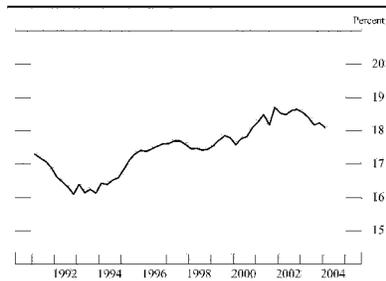


NOTE: The data are quarterly and extend through 2004:Q1.  
SOURCE: For mortgages, the Mortgage Bankers Association; for auto loans, the Big Three automakers; for credit cards, Moody's Investors Service.

toward mortgage debt as a means to finance household expenditures.

Low interest rates, in concert with strong growth in disposable personal income, have helped to keep financial obligations manageable for most households. In the first quarter of the year, the debt service ratio and the financial obligations ratio for the household sector in the aggregate, both of which gauge pre-committed expenditures relative to disposable income, continued to edge down from their peaks in 2001. Other indicators also suggest that the financial well-being of households has stabilized and may be improving. Delinquencies on credit card and auto loans generally declined in the first three months of the year, and bankruptcy rates, while still high, stepped down in the first quarter from their recent peak.

Household financial obligations ratio



NOTE: The data are quarterly and extend through 2004:Q1. The financial obligations ratio equals the sum of required payments on mortgage and consumer debt, automobile leases, rent on tenant-occupied property, homeowners' insurance, and property taxes, all divided by disposable personal income.

Rapid increases in home prices have continued to buoy household net worth this year. In contrast, stock prices are about unchanged. Although news on earnings and economic activity has generally been favorable, rising oil prices and interest rates and, perhaps, heightened geopolitical concerns have weighed on investor sentiment. Nevertheless, inflows into equity mutual funds have been even stronger thus far in 2004 than they were last year.

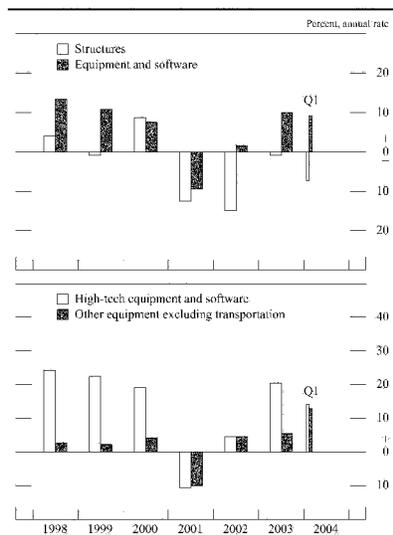
*The Business Sector*

Fixed Investment

For the most part, businesses appear to be shaking off the extraordinary reluctance to undertake new investment projects that was evident in 2002 and 2003. Indeed, although outlays on nonresidential construction have not yet turned up decisively, real spending on equipment and software (E&S) has been advancing briskly. The broadly based growth in E&S spending has been driven by increasingly favorable fundamentals: positive expectations for sales, high levels of corporate profits and cash flow, a desire to replace or upgrade aging equipment after a period of weak investment spending, and the continued low cost of capital.

Real E&S spending rose at an annual rate of more than 15 percent in the second half of last year, and it posted another sizable increase in the first quarter of 2004 despite flat business purchases of motor vehicles and a dip in deliveries of aircraft. Excluding transportation equipment, real spending on E&S rose at an annual rate of 13½ percent in the first quarter. In the high-tech category, real purchases of computers and software remained on the solid uptrend that has been evident for the past couple of years, and real outlays on communications

Change in real business fixed investment



NOTE: High-tech equipment consists of computers and peripheral equipment and communication's equipment.

equipment increased further, reaching a level about 20 percent above the low in the fourth quarter of 2002. Spending for equipment other than high-tech and transportation, which accounts for about 40 percent of E&S (measured in nominal terms), also rose markedly in the first quarter. Such spending tends to be particularly sensitive to the prospects for aggregate demand. In addition, it may be receiving a lift from the partial-expensing tax provision, which is especially valuable for equipment with relatively long service lives for tax purposes; that provision is slated to expire at the end of 2004.

Equipment spending appears to have posted another solid increase in the second quarter. Outlays on transportation equipment seem to have rebounded, and the incoming data on high-tech equipment point to robust real expenditures. Some indicators for spending on other nontransportation equipment have been a bit soft recently. But the May level of shipments for this broad category was still above that of the first quarter, and backlogs of unfilled orders, which have risen impressively over the past year, continued to build.

Real nonresidential construction has remained about unchanged, on net, since the steep decline in 2001 and 2002. Construction of office buildings is still running at

roughly half the pace of 2000, although vacancy rates have stabilized—albeit at very high levels—and the decline in rents has slowed. Factory construction also remains sluggish. Construction of retail and wholesale facilities, in contrast, has held up fairly well, a performance consistent with the strength in consumer spending. Outlays on buildings for health care and education also have been reasonably well sustained.

#### Inventory Investment

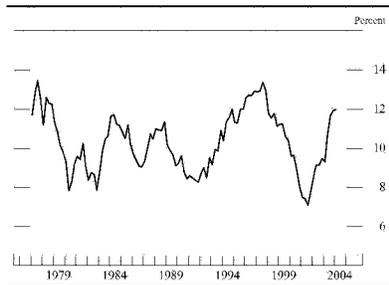
Inventory investment has generally remained subdued even as final sales have strengthened. Although real nonfarm inventory investment picked up to an annual rate of \$30 billion in the first quarter, the accumulation occurred almost entirely in the motor vehicle sector, in which sagging sales and a high level of production early in the year created a noticeable bulge in dealer stocks, especially of light trucks. In the second quarter, the automakers reduced assemblies; but with sales running only a little above their first-quarter pace on average, inventories of motor vehicles remained elevated. Outside the motor vehicle industry, nonfarm inventories increased at a meager \$6 billion annual rate in real terms in the first quarter, and the available data point to only a moderate step-up in real stockbuilding, on balance, in April and May. In general, non-auto inventories appear lean relative to sales, even after factoring in the downward trend in inventory-sales ratios that has accompanied the ongoing improvements in supply-chain and logistics management.

#### Corporate Profits and Business Finance

Continuing the gains of last year, profits of the business sector to date have remained strong. In the first quarter of 2004, earnings per share for S&P 500 firms were about 26 percent higher than their level four quarters earlier, and before-tax profits of nonfinancial corporations as a share of GDP from that sector edged up following a steep increase in 2003. A jump in profits in the petroleum and gas industries owing to higher oil prices was responsible for much of the rise in earnings. However, firms across many industries, with the notable exception of telecommunication services, registered solid gains in earnings. In response to this pattern of higher profits, analysts have been steadily marking up their forecasts for earnings in subsequent quarters.

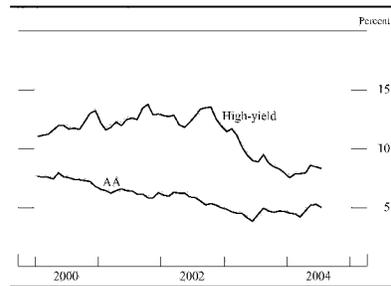
Net equity issuance has remained negative this year. Seasoned offerings have been scarce, the pace of initial public offerings has only inched up, and share retirements have continued to be strong. Corporations have continued to repurchase shares at a rapid rate to manage their

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



NOTE: The data are quarterly and extend through 2004:Q1. Profits are from domestic operations of nonfinancial corporations, with inventory valuation and capital consumption adjustments.

Corporate bond yields



NOTE: The data are monthly averages of daily data. The final observation is the average of trading days through July 14, 2004. The AA rate is the Merrill Lynch AA index with a remaining maturity of seven to ten years. The high-yield rate is the yield on the Merrill Lynch 175 high-yield index.

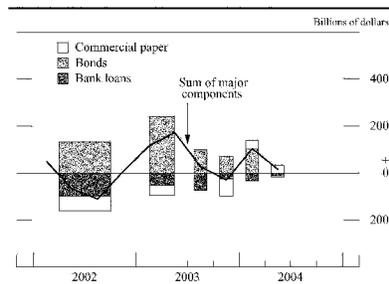
cash positions, even as they have increased dividend payments.

Firms relied heavily on their elevated profits and substantial cash holdings to finance their investment in inventories and fixed capital in the first half of 2004. As a result, the growth of nonfinancial business debt remained modest. Much of the proceeds from bond issuance was used to pay down higher-cost debt, and the timing of the issuance of investment-grade bonds in particular was influenced by movements in interest rates; issuance spiked in March in the wake of the drop in yields but subsided in April as rates rebounded. Short-term debt financing showed signs of turning around after contracting over the previous three years. Commercial paper outstanding expanded in the first two quarters of 2004. Business loans

at banks have fallen on balance so far this year but at a much slower pace than in 2003. The Federal Reserve's Senior Loan Officer Opinion Survey conducted in April 2004 indicated that demand for business loans had begun to expand and that commercial banks had again eased both standards and terms on these loans over the previous three months.

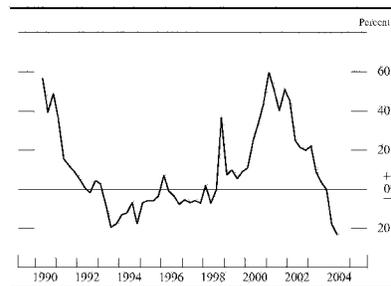
Strong profits, low interest rates, and continued deleveraging helped improve the credit quality of nonfinancial firms over the first half of the year. In the second quarter, the delinquency rate on business loans dropped

Major components of net business financing



NOTE: Seasonally adjusted annual rate for nonfinancial corporate business. The data for the sum of major components are quarterly. The data for 2004:Q2 are estimated.

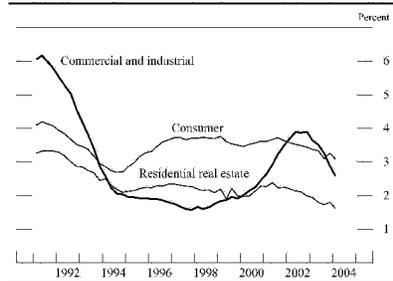
Net percentage of domestic banks tightening standards on commercial and industrial loans to large and medium-sized firms



NOTE: The data are based on a survey generally conducted four times per year; the last reading is from the April 2004 survey. Large and medium-sized firms are those with annual sales of \$50 million or more. Net percentage is the percentage reporting a tightening less the percentage reporting an easing.

SOURCE: Federal Reserve, Senior Loan Officer Opinion Survey on Bank Lending Practices.

Delinquency rates on selected types of loans at banks

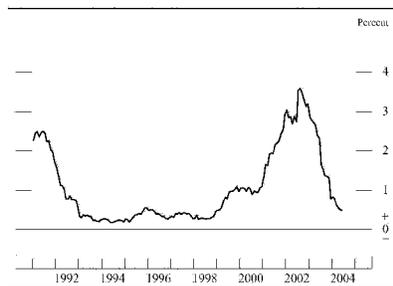


NOTE: The data, from bank Call Reports, are quarterly, are seasonally adjusted, and extend through 2004:Q1.

for the sixth consecutive quarter; the continued decline has reversed a large part of the preceding run-up. Early in the year the twelve-month trailing default rate on outstanding bonds fell into the relatively low range observed over much of the 1990s, and in June it registered another decline. Moreover, in the first part of the year, the pace of upgrades of bond ratings by Moody's Investors Service rose while the pace of downgrades fell.

Borrowing against commercial real estate assets continued at a rapid pace during the first half of this year. Anecdotal reports suggest that some firms were using mortgages on commercial property to lock in low-cost, long-term funding. Despite the persistently high vacancy rates for most types of commercial property, the loans backed by these assets have continued to perform well.

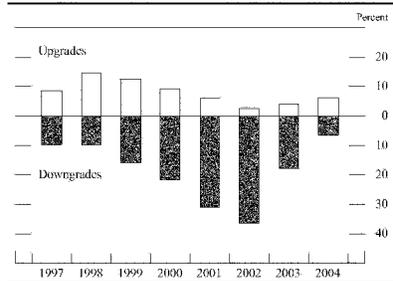
Default rate on outstanding bonds



NOTE: The default rate is monthly and extends through June 2004. The rate for a given month is the face value of bonds that defaulted in the twelve months ending in that month divided by the face value of all bonds outstanding at the end of the calendar quarter immediately preceding the twelve-month period.

SOURCE: Moody's Investors Service.

Ratings changes of nonfinancial corporate bonds



NOTE: Data are at an annual rate; for 2004, they are the annualized values of monthly data through May. Debt upgrades and downgrades are expressed as a percentage of the par value of all bonds outstanding.

SOURCE: Moody's Investors Service.

Delinquency rates on commercial mortgages held by banks and insurance companies remained very low in the first quarter. A drop in delinquencies on commercial-mortgage-backed securities (CMBS) in recent months has partially reversed last year's rise, and the narrow risk spreads on CMBS suggest that investors have limited concerns about loan quality.

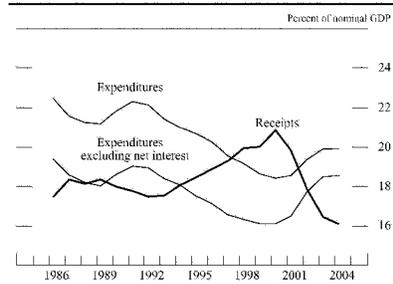
### The Government Sector

#### Federal Government

The deficit in the federal unified budget has continued to widen. Over the twelve months ending in June, the unified budget recorded a deficit of \$431 billion, \$120 billion more than during the comparable period last year and equal to nearly 4 percent of nominal GDP. In large part, the rise in the deficit is attributable to further rapid increases in spending on defense and other programs and the loss of revenues resulting from the tax legislation enacted in recent years. In addition, interest costs, which fell sharply between fiscal 1997 and fiscal 2003 as a result of budget surpluses and declining interest rates, have leveled off and thus are no longer a significant factor helping to restrain the deficit. The primary deficit, which excludes net interest, totaled \$276 billion over the twelve months ending in June, also approximately \$120 billion more than over the year ending in June 2003.

Over the twelve months ending in June, nominal federal spending was nearly 7 percent higher than during the same period a year earlier and stood at about 20 percent of nominal GDP—virtually the same as in fiscal 2003 but 1½ percentage points above the recent low in fiscal 2000. Spurred by the war in Iraq, defense spending

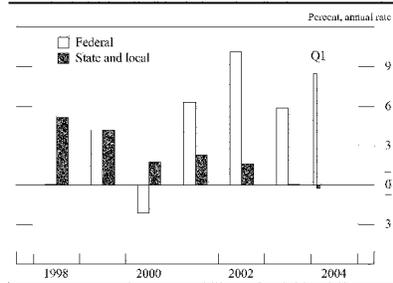
Federal receipts and expenditures



NOTE: The budget data are from the unified budget; through 2003 they are for fiscal years (October through September), and GDP is for Q4 to Q3. For 2004, the budget data are for the twelve months ending in June, and GDP is for 2003:Q4 to 2004:Q1.

ramped up another 14 percent; outlays for nondefense discretionary programs, which include homeland security, moved up further as well. Spending on the major health programs rose at a rapid clip, in part because the Jobs and Growth Tax Relief Reconciliation Act of 2003 (JGTRRA) temporarily increased grants to the states under the Medicaid program and boosted payments to some Medicare providers. In addition, as noted, net interest payments, which had plummeted between 1997 and 2003, flattened out. Real federal expenditures for consumption and gross investment—the part of government spending that is a component of real GDP—rose at an annual rate of 8½ percent in the first calendar quarter of 2004; that increase reflected a surge in real defense spending, which now stands more than 30 percent above the levels that prevailed, on average, from 1997 to 2000.

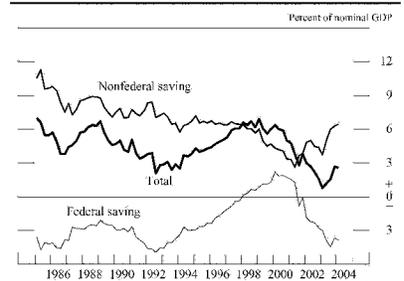
Change in real government expenditures on consumption and investment



Federal receipts in the twelve months ending in June were 1½ percent higher than during the comparable period of the previous year after having fallen markedly between fiscal 2000 and fiscal 2003. Receipts received a substantial boost over the past year from a strong gain in corporate taxes, which were lifted by robust profits. Social insurance taxes, which tend to move in line with wages and salaries, also increased. But individual income taxes were below last year's level: Although taxable incomes rose moderately, collections were reduced by the lower withholding rates in place since mid-2003 and by the effects of JGTRRA on refunds and final settlements this spring.

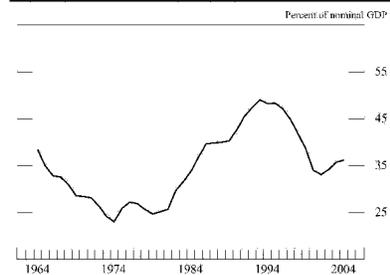
The deterioration in the unified budget since 2000 has been mirrored in a sharp downswing in federal saving—essentially, the unified surplus or deficit adjusted to conform to the accounting practices followed in the national income and product accounts (NIPA). Gross federal saving fell from a high of nearly 3 percent of nominal GDP in 2000 to negative 3 percent of GDP in the first quarter of 2004; measured net of estimated depreciation, federal saving fell from 2 percent of GDP to negative 4 percent of GDP over this period. In the past couple of years, the rise in business saving from the rebound in profits and reductions in corporate taxes has cushioned to some extent the effect of growing budget deficits on national saving. In fact, because of the dramatic increase in business saving in recent quarters, national saving has recovered some from the extreme lows of early 2003. Even so, as of the first quarter of 2004, national saving (measured net of estimated depreciation) was still equal to just about 2½ percent of GDP, compared with a recent high of 6½ percent in 1998. If not reversed over the longer haul, such low levels of national saving could eventually impinge

Net saving



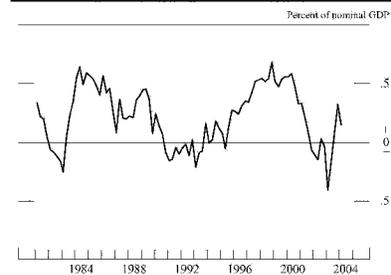
NOTE: The data are quarterly and extend through 2004:Q1. Nonfederal saving is the sum of personal and net business saving and the net saving of state and local governments.

Federal government debt held by the public



NOTE: Through 2003, the data for debt are year-end figures, and the corresponding value for GDP is for Q4 at an annual rate, the final observation is for 2004:Q1. Excludes securities held as investments of federal government accounts.

State and local government net saving



NOTE: The data, which are quarterly, are on a national income and product account basis and extend through 2004:Q1. Net saving excludes social insurance funds.

on private capital formation and thus slow the rise of living standards.

Reflecting the need to finance the sizable federal budget deficit, federal debt held by the public expanded at an annual rate of 11¼ percent in the first half of the year. The ratio of this debt to nominal GDP now exceeds 36 percent. The Treasury tilted its issuance toward longer-term and inflation-indexed securities somewhat, and announced semiannual issuance of a twenty-year inflation-protected bond beginning in July and a five-year inflation-protected note beginning in October.

#### State and Local Governments

States and localities have started to see some improvement in their budget positions after having gone through several difficult years. Strong growth in household income and consumer spending has boosted revenues in recent quarters, as have the additional federal grants authorized under JGTRRA. And although rising medical costs and security needs have continued to put upward pressure on spending, state and local governments have generally held the line on hiring and have kept other outlays in check. The restraint on spending, in combination with a drawdown of reserve funds and some increases in taxes, has helped states and localities satisfy their balanced-budget requirements. In fact, between the third quarter of 2003 and the first quarter of 2004, NIPA net saving (excluding social insurance funds) for this sector averaged \$21 billion at an annual rate (¼ percent of nominal GDP), compared with negative \$7 billion in 2002 and negative \$31 billion in the first half of 2003. (Net saving is roughly similar to the surplus or deficit in an operating

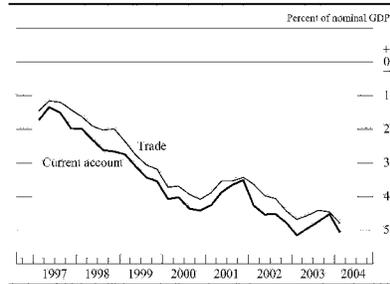
budget.) Although a few states are still struggling with strained fiscal situations, most have entered fiscal 2005 (which started on July 1 in all but four states) with expectations of respectable growth in revenues and with budgets in place that allow for some increases in spending on high-priority services and some rebuilding of reserve funds.

Real consumption and investment spending by state and local governments was essentially flat in the first quarter of 2004; available indicators point to a moderate increase in the second quarter. Outlays for consumption items, which were little changed in 2003, appear to have remained subdued throughout the first half of the year. Investment expenditures also were about unchanged in the first quarter, but they turned up sharply in the spring, mainly because of a jump in spending on highways.

Significant demand for infrastructure spending and favorable interest rates led to robust issuance of state and local government debt to finance capital expenditures and to advance refund higher-cost debt. Nevertheless, over the first half of the year, net issuance edged down from its rapid pace in 2003 to about a 6 percent annual rate. The deceleration reflected a decline in short-term borrowing as improvements in the fiscal positions of state and local governments lessened the need for temporary funding of budget shortfalls.

The credit quality of municipal borrowers has stabilized after two years of deterioration; for the year to date, upgrades and downgrades of credit ratings have been roughly equal. In a marked change from last year's sentiment, rating agencies have begun to express guarded optimism about the credit quality of states because of improvements in state revenue flows and restraint on spending.

U.S. trade and current account balances



NOTE: The data are quarterly and extend through 2004:Q1.  
SOURCE: Department of Commerce.

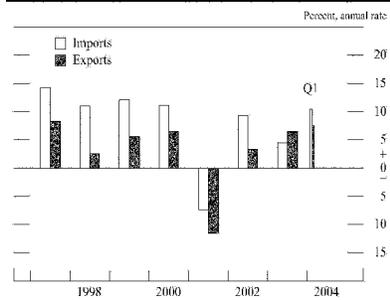
*The External Sector*

In the first quarter of 2004, the U.S. current account deficit expanded to an annual rate of \$580 billion, or about 5 percent of GDP. As in the past, the widening was driven primarily by a larger deficit in trade of goods and services. The surplus on net investment income declined in the first quarter but remained well above its average value in the previous year. The deficit on net unilateral transfers rose because of a concentration of disbursements of government grants in the first quarter.

International Trade

The U.S. trade deficit in goods and services registered \$548 billion at an annual rate in the first quarter, about \$46 billion larger than in the fourth quarter of 2003. On

Change in real imports and exports of goods and services



SOURCE: Department of Commerce.

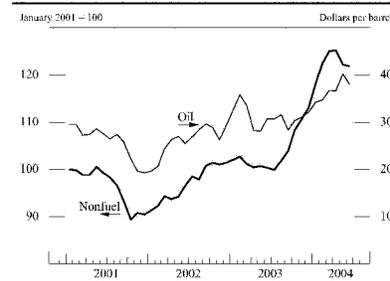
average, data for April and May suggest that the trade deficit continued to widen in the second quarter.

Real exports of goods and services increased at an annual rate of 7½ percent in the first quarter of 2004, well off the blistering 20 percent pace of the fourth quarter but still above the average for 2003. Solid gains in exports since mid-2003 arose in part from the strong economic performance of many of our major trading partners. In addition, the net decline in the exchange value of the dollar since 2002 continued to make U.S. goods and services more competitive abroad. Increases in exports of U.S. goods were widespread across our major trading partners, with the exception of Japan, and were concentrated in real exports of capital goods, industrial supplies, and consumer goods. Real exports of agricultural products fell sharply, hurt by foreign bans on U.S. beef products following reports of mad cow disease in a U.S. herd. Exports of services rose moderately.

Prices of total exports rose at an annual rate of 5¾ percent in the first quarter, boosted by another jump in agricultural prices along with substantial increases in the prices of other primary commodities and industrial supplies. Prices of U.S. agricultural exports have been pushed up by very strong global demand, particularly from China. For specific products, such as cotton and soybeans, lower production in some countries also contributed to price run-ups. More recently, prices of soybeans and other agricultural products have eased in the face of a slowing in the growth of demand from China and the anticipation of larger harvests. Even so, available data point to continued strong increases in export prices in the second quarter.

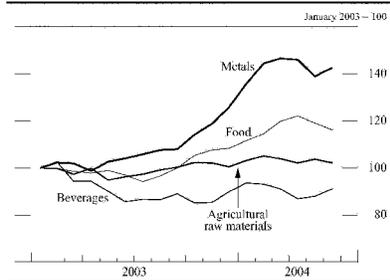
Supported by solid U.S. economic growth, real imports of goods and services rose at an annual rate of

Prices of oil and of nonfuel commodities



NOTE: The data are monthly and extend through June 2004. 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 from the International Monetary Fund.

Prices of major nonfuel commodities

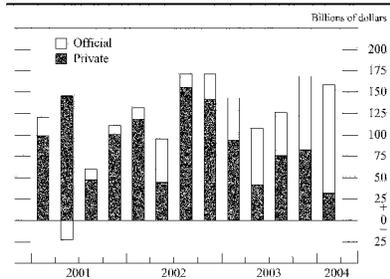


NOTE: The data are monthly and extend through June 2004. The metals category includes aluminum, copper, and iron ore; food includes cereals, vegetable oils and protein meals, seafood, and meat; agricultural raw materials consists of timber, cotton, wool, rubber, and hides; beverages consists of coffee, cocoa beans, and tea.  
SOURCE: International Monetary Fund.

10½ percent in the first quarter. This increase was below the fourth-quarter pace but still roughly double the rate of increase for 2003 as a whole. Real imports of goods were boosted by a sharp increase in oil imports. Gains in imports of non-oil goods were also sizable and widespread across categories. Imports of services grew slightly in the first quarter.

The spot price of West Texas intermediate (WTI) crude oil surged above \$40 per barrel in May and has since fluctuated close to that level. The run-up in the price since the beginning of the year has been driven by surprisingly strong global demand for oil. Supply issues have been important as well. These were mainly continued violence in Iraq, including the sabotage of oil facilities, attacks on foreigners in Saudi Arabia, ongoing unrest in Nigeria, political turmoil in Venezuela, and tax payment difficul-

U.S. net financial inflows



SOURCE: Department of Commerce.

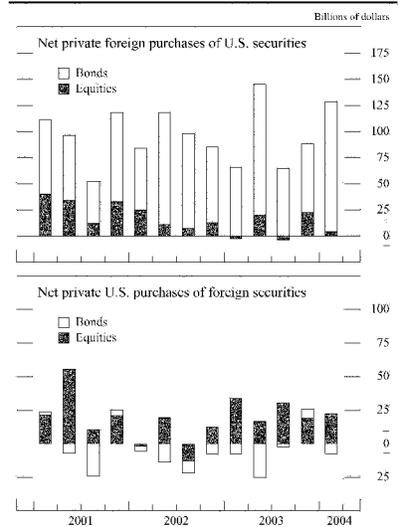
ties at a major Russian oil company. The recent increase in OPEC production (mainly by Saudi Arabia) has eased the upward pressure on prices a bit, but they have remained elevated.

Prices of imported non-oil goods rose at an annual rate of 5½ percent in the first quarter after minimal increases in the second half of 2003. Prices for imported consumer goods rose at an annual rate of 2¼ percent after being flat in 2003. Skyrocketing global commodity prices last year and early this year boosted prices of imported industrial supplies (especially metals) and of foods, feed, and beverages. The jump in commodity prices reflected strong demand, the net depreciation of the dollar over the past two years, and the limited expansion in supply of many commodities since the 2001 trough in commodity prices. Available data suggest a modest step-down in the rate of increase of import prices in the second quarter; the move in part reflects a flattening of consumer goods prices.

The Financial Account

The U.S. current account deficit has continued to be financed largely by foreign flows into U.S. bonds. For-

U.S. net international securities transactions



SOURCE: Department of Commerce and the Federal Reserve Board.

eign official inflows, already sizable in 2003, rose sharply in the first quarter of 2004 and then moderated somewhat. Similarly, private foreign purchases of U.S. bonds, which were significant in 2003, increased sharply in the first quarter and also appear to have moderated in the second quarter. In contrast, foreign demand for U.S. equities was weak in 2003 and has remained so in 2004. Purchases of foreign equities by private U.S. investors appear to be strengthening, but U.S. investors still show no appetite for foreign bonds.

Direct investment into the United States in the first quarter continued to be restrained by the slowdown of global mergers and acquisitions since 2002. In contrast, U.S. direct investment abroad was strong in 2003 and in the first quarter of 2004, as the effect of fewer mergers and acquisitions was offset by sizable reinvested earnings.

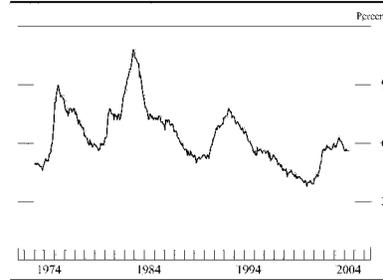
*The Labor Market*

Employment and Unemployment

The demand for labor turned up in late 2003 after an extended period of weakness, and it has gathered additional steam this year. After averaging about 60,000 per month in the fourth quarter of 2003, gains in private nonfarm payroll employment rose to an average of about 200,000 per month in the first half of 2004. The job gains were especially large in March, April, and May but ebbed somewhat in June. The civilian unemployment rate, which had fallen from a recent peak of 6.3 percent in June 2003 to 5.7 percent in December 2003, was little changed over the first half of the year. In June, it stood at 5.6 percent.

The increases in payrolls over the first half of 2004 were widespread. Especially notable was the turnaround in the manufacturing sector, in which employment bot-

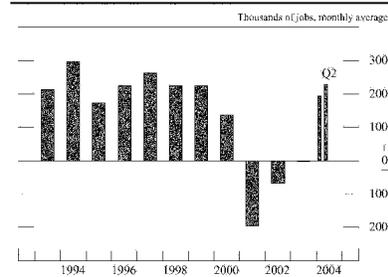
Civilian unemployment rate



NOTE: The data are monthly and extend through June 2004.

tommed out in January and then rose a cumulative 65,000 jobs through June. The rise in manufacturing jobs was concentrated in the durable goods industries—in particular, those making fabricated metals and other construction-related products, computers and electronic equipment, and machinery. After a long string of declines, employment at producers of nondurable goods was little changed, on net, over the first half. Job gains in virtually all other major sectors have been greater this year than last. In particular, hiring in retail trade, which had been lackluster in 2003, turned up appreciably, and construction employment increased further. The professional and business services sector also posted a sizable rise, in part because the rebound in manufacturing activity lifted hiring at temporary-help firms. A clear indication of the breadth of the employment increases is provided by the six-month diffusion index compiled by the Bureau of Labor Statistics (BLS). The index is equal to the percentage of industries that increased employment over the most recent six months plus one-half the percentage with unchanged employment; in June, the index moved up to its highest level since April 2000.

Net change in payroll employment

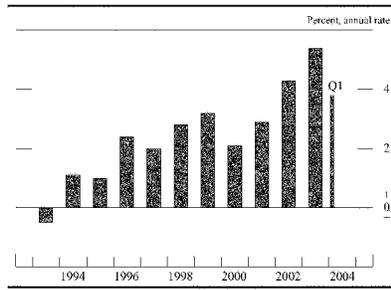


NOTE: Private nonfarm.

Productivity and Labor Costs

Gains in labor productivity have slowed somewhat in recent quarters after the spectacular increases of mid-2003. Still, according to the currently published data, output per hour in the nonfarm business sector rose a remarkable 5½ percent over the year ending in the first quarter. Over the past three years, increases in productivity have averaged more than 4 percent per year, compared with average increases of about 2½ percent per year in the second half of the 1990s. During that earlier period, an expansion of the capital stock was an important source of productivity growth. However, in the more

Change in output per hour

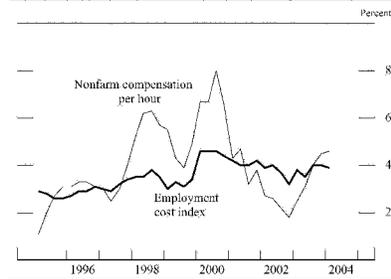


NOTE: Nonfarm business sector.

recent period, when the business environment—at least until the past few quarters—was characterized by sluggish demand, lean capital budgets, and an extraordinary reluctance of firms to add to payrolls, businesses appear to have raised their productivity mainly through changes in organizational structures and better use of the capital already in place. With hiring having picked up of late, measured productivity growth may slow in coming quarters; but if recent experience is any guide, businesses will continue to focus on achieving structural improvements in the efficiency of their operations. The upswing in investment spending now under way also bodes well for sustained favorable productivity performance in the period ahead.

The rapid productivity growth in recent years has helped to bolster increases in hourly compensation in the

Measures of change in hourly compensation

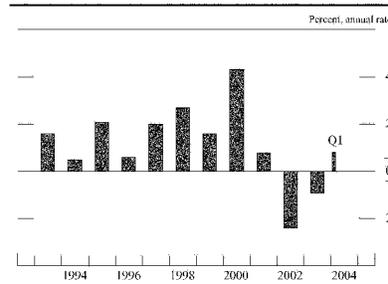


NOTE: The data extend through 2004:Q1. For nonfarm compensation, change is over four quarters; for the employment cost index (ECI), change is over the twelve months ending in the last month of each quarter. Nonfarm compensation is for the nonfarm business sector; the ECI is for private industry excluding farm and household workers.

face of the soft labor market and the low consumer price inflation in 2003. As a result, increases in the employment cost index (ECI) measure of hourly compensation, which is based on a survey of private nonfarm businesses conducted quarterly by the BLS, have held fairly steady of late. In fact, the rise in the ECI over the twelve months ending in March—at a shade less than 4 percent—was virtually the same as the increases over the preceding two years. Benefit costs, which rose 7 percent over the year ending in March, have continued to be the fastest rising portion of hourly compensation; health insurance costs have remained on a steep uptrend, and employers have boosted their contributions to defined-benefit retirement plans to make up for earlier stock market losses. The rising benefit costs have likely exerted some downward pressure on wages, which rose just 2½ percent over the twelve months ending in March; the twelve-month change in the wage component of the ECI, which was close to 4 percent in 2000 and 2001, has been in the range of 2½ percent to 3 percent since late 2002.

The change in compensation per hour in the nonfarm business (NFB) sector—an alternative measure of hourly compensation based on data constructed for the NIPA—has swung widely in recent years. Fluctuations in the value of stock option exercises, which are excluded from the ECI but included in the NFB measure, likely account for some of the differential movements in the two series. The four-quarter change in the NFB measure bottomed out at a bit less than 2 percent in 2002, when the value of exercised options was dropping; it has moved up steadily since that time and, in the first quarter, stood at 4½ percent—a rate not much different from the increase in the ECI. With productivity growth slowing to a pace below that of NFB hourly compensation, unit labor costs rose in both the fourth and first quarters after having trended down over the preceding two years.

Change in unit labor costs



NOTE: Nonfarm business sector.

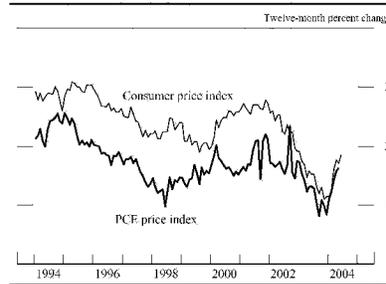
Prices

Inflation moved higher in the first half of 2004. After rising just 1½ percent over the four quarters of 2003, the price index for personal consumption expenditures (PCE) increased at an annual rate of 3½ percent between the fourth quarter of 2003 and May 2004. In that period, energy prices soared, and increases in core consumer prices picked up to an annual rate of 2¼ percent—more than 1 percentage point faster than the increase in 2003. Data for the consumer price index (CPI) are available through June and show some moderation in the core component of the series. Over the first half of the year, the core CPI rose at an annual rate of 2½ percent, compared with an increase of 1¼ percent over the four quarters of 2003.

Reflecting the surge in crude oil prices, PCE energy prices rose at an annual rate of more than 25 percent in the first quarter; they apparently posted another outsized increase in the second quarter. Gasoline prices increased rapidly through May as crude oil costs rose and as price markups were boosted by strong demand and lean inventories; although gasoline prices have fallen on balance since late May, they are currently nearly 30 percent above their level at the end of last year. As for natural gas, which can often substitute for fuel oil in the industrial sector, spot prices were elevated at the start of the year, fell somewhat in February and March, and trended up over the spring. The higher spot prices for natural gas this spring pushed up prices paid by consumers through June. PCE electricity prices appear to have risen at an annual rate of 3 percent over the first half of the year, a pace similar to that in 2003.

Although volatile from month to month, consumer food prices rose moderately on balance over the first half of

Change in consumer prices excluding food and energy



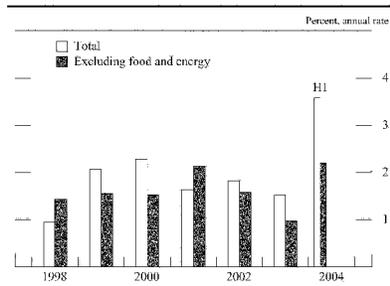
NOTE: The data for the CPI extend through June 2004, for PCE, they extend through May 2004.

2004 after having moved up in late 2003. Robust global demand is imparting upward impetus to food prices, but U.S. producers are in the process of boosting supply, which should help restrain increases in retail food prices in coming quarters.

The step-up in core PCE inflation this year has been especially pronounced in a few categories. In particular, prices of motor vehicles have firmed after a noticeable decrease in 2003. In addition, increases in shelter costs, which were surprisingly low in 2003, are now running more in line with earlier trends. Core inflation has also been lifted this year by substantial increases, on balance, in a number of categories for which prices cannot be derived from market transactions and thus must be imputed by the Bureau of Economic Analysis—for example, prices of financial services provided by banks without explicit charge. These non-market-based prices, which were about flat in 2003, are difficult to estimate, and the imputed figures tend to be volatile.

A number of factors have contributed to the run-up in core inflation this year. Higher oil prices have doubtless raised the cost of producing other goods and services. So have the steep increases in prices of non-oil commodities such as copper and lumber, which came about as economic activity strengthened worldwide and as industrial capacity utilization both here and abroad tightened. Likewise, the decline in the dollar has boosted non-oil import prices and thus the costs of inputs for many domestic producers. The weaker dollar has also likely lessened the pressure on firms facing foreign competition to hold the line on prices—a consideration that is probably contributing to the widespread perception that firms' pricing power has increased lately. Moreover, unit labor costs have edged up recently after having declined noticeably in 2002 and 2003.

Change in PCE price index



NOTE: The data are for personal consumption expenditures (PCE). The changes for 2004 are from 2003:Q4 to May 2004.

From a cyclical perspective, the sharp upturn in commodity prices is not surprising, given the pickup in the growth of industrial production. In fact, such large increases in commodity prices are typical as economic activity accelerates and capacity utilization rises—especially for products for which the supply is relatively fixed in the short run. Some portion of these increases usually proves transitory. More important, cyclical swings in commodity prices tend to have only a minor effect on overall inflation, both because they account for a small share of total costs and because changes in commodity prices tend to be partly absorbed in firms' profit margins, at least for a time.

The faster rate of inflation this year underscores the difficulty of gauging price pressures. Nevertheless, on the whole, the evidence suggests that slack remains in labor and product markets, which should be exerting some downward pressure on inflation. The unemployment rate—at 5½ percent currently—is not significantly lower than it was through much of 2002 and 2003, when core inflation was trending down. And despite the run-up this year, capacity utilization in the manufacturing sector is still below its longer-run average. In addition, the strong upward trend in productivity is continuing to help keep the rise in labor costs muted, and profit margins are sufficiently wide to give firms scope to absorb cost increases for a while without putting undue upward pressure on prices.

The upturn in actual inflation has been echoed in some measures of inflation expectations. For example, according to the Michigan Survey Research Center, the median expectation for inflation over the coming year has averaged slightly more than 3 percent since early spring after hovering in the area of 2½ percent to 2¾ percent in 2003 and early 2004. The median expectation for inflation over the next five to ten years has been running a bit below 3 percent in recent months, a reading similar to the figures for 2002 and 2003. According to the Survey of Professional Forecasters conducted by the Federal Reserve Bank of Philadelphia, expectations of inflation over the next ten years held steady in June at 2½ percent. Inflation compensation over the next five years as measured by the spread between the yield on nominal Treasury securities and their indexed counterparts rose noticeably during the first half of 2004. To be sure, inflation compensation is also influenced by perceptions of inflation risk and the secular increase in demand for inflation-indexed debt, but the rise in near-term inflation compensation likely reflects, at least in part, higher inflation expectations. Similar to the survey-based measures of longer-run inflation expectations, inflation compensation for the period five years to ten years ahead was little changed on net over the first half of the year.

Broader NIPA price measures are available only

#### Alternative measures of price change

| Percent                                 |              |              |
|---|--------------|--------------|
| Price measure                           | 2002 to 2003 | 2003 to 2004 |
| <i>Chain-type (Q1 to Q1)</i>            |              |              |
| Gross domestic product .....            | 1.7          | 1.8          |
| Gross domestic purchases .....          | 2.3          | 1.7          |
| Personal consumption expenditures ..... | 2.4          | 1.6          |
| Excluding food and energy .....         | 1.6          | 1.3          |
| <i>Fixed-weight (Q2 to Q2)</i>          |              |              |
| Consumer price index .....              | 2.2          | 2.8          |
| Excluding food and energy .....         | 1.5          | 1.8          |

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

through the first quarter, and the four-quarter changes in these series do not show the rise in inflation indicated by the monthly data discussed above. In particular, the rate of increase in the price index for GDP over the year ending in the first quarter was just 1¼ percent, the same as over the preceding year. The four-quarter change in the price index for gross domestic purchases—which is defined as the prices paid for purchases of domestic and imported consumption, investment, and government goods and services—dropped from 2¼ percent to 1¾ percent over the same period; the deceleration reflects mainly the effects of energy prices, which rose even more rapidly over the year ending in the first quarter of 2003 than they did over the most recent year.

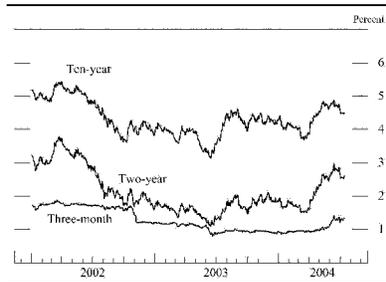
#### U.S. Financial Markets

As 2004 opened, financial market conditions were quite accommodative, with low corporate bond yields, narrow risk spreads, and relatively easy terms and standards on bank lending. Although equity prices changed little, and interest rates rose on balance in response to positive economic news and expectations of a tightening of monetary policy, financial conditions in the first half of the year remained supportive of economic growth. Business borrowing nevertheless remained tentative, while increases in the debt of the federal government and of households were sizable.

#### Interest Rates

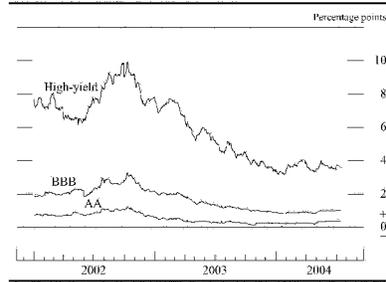
From the end of 2003 through the end of March, yields on nominal Treasury coupon securities fell, on net, about 30 to 45 basis points. Although interest rates rose immediately after the FOMC's January meeting in response to the Committee's decision to remove its statement that monetary policy could remain accommodative for "a considerable period," the increase proved to be short lived. Weak employment reports released in early February and

Interest rates on selected Treasury securities



NOTE: The data are daily and extend through July 14, 2004.

Spreads of corporate bond yields over the ten-year Treasury yield



NOTE: The data are daily and extend through July 14, 2004. The spreads compare the yields on the Merrill Lynch AA, BBB, and 175 high-yield indexes with the yield on the ten-year off-the-run Treasury note.

early March prompted yields to fall amid doubts about the strength of the economic expansion. Federal funds futures contracts at the end of March appeared to indicate that market participants placed small odds on a tightening of monetary policy before late 2004, and contracts also seemed to price in only a gradual increase in the federal funds rate during 2005.

Interest rates backed up in the second quarter as data releases increasingly suggested that the economic expansion would remain vigorous. Yields on the two-year and ten-year nominal Treasury notes ended the first half of the year 90 and 36 basis points higher, respectively, than at the end of 2003, as markets adjusted to the greater likelihood of an earlier onset and more rapid pace of monetary policy tightening. The surprisingly strong

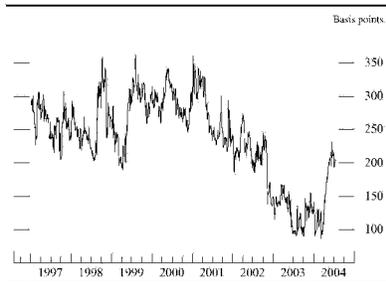
employment reports published in April and May, higher-than-expected readings on core inflation, and surging oil prices all spurred increases in Treasury yields. After the release of the employment report in May, federal funds futures contracts priced in a hike in the target federal funds rate at the June FOMC meeting and a more rapid tightening of monetary policy than had been anticipated. With the evolving outlook for monetary policy, the volatility of short-term interest rates implied by option prices jumped in the first half of the year after staying in a relatively low range in 2003. Near-term interest rates declined a bit after the Committee's decision at its June meeting to raise the intended federal funds rate 25 basis points; the Committee's reaffirmation that policy accommodation likely could be removed at a "measured" pace apparently reassured investors that a steep rise in the federal funds rate probably was not in train.

Yields on investment-grade corporate debt moved roughly in line with those on comparable nominal Treasury securities over the first half of the year, producing little net change in risk spreads from their level at the end of last year. Spreads on speculative-grade debt over Treasury debt declined a bit further after having narrowed sharply during 2003 as the economic expansion was seen as gathering steam.

Equity Markets

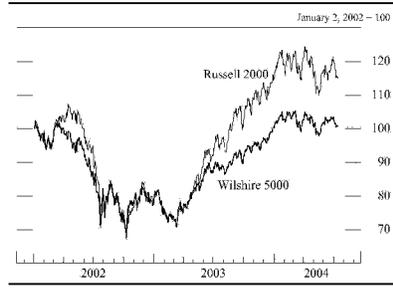
Over the first half of 2004, equity prices were subject to the strong crosscurrents of robust earnings reports, rising interest rates, fluctuating fears about geopolitical developments, and sharply higher oil prices. On balance, broad

Implied volatility of short-term interest rates



NOTE: The data are daily and extend through July 14, 2004. The series shown is the implied volatility of the three-month eurodollar rate over the coming four months, as calculated from option prices.

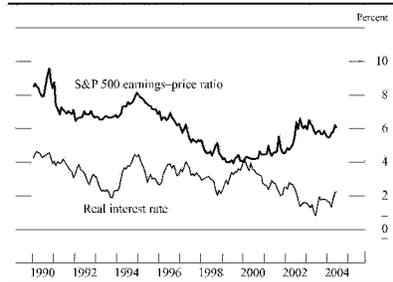
Major stock price indexes



Note: The data are daily and extend through July 14, 2004.

equity price indexes at the end of June had edged about 2½ percent to 3¼ percent above year-end levels after having surged 25–30 percent over the course of 2003. Over the first half, analysts raised their estimates of profits for coming quarters; the upward revision outstripped the more modest increase in equity prices and boosted the ratio of expected year-ahead earnings to stock prices. With real interest rates higher, however, the difference between the earnings–price ratio and the real ten-year Treasury yield—a crude measure of the equity risk premium—changed little to remain close to its average value over the past two decades and above its level during the late 1990s.

S&P 500 forward earnings–price ratio and the real interest rate



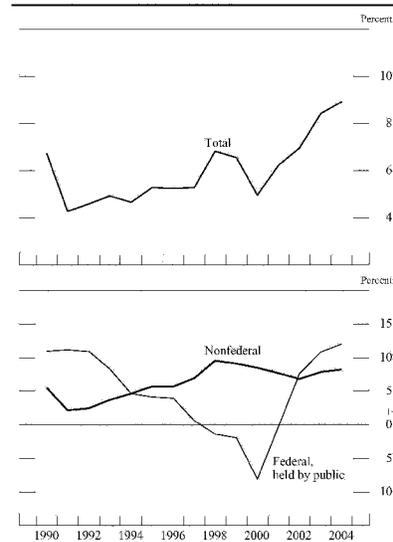
Note: The data are monthly and extend through June 2004. The forward earnings–price ratio is based on I/B/E/S consensus estimates of earnings over the coming year. The real interest rate is estimated as the difference between the ten-year Treasury rate and the expected ten-year inflation rate reported in the survey by the Federal Reserve Bank of Philadelphia.

Debt and Financial Intermediation

Aggregate debt of the domestic nonfinancial sectors expanded at an annual rate of about 8½ percent in the first quarter of 2004, a gain similar to last year’s increase. Debt growth in the business sector has remained subdued so far this year, as ample internal funding has limited the need for external finance. In contrast, household debt has continued to expand rapidly, spurred by an elevated pace of home purchases and cash-outs from mortgage refinancing. The large federal budget deficit led to another sharp increase in Treasury debt in the first half of this year. Municipal borrowing moderated somewhat, on balance, in the first half of the year, as the improving fiscal condition of state and local governments reduced the need for short-term borrowing to cover budget gaps.

The growth of credit on the books of depository institutions picked up to an annual rate of 14 percent in the first quarter of 2004. Financing secured by residential

Change in domestic nonfinancial debt



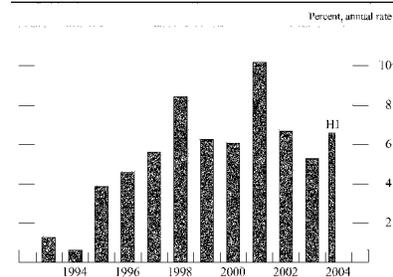
Note: For 2004, change is from 2003:Q4 to 2004:Q1 at an annual rate. For earlier years, the data are annual and are computed by dividing the annual flow for a given year by the level at the end of the preceding year. The total consists of nonfederal debt and federal debt held by the public. Nonfederal debt consists of the outstanding credit market debt of state and local governments, households, nonprofit organizations, and nonfinancial businesses. Federal debt held by the public excludes securities held as investments of federal government accounts.

real estate—including home mortgages, home equity loans, and mortgage-backed securities—drove the expansion. In contrast, business loans continued to run off, falling at an annual rate of about 5 percent in the first half of the year after a 10 percent drop in 2003. The deceleration was consistent with some signs that demand for business loans was beginning to recover as well as with an easing of standards and terms on these loans.

#### The M2 Monetary Aggregate

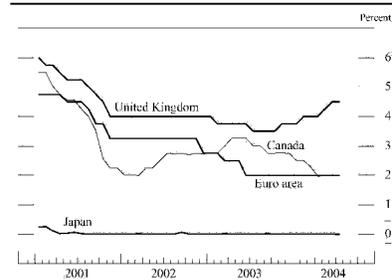
In the first half of 2004, short-term interest rates were stable and M2 grew at an annual rate of 6½ percent—a pace that was roughly in line with estimates of nominal GDP—after contracting at a record rate in the fourth quarter of 2003. Liquid deposits—the largest component of M2—had been depressed late last year by the ebbing of last summer's mortgage refinancing boom. Mortgage refinancings tend to boost M2 as the proceeds are temporarily placed in non-interest-bearing deposit accounts pending disbursement of funds to the holders of mortgage-backed securities. When refinancings slowed last year, the decline in such escrow accounts held down the growth of liquid deposits. In the first half of this year, M2 probably received a boost from the new round of mortgage refinancings that followed the first-quarter decline in mortgage interest rates. The strength in liquid deposits was partly offset, however, by continued weakness in money market mutual funds and small time deposits. Given the recent very low yields on these two components of M2, households likely viewed them as less attractive savings vehicles than other assets.

#### M2 growth rate



NOTE: M2 consists of currency, travelers checks, demand deposits, other checkable deposits, savings deposits (including money market deposit accounts), small-denomination time deposits, and balances in retail money market funds.

#### Official interest rates in selected foreign industrial countries



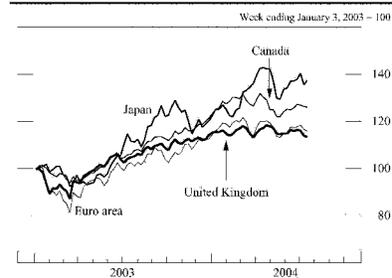
NOTE: The data are as of month-end; the last observation for each series is the average of trading days through July 14, 2004. The data shown are the call money rate for Japan, the overnight rate for Canada, the refinancing rate for the euro area, and the repurchase rate for the United Kingdom.

#### International Developments

Foreign economic activity expanded in the first half of this year at a pace only slightly below the rapid increase in the second half of 2003. Global trade has been boosted by strong demand, especially from the United States and China. The run-up in oil and commodity prices has contributed to rising, though still moderate, inflation across the industrial and developing countries.

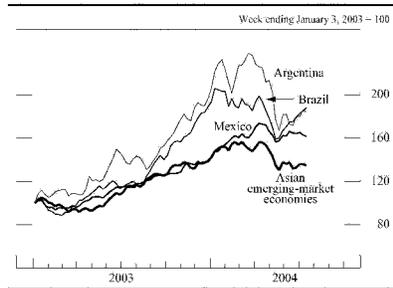
By the end of the first half of this year, monetary policy in most major foreign economies had either tightened or assumed a less accommodative tone. Citing high rates of capacity utilization and mounting inflationary pressures, the Bank of England has raised its target rate 100 basis points since early November. Mexico and China also have tightened policy. Elsewhere, including the euro area,

#### Equity indexes in selected foreign industrial countries



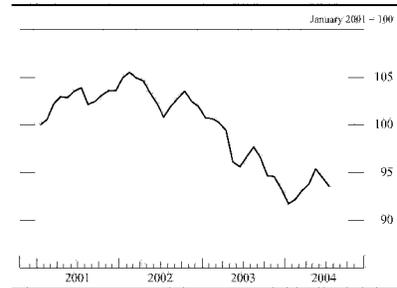
NOTE: The data are weekly. The last observation for each series is the average of trading days through July 14, 2004.

Equity indexes in selected emerging-market economies



NOTE: The data are weekly. The last observation for each series is the average of trading days through July 14, 2004. The Asian emerging-market economies are China, Hong Kong, India, Indonesia, Malaysia, Pakistan, the Philippines, Singapore, South Korea, Taiwan, and Thailand; the index weight for each of these economies is its market capitalization as a share of the group's total.

U.S. dollar nominal exchange rate, broad index



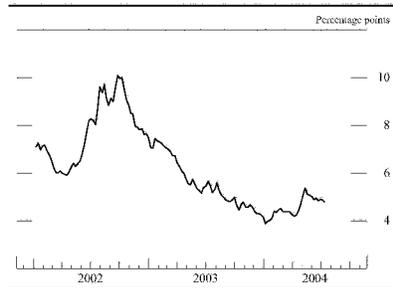
NOTE: The data are monthly and are in foreign currency units per dollar. The last observation is the average of trading days through July 14, 2004. The broad index is a weighted average of the foreign exchange values of the U.S. dollar against the currencies of a large group of major U.S. trading partners. The index weights, which change over time, are derived from U.S. export shares and from U.S. and foreign import shares.

Canada, and Japan, central banks most recently have kept policy unchanged after easing previously. In general, official statements are expressing increasing concern over the inflationary risks associated with stronger economic activity and higher world energy and commodity prices.

In foreign financial markets, equity price performance has been more mixed so far in 2004 than during the second half of 2003; sharply rising interest rates over the past few months have weighed on equity valuations, damping the effects of an improved earnings outlook. Since year-end, stock prices in Europe and Canada have

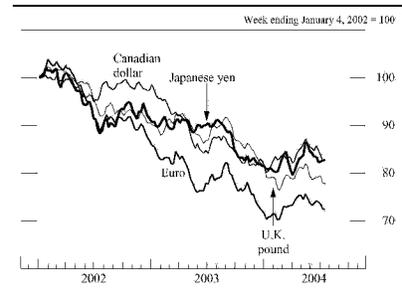
changed little, on balance. In contrast, rapidly improving economic conditions in Japan have helped boost Japanese equity prices about 10 percent. Other Asian stock price indexes have fallen, on average, in part because of concerns about the possibility of an acute slowdown in China. Mexican stocks have been bolstered by strong earnings growth of leading Mexican communications firms and, more generally, by the strengthening U.S. expansion. Foreign long-term interest rates rose rapidly in the second quarter as new data (including from the United States) showing faster growth and higher inflation led market participants to expect more-aggressive monetary tightening. Over the first half of the year, the

Spread on internationally issued sovereign debt of emerging-market economies



NOTE: The data are weekly averages. The last observation is the average of trading days through July 14, 2004. The series shown is the J.P. Morgan Emerging Market Bond Index Plus (EMBI+), which is the spread of the yield of certain dollar-denominated sovereign debt instruments of emerging-market economies over U.S. Treasury securities; over the period shown, the index encompassed nineteen countries.

U.S. dollar exchange rate against selected major currencies



NOTE: The data are weekly and are in foreign currency units per dollar. The last observation for each series is the average of trading days through July 14, 2004.

spread on internationally issued sovereign debt of emerging-market economies over U.S. Treasuries moved up somewhat from its very low level.

After depreciating over the previous two years, the value of the dollar rose slightly, on balance, in the first half of 2004. The firming of the dollar has been attributed to perceptions by market participants that near-term monetary tightening in the United States would be faster than such tightening abroad.

#### Industrial Economies

A broadly based recovery appears to have been established in Japan over the first half of 2004. Real GDP rose at an annual rate of more than 6 percent in the first quarter after an even greater increase in the fourth quarter. Aided by demand from China, growth of Japanese real exports remained robust. Personal consumption and business investment also firmed. More-recent indicators show that domestic strength continued in the spring with large gains in household expenditures and improved labor market conditions. Deflation continued to wane in Japan. Consumer price deflation over the first half of the year was slight, and wholesale prices increased. In financial markets, the stronger economy boosted equity markets and helped drive up the yield on the ten-year bellwether government bond to more than 1¼ percent from its June 2003 record low of about ½ percent. After making substantial sales of yen for dollars in the first quarter, Japanese authorities ceased intervention in mid-March. Even so, the yen depreciated early in the second quarter before appreciating to around ¥109 per dollar.

Economic conditions in the euro area firmed over the first half of 2004, but performance varied across countries, and the region as a whole continues to lag the global upturn. Real GDP in the euro area increased at an annual rate of 2¼ percent in the first quarter; output in France, Spain, and several smaller member countries rose relatively briskly, while growth in Germany and Italy was less robust. In the first quarter, domestic demand firmed noticeably, except in Germany, where growth was due entirely to a spike in exports. German consumer spending remains anemic, held down by a weak labor market and low consumer confidence. Euro-area indicators for the second quarter initially were upbeat, but more-recent data have been mixed. Labor markets have yet to benefit from the recovery, and the average unemployment rate in the region edged up to 9 percent in the spring. Inflation for the euro area over the twelve months ending in June was near 2½ percent, a rate above the European Central Bank's medium-term goal of less than, but close to, 2 percent. Excluding energy, food, alcohol, and tobacco, prices rose slightly less than 2 percent over the same period.

Economic expansion in the United Kingdom continued unabated over the first half of 2004. Labor markets tightened further; the unemployment rate edged down to its lowest level in almost three decades, and labor earnings posted solid gains. Despite the strong economy, consumer price inflation over the twelve months ending in June was 1½ percent, remaining below the central bank's official target rate of 2 percent. Conditions in the U.K. housing market, however, remained red hot, with double-digit price increases, high levels of household mortgage and consumer borrowing, and sizable withdrawals of home equity.

The Canadian economy picked up steam in the first half of 2004 after a year plagued with difficulties including SARS, mad cow disease, and a regional power outage. Sizable gains in consumption and investment boosted output in the first quarter, and indicators are pointing to continued good performance in these sectors. Export growth was strong, as the robust economic performance of the United States appears to have outweighed the negative effect of Canadian dollar appreciation on trade. The unemployment rate was relatively stable over the first half, and employment bounced back in the second quarter from a first-quarter lull. Consumer price inflation decreased early in the year, but energy costs helped drive up the rate to 2½ percent over the twelve months ending in June. Prices excluding food, energy, and indirect taxes have remained more subdued, rising slightly less than 1½ percent over the same period.

#### Emerging-Market Economies

Estimates suggest that real GDP in China surged in the first quarter with continued outsized gains in fixed-asset investment. Fears of overinvestment, particularly in the steel, cement, and aluminum industries, led Chinese officials to intensify their tightening measures early in the second quarter. These measures included increases in reserve requirements and in some interest rates as well as stricter criteria for the approval of investment projects. A sharp slowdown in estimated real GDP for the second quarter suggests that these steps are working. Despite the recent slowing in growth, Chinese exports and imports soared in the first half of the year, and trade was close to balanced.

Growth in the other Asian emerging-market economies slowed only moderately in the first quarter from the fast pace at the end of last year. Exports, which continued to be the driving force behind that growth, were fueled by Chinese demand as well as by the recovery in the global high-tech market and stronger world demand overall. Consumer demand generally rose across the region with the notable exception of Korea, where high levels of con-

sumer debt are weighing on spending. Although still only moderate, inflation across the Asian emerging-market economies is beginning to rise as stronger aggregate demand takes hold and higher energy and commodity prices pass through to prices more generally.

The Mexican economy has been propelled this year by strong demand from the United States. Gains have been broadly based, with sharp increases in industrial production, exports, construction, and retail sales. Employment in the industries most closely linked to U.S. trade also has started to increase. Responding to a rise in twelve-month inflation to slightly above its 2 percent to 4 percent target range, the Bank of Mexico has tightened policy several times so far this year. Elevated oil prices boosted the Mexican public-sector fiscal surplus to a record high during the first five months of the year and facilitated an increase in federal transfers to state governments.

In Brazil, GDP grew robustly in the first quarter, and indications are that economic activity continued to

expand in the second quarter with support from strong external demand. Job growth has been robust, although unemployment has remained high. Inflation, however, continues to concern authorities. Asset prices weakened earlier this year, in part because of rising global interest rates but also because of market participants' unease about the direction of structural and fiscal reforms; since then, asset prices have partially rebounded.

The recovery in Argentina has continued at a rapid pace in recent quarters, but limited investment in the energy sector, reflecting a lack of structural reforms, has forced the government to import electricity, natural gas, and fuel oil from neighboring countries. Creditors have shown little enthusiasm for the country's latest debt restructuring plan, and the federal government faces difficult challenges in normalizing its international financial situation and reforming its fiscal relations with the provinces.