

**FEDERAL RESERVE'S SECOND MONETARY POLICY
REPORT FOR 2003**

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

FIRST SESSION

ON

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

—————
JULY 16, 2003
—————

Printed for the use of the Committee on Banking, Housing, and Urban Affairs



U.S. GOVERNMENT PRINTING OFFICE

91-369 PDF

WASHINGTON : 2004

For sale by the Superintendent of Documents, U.S. Government Printing Office
Internet: bookstore.gpo.gov Phone: toll free (866) 512-1800; DC area (202) 512-1800
Fax: (202) 512-2250 Mail: Stop SSOP, Washington, DC 20402-0001

COMMITTEE ON BANKING, HOUSING, AND URBAN AFFAIRS

RICHARD C. SHELBY, Alabama, *Chairman*

ROBERT F. BENNETT, Utah

WAYNE ALLARD, Colorado

MICHAEL B. ENZI, Wyoming

CHUCK HAGEL, Nebraska

RICK SANTORUM, Pennsylvania

JIM BUNNING, Kentucky

MIKE CRAPO, Idaho

JOHN E. SUNUNU, New Hampshire

ELIZABETH DOLE, North Carolina

LINCOLN D. CHAFEE, Rhode Island

PAUL S. SARBANES, Maryland

CHRISTOPHER J. DODD, Connecticut

TIM JOHNSON, South Dakota

JACK REED, Rhode Island

CHARLES E. SCHUMER, New York

EVAN BAYH, Indiana

ZELL MILLER, Georgia

THOMAS R. CARPER, Delaware

DEBBIE STABENOW, Michigan

JON S. CORZINE, New Jersey

KATHLEEN L. CASEY, *Staff Director and Counsel*

STEVEN B. HARRIS, *Democratic Staff Director and Chief Counsel*

PEGGY R. KUHN, *Senior Financial Economist*

MARTIN J. GRUENBERG, *Democratic Senior Counsel*

JOSEPH R. KOLINSKI, *Chief Clerk and Computer Systems Administrator*

GEORGE E. WHITTLE, *Editor*

C O N T E N T S

WEDNESDAY, JULY 16, 2003

	Page
Opening statement of Chairman Shelby	1
Opening statements, comments, or prepared statements of:	
Senator Johnson	2
Senator Allard	3
Senator Sarbanes	3
Senator Enzi	5
Prepared statement	45
Senator Reed	7
Senator Bennett	7
Senator Bayh	8
Senator Hagel	8
Senator Chafee	8
Senator Corzine	22
Senator Carper	25
Senator Crapo	27
Senator Dodd	29
Senator Schumer	32

WITNESS

Alan Greenspan, Chairman, Board of Governors of the Federal Reserve System, Washington, DC	8
Prepared statement	46
Response to written questions of:	
Senator Shelby	50
Senator Sarbanes	53
Senator Bunning	56
Senator Miller	56

ADDITIONAL MATERIAL SUPPLIED FOR THE RECORD

Monetary Policy Report to the Congress, July 16, 2003	59
Letter to Senator Tim Johnson from Alan Greenspan, dated June 25, 2003	89

FEDERAL RESERVE'S SECOND MONETARY POLICY REPORT TO CONGRESS FOR 2003

WEDNESDAY, JULY 16, 2003

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

The Committee met at 10:00 a.m. in room SD-538, Dirksen Senate Office Building, Senator Richard C. Shelby (Chairman of the Committee) presiding.

OPENING STATEMENT OF CHAIRMAN RICHARD C. SHELBY

Chairman SHELBY. The hearing will come to order.

I am very pleased this morning 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.

This morning, I will keep my remarks brief as we are all eager to hear from the Chairman on his views on the U.S. economy and other related issues. We also have the benefit, Mr. Chairman, of having read about your remarks before the House yesterday.

At this time I would like to make two observations, both of which you highlight in your statement or in your more extensive report.

First, the economy stands on the brink of, we hope, a strong recovery. The question is how strong will the rebound be and what further steps can be taken should the recovery falter. There is little question that we all would like to see the economy grow faster and to have more jobs created for the American people. A number of stimulative measures, including the tax cut enacted in May, have already been taken. We know from your testimony that the Federal Reserve also stands ready to take additional action should the economy remain sluggish.

Second, the Congress, I believe, needs to remain focused on achieving the appropriate fiscal policy. Yesterday, as we all know, the OMB announced an update of its budget estimates, revising its estimates of the 2003 deficit upward to \$455 billion. The budget forecast has been adversely affected by the relatively weak economy and by the necessary expenditures to fight the war on terrorism. Over the longer term, the Congress needs, I believe, to renew its effort at reforming mandatory programs and controlling Government spending. We would certainly welcome, Mr. Chairman, your views of the importance of that goal.

We are happy to host you and we look forward to your remarks and an enlightening discussion.

Senator Johnson.

STATEMENT OF SENATOR TIM JOHNSON

Senator JOHNSON. Thank you, Chairman Shelby, for inviting Chairman Greenspan before this Committee to present the Second Monetary Report to Congress for 2003. I hope that we will find some good news in the report given the recent demoralizing headlines about an exploding budget deficit, the tax cuts enacted earlier this year, contrary to Chairman Greenspan's recommendation that any tax cuts be offset so as to minimize deficit.

Once again, the Office of Management and Budget has adjusted its deficit estimates upward. We are now being told that this year's deficit will reach \$455 billion, 50 percent higher than the Bush Administration forecast just 5 months ago. In fact, the deficit is \$55 billion higher than many economists projected just last week. This represents a fiscal reversal of more than \$680 billion since 2000 when the Treasury reported a surplus—a surplus—of \$236 billion.

At the same time, the unemployment rate has reached 6.4 percent. More than 9.4 million Americans are looking for work and cannot find a job. Now, as much as the next person, I will take a glass-half-full attitude any day, but at a certain point, one begins to suspect that reports of an imminent economic recovery are assuming a bit more juice than we really have.

For example, just one year ago, Chairman Greenspan predicted that our economy, our GDP, would grow between 3.5 and 4 percent in 2003. Chairman Greenspan has now slashed those projections to 2.5 to 2.75 percent. A year ago, Chairman Greenspan predicted the unemployment rate would be approximately 5.24 to 5.5 percent by the end of 2003. We are now at 6.4 percent and rising steadily.

Now, I have enormous respect for Chairman Greenspan, and I know that the depth of the economic malaise has taken us all by surprise. But I am deeply skeptical of arguments by this Administration that all economic ills will be cured if we give massive tax cuts, without offsetting them, to those at the top of the economic ladder in the hope that the money will somehow trickle down to working families.

At this point I would also like to make note of a topic on which Chairman Greenspan and I do see eye to eye, and, Mr. Chairman, I do have a 10-page letter from Chairman Greenspan that I would ask unanimous consent that the letter be inserted into the record in its entirety.

Chairman SHELBY. Without objection, it is so ordered.

Senator JOHNSON. This letter deals with the topic of the regulation of the industrial loan companies and the importance that these banks come under consolidated supervision. As many of you know, I have a longstanding concern about the mixing of banking and commerce, and I am alarmed that recent attempts to expand the ILC charter would undercut much of the progress we have made over the past few years, including closing the so-called "unitary thrift loophole" a few years ago. Of even greater concern, I believe, is the ability of ILC's, which may have commercial parent companies, to escape consolidated supervision by the Federal Reserve.

I would like to quote from Chairman Greenspan's letter about the critical importance of consolidated supervision:

Consolidated supervision provides the Board with both the ability to understand the financial strength and risks of the overall banking organization and the author-

ity to address significant management, operational, capital, and other deficiencies within the overall organization before these deficiencies pose a danger to subsidiary insured banks and the Federal safety net. As the Treasury Department noted in its 1991 report and recommendations on modernizing the financial system, umbrella oversight of a financial company that controls an insured bank, "is necessary to protect the insured depository [institution] from affiliate risk. Umbrella oversight is designed to identify problems in the holding company or affiliates that are likely to cause difficulties for the insured bank, and to apply remedial action."

I would like to note my great respect for FDIC Chairman Powell, and I do not mean in any way to impugn the supervisory capacity of his agency. However, ILC's which exist principally within large affiliated structures should not be regulated separate and apart from those affiliates. The Bank Holding Company Act provides a unique set of supervisory powers which are vitally important where banking and commerce are intertwined in a way that introduces additional risk to the system.

Thank you, Mr. Chairman, for holding today's hearing. I apologize in advance that I will be unable to stay for questions due to competing and conflicting hearing obligations.

Chairman SHELBY. Senator Allard.

COMMENTS OF SENATOR WAYNE ALLARD

Senator ALLARD. Mr. Chairman, I would also like to thank you for holding this hearing and join my colleagues in welcoming Federal Reserve Board Chairman Greenspan to this hearing. I always look forward to the opportunity to hear from Chairman Greenspan concerning monetary policy and other economic issues.

I was pleased to hear Chairman Greenspan's generally positive comments yesterday. I share his belief that the economy is headed in a positive direction. But the recovery is still preliminary, and we need to ensure that we keep the country headed in the right direction. Now is the time to address the long-term solvency of Social Security and Medicare and to put the Government on a plan to eliminate the deficit and to pay down the national debt.

I would invite my colleagues to join me in voting to hold down spending excesses on the floor of the Senate. So far, there have just been a few that have been willing to join me in that effort. To balance the budget means that we need to hold down spending as we go through the appropriations process, and that is what we are beginning to address now on the floor of the Senate.

By pursuing policies of low taxation, limited Federal regulation, free trade, and sound monetary policy, the United States will prosper with wealth and opportunity.

Chairman Greenspan, again, thank you for appearing before the Banking Committee today, and I look forward to your testimony.

Chairman SHELBY. Senator Sarbanes.

STATEMENT OF SENATOR PAUL S. SARBANES

Senator SARBANES. Thank you very much, Mr. Chairman. I am pleased to join with my colleagues in welcoming Chairman Greenspan to this morning's hearing on the Federal Reserve's Semi-Annual Report to Congress on Monetary Policy.

I went over Chairman Greenspan's statement this morning. As usual, it provided a thoughtful overview of the outlook for the economy and signaled the Fed's willingness "to maintain a highly

accommodative stance of policy for as long as needed to promote satisfactory economic performance.” However, I found very little discussion in the statement of what I consider to be a significant concern with respect to our economy today, and that is an exceptionally weak labor market.

Chairman Greenspan’s statement mentions that, “incoming data on employment and aggregate output remain mixed.” In the context of a discussion of productivity, the statement also says that, “One consequence of these improvements in efficiency has been an ability of many businesses to pare existing workforces and still meet increases in demand. Indeed, with the growth of real output below that of labor productivity for much of the period since 2000, aggregate hours and employment have fallen, and the unemployment rate rose last month to 6.4 percent of the civilian labor force.”

Now in my perusal of the statement, this is the extent of the discussion about jobs in our economy. Given what I believe is the disturbing prospect for employment, particularly at this stage of a so-called recovery, Mr. Chairman, I would like to take a moment or two to review in a little more detail the employment situation.

Since January of this year, the unemployment rate has risen from 5.7 percent to 6.4 percent, the highest unemployment rate in over 9 years, since April of 1994; 9.4 million workers are unemployed, the most unemployed workers since December 1992, more than 10 years ago. If individuals who have become too discouraged to look for work were included in the unemployment rate figure, it would be well over 7 percent.

The economy has lost 394,000 jobs since January, losing jobs each of the past 5 months. Since February 2001, total jobs have fallen 2.6 million, and private sector employment has fallen more than 3.1 million. More than 3 million private sector jobs have been lost since February 2001, a little over 2 years ago—2 and a half years ago. Last week, the Labor Department reported that an additional 439,000 workers filed initial unemployment insurance claims. More than 400,000 workers have been filing initial claims now for 21 consecutive weeks. The last time we had such an extended streak was in September 1992—again, more than 10 years ago.

Continuing claims for unemployment insurance are at a 20-year high of 3.8 million. That is the highest level since February 1983—more than 20 years ago. There are over 1.1 million Americans who have already exhausted all of their unemployment insurance benefits still unable to find a job. The average unemployed worker has been out of work 19.8 weeks. That is the highest duration average for unemployed workers, 19.8 weeks, since 1948, except for a 7-month period in 1983 and 1984 when unemployment ranged between 8 and 10 percent.

Since GDP reached a low in the third quarter of 2001, the economy has lost over 2 million jobs. At the same stage of the early 1990’s cycle—when the phrase “a jobless recovery” was coined—the economy had already generated net job gains totaling 482,000, and job growth had already turned positive on a sustained basis by the summer of 1992, just a year after the recession officially ended. In other words, it seems to me we are in a very difficult situation

here, and we really need to lay this out and then make some judgments about how to move on it.

Last week, *The Washington Post* reported that the National Bureau of Economic Research, the arbiter of when U.S. economic recessions begin and end, has been unable to declare an end to the recession that began in March 2001, because payroll employment has continued to decline long after the economy resumed growing.

The article noted that employment has never been down so much this far into a post-recessionary phase. The article quotes a prominent Wall Street economist as saying, "The current situation makes the early 1990's jobless recovery look like a hiring spree."

On Monday, *The New York Times* reported that, "Teenagers are facing the worst summer job market in years, with the percentage of those holding summer jobs at its lowest in 55 years and the unemployment rate at its highest in a decade."

I take note of all of this because I think there is a serious prospect that the employment situation may not improve in the coming months and unemployment may continue to rise. It is by no means clear that a level of economic growth can be achieved that will bring about a significant improvement in the unemployment rate.

Taken together, it seems to me more focused attention on our employment situation is warranted. Unlike Chairman Greenspan's statement that he finds the situation mixed, I find it very negative with respect to the employment situation.

Chairman Greenspan notes in his testimony the achievement of "effective price stability—a long-held goal assigned to the Federal Reserve by the Congress." And it is certainly part of the statutory mandate of the Fed as determined by the Congress. But I would note another goal assigned by the Congress not covered in the Chairman's statement and that is "maximum employment." Mr. Chairman, I think it is important that we focus on this. At a minimum, it seems to me critical that unemployment insurance should be extended for those long-term unemployed who have exhausted their benefits.

Thank you very much.

Chairman SHELBY. Senator Enzi.

STATEMENT OF SENATOR MICHAEL B. ENZI

Senator ENZI. Thank you, Mr. Chairman.

Everyone always looks with anticipation toward this presentation. Of course, there is a little more anticipation when it is the Senate's turn for the first presentation, but we thank you for all of the insight that you provide.

The U.S. economy is still the greatest economy in the world, but there are certain issues that we need to address to ensure that we retain that position. If I had to pick a single issue that has the greatest impact on the financial affairs of Wyoming, and the rest of the Nation, I would choose the state of the Nation's energy development. Every sector of our economy relies on some form of technology that in turn relies on electricity and/or fossil fuels to function. And one of the secrets of the United States has always been low-cost energy. Our economy is literally driven by our ability to develop and maintain a steady, constant energy supply.

Wyoming's role is much like the position held by the colonies during America's first years of European settlement. We provide the raw materials or, in other words, the feedstock that makes the rest of the Nation's energy economy function. In my home county of Campbell County, Wyoming, we would be the third largest coal-producing country in the world. One-third of our Nation's coal is produced in this county alone. We also produce more uranium annually than the rest of the Nation combined and have the greatest potential for natural gas development in the entire continental United States. In our county, we are in the process of building some 50,000 wells for coal-bed methane, and they just made a discovery that there is another coal formation below the present one. The top formation is 60 to 100 feet thick, and under about 60 to 100 feet of dirt. The other one is a little bit lower, but it is 200 feet thick and it has considerably more natural gas production than the other. In short, we have what the rest of the Nation needs to keep its technology fueled and running.

Unfortunately, most of that energy is stranded in Wyoming and is inaccessible to other parts of the country that need it. Our natural gas development is being slowed down by the inability to get the gas out of State. We are short of pipelines. We are talking about some pipelines from Alaska. We need to talk about pipelines to get the gas that has already been discovered in the lower 48 to where it is needed. Our electricity runs into bottlenecks where the power lines outside the State do not have enough capacity to carry what we can generate, and our coal is being hit with the threat of new regulations and bureaucratic limitations that could eventually slow down exploration and development. All of these limitations are having an effect on the rest of the economy.

I know that Chairman Greenspan has already visited the Hill on a number of occasions and has testified on this issue. I look forward to any additional insights he might offer on how we can bolster the economy by increasing energy stability, and I hope he could address what future role the energy-producing States can play in meeting our energy demands.

I know that we have had a craze of trying to go with natural gas for as many things as possible. The production of electricity can be very efficiently done with coal, and I know they were making a decision in Rapid City one year on whether to use peaking power from natural gas. They discovered that the peaking power would require as much natural gas and be needed at the same time as gas to heat Rapid City. It was an equivalent amount. It took as much electricity as it would take to heat in winter in Rapid City. So, we are talking about some large quantities of gas for things that could be substituted by coal production. We do need to be able to get the electricity around. And I have mentioned the need for pipelines.

In addition to the importance of natural gas prices on our Nation's economy, we must also ensure that we have a favorable business climate to encourage the creation and growth of our small businesses. And small business has been the backbone for the country; more than 97 percent of the businesses are small business. I appreciate any of the concentration that people have done on im-

proving small business, and I would ask that a copy of my full statement be made part of the record.

Chairman SHELBY. Without objection, it is so ordered.
Senator Reed.

COMMENTS OF SENATOR JACK REED

Senator REED. Thank you, Mr. Chairman, and welcome, Chairman Greenspan. You are certainly a respected voice on these matters, not only here in Washington but also internationally.

We are in the midst of some of the worst economic news we have had in a long time, particularly the unemployment numbers. And the Administration seems to suggest more tax cuts and it will get better. The Congress has passed more tax cuts, and it is getting worse. I do not think that is the approach that we should take.

It is particularly worse when it comes to the increase in unemployment, and I think Senator Sarbanes' comments are very precise and detailed about what is happening and the fact that it seems in most cases to be a lag variable. So even when the GDP starts improving, we are likely to see further increases in unemployment. We are reaching a critical juncture. These are the real lives of our constituents.

And right over the horizon is Social Security and Medicare, and rather than taking prudent steps today to strengthen those programs, or at least to reserve resources to do that, we have effectively funded the tax cuts with Social Security monies and other monies. I know it is incumbent upon all of us to restrain spending, but, frankly, in 2003, about 94 percent of the spending above the baseline was devoted to defense, homeland security, and other items as a response to September 11, plus Iraq and Afghanistan. It is very difficult to hold down spending when we are spending \$4 billion a month in Iraq and \$1 billion a month in Afghanistan.

Today, we will consider and this week we will vote on a defense bill that is a significant increase in spending, and, ironically, none of those funds will include the cost of Iraq. That will come later, probably in a supplemental. So, we have a policy that is difficult to rationalize in terms of our fiscal policy here: Uncontrollable expenses, or at least very-difficult-to-predict expenses, resulting from our operations in Iraq, Afghanistan, and homeland security, and continued tax cuts which leave us, I think, not only with a poorly performing economy but also in no position to deal with the issues of Medicare and Social Security.

I look forward to your comments, Mr. Chairman.
Chairman SHELBY. Senator Bennett.

COMMENTS OF SENATOR ROBERT F. BENNETT

Senator BENNETT. Thank you, Mr. Chairman. I will resist the temptation to engage in a debate and save that for speeches on the floor.

I appreciate Chairman Greenspan's being with us today and look forward to his testimony.

Chairman SHELBY. Senator Bayh.

COMMENTS OF SENATOR EVAN BAYH

Senator BAYH. Welcome, Mr. Chairman. I look forward to your testimony as well. I think my colleagues have covered most of the relevant terrain.

Chairman SHELBY. Senator Hagel.

COMMENTS OF SENATOR CHUCK HAGEL

Senator HAGEL. Mr. Chairman, thank you.

I, too, welcome Chairman Greenspan. With all of this good news floating around today, I look forward to your comments.

Thank you.

Chairman SHELBY. Senator Chafee.

COMMENTS OF SENATOR LINCOLN D. CHAFEE

Senator CHAFEE. Likewise, welcome, Mr. Chairman, and you have the back-to-back—the House yesterday, the Senate today. I look forward to your testimony.

Chairman SHELBY. Chairman Greenspan, your written testimony will be made part of the record in its entirety. You proceed as you wish. Welcome to the Committee again.

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

Chairman GREENSPAN. Thank you very much, Mr. Chairman and Members of the Committee.

When in late April I last reviewed the economic outlook before the Congress, full-scale military operations in Iraq had concluded, and there were signs that some of the impediments to brisker growth in economic activity in the months leading up to the conflict were beginning to lift. Many, though by no means all, of the economic uncertainties stemming from the situation in Iraq had been resolved, and that reduction in uncertainty had left an imprint on a broad range of indicators.

Stock prices had risen, risk spreads on corporate bonds had narrowed, oil prices had dropped sharply, and measures of consumer sentiment appeared to be on the mend. But, as I noted in April, hard data indicating that these favorable developments were quickening the pace of spending and production were not yet in evidence, and it was likely that the extent of the underlying vigor of the economy would become apparent only gradually.

In the months since, some of the residual war-related uncertainties have abated further and financial conditions have turned decidedly more accommodative, supported, in part, by the Federal Reserve's commitment to foster sustainable growth and to guard against a substantial further disinflation. Yields across a number of maturities and risk classes have posted declines, which together with improved profits boosted stock prices and household wealth. If the past is any guide, these domestic financial developments, apart from the heavy dose of fiscal stimulus now in train, should bolster economic activity over coming quarters.

To be sure, industrial production does appear to have stabilized in recent weeks after months of declines. Consumer spending has held up reasonably well, and activity in housing markets continues strong. But incoming data on employment and aggregate output re-

main mixed. A pervasive sense of caution reflecting, in part, the aftermath of corporate governance scandals appears to have left businesses focused on strengthening their balance sheets and, to date, reluctant to ramp up significantly their hiring and spending. Continued global uncertainties and economic weakness abroad, particularly among some of our major trading partners, also have extended the ongoing softness in the demand for U.S. goods and services.

When the Federal Open Market Committee met last month, with the economy not yet showing convincing signs of a sustained pick-up in growth, and against the backdrop of our concerns about the implications of a possible substantial decline in inflation, we elected to ease policy another quarter-point. The Federal Open Market Committee stands prepared to maintain a highly accommodative stance of policy for as long as needed to promote satisfactory economic performance. In the judgment of the Committee, policy accommodation aimed at raising the growth of output, boosting the utilization of resources, and warding off unwelcome disinflation can be maintained for a considerable period without ultimately stoking inflationary pressures.

The prospects for a resumption of strong economic growth have been enhanced by steps taken in the private sector over the past couple of years to restructure and strengthen balance sheets. These changes, assisted by improved prices in asset markets, have left households and businesses better positioned than they were earlier to boost outlays as their wariness about the economic environment abates.

Nowhere has this process of balance sheet adjustment been more evident than in the household sector. On the asset side of the balance sheet, the decline of longer-term interest rates and diminished perceptions of credit risk in recent months have provided a substantial lift to the market value of nearly all major categories of household assets. Most notably, historically low mortgage interest rates have helped to propel a solid advance in the value of the owner-occupied housing stock. And the lowered rate at which investors discount future business earnings has contributed to the substantial appreciation in broad equity price indexes this year, reversing a portion of their previous declines.

On the liability side of the balance sheet, despite the significant increase in debt encouraged by higher asset values, lower interest rates have facilitated a restructuring of existing debt. Households have taken advantage of new lows in mortgage interest rates to refinance debt on more favorable terms, to lengthen debt maturity, and, in many cases, to extract equity from their homes to pay down other higher-cost debt. Debt service burdens, accordingly, have declined.

We expect both equity extraction and lower debt service to continue to provide support for household spending in the period ahead, though the strength of this support is likely to diminish over time.

In addition to balance sheet improvements, the recently passed tax legislation will provide a considerable lift to disposable incomes of households in the second half of the year, even after accounting for some State and local offsets. Most mainstream economic models

predict that such tax-induced increases in disposable income should produce a prompt and appreciable pickup in consumer spending. The evolution of spending over the next few months may provide an important test of the extent to which this traditional view of expansionary fiscal policy holds in the current environment.

Much like households, businesses have taken advantage of low-interest rates to shore up their balance sheets. Most notably, firms have issued long-term debt and employed the proceeds to pay down commercial paper, bank loans, and maturing high-cost debt. The net effect of these trends to date has been a decline in the ratio of business interest payments to net cash flow, a significant increase in the average maturity of liabilities, and a rise in the ratio of current assets to current liabilities.

With business balance sheets having been strengthened and with investors notably more receptive to risk, the overall climate in credit markets has become more hospitable in recent months. Specifically, improvements in forward-looking measures of default risk, a decline in actual defaults, and a moderation in the pace of debt-rating downgrades have prompted a marked narrowing of credit spreads and credit default swap premiums.

In the past, such reductions in private yields and in the cost of capital faced by firms have been associated with rising capital spending. But as yet there is little evidence that the more accommodating financial environment has materially improved the willingness of top executives to increase capital investment. Corporate executives and boards of directors are seemingly unclear, in the wake of the recent intense focus on corporate behavior, about how an increase in risk-taking on their part would be viewed by shareholders and regulators.

As a result, business leaders have been quite circumspect about embarking on major new investment projects. Moreover, still-ample capacity in some sectors and lingering uncertainty about the strength of prospective final sales have added to the reluctance to expand capital outlays. But should firms begin to perceive that the pickup in demand is durable, they doubtless would be more inclined to increase hiring and production, replenish depleted inventories, and bring new capital online. These actions in turn would tend to further boost incomes and output.

The favorable productivity trend of recent years have continued, which certainly bode well for the future. Output per hour in the nonfarm business sector increased 2.5 percent over the year ending in the first quarter. It has been unusual that firms have been able to achieve consistently strong gains in productivity when the overall performance of the economy has been so lackluster. To some extent, companies under pressure to cut costs in an environment of still-tepid sales growth and an uncertain economic outlook might be expected to search aggressively for ways to employ resources more efficiently.

However, one consequence of these improvements in efficiency has been an ability of many businesses to pare existing workforces and still meet increases in demand. Indeed, with the growth of real output below that of labor productivity for much of the period since 2000, aggregate hours and employment have fallen, and the unem-

ployment rate rose last month to 6.4 percent of the civilian labor force.

Inflation developments have been important in shaping the economic outlook and the stance of policy over the first half of the year. With the economy operating below its potential for much of the past 2 years and productivity growth proceeding apace, measures of core consumer prices have decelerated noticeably. Allowing for known measurement biases, these inflation indexes have been in a neighborhood that corresponds to effective price stability—a long-held goal assigned to the Federal Reserve by the Congress. But we can pause at this achievement only for a moment, mindful that we face new challenges in maintaining price stability, specifically to prevent inflation from falling too low.

This is one reason the Federal Open Market Committee has adopted a quite accommodative stance of policy. A very low inflation rate increases the risk that an adverse shock to the economy would be more difficult to counter effectively. Indeed, there is an especially pernicious, albeit remote, scenario in which inflation turns negative against a backdrop of weak aggregate demand, engendering a corrosive deflationary spiral.

It is incumbent on a central bank to anticipate such contingencies, however remote, and the Federal Reserve has been studying how to provide policy stimulus should our primary tool of adjusting the target Federal funds rate no longer be available. Indeed, the Federal Open Market Committee devoted considerable attention to this subject at its June meeting, examining potentially feasible policy alternatives. However, given the now highly stimulative stance of monetary and fiscal policy and well-anchored inflation expectations, the Committee concluded that economic fundamentals are such that situations requiring special policy actions are most unlikely to arise. Furthermore, with the target funds rate at 1 percent, substantial further conventional easings could be implemented if the Federal Open Market Committee judged such policy actions warranted. Doubtless, some financial firms would experience difficulties in such an environment, but these intermediaries have exhibited considerable flexibility in the past to changing circumstances. More broadly, as I indicated earlier, the Federal Open Market Committee stands ready to maintain a highly accommodative stance of policy for as long as it takes to achieve a return to satisfactory economic performance.

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

Chairman SHELBY. Thank you, Mr. Chairman.

Mr. Chairman, in response to your remarks yesterday, bond markets moved the yield on the benchmark 10-year Treasury up to 3.93 percent. Was the market reaction, in your judgment, in line with what you anticipated would be the case? And if not, would you take an opportunity to redirect your thoughts or just tell us what your thoughts are?

Chairman GREENSPAN. Well, as I indicated yesterday, remember that just prior to our last meeting, the financial markets had been split on the evaluation of whether we would move 25- or 50-basis-points. In the event, of course, we moved 25-basis-points and we concluded as a consequence that when we announced that, interest rates would rise, as indeed they did.

It is difficult to judge what causes market rates to move. There are a great number of opinions out there, and I hesitate to give an opinion because that is basically endeavoring to try to answer the question why did a large number of market participants do certain things?

You can draw certain inferences. For example, Treasury rate yields went up significantly, as, in effect, did high-grade corporates. But speculative-grade bond yields actually went down and the exchange rate firmed up. So a number of commentators have concluded, looking at those data, that the general view of the economy which we expressed—meaning the Federal Reserve—was somewhat stronger than they had expected we would have indicated.

There was also a general judgment that, in a sense, we took off the table, as I read one commentator stipulating, the notion that we might use so-called nontraditional means. I was not aware I took anything off the table at any time, but apparently that was the view that was taken at the time.

Remember that the Federal Open Market Committee can make a judgment about policy probably with a 15-minute lead. And our job is to be prepared to be able to move if we have to in any particular case. But that requires a good deal of backup analysis, and that is what we have been doing, and we have been trying to convey what we are learning along the way to the American public and the markets.

Chairman SHELBY. Mr. Chairman, what is your view on the spread between short- and long-term rates at the moment?

Chairman GREENSPAN. The market is obviously responding to our general view—which has been our policy and will continue to be our policy, as best I can judge—that we will hold rates until the economy achieves satisfactory performance, which means that we tend to anchor the short-term rate structure because what we are targeting, as you know, is the overnight rates.

Chairman SHELBY. Sure.

Chairman GREENSPAN. And the longer-term rates reflect three things: They basically reflect inflationary expectations, the expectations of real economic growth, and the supply of securities. And in all of those cases, those markets will move essentially independently in many respects of what Federal Reserve policy is.

Chairman SHELBY. Mr. Chairman, this morning's data released on industrial production showed an output gain for manufacturing. Does this signal a potential rebound for this sector of the economy which has been lagging?

Chairman GREENSPAN. It certainly indicates—at least, as I say in my prepared remarks—that industrial production has stabilized. But it is stabilized, as best I can judge on the data we are looking at, with inventories being liquidated, which effectively is saying that the consumption of industrial production, is somewhat higher than the production level, implying that at some point it will rise further. But short of that, I would just as soon not give you any projection because we do not have one immediately that is useful.

Chairman SHELBY. We respect that.

Senator Sarbanes.

Senator SARBANES. Thank you, Mr. Chairman.

In this July report, the Fed has downgraded its projection for GDP growth for 2003 for the second time. Last July, the Fed forecast GDP growth for 2003, the year we are in, between 3.5 and 4 percent. In February, it lowered that forecast slightly to between 3.25 and 3.5 percent. And now it estimates growth between 2.5 and 2.75 percent for 2003.

Regrettably, this pattern is similar to forecasts for the previous several years. In February 2001, the Fed projected economic growth of between 2 and 2.5 percent. In July, we were already in the midst of a recession, and the Fed significantly lowered its projections to between 1 and 2 percent growth. Growth in 2001 was barely even positive at 0.3 of a percent.

In February 2002, the Fed projected growth of between 2.5 and 3 percent for 2002, only to revise that projection upward in July to between 3.5 and 3.75 percent. Growth came in below projections at 2.4 percent. Those are the three most recent years.

So far economic growth in the first quarter of this year was a meager 1.4 percent. The consensus estimate is that the second quarter will hardly be any better. But now we are hearing that next year the growth will pick right back up to between 3.75 and 4.75 percent, according to this report.

It leads me, Mr. Chairman, to ask: Are the models that you are using at the Fed overly optimistic? Or have we all fallen into the trap of believing that there is a mythical recovery which is just around the corner? I mean, in all three of these years now, the Fed has really been off the mark on its projections, overly optimistic consistently?

Chairman GREENSPAN. That is true, and I would suggest to you that it is not the result of a single model because what you are quoting is, I would put it this way, the consensus of the individual forecasts of the members of the Federal Open Market Committee. That is not the staff forecast as such, which we produce separately.

But it is certainly the case that we and others—in fact, the general consensus—have been projecting a recovery sooner than it has obviously been occurring.

Senator SARBANES. Well, that would lend some weight to the view that we have a more serious economic situation on our hands than is being generally acknowledged or admitted to.

Chairman GREENSPAN. Oh, there is no question that that is the case, and indeed, remember that we did have the emergence of Afghanistan and especially the Iraqi war, the big surge in oil prices, and a number of events which we did not forecast.

Senator SARBANES. Let me ask about the labor market, just to follow along with this line of thought. The June 25, Federal Open Market Committee statement said, “Recent signs point to labor and product markets that are stabilizing.” Now this was a shift from the FOMC meeting on May 6 in which the FOMC found, “Initial claims for unemployment insurance remained at an elevated level, suggesting further labor market weakness in May.” Indeed, the labor market was quite weak in May, with the revised data reporting that 70,000 jobs were lost. Initial claims for unemployment remained above the 400,000 level throughout May and June.

Since your June report, initial claims have risen to 439,000 for the most recent week. They have been above the 400,000 level for

21 consecutive weeks. The unemployment rate jumped to 6.4 percent, a 9-year high, and the economy continued to lose jobs in June for the fifth consecutive month. As I said earlier, the number of workers who were unemployed for more than one week has reached a 20-year high of 3.8 million.

Would it not be more accurate now in describing the labor market to go back to the May formulation, an elevated level suggesting further labor market weakness rather than the June formulation, the labor markets are stabilizing?

Chairman GREENSPAN. Well, Senator, my recollection—and I would have to look at the data—is that the reason the statement of stabilization was put in there is that the employment data historically were revised to, as I would put it, a more stable pattern. They then were revised again down in the most recent report. So what we were reflecting were the BLS payroll data, which, as I recall, had shown signs of stability, which then was erased in the next month's report.

Senator SARBANES. Yes, I understand that, and the point I was trying to get at is, given the additional data that is now available to us, as you come this morning, wouldn't the May formulation of a further labor market weakness be more apt to our current circumstance than the June formulation of a stabilizing labor market?

Chairman GREENSPAN. Senator, we will not know until we get beyond the July initial claims figures, and let me explain to you what that is.

We have very considerable difficulty during the month of July, especially in the first 2 weeks of July, in seasonally adjusting the normal retooling that goes on in the motor vehicle industry and seasonal shutdowns in a number of different industries, and they vary. And we have found that the variants of the seasonals are very large, and so until we get into August, we will not get a good reading on initial claims or insured unemployment.

It is conceivable that the formulation you just suggested may, in fact, turn out to be the correct one. I would like to wait a couple of weeks before I respond to that in any definitive manner.

Senator SARBANES. Thank you, Mr. Chairman.

Chairman SHELBY. Senator Allard.

Senator ALLARD. Chairman Greenspan, we just enacted a tax cut. Would you say that that tax cut increases the likelihood that our economy will recover more quickly?

Chairman GREENSPAN. I have argued in the past that I did not view fiscal measures as being appropriate for purposes of short-term fiscal stimulus. I have said that over the years. I have indicated that in many testimonies here.

The truth of the matter is that more, I suspect, for fortuitous reasons, the last two tax cuts have turned out to be timed in a manner which would affect the economy. And I do believe that the current one, as I indicated in my prepared remarks, by shifting a very substantial amount of monies to reduce taxes and increase disposable personal income in the third quarter has the makings of a fairly prompt impact on sales.

It is too soon to judge whether that impact is going to be, as I put it in my prepared remarks, what standardized conventional models ordinarily suggest would occur. But there is no question

that the quality of the data on sales have been improving. The retail sales released for the month of May, which is obviously prior to these data, was obviously above expectations. And, indeed, chain store sales in recent weeks have been running above expectations.

Motor vehicle sales seem to be a shade better, but it is too soon to tell. And the best thing is we will probably find out the answer to your question of whether the tax cuts really made a difference I would say probably toward the end of this quarter.

Senator ALLARD. Thank you for your response.

As you know, you and I have had a discussion about the capital gains tax. In some of those hearings where you appeared before either this Committee or the Budget Committee, you have strongly argued for its elimination or reduction. Whenever we get a fiscal note on a capital gains proposal, or tax reduction proposal, it has a positive fiscal note; in other words, it shows increasing revenue to the Federal Government.

So, I was struck by your comment yesterday when you acknowledged that the tax cuts have a stimulatory effect, although you noted that you doubted the tax cut paid for itself. Would you modify that comment, specifically with regards to capital gains?

Chairman GREENSPAN. No, not really, Senator. It is certainly the case that if you cut the capital gains tax, you are likely to get fairly significant revenue initially. You probably will get an initial response in revenue raising as the turnover occurs.

Senator ALLARD. Right.

Chairman GREENSPAN. But over the long run, I do not think the data show that. In other words, you get an initial surge in revenues followed by a significant decline from the capital gains tax, and taken over the long run, you would lose revenue, as best I can judge.

Senator ALLARD. Chairman Greenspan, this Congress is right now wrestling with the reauthorization of transportation bills, highway transportation and mass transit in particular. Members of Congress are struggling with how they are going to pay for all these transportation projects. Some have called for an increase of 2 cents per gallon, while others are calling for an increase in excess of 12 cents per gallon.

First, I wonder if you might comment on how you think this tax increase could have an impact on our economy when it is dedicated to improving the infrastructure of this country. The second part of the question: In Colorado, we have a unique situation. We have some of the highest gas taxes in the country. And, our neighbor, Wyoming, has some of the lowest gas taxes in the country. Could you talk a little about how those two extremes may be impacted since they are right next to each other? I would appreciate it.

Chairman GREENSPAN. Well, it should be apparent that if you increase the gasoline tax, consumption of gasoline will go down. That has two effects. Since a significant part of the crude oil and, indeed, even gasoline stocks that we consume are imported, it probably has the effect of reducing consumption of gasoline, reducing, I should say, aggregate consumption, which is partially offset from imports. The net effect is probably to weaken the economy slightly. But I would be doubtful that that is a big issue, and I think there are far more important other issues that are involved in gasoline

tax, which obviously gets to questions of conservation, gets to questions of security of supply, and I would be hesitant to draw the economic impact as being a crucial issue in the context of the small changes that we tend to talk about.

I have really nothing to say about the disparity among States. That has to do with your legislatures, and if you want to have a meeting at the border to marginalize them, that is a question for the States.

Senator ALLARD. Let me rephrase that question. Is there likely to be a greater economic impact on States that have high gas taxes as opposed to those who have lower gas taxes?

Chairman GREENSPAN. Yes.

Senator ALLARD. I see my time has expired. Thank you.

Chairman SHELBY. Senator Reed.

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

Thank you, Chairman Greenspan.

In this Monetary Report to the Congress, page 12, and I quote, "With little change, on balance, in non-Federal domestic saving over this period, the downswing in Federal saving"—which I think roughly is the surplus—"showed through into net national saving, which was equal to less than 1 percent of GDP in the first quarter, compared with the recent high of 6.5 percent of GDP in 1998. If not reversed over the longer haul, such low levels of national saving could eventually impinge on the formation of private capital that contributed to the improved productivity performance of the past half-decade."

Today's headlines from *The Washington Post*,—White House Foresees 5-Year Debt Increase Of \$1.9 Trillion.—"The Federal Government will pile up \$1.9 trillion in new debt over the next 5 years and will still be running an annual deficit of \$225 billion by 2008, long after White House economists assume current war costs will have subsided and the economy will have recovered. . . ." Those are pretty rosy predictions but, nevertheless, even the White House assumes we will be running deficits and not surpluses by 2008.

The question is: Where is the long haul? Is it 2005, 2006, 2007, 2008, 2009? When are we going to start seeing this adverse impact requiring us to do something more than just talk about it?

Chairman GREENSPAN. Remember that the statement in that report is a statement of accounting and arithmetic; that is, the accounts of savings and investment must balance. Obviously, if you get an absorption of savings from the private sector by increased Federal deficits, that will reduce the private savings available to finance investment.

But as I said yesterday in response to a related question, that leaves open the question of financing domestic capital investment by essentially borrowing savings from abroad, as one possibility, which we have done, obviously, quite extensively. And then there is a quite important question which gets to the issue that only roughly half of our productivity increases are directly attributable to the amount of capital investment that is employed in the economy. The rest are technological changes, organizational changes, things which economists call "multi-factor productivity."

There is no question that if you run substantial and excessive deficits over time, you are draining savings from the private sector,

and other things equal, you do clearly undercut the growth rate of the economy. That is one of the reasons I have argued for years about getting the deficit down. So, I have no question that if we do not come to grips with these deficit issues, it will make it more difficult for us to maintain the type of growth rates which, to respond to Senator Sarbanes' concerns, will bring total employment up and bring the unemployment rate down.

Senator REED. As I understand the numbers out of the White House, though, they are assuming a full-employment economy by 2008 and still deficits. Is that accurate?

Chairman GREENSPAN. That is certainly economically consistent. It depends on the nature of the individual assumptions that are made with respect to a lot of different variables.

Senator REED. I still have not heard the long haul, where I am looking over the horizon. Where should I put my stake down for the long haul? Certainly that is something that you must think about. It is one thing, because your models and your presumptions all have a time base as well as other parameters.

Chairman GREENSPAN. That is exactly right, Senator. Even though, as I indicated earlier, we can move on 15 minutes notice, nonetheless, unless we have a broad overview of the forces that are driving the economy, not only in the short run but also in the long run, it is difficult to make judgments as to what the appropriate posture of monetary policy is unless you have the full context of both the short term and the long term.

Senator SARBANES. Jack, would you yield for a second?

Senator REED. I would yield to the gentleman.

Senator SARBANES. Would you run large deficits at full employment levels? If the economy is at full employment levels, what is your view with respect to running large deficits in the Federal budget?

Chairman GREENSPAN. I would be against it.

Senator REED. May I ask one more question? That is, the consumer has been one of the stalwarts in the economy. Getting back to the taxes, there are at least two issues with the taxes. One is the size and the other issue is who are the beneficiaries? It seems to me, and the one phrase I remember from college economics is that the marginal propensity to consume is the inverse of proportional income. So that if we target these tax cuts—I have exhausted all my economic knowledge, I will admit it.

[Laughter.]

Senator REED. If we target these tax cuts to the wealthiest, which seems to be the case, we will not get the proportional benefit from consumption that we would if we had targeted these tax cuts to lower-income Americans.

Chairman GREENSPAN. Senator, I was exposed to the same economic education that you were as an undergraduate.

Senator REED. I think it took in your case.

[Laughter.]

Chairman GREENSPAN. I would merely qualify the conclusion. What we have found recently is that while indeed the marginal propensity to consume does fall as incomes rise, that the extent of the decline is much less than has been our previous expectation, and what I also would presume to be conventional wisdom. So, yes,

it is true that marginal propensities to spend fall, but it is not enough to really make a very substantial difference when you apply it to various different income distributions.

Senator REED. Thank you.

Thank you, Mr. Chairman.

Chairman SHELBY. Senator Bennett.

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

Chairman Greenspan, this is anecdotal from my own observation, but I want to share it with you and get your response. One of the areas where I have found that the recent recession and soft recovery has hit very, very hard is in the area of venture capital. VC's, as I have discussions with them about new ideas and new opportunities, say very flatly, "We have no money. There is no VC money." What little VC money that has been available has gone not to fund new ventures but to follow the pattern that you outlined in your statement, to shore up the balance sheets of the ventures that they funded during the bubble of the 1990's, so that when we had the froth and the excitement of the late 1990's, and you could get venture capital for almost any idea, no matter how hare-brained it might have been in retrospect, the system washed out all of the bad investments and the venture capitalists took what money they did have and went back to the investments that were just hanging on, but surviving nonetheless, and put money that would have gone into new ventures and thus created new jobs into strengthening the balance sheets of the companies that they had.

The VC's were saying to me, "We have a liquidity crisis. We cannot get any money out of the banks. The banks are getting very, very anxious about making sure that they are not taking undue risks, much the way they did after the savings and loan crisis when banks got very, very conservative in their lending process. We cannot raise very much money from individuals. They are burned. They are being very, very cautious, and consequently there is a liquidity crisis in the venture capital world."

I think that may have some impact on the unemployment situation that Senator Sarbanes is so concerned about because much of our job creation comes from new business creation. Fortunately, we are not like Europe, and we are not like Japan where they do not have the VC tradition. So until we get venture capitalists funding new entrepreneurial activities, we are probably not going to make as big a dent on the unemployment number as we would like. The Fortune 500 cannot solve the unemployment problem. The Fortune 500 has always been lagging in job creation as opposed to the entrepreneurial side of the house.

Do you have any data, or if no data, any intuition about what might be happening in the venture capital world and what we might be able to look forward to in this uniquely American phenomenon of a lot of private capital funding brave new entries into the world?

Chairman GREENSPAN. Senator, the data that we have show, as you correctly point out, a moderate to small industry prior to the mid-1990's, and then with the surge of the stock market there is this huge increase in venture capital as a spike, and indeed it has come all the way back down to where it had been. It is not below, but clearly it was all the way up and all the way down. My impres-

sion is that it depends to a very large extent not just on the availability of capital without the ideas, but you need to start to get market values up first, so that there are presumed opportunities. Remember, that so far as financing is concerned, as important as venture capital is for these highly speculative and very imaginative projects, and as you pointed out, some of them perhaps a little exotic, too exotically imaginative in the past, far more important is the fact that there has been a very significant decline in what we call junk bond yields. Those are high-yielding bonds which are a large source of financing for capital investment in a number of lower-grade corporations whose fluctuation in capital expenditure is quite large. So, yes, I do think if we were to get increased venture capital going it would be helpful, but I think if the economy gets going, venture capital will follow along.

I do not believe that it is a leading indicator at all, and it is one which really requires opportunities to arise and individuals looking for various different types of investments because they presume that other market prices have gone up too high.

Senator BENNETT. Thank you.

Chairman SHELBY. Senator Bayh.

Senator BAYH. Thank you, Mr. Chairman. Time permitting, I have three questions, two of a short-term nature, one of a longer-term nature.

My first question would be: When do you anticipate a pickup in capital investment, and how robust would you expect that to be? Particularly, Mr. Chairman, you mentioned three factors in your testimony. First, the increased risk aversion by corporate decision-makers because of the recent scandals. I will assume that they will eventually become acclimated to the new rules and that will abate. Second, you mentioned overcapacity in some parts of the economy. You did not mention telecom, but some of those areas I assume we will just have to work their way through that. In particular, if you could, I would like for you to address the third point you mentioned, which is when do you think the pickup in demand will be perceived as being durable, thereby incenting corporate decision-makers to increase their capital investments?

Chairman GREENSPAN. Senator, if we knew the answer to just any two of those three questions, I think we would have the elements of an economic forecast, because that is really where the major uncertainties are.

The problem in the corporate governance area is one in which there has been a shock to the corporate sector because the types of things that occurred were not presumed contemplatable in an earlier period, and it is going to take a while for that to wear off. I do not know how long it will take, but one way of getting some judgments, I would be looking to see whether mergers and acquisitions begin to pickup. That would give you a sense that there is lessened concern.

Senator BAYH. There are some tentative signs of that, more MA activity.

Chairman GREENSPAN. Well, I have heard the same, but it is still quite preliminary and not really evident.

Senator BAYH. Could I ask, Chairman—forgive me for interrupting, but our time is unfortunately limited—if you might focus

on the third factor, when the pickup in demand will be perceived as being more durable?

Chairman GREENSPAN. It will depend on two things. One, on the issue which I was discussing with Senator Reed, what the propensity to consume out of these very substantial tax cuts concentrated in a short period of time is, and, two, whether the increase in demand is perceived by the business community as not a blip but as something which is more ongoing. I cannot answer that question with any degree of certainty, but at the moment most private forecasters have forecast for the third quarter which I will tell you are higher than ours.

Senator BAYH. Well, that is encouraging.

Chairman GREENSPAN. I do not know whether that makes it right. I am just saying it.

[Laughter.]

Senator BAYH. It is always nice to be encouraged, right or not. It seems to me though that that really lies at the crux of the issue, that the risk aversion because of the corporate scandals will eventually subside as decisionmakers acclimate themselves to the new rules that we have attempted to put in place and that some of the overcapacity, we will eventually work our way through that, but really the key here is the perception of the durability of demand going forward on a sustainable basis, to the increase in CapEx which has been a significant missing component of this tentative recovery to date.

My second question I do not think I am going to get to my third, which is unfortunate because I wanted to ask you about the long-term fiscal challenges that we face when the baby boomer begins to retire. Perhaps that will await another time.

We all care about the deficit here. I know when I go home people occasionally ask about it, but my perception is that the public only begins to focus on the deficit when it begins to bite in real rather than theoretical terms, and public policymakers tend to only make the difficult decisions that have to be made once the public has begun to focus because of real world consequences.

So my question would be, and you mentioned in response to one of my colleagues' questions, or rather one of my colleagues may have mentioned the activity in the credit markets yesterday, and then you mentioned that the more high-yielding securities actually responded well, I assume because of perception of a reduced default risk. But the treasuries and high-grade corporates went the other direction. My question would be: When do you perceive that the adverse consequences of the deficit will actually begin to manifest themselves in real terms? It seems to me that the markets yesterday were at least sending a near-term signal that the answer may be now. In terms of the crowding out, they are anticipating both higher private demand, which was the reason for my first question, simultaneously with high ongoing deficits, and that we may see crowding out sooner rather than later.

Chairman GREENSPAN. I think it is difficult to separate the issue of increased supply in the short term, and general notions of broad economic recovery. They are interrelated and very difficult to separate. We have found that the impact of deficits on current long-term interest rates are related to changes in long-term deficit ex-

pectations, not generally short-term issues of deficits and Treasury borrowing. So it is not clear to me to what extent changes in yields are impacted, although there is no question that if you put new securities in the market, prices will tend to adjust. But the real impact on long-term interest rates which matter are really driven by long-term expectations of the deficit to the extent that interest rates are affected by deficits, which as you know, I am a firm believer they are.

Senator BAYH. My time has expired, Mr. Chairman, which is too bad, because that led directly to my third question which was the long term—

Chairman SHELBY. Senator, we will have another round.

Senator BAYH. Thank you, Mr. Chairman.

And thank you, Chairman Greenspan.

Chairman SHELBY. Senator Hagel.

Senator HAGEL. Mr. Chairman, thank you.

Chairman Greenspan, thank you again for appearing before the Committee. Actually, I would like to pick up where the Senator from Indiana left off, staying within the universe of deficits, and I think where the Senator from Indiana was going with this is in the unfunded entitlement liabilities direction, or at least that is where I want to go with the question.

First, it has been noted here, and you have responded to some questions about OMB's numbers that they released yesterday which appeared in the papers today about a \$1.9 trillion deficit over the next 5 years, and I think we are all familiar with the numbers that they have projected for this fiscal year as well, as higher numbers for next year. Staying in that universe for a moment, there was a piece in the *Financial Times* yesterday, and I do not know if you saw it. The headline was "The Fiscal Overstretch That Will Undermine An Empire." As a matter of fact, one of the authors of this, according to the story, is a senior economist at the Federal Reserve in Cleveland. It talks about the unfunded entitlement liabilities that are out there for this country. And you know the numbers very well on this, Mr. Chairman. In 8 years, 77 million baby boomers start collecting Social Security benefits.

What they did in this study is they tried to, as best they could, develop a model that would tell them what kind of revenues we could expect within that time frame versus the commitments that the Government had. What they found was a \$44 trillion shortfall in revenues, and a great amount of that was due to the Medicare-Social Security liabilities that are unfunded.

Now, in light of that, as you have been following, and you and I have had some discussions about this previously, both the House and the Senate have passed a Medicare reform bill, and the centerpiece of that, as you know, is a prescription drug plan. I would be interested in your thoughts about the entirety of this issue because of the kind of obligations that we are saddling future generations with a prescription drug plan in a Medicare reform bill, and any other comments you would like to make in this regard, because I think you just said that large deficits, in your words, undercut the growth rate of an economy.

So with all of that, have at it. Thank you.

Chairman GREENSPAN. Without discussing any particular programs, I do think that it is possible to get a general projection of what under the best conditions the revenue flows in this country would be to the U.S. Treasury. Wholly independent, the Congress passes legislation with commitments for the future which do not relate to the available revenues. It is a very difficult evaluation, and I will grant you that others will come to different conclusions. In recent years it has been my impression that the statutes that we have now currently in place, granted the demographics that will emerge in the years ahead, will create a level of spending in excess of our capability to finance it. It is not an issue of raising taxes because there comes a point, as everybody agrees, when you raise taxes, you will lose revenue eventually, so it is not an open-ended situation.

As a consequence of that I do think that it is crucially important for us to look at the whole fiscal situation in the context of whether our laws are internally consistent, whether, in fact, the structure of obligations we have presented for the future are indeed capable of being financed in real terms, because remember, we are talking real resources. Money is merely an intermediary here. From the types of numbers that I have been looking at, when we get into the period beyond 2010, 2011, and 2012, we are running into potentially serious troubles in which the claims on the aggregate GDP, in order to finance what is required by law for retirees, would require a significant reduction in the real earnings of the working people over and above what otherwise would be the case. In other words, a disproportionate amount of the GDP would have to be diverted, and it is not clear under those conditions whether we create a very major problem between generations in that regard. I think it is readily forecastable now because we may, as Senator Sarbanes says, have some trouble with our GDP forecasting. We do not have trouble in forecasting the age structure of the American population and what the demographics are going to impose on us as we move toward the movement of this very large baby boom generation from productive work into retirement.

Senator HAGEL. Thank you.

Chairman SHELBY. Senator Corzine.

COMMENTS OF SENATOR JON S. CORZINE

Senator CORZINE. Thank you, Mr. Chairman.

I welcome Chairman Greenspan. Let me just follow on there just for a brief second. I think your arguments today with regard to structural deficits which we apparently have now in place due to the set of policies and the need to prepare for the demographic reality that you suggest, tells us that our imprudence at the current moment is only going to aggravate the problems that one could anticipate coming down the pike with how we deal with these obligations. We certainly put ourselves on a course where we may be in a position where we have no choices to deal with that, and we are taking those choices off the table as we go, and it is very troubling to me.

We have a statement you made to this Committee in February. We have to be very careful in talking about structural deficits because there is no self-equilibrating mechanism when structural

deficits are occurring because the rise in indebtedness increases the amount of interest payments which, in turn, increases the debt still further, and there is an acceleration, a pattern, till you reach a certain point of no return. You put that against the demographic situation, and we are taking off the table our ability, many of the options to deal with just the issue we are talking about suggests.

I had a couple of micro issues. Since we are now seemingly going to be financing the U.S. Treasury for very significant amounts of dollars for a very long period in time, regardless of how you calculate it, including what the Budget Office let us know yesterday, is it not time that the Treasury reconsider the issuing of 30-year notes? At the time they ended the 30-year bond, they argued that we were headed into surplus. I think that was 2 years ago or 2½ years ago. And a long bond was no longer necessary to meet Government financing needs. They also added at the time that the return to deficit might necessitate a reintroduction.

I would also ask that, given the debate that we are now having about discount rates for pension policies, which are so important for the private sector and others, there is also a need for clarity with regard to what the yield curve looks like, using indices that may be an accurate reflection of longer dated markets for discount rates. It just seems there are a number of reasons to spread out over a longer period of time. I remember these arguments being made by the most eloquent economists in the late 1970's and early 1980's of why we needed a full-year curve. Is it not time to reconsider that point of view? I would love to hear how you feel about it yourself.

And then finally, another micro issue. We see the SEC talking about easing voting for outside directors and other issues. Do you have any comments on how that might impact capital formation? Is that a positive? Is that a negative? And how would you respond?

Chairman GREENSPAN. On the 30-year bond I am going to be interested in hearing the various debates and arguments on both sides of the issue, which I think will eventually materialize for exactly the reasons that you raise, Senator. There are pros and cons to the issue, as you are aware, and I do not want to anticipate how Treasury will come out, but I would presume we will be involved, as we have been over the years, in discussions on this issue as it affects our monetary structure. While to be sure the ultimate decision has to be with the Secretary of the Treasury, we do have input and we will endeavor to review the pros and cons and try to come to a conclusion ourselves on that issue.

Senator CORZINE. Did you have a view about whether it was constructive or not in the period of time? We had almost 20 years of experience.

Chairman GREENSPAN. Yes. I thought that if you took the projections of the surpluses seriously, and remember, we all were skeptical, but those were nonetheless the best judgments that people could make at that time, then the issue of taking the 30-year off the table clearly was a very reasonable one. Times have changed, Senator. Presumably these issues will be revisited as part of a broader set of questions of how Treasury needs to fund itself, or more exactly, how Treasury needs to fund the debt requirements of the Government.

Senator CORZINE. Shareholder issues?

Chairman GREENSPAN. Actually, I am aware that the SEC was discussing that yesterday and I have not caught up to what they have been mentioning on the issue. I am aware that it is in the papers this morning, but I have not as yet had a chance to see, and hence to comment on anything that they have said on that regard.

Senator CORZINE. Thank you.

Chairman SHELBY. Senator Chafee.

Senator CHAFEE. Thank you, Mr. Chairman.

Again, welcome, Chairman Greenspan. In your written testimony you say there is an especially pernicious, albeit remote scenario, in which inflation turns negative against a backdrop of weak aggregate demand, engendering a corrosive deflationary spiral. Can you describe what might be a worst case scenario of this corrosive deflationary spiral?

Chairman GREENSPAN. Sounds by itself as a worst case scenario.

[Laughter.]

It is an issue which economists never even thought about largely because, as I indicated in my prepared remarks, it was considered a curiosity, because with fiat money it just seemed noncredible that you could get too little inflation and that the capacity of central banks essentially to print money at will could not overcome any such tendency. That changed with the evident difficulties that Japan has been having. Even though there are good arguments, as I point out in my prepared remarks, to presume that the Japanese case of modest deflation is idiosyncratic, especially related to their institutions and specific difficulties that they have. But it still raises questions as to whether we are prepared as a central bank in the event that that happens.

It was not an issue that concerned us when the inflation rate was 5 percent, 3 percent, or even 2 percent, but in the last 6 to 9 months the rate of inflation has fallen quite dramatically in this country. It has triggered a fairly extensive evaluation on our part as to what we would do if we perceived that that issue was becoming an important one. And as I indicated, we have spent a good deal of time on examining types of alternative monetary policies which we believe could successfully address that problem and fend it off. It is quite remote, in our view, because we do not see the elements of that occurring, but if it occurs, it is a very major event. Even though its probability is very small, the size of the problem, should it occur, is sufficiently large to have engaged our attention, and it will continue to engage our attention until it is very clear that it can be fully taken off the table.

Senator CHAFEE. And as you war game for this scenario, do you worry about, as you said, stoking inflationary pressures on the other end?

Chairman GREENSPAN. We certainly do, and obviously a central bank needs to be acutely aware of that, but as I indicated in my prepared remarks, the impact of a number of forces from the collapse of the bubble in stock prices and its downward pressure on asset values for a while, and the issue of globalization, are all working at this stage to contain inflationary impulses. But it is obvious that our goal is price stability, and it is price stability on both sides. We are engaged in trying to fend off both deflation and infla-

tion, and hopefully we can maintain the degree of price stability that we have finally achieved and hopefully do so for a very considerable period of time.

Senator CHAFEE. I do not think you mentioned in your testimony exactly what you would do if we went down that pernicious path of disinflation?

Chairman GREENSPAN. Senator, we have discussed what we call nontraditional means, meaning the focus of central bank policy in this country has, for a very long period of time, been restricted to endeavoring to change the overnight rate of interest without any advertence to how we might impact longer-term interest rates.

The reason that issue comes up is that with the Federal funds rate at 1 percent, there is obviously a downside limit to how far we could engage in further monetary expansion which is the obvious remedy that a central bank would create to confront this type of difficult deflationary process. Obviously, with only 100 basis points left, we have to first conceive what we would do in the event, which I have indicated we consider is remote, of needing to go well beyond that, and we have engaged in a number of different issues, all of which are involved in expanding the balance sheet of the central bank, which essentially means that we buy different types of assets and we do different types of things including moving out on the yield curve well beyond the issue of overnight funding.

That is an issue which we have been concerned about for a number of months. We have accordingly, not having focused on it before because we, as I said, thought it was an academic curiosity, but I think we have pretty much caught up to speed, so to speak, and we trust we never have to engage in such policies, but I think we are in a position to know what to do and how to do it should that necessity arise.

Senator CHAFEE. Thank you.

Chairman SHELBY. Senator Carper.

STATEMENT OF SENATOR THOMAS R. CARPER

Senator CARPER. Thanks, Mr. Chairman.

Welcome, Chairman Greenspan. Good to see you.

Senator Chafee and I have offered legislation, along with Senators Judd Gregg of New Hampshire and also Lamar Alexander of Tennessee, that attempts to address the need to clean our air further with respect to emissions of sulfur dioxide, nitrogen oxide, mercury, and also CO₂. We have sought to find a middle position, if you will, between Clear Skies over here, the President's proposal, the competing proposal over here by Senator Jeffords, and we sought to put something right here in the middle which puts in place caps on emissions including carbon, but relies on market systems, such as cut cap and trade. For example, if you are a utility and I am a farmer, and you have to reduce your emissions, you can use technology, you can change up your mix of fuels. You can say to this farmer: I would like for you to put more money in and expand the number of trees on your land, reforestation, change the planting patterns on the land, change what I do on our animal feedlots, that kind of thing, so different ways to achieve the goal.

It has been estimated over the next I guess 17 years, by 2020, if there is no change in the law at all, just business as usual, the

cost of generating electricity for the producers is about \$95 billion. The cost under the President's Clear Skies Initiative is about \$101 billion. The cost under our proposal is about \$102 billion. So, we are trying to decide whether or not at a time when we want utilities to be able to create the electricity, we want them to reduce their sulfur dioxide, nitrogen oxide, and mercury, if this is also a time to come in and say, all right, somewhere along the line you are going to have to face reducing carbon dioxide, and rather than wondering when that is going to happen, let us just provide some certainty and to try to do it now. There are some, as I suggested, marginal costs that are involved in that, about a billion dollars it looks like by 2020.

I wanted to talk with you a little bit this morning. You and I have talked about energy costs before, but I want to talk a little bit this morning about the cost of trying to regulate carbon dioxide, and the effect that that might have on our economy, and just your counsel on how we might go about it. I have a concern. I am a native of West Virginia and I have a lot of concerns about coal still in my native State. I am not interested in seeing a lot of change in the fuel mix. I want us to use coal, but use clean coal. Interestingly enough, under the President's proposal and in the proposal that we have made, by 2020 it is estimated about 45 percent of electricity generation will still come out of coal, in either proposal. And what has been suggested to us by some analysis done by people more objective than we are, is we can have some good outcomes with respect to better health outcomes, less premature deaths with our approach. Health care savings of about \$50 billion under our approach. And to do so without putting huge burdens on utilities and on the consumer.

That is kind of laying it out there. I do not know if there is a question in there or not, but I hope there might be.

[Laughter.]

The thought is, in regulating CO₂ how might we go about it? Does any of that make any sense? I will not be offended by what you might say. Senator Chafee might be.

[Laughter.]

Chairman GREENSPAN. Senator, I think the type of analysis that you are discussing is probably the most complex type of statistical analysis which you can bring to bear on Government policy. First of all, we have a number of different problems all emerging simultaneously. We have an issue of the new technologies enabling the wielding of power over very significant areas, and hence the whole question of the nature of regulation of the electric power industry by itself is a very difficult issue, which is all the more difficult because, as you know, there is no way, with the exception of a minor situation with hydroelectric facilities, of effectively storing electric power. And if you do not have inventories in a product, the tendency for markets to spike in all different directions with respect to price is very high, as we observed in California a couple of years ago. I do not think yet we have come to grips with the question of exactly how to manage our power industries in a manner in which the efficiencies which are evident in the newer technologies are brought forth. Coupled with that is the overall issue of the fuel in-

puts in the CO₂ emissions, and then of course, there is the Kyoto Protocol out there which is also overhanging this whole question.

The trouble I see is that, because these issues are extremely complex, we develop very complex models and the conclusions of a number of these studies may be model specific as distinct from what economists would say robust, meaning the same results would come up no matter what models you tend to use.

So, I am not someone who has been involved in this specific problem but I have spent a good deal of my life involved in this type of process. I would essentially suggest, if I may, that the resolutions of all the related issues be done simultaneously because you cannot, as far as I can see, make the judgments with respect to natural gas or coal, or various different emissions requirements, without having an understanding simultaneously of what the underlying technology force is, specifically the new technologies which enable a very large regional bridge to be created. You have to address them at the same time, and I think that is going to be very difficult, and all I suggest to you is that when you get a number from a specific model which has three digits in it, you may suggest that only two of them may be accurate, and indeed it is quite possible that only one is. So it is a very difficult issue, and I understand where you are coming from and I wish you well.

Senator CARPER. I will take those good wishes and run with them. Thank you.

Chairman SHELBY. Senator Crapo.

COMMENTS OF SENATOR MIKE CRAPO

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

Chairman Greenspan, thank you for coming here and presenting your information about our monetary policy in the country.

I want to go back to an issue you and I have discussed several times over the last 2 years, and that is derivatives. As you well know, we have for the last 2 years faced, on two or three occasions, efforts to change the manner in which we regulate derivatives. Under the Commodities Futures Modernization Act of 2000, the President's Working Group and others recommended a structure by which we approach the management of commodities in a number of contexts, and derivatives were handled in a particular way under that approach.

By the way, let me interject. I want to thank you, the Secretary of the Treasury, the Chairman of the Securities and Exchange Commission, and the Chairman of the Commodities Futures Trading Commission for being so prompt in responding to our letter inquiring about this yet once again this year when the amendment came forward on the energy bill once again to try to make this change in the way that we regulate derivatives.

The purpose of my bringing it up with you again is that there are again rumors that we will see another effort to try to in some way similar to the previous amendments change the Commodities Futures Modernization Act so that we create a new regulatory regime for derivatives, and in my opinion, create some confusion with regard to the regulator in terms of the introduction of regulation from FERC as well.

The question I have is, has anything changed? Is there a reason that we should change our approach to the regulation of derivatives or does the Commodities Futures Modernization Act still represent a very solid approach to managing this issue?

Chairman GREENSPAN. I am of the opinion that it was an excellent Act when it was passed in 2000 as I recall.

Senator CRAPO. In 2000, that is right.

Chairman GREENSPAN. And as far as I can judge, I see nothing which would alter my view and my appraisal of it.

Senator CRAPO. I know you have done this before, but could you give us your understanding of why derivatives are helpful in our markets?

Chairman GREENSPAN. We have a very complex financial system in which we endeavor to regulate in a manner to enable the system to be stable and function in a way which contributes to economic growth, not only in our country but also for the world at large. What we have found over the years in the marketplace is that derivatives have been an extraordinarily useful vehicle to transfer risk from those who should not be taking it to those who are willing to take it and are capable of doing so.

Prior to the advent of derivatives on a large scale we did not have that capability, and we often had, for example, financial institutions like banks taking on undue risk and running into real serious problems. From 1998 to 2001, we had a trillion dollar increase in debt in telecommunications worldwide. A significant part of that debt went into bankruptcy, and yet no financial institution of any significance was caught in that, and the reason was that, in this case, credit derivatives were employed to transfer the risk from these highly leveraged financial institutions to other institutions and pension funds, insurance companies, pension funds largely, which had much more equity and could absorb the costs of default which they did, but they did not like it. But they are still around and they are still viable.

The vast increase in the size of the over-the-counter derivatives markets is the result of the market finding them a very useful vehicle. And the question is, should these be regulated, well, indeed for the United States they are obviously regulated to the extent that banks, being the crucial creators of these derivatives, are regulated by the banking agencies, but not beyond that.

The reason why we think it would be a mistake to go beyond that degree of regulation is that these derivative transactions are transactions amongst professionals, and the institutions which are involved have very considerable what we call counterparty surveillance, where, for example, one major bank will know far more about its customer, whether it is a bank or something else, than we could conceivably know as regulators. In a sense this counterparty surveillance has become the crucial element which has created stability in that particular system.

My concern and others' concerns about going in the direction of an increasing degree of Government regulation is that we will undercut counterparty surveillance and that the net effect will not be to enhance the stability of that overall structure, but undermine it, and it has become such a valuable tool, in my judgment, in the international financial system that anything that we can do to en-

hance its capability of internal stabilization, which is currently the case, we ought to do, and I do not believe that many of the measures that have been offered to introduce increased regulation are indeed positive in the sense that they would have a positive outcome. My fear is that their effect would be counterproductive and that is the reason I wrote the letter, the response to you on that occasion, and why the President's Working Group came out the way that it did on that issue.

Senator CRAPO. Well, thank you very much for that extended explanation. Each time we face this issue we pick up a little support and our strength grows, and I think it is because we are better able to explain to the Members of the Senate the issues as you have just done. So thank you very much.

Chairman SHELBY. Thank you, Senator Crapo.
Senator Dodd.

STATEMENT OF SENATOR CHRISTOPHER J. DODD

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

Mr. Chairman, thank you once again for being here. I apologize, I was not here for your opening comments. We had a briefing by Secretary Powell, so a lot of us, about half the Members of the Senate were up there for about an hour or so.

Let me preface, I gather others have raised a number of questions about the deficits and your thoughts about them. I thank you again.

Your comments earlier this year about the tax cuts and their being revenue neutral I think were tremendously helpful to many of us. Unfortunately, they were not heeded by many, nonetheless I think your cautionary note about the importance of the revenue neutrality of those proposals was worthwhile to be heard. Clearly, and obviously, I join with those who are deeply worried about the overall condition of the economy. I know you struck a more optimistic note, and I appreciate that, but as I look at these numbers, with more than 3 million private sector jobs having been lost over the last couple of years and business investment is down by 12 percent. Consumer confidence is down by 28 percent. This is the only Administration in 70 years that has seen a decline in private sector jobs. I find that deeply, deeply troubling. When you add the fact that the Administration's solution to the Nation's economic woes has been more tax cuts, and if you add them up over the next few years, you get in excess of \$3 trillion, not to mention of course the cost of the war in Iraq and elsewhere.

In fact, the Administration's own estimate is that more than half of the changes in the Federal deficit, changes which total over \$4 trillion, according to them between the years 2004 and 2008, are a result of the President's domestic policies, which include three tax cuts and international policies including the war with Iraq. So there is a real concern here.

I would like to focus on the trade deficit and the loss in manufacturing jobs. I spent some time over the last several weeks, as all my colleagues have, in my State, I attended meetings in my business community and labor community separately. If I had been taken into both of them blindfolded and not told which group was which, I could not have distinguished them in terms of their con-

cerns about job loss and what is happening to the manufacturing sector in our society and the growing trade deficits.

I was stunned, like many were, to read where Japan bought up more than \$42 billion in May, a record number. If you take Japan, Taiwan, Korea, and China, there is a trillion dollars that countries have accumulated in reserves. Now many would argue that this amounts to manipulation, that this was not just coincidental. I agree with you that these values ought to be determined by the international marketplace, but nonetheless there are provisions in the International Monetary Fund and other organizations that require that when you have manipulation of currencies, particularly when it affects jobs to the extent that it appears to be doing in our own country, than others have to step up.

I was disappointed. I know, Mr. Chairman, you have asked the Secretary of the Treasury to be here before the Committee. He was due to be here tomorrow, I think, or the next day, and he turned us down. Of course under the Trade Act of 1988, the Secretary of the Treasury is required to report to this Committee and to submit a report twice a year. So, I am hopeful that before this year is out he will be here to respond to these questions about the trade deficit that now is going to, based on a quarterly report, exceed \$540 billion this year.

I know it is not the Fed's job to get into this specifically, but this is such a growing concern to me about what is happening here, when you look at the job loss, the businesses that are going out of business. I see it in my own State to an alarming degree. Someone has to respond to this. We need some ideas on how to respond to this. If, in fact, we are seeing currency manipulation going on by some of our partners, particularly in the Pacific Rim, then I think it is critically important that we answer this in some way, and I would be very curious what your thoughts might be as to how we might respond to this. First of all, is it a matter of concern to you? And if so, what can the Fed do or what can we do to begin to try and stem this tide?

Chairman GREENSPAN. Well, I think, Senator, it is important to understand the causes of the problem before we try to address them. On the import side, as I think I have indicated to this Committee on many occasions, we observe in our international accounts a fairly significant difference between the propensity to import goods and services relative to our incomes in the United States compared with our trading partners, which is another way of saying, if everybody's GDP were increasing at the same pace, we would have a trade deficit which is ever increasing, and indeed there would be a counterpart increase of surpluses elsewhere. So, we do have this imbalance in the system which at some point is going to adjust, and there is some evidence that it is in the process of adjusting, but clearly, the proportion of the consumption of goods in this country that is imported has been rising for quite a long period of time.

In addition, the productivity in manufacturing has been exceptionally impressive, more so than for the economy as a whole, and obviously if you have a very rapid rate of increase in productivity, any particular increase in industrial output will have a lower requirement for workers than one when productivity were growing

less. So it is the combination of these two factors which has been decreasing the level of employment in the manufacturing area, coupled with the fact that there has been a gradual reduction in manufacturing relative to the economy as a whole over and above these other factors.

The question you raise with respect to currency manipulation is a tricky issue because it would be desirable and has evidently been desirable for emerging countries to have reasonably high reserves because what has happened is that in crisis conditions when their reserves are high there has been less in the way of underlying world instability, say, as we had in 1998. Now, having said that, there is no question that the motives of some of the accumulation of reserves has been to stabilize exchange rate against the dollar on the part of a number of countries, and that process obviously means that you will accumulate dollar denominated assets as indeed a large number of them have, and the figures you cite are related to this particular question.

This is not, however, an activity which a central bank can engage in indefinitely because as you buy dollars, as indeed you used to buy gold under the gold standard, the asset side of the balance sheet of the central bank expands unless, as we say, it has been sterilized, and it is increasingly more difficult to sell off other non-U.S. dollar assets to effectively neutralize the effect of accumulating these dollars.

The consequence of the big rise in the asset side of the central bank is to create a major increase in money supply growth, and that cannot continue indefinitely. So this is not a process which central banks can engage in indefinitely. Something has to give. But there is no question that the motive here in many respects at least as I judge it, is to suppress the value of their currency. They cannot do it indefinitely, and I think a number of my colleagues, the Secretary of the Treasury, for example, have indicated that they would like to see less of that going on.

Senator DODD. I appreciate that, and I would hope that, Mr. Chairman, he would be here. I do not know what his motivations were for not coming tomorrow, but obviously there is a growing concern.

Chairman SHELBY. I understand he is going to be with the President tomorrow, but Secretary Snow has indicated on many occasions, that he will appear before the Banking Committee.

Senator DODD. I hope so. Again, I appreciate the Chairman of the Fed's response, and obviously, I am fully aware that the Central Bank's responsibility in this regard is very different, but as I hear from my own constituencies and others—and a lot of it is unemployment, but going out of business too. I mean their productivities are rising but they are finding it more and more difficult to compete in the marketplace. I have been supportive in the past on free trade agreements and so forth for all the obvious reasons, but that free trade is always conditioned on fair trade as well, and when you have what you and I suspect is currency manipulation going on simultaneously, then it makes it very, very difficult for us. As I sat in a room the other day, one fellow got up and he said: "I am the CEO of a company. I am the only one in this room that

still makes anything.” There is a growing concern in the United States about the fact that we are making fewer and fewer things.

Chairman GREENSPAN. Just remember that the nature of the economy is becoming increasingly conceptual as distinct from physical, in the sense that ideas are becoming increasingly the predominant means by which we create wealth. The consequence of that is that there is less physical stuff around. I think that is good, not bad for the economy as a whole, but if you are a maker of stuff, it is not.

Senator DODD. If your job depends upon being a maker of stuff, it is more than just a conceptual kind of problem you have. It is a real problem.

As I saw the other day in Wal-Mart, they had a sale on and they sold \$1 billion in one day of television sets made in China. One day, \$1 billion. Not a single one of them made in the United States. Now there is something fundamentally wrong if we cannot do a better job of at least creating an atmosphere where there is an opportunity for U.S. manufacturers to have the same kind of opportunity. I worry about that, and I know you do as well.

Thank you, Mr. Chairman.

Chairman SHELBY. Senator Schumer.

COMMENTS OF SENATOR CHARLES E. SCHUMER

Senator SCHUMER. Thank you, Mr. Chairman. I want to thank you again for the job you do.

I have a few questions. One is a little bit related to Chris Dodd’s but somewhat different. One of the reasons we lose manufacturing jobs is trade with China, and there are the classic free trade arguments about why businesses would go to China. But there is something else that has been happening, and I would like your comment on that, and that is that the Chinese have tightly pegged their currency—it is a fixed rate. The yuan has been, since 1994, at 8.3 yuan per dollar.

Now if you let that currency float, almost every economist says it would be valued higher. Goldman Sachs says 15 percent; some say 25 to 40 percent. And the natural reason that we all went to floating currencies among the major currencies is, it is a self-correcting mechanism that you and Chris Dodd were talking about.

Why wouldn’t it be a good idea for our President to jawbone the Chinese, or our Treasury Secretary, to let their currency float? You know, the Chinese seem in a lot of ways to want to be part of the family of nations when it benefits them, you know, the bigger, more productive nations, but not when it doesn’t. Why wouldn’t it help everybody to let the yuan float? And why wouldn’t it be a good idea for our Government to urge the Chinese to make it happen?

Chairman GREENSPAN. Well, the Secretary of the Treasury has indicated that.

Senator SCHUMER. I have not heard any public pronouncements about that.

Chairman GREENSPAN. No, indeed, there has been a public statement.

Senator SCHUMER. Why do the Chinese resist? Well, we know why but—

Chairman GREENSPAN. Let me just say this—

Senator SCHUMER. If you could comment in general on that.

Chairman GREENSPAN. Yes. There is an issue here, but remember that it is very much to the advantage of the United States to have China involved in world trade interrelated to all the various institutions with which we are involved. They had and indeed still have the centrally planned economy, which has considerable rigidities in it, and they have been endeavoring, and with some success, to open it up, creating property rights, creating markets, which seems to be contradictory to their political system. But, so far, it is working and they are increasingly engaging on trade throughout the world. I happen to think that is very good. Most economists would say that is good.

In the process of doing that, because of the structure of the rigidities of their system, they tended for purposes of stability to fix the yuan to the dollar. And to date—

Senator SCHUMER. They have not changed it—

Chairman GREENSPAN. No, they have not, exactly. And that obviously from their point of view has created a degree of stability, but it has required them, in order to hold that rate, to be very heavy purchasers of U.S. dollar-denominated assets. And they have accumulated a very large store of assets, as has been indicated in various different fora.

At some point they will no longer be able to do that because it will create an inability of their monetary system to function well. How one approaches the issue of getting the exchange rates better balanced is partially an economic issue, partially a political issue.

Senator SCHUMER. You are good at both.

Chairman GREENSPAN. My tools are limited.

Senator SCHUMER. But would it be, all things being equal, better to have either a revaluation of the yuan or at least to let it float? Aren't they a big enough economy now? It is not 1994. Do you think they should be letting it float?

Chairman GREENSPAN. I think that from an economic point of view it is going to become increasingly evident that that is what is going to have to happen if the existing cost structures around the world remain as they are. And I think the Chinese economists are sufficiently sophisticated to understand that.

Senator SCHUMER. When you hear—and we are all hearing what Senator Dodd talked about—that manufacturing is just shrinking and shrinking, and you are right, you said once before, something I have repeated often, high value is added more by thinking things than by making things these days. That is correct. But you still have a large manufacturing base. I do not know if the same is happening in agriculture as in manufacturing; in other words, there is more production with fewer workers, or is it less production?

Chairman GREENSPAN. Oh, no, in fact, if anything, it may be more impressive.

Senator SCHUMER. More than agriculture.

Chairman GREENSPAN. Remember, crop yields are incredible.

Senator SCHUMER. Okay, so I understand that. Let me ask you one other question, if I might, Mr. Chairman. We are in this period now where the economy moves along at not a terribly rapid pace, but a decent pace, 1 percent, 2 percent, maybe 3 percent growth. Because productivity outstrips that growth, the number of jobs de-

clines, and I am sure my colleagues have talked about that. This is the first Administration since Herbert Hoover's where the absolute number of jobs has declined, even though growth has occurred.

How long can this continue? Now, I understand that incomes are going up. But if incomes continue to go up and jobs continue to decline, it means that wealth, almost by definition, is being more concentrated.

Is this bad for the economy? Can we just continue to go along at this pace? And doesn't the job loss—if it does matter—help drag the economy and instead of creating an upward cycle, which we had in the 1990's where productivity and job growth went hand-in-hand, really provide a drag on the economy where productivity goes up and jobs go down?

Chairman GREENSPAN. It has certainly been our experience, Senator, that you cannot have the situation with productivity growth growing faster than the economy as a whole; in other words, essentially rising output, falling employment. The reason basically is that one must presume that the consequence of that is an opening up of profit margins as one characteristic and historically increased capital investment.

Over time, that situation is unstable and eventually adjusts to a higher level of economic growth and, hence, increasing employment, or productivity growth slowing down. Obviously, if you continue GDP growing and employment declining, at the end of the day everything is being produced by nobody.

Senator SCHUMER. Right. Or another country. See, that is what may change this, the interrelatedness of the world economy.

Chairman GREENSPAN. But then the question is: Where do we get the purchasing power, meaning the goods and services we produce, to be able to buy it from others? So it is an internally long-term inconsistent framework, and our expectation is that what will occur as a consequence is that the GDP growth will move above the productivity rate and employment will start to turn up accordingly.

Senator SCHUMER. Thank you, Mr. Chairman.

Chairman SHELBY. Chairman Greenspan, could you just briefly highlight for the Committee the nature of your concerns regarding the industrial loan corporations and the extent to which your concerns are based on safety and soundness consideration?

Second, could you provide commentary as to the deficiencies in the current regulation, if any, of industrial loan corporations that lead you to these concerns, if you have them?

Chairman GREENSPAN. Mr. Chairman, my major concern is the fact that under Gramm-Leach-Bliley, we significantly increased the powers of our financial system, and in very important ways, in my judgment. But with the advent of these increased powers and the new technologies and products—for example, derivatives, as I mentioned before—we have a whole new array of types of regulatory issues which confront us.

I believe, as I have stated previously, that in the future it is going to be impossible to distinguish between commerce and banking, and ultimately we are going to be in a position where we are not going to try to make that distinction.

But, it is important, in my judgment, to move in that direction in a calibrated way and to understand first what the consequences from a regulatory point of view have been as a consequence of the significant changes that have occurred in regulation in the last decade. It is not only Gramm-Leach-Bliley. It is a whole series of other regulatory changes.

If we eventually get to the point where we fully understand and are comfortable with the issue that we have imposed a new set of regulations on the system, then I think we can start to think about the issue of moving further. However, I do not believe we are there at this point.

My concern is that the vehicle of the industrial loan company, as it is being currently constituted and expanded under existing proposals, will, for all practical purposes, create an institution which will be very attractive for commercial enterprises, irrespective of their size, and will have a functioning commercial bank with Federal deposit insurance, and that will effectively create a melding of commerce and banking inadvertently—if I may put it that way, because that is not the purpose, obviously, of this—

Chairman SHELBY. But we are not there yet, are we?

Chairman GREENSPAN. We are not there yet, but I would suggest that it is very important, before we move to effectively convert industrial loan corporations into commercial banks without over-riding supervision, that the issue of whether we wish to move more broadly in this direction come before this Committee and your counterparts in House Financial Services, because there is a very major policy question here which, in my judgment, is not being addressed. And I think prior to moving forward and changing the structure, as indeed it will change under certain proposed legislation, it is important that the Congress come to a policy conclusion of a much broader dimension.

Chairman SHELBY. Mr. Chairman, tomorrow this Committee will hold a hearing focused on the oversight of Government-sponsored enterprises with an eye toward the accounting issues that have recently surfaced at Freddie Mac. Some people have criticized OFHEO, the regulator, noting that it lacks many of the powers that the bank regulatory agencies possess.

Without getting into this morning who the GSE regulator should be or where the regulator should be situated, what additional authorities, if any, in your judgment, should the GSE regulator have?

Chairman GREENSPAN. It is difficult to say because I think the broader issue, as I have indicated in public testimony previously, is the question of the subsidy which the financial markets grant to the GSE's on the presumption that they will be bailed out in the event of difficulty by the Federal Government.

Their debentures, as they point out quite correctly, are not guaranteed by the full faith and credit of the United States, and there is no statute under which there is effectively a Government guarantee or subsidy issue.

Chairman SHELBY. It is all perception, isn't it?

Chairman GREENSPAN. There is a strong perception, and I do think that, in considering the issue of where the focal point of supervision and regulation is, it be in the context of understanding

how that particular subsidy impacts on the financial structure of those institutions and the various markets they are involved in.

As I have said previously, these are very well-run companies, leaving aside the most recent problems with regard to accounting, and it is not an issue of them having, for example, techniques in derivative employment that are not the very finest in risk management. They do very well in that regard.

The problem has to do with a much broader question, and I think what you need is a regulatory supervisor which has the capability of viewing the GSE's in total, not only Fannie and Freddie, but also I will include the Federal Home Loan Banks in this as well. You need to construct a regulator which has the reach to fully grasp the very major questions which were involved in these now very important institutions in our financial system.

Chairman SHELBY. They would need the reach and the depth, wouldn't they, to get into real regulation?

Chairman GREENSPAN. It is going to be an interesting transition, I believe.

Chairman SHELBY. Senator Sarbanes.

Senator SARBANES. Thank you, Mr. Chairman. I will be very quick. I have just a few points on this second round.

First of all, Chairman Greenspan, I have to say I think we are being much too sanguine about this trade deficit and foreign indebtedness. As recently as 1982, just over 20 years ago, we had a net asset position worth 7 percent of our GDP. Our liabilities to foreigners now exceed our assets abroad by \$2.6 trillion, equal to 25 percent of the GDP. We ran a current account deficit in the first quarter of \$544 billion, a record 5.1 percent of GDP. That deficit that is financed by more foreign borrowing will raise our indebtedness another 3 to 4 percent, depending on the growth of GDP. Japan bought more than \$40 billion in dollar assets in the month of May alone. And the governments of China, Korea, and Taiwan have been actively intervening to keep their currencies low relative to a market-determined price for their currencies.

We are becoming increasingly dependent on the kindness of strangers and, in particular, on foreign government lenders. In fact, the Fed pointed out in its report, "The U.S. current account deficit continued to be financed in large part by private flows into U.S. bonds and by foreign official inflows. Private foreign purchases of U.S. securities, which slowed in the latter part of 2002, stepped down a bit more in the first quarter of 2003. In contrast, inflows into the United States from official sources, which surged in 2002, picked up further in the first half of 2003."

I mean, we are obviously, it seems to me, being taken advantage of in the international marketplace because others are not playing by the rules of international trade, and it is working very much to their advantage, and we continue to get deeper and deeper into the hole. And it seems to me we need to move this up on the priority list of our concerns, and certainly that is one of the matters we will focus on when Secretary Snow comes.

I do not really have a question. I just want to put that to you and hope you will take it under advisement in terms of the need to really start thinking seriously about this issue. Otherwise, one

of these days things may just snap, and we will find ourselves in a difficult situation.

Let me ask you, just as kind of an aside: Do you think that the responsibilities of the presidents of the Federal Reserve branch banks are equal to or perhaps greater than the responsibilities of the presidents of Federal Home Loan Banks?

Chairman GREENSPAN. I would certainly think so. At least it is my judgment. I am sure that they have a different view. I mean the Federal Home Loan Bank presidents.

Senator SARBANES. I am not putting a question—I mean, that is the question I want to ask. Mr. Chairman, Chairman Shelby, I just want to note for the record this is not the hearing to explore that, but these salaries and compensation of the presidents of the Federal Home Loan Banks are going through the roof. In most instances, they have doubled or tripled over the last 3 years. They far exceed, again, by a factor of 2 to 3 times, what Federal Reserve branch bank presidents are making. They are now up counting their other benefits in excess of \$1 million in some of these Federal Home Loan Banks. It is a bonanza.

Now, you know, we need to address that when we have the Federal Home Loan Bank people here.

Chairman SHELBY. Proper hearing, absolutely.

Senator SARBANES. But I have been looking at some of these figures, and they just leap off the page at you in terms of what is taking place.

Now, Chairman Greenspan, you said in your statement, “The Federal Reserve has been studying how to provide policy stimulus should our primary tool of adjusting the target Federal funds rate no longer be available. Indeed, the FOMC devoted considerable attention to this subject at its June meeting.”

I think the Fed has done a good job in increasing transparency in recent years, and I think that is a very important contribution to enabling people to know where the Fed is going with respect to its policy.

If you have to shift off the Federal funds rate, what will you go to in terms of assuring transparency out there for the public? How will you signal policy for longer-term rates? Would you choose a specific maturity, or set some sort of time frame? You know, your policy has been widely acclaimed on transparency, but if you shift the focus, how will you do that?

Chairman GREENSPAN. There are a large number of variations, any one of which could be usable. Remember, the major issue that we are confronted with is expanding the balance sheet of the Federal Reserve in total.

Now what that means is we, as I indicated previously, could move out on the maturity schedule and buy longer-term bonds. There has been a big discussion of whether you try to peg the rates or not peg the rates.

Remember, we did peg the rates from 1942 to 1951. That was a wholly different world, of course, and markets were different. But we have examined a number of different issues and, needless to say, discarded a large number of them as impractical or inappropriate. But all I can say to you is that, for what we would have to do in the remote event that those conditions arose, it is not that

we have inadequate choices. We have more than we need. And we would then have to choose amongst them. Because we can create what we need to create in any of a number of different ways—

Senator SARBANES. Yes, but the thrust of my question is not whether you have these tools, but whether you will depart from, I think, the welcome trend toward greater transparency in the Fed's decisionmaking and go to a more opaque approach so that people perceive—

Chairman GREENSPAN. No, no. Remember, Senator, we publish our balance sheets every week, and it is in sufficient detail to be able to very quickly understand exactly what it is the 12 operating central banks are doing.

Chairman SHELBY. Senator Bennett—

Chairman GREENSPAN. I will say to you that if we do things which are somewhat different, we will alter our reporting in a manner to make clear what it is we are doing.

Senator SARBANES. Will your policy statement make this clear? Or will we have to get a whole new breed of Fed watchers or—

Chairman GREENSPAN. No, if we go in this direction—I just want to emphasize this is a remote contingency. It will be clear what we are doing, and there will be no purpose in being obscure or unclear. It will not serve the purposes of monetary policy to do that.

Senator SARBANES. Thank you.

Chairman SHELBY. Senator Bennett.

Senator BENNETT. Thank you, Mr. Chairman.

Chairman Greenspan, listening to this whole conversation this morning, first, I share your sense of optimism about the economy near term. I think we are rebounding. We are coming back. And as we come back, Federal revenues as a percent of GDP will go up, and we will see, as we always see, revisions in the projections as to what the deficit or the surplus will be. I have said before and repeat here, the only thing I know about the figures we are seeing for the future is that they are wrong. I do not know whether they are too high or too low, but I know that they are wrong.

Chairman GREENSPAN. I think that is a sound judgment, Senator Bennett.

Senator BENNETT. Okay. Now, I would like to go where some of the conversation here has gone, which is beyond the near term, beyond this recovery and how long will it take and how good will it be, on into those dreaded years of 2012 and beyond. And I think we have a model—imperfect, of course, but a model of what might very well happen to us as we look at contemporary Germany.

In Germany, if they had an unemployment rate of 6.4 percent right now, they would rejoice and think that was absolutely wonderful. If they had a deficit at our percentage of GDP, they would rejoice. If they had a national debt at our percent of GDP, they would rejoice.

They have over the years built into their entire culture a welfare state mentality of the things that they will take care of and the things that they will fund, and now they are hitting the demographic wall that we are facing, much more rapidly than we. And because they do not have the level of immigration that we do, it is going to be far worse. That is, the overall population is shrinking; ours will continue to grow. Even in the face of the retiring

baby boomers, we will still continue to have new workers coming into the country by virtue of immigration, and our population will grow. Their people are stagnant, if not, in fact, scheduled to shrink. And they are faced with the systematic dismantling of many of the social services that they have built into their culture over the previous decades.

We have held hearings in the Joint Economic Committee about medical costs, and there is a perverse and counterintuitive circumstance going on in that the more technology we bring into health care, the more it costs. This is exactly different from the way things work in other parts of the economy. The more technology you apply, the lower the cost becomes. And as we have tried to pursue why we have the opposite trend in health care, it is because you keep people alive longer. If you were aimed at cost control only, you would let them die and thereby save the cost of their medical care in their later years. But we get technology coming along that solves some of the health care problems, keeps them alive longer, but in terms of the impact on Medicare, raises the overall cost. So the more technological innovation we have and the more breakthroughs we have, from an economic point of view the more expensive Medicare is going to get.

Can we look at Germany and some of the other countries that are seeing this demographic impact more rapidly than we see it, that is, it is coming 10 years or 15 years before it will hit us, and learn anything, or do we just look at them and say: Gee, there is where we will be and we have no choice but to start to lower benefits and dismantle services later on if we are going to afford it?

Chairman GREENSPAN. Senator, I certainly hope that we can learn. Indeed, I think the Germans are learning from us in the sense that they are aware that their labor market, which has become exceptionally rigid, has been a major factor in the sluggish growth in their country, and they are endeavoring to change it, and the model they are moving toward, not fully but at least in the direction, is the one that we have, which does work in a remarkably flexible way, at least certainly considering all others.

I think we learn from each other and I do agree that it is an unusual phenomenon of watching an economy essentially decline as population declines, even though standards of living per capita can be rising, the aggregate economy can be declining. That will change the structure of how production is organized, and it has a very major impact obviously on the relationship of retirees to workers, especially, as you point out, if the medical technology increases life expectancy.

We are all going to be learning from each other, but you are quite correct in saying that Germany, Italy, Japan, specifically, and maybe Europe in general, are clearly well ahead of us in that regard, and so we will be observing what can happen to an economy in which population is stable or declining, and while that is not on the horizon directly for the United States, remember, our fertility rates are higher than theirs. I notice we had a surprisingly low birth rate the last year, but our fertility rates generally have been up at least to replacement levels, and immigration has increased the population. So, we are not confronting the same problems they do, but the underlying pressures are there and it is important that

we recognize the implications of what it means to have an increasing retirement-to-working age population even if your population in itself is not slowing.

Senator BENNETT. That is my point. Their situation is worse than ours, but the underlying pressures are basically the same.

Chairman GREENSPAN. Indeed they are.

Senator BENNETT. Thank you.

Chairman SHELBY. Senator Corzine.

Senator CORZINE. Thank you, Mr. Chairman.

I appreciate this wide-ranging discussion and find it highly informative, and I am going to say all the positive things and then come back to an overview.

Chairman GREENSPAN. Mr. Chairman, may I have a 5-minute break at this moment?

Chairman SHELBY. You can. The Committee will stand in recess. [Recess.]

Chairman SHELBY. The Committee will come to order.

Senator Corzine.

Senator CORZINE. Thank you. I knew my questions were going to scare him to death.

Chairman SHELBY. I do not believe that now.

Senator CORZINE. I do not either.

[Laughter.]

As I was beginning, Mr. Chairman, I want to preface what I say by saying I have great respect for you and all you have done, and the Federal Reserve as an institution, which I think is terrific. I have listened both to recaps of yesterday's hearing and today's hearing, and frankly, one individual. I do not come away as sanguine as I think the tone of the discussion has been.

My colleagues have talked about the straight deficit and its translation into the loss of manufacturing jobs, which there was a response yesterday that did not seem as serious to me as it is in the lives of the people that I see in New Jersey. Federal budget deficits, a \$4 trillion negative cash swing in 2½ years by projections, is by anybody's standards an incredible change in fiscal circumstances. The demographic problem that we know we face. Our State and local governments, we see \$100 billion, give or take a little bit, at the State level in the fiscal time frame. It is much larger at the State level. Property taxes are going up to offset in many places all of the Federal tax cuts we have had. There is 8 out of 9 quarters we have under this Administration, we have seen a decline in business investment by the GDP numbers, not a long-run formulation for a long-term increase in productivity, even though I understand we are in a conceptual economy as opposed to a physical economy, accept that. But it is not a statement of confidence if nothing else. And the job deficit is real. We have used the headline, used the 21 weeks of initial claims, and set aside the seasonal adjustment issues. These are real problems. The unemployment rate for African-Americans has gone up 3½ percent while for white Americans it is 1.7. We are up at something like 11.5 percent. Minorities are suffering a disproportionate burden, and as I think Senator Sarbanes indicated in his first question, that there have been projection errors, not only by the Federal Reserve but also by

private sector and a broad set of economists. We have not really changed the policy mix.

I am going to read a quote from Mr. Rosenberg from a firm that I know well, but did not work at one that I worked with. "This is the third round of Bush tax cuts, the thirteenth round of Fed rate relief and about the sixth mortgage refinancing wave so far this cycle," Mr. Rosenberg from Merrill Lynch said in a report commenting on the latest rate cut. "And what do we have to show for it except an economy struggling at a 1 or 2 percent rate."

Now maybe that is changing, but I do not understand what is different in the policy mix we have today versus what we had 2½ years ago, a year and a half ago, and now, that gives us so great a confidence that this is all going to work as well as everybody projects it is, and I could not agree more, that the one thing that is for certain, projections are likely not to be met. We do not know whether they are going to be under or over, but we seem sanguine about a state of occurrence in our economy where there is real job loss, it is making a real difference, the income distribution is more than likely widening, given the kinds of nature of where tax cuts and job cuts and manufacturing are going in this country. I am troubled more than what the tone of the discussion is about.

Chairman GREENSPAN. I think the best way to confront the issue is that there is a good deal more to how an economy evolves than what policy is. Policy is at the margins of what an economy is doing. I think that we have to go back to how the economy evolved subsequent to the big stock market break, the sharp decline in capital investment, and indeed the shocks to our economy that occurred subsequent to that.

I have testified on numerous occasions that in spite of those, we have hung in there. The economy has not grown particularly, but it has not receded. This is a very unusual cycle, and as you well know, the recession has been very shallow, and as a consequence of that, you cannot have a kickback from a nonsignificant recession. There is no bounce in the structure of the economy.

What strikes me about the degree of flexibility which is broad, is it has been able to absorb a very surprisingly large number of the types of shocks that in my historical experience would have created real serious problems to this economy, and they did not. What it did do, however, is it took all of the buoyancy out of the economy. That is, rather than have significant negative GDP numbers, what we have had is absorbing a whole series of negative forces and essentially stand still, so to speak, or grow very gradually. That is far superior in my judgment.

Senator CORZINE. I would say though we have had 13 rate cuts and something that is approaching, depending on how you count the numbers, \$1.8 to \$3 trillion in tax cuts. I mean these are not light stimulants to an economy.

Chairman GREENSPAN. No. And I would go further. I would say that it has required all of this to essentially be able to come off a very substantial collapse of a bubble and yet have an economy which is at least gradually growing, which it has been. And one has to presume that if that is the correct analysis of what it is we are observing, at some point we absorb the full negative shocks and the underlying flexibility shows through.

Now, I am fully aware of the fact that out there everybody's forecasts, including those of your old firm and all of its competitors, have fairly significant acceleration in the current quarter and in the fourth quarter, and the reason is they all have the standard basic models which we all employed to forecast the economy, and the general presumption is, if even a modest part of the big tax cut is spent in retail, the GDP will go up. That is what is causing these forecasts to be what they are.

I try to indicate within the context of my prepared remarks that there is a distinction between what is occurring and what the forecasts are. Now the data that had been coming in are not inconsistent with this economy picking up. I do not know whether they can meet the particular forecasts of some of the forecasters, but we are seeing gradual changes, all which are consistent with that process happening. Are we far along in that process? We are not. We first had to stop eroding, because remember, in April and May this economy was weakened, or I should say more exactly in March and April. May stabilized, and as best we can judge, June has come back a bit. The crucial issue is going to be whether, in fact, capital investment comes back because that is the key link to this system, and right at the moment it is a forecast, and we will be watching it very closely. If it fails to materialize we will continue to be going up and going down, but not carrying through in a way which one would call a vibrant economy. I happen to be optimistic about how this process is going, but I must tell you I do recognize the difference between economic reality and a forecast, and all I will say to you is that we are not quite up to where we are getting clear indications that the forecast is coming up, but we are moving in that direction. Statistic by statistic tends to be coming in somewhat better than we expect, and that is usually a sign that things are changing.

Senator CORZINE. Thank you.

Chairman SHELBY. Senator Schumer.

Senator SCHUMER. Thank you.

I want to thank you for staying and answering these questions. It is a great discussion. I just want to go back to the yuan for a minute. My staff, who is usually right, although not infallible, says that while Secretary Snow has talked in general about floating rates, he has never specifically and publicly talked about devaluing the yuan, and it just seems to me that China should be stepping up to the plate here, and we should not wait until they can no longer buy any United States Treasuries and then let it unravel at that point in time.

Chairman GREENSPAN. Senator, unless I am mistaken, the Secretary did raise the issue enough so that the Chinese officially said it was false. Now if they did not, my memory may be faulty in this regard, but I suggest that—

Senator SCHUMER. Do you not think a little more of this would be helpful? I mean, here is something that is not against free trade principles. In fact, the fixed income rate probably is. We have a huge problem with China. That is going to be a problem because of discombobulations of the economy, no matter what the yuan is pegged at, but it is artificially low, and it is being kept that way by the Chinese for their own advantage.

Chairman GREENSPAN. You know, a number of trading partners with China have raised this issue. I think the question is whether or not public discussion moves the ball further down the road than private discussion.

Senator SCHUMER. Right. You have now answered my question. I appreciate it. Next question I have is, just related to your last interchange with Senator Corzine. It is a very interesting perspective. I think it helps us understand things, and that is that with all this stimulus and which is very significant. I cannot remember interest rates being low and taxes being cut as much in my lifetime as now. You needed this to shield the economy or at least temper, cushion the economy from the bubble bursting and all the effects there, not only stock market but also I guess over investment in certain sectors as well. It would seem to me that if you are right and we have overcome these bumps, then something we have not worried about in a long time, which is the dangers of inflation, might rear its head back. It just strikes me as, you know, your assurance yesterday that interest rates are going to stay low for a long period of time, do not quite fit into the puzzle of dramatic stimulus of the economy, shocks that obviously should be receding as we move on in time from them, we are 2 years and 3 years away rather than 1 year. Could you comment on that?

Chairman GREENSPAN. Certainly. It is our judgment that the extent of the downward pressures on the price level that are coming not only from the aftermath of the bubble, but also increasing globalization are significantly greater than the inflationary forces that are emerging in various different areas of the world economy. Remember, it is not only the United States who has had a significant reduction in the inflation rate, but also it is pretty much around the world, including a number of emerging countries whose problems were chronic inflation of a most destabilizing form. This is a world phenomenon, and in that sense it is larger than the United States as such. It has been the conclusion of the Federal Reserve that while we obviously over the years have been extraordinarily sensitive to the issue of inflation, and indeed our policies were fundamentally to get to price stability, we have recognized that the world has changed in a way which requires us to alter our policy mix, but I do not deny that some time down the road, that the situation will turn again, and I trust we will have a very long lead time to anticipate that.

Senator SCHUMER. One final question, Mr. Chairman. There has been a recent discussion between two of my fellow New Yorkers, your colleague and a man I supported for the SEC, Mr. Donaldson, our New York Attorney General in the last while, about—and I have not made up my mind on this one, so I would like your guidance—basically on whether legislation in Congress or some attempt to say that State regulators, they can prosecute wrongdoers under their local security laws but not sort of set agreements, change the basic tableau, that that ought to stay national. And obviously, the Donaldson argument is this is a national function, we have national markets and to have 50 regulators go willy-nilly creates a nearly impossible situation. Spitzer's counter argument is we had that, and when you have one regulator, the chance of that regu-

lator being asleep at the switch is greater than if you had 50, and he did a good job stepping into this.

Would you comment, if not on the specific legislation that is approaching, if you want to do that, great, but on the general conflict between those two ideas?

Chairman GREENSPAN. I think the argument that you have national markets and you should have a single regulator is the correct position. If you are worried about a single regulator having problems, that is a legitimate concern. It does not follow that that is solved by having 50 additional regulators, but it does suggest that there needs to be oversight of all regulatory agencies. I think that it is important that the Federal Reserve has Congressional oversight. The oversight of the SEC is this Committee. And indeed, it is important that they have the authority to do what they need to do, but there is always the danger that monopoly regulators can begin to become very inefficient and very disturbing.

I, for example, have argued in the past that we should not have a single regulator for American banking because I am worried about monopoly regulation. But the answer is not an indefinite proliferation of alternate regulators.

Senator SCHUMER. So, you would be sympathetic to the legislation the House just passed?

Chairman GREENSPAN. I am.

Senator SCHUMER. Thank you, Mr. Chairman.

Chairman SHELBY. Mr. Chairman, we appreciate your staying with us all morning and into the early afternoon. We appreciate always your appearance here and your insightful views. Thank you.

Chairman GREENSPAN. Thank you, Mr. Chairman.

Chairman SHELBY. The hearing is adjourned.

[Whereupon, at 12:55 p.m., the hearing was adjourned.]

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

PREPARED STATEMENT OF SENATOR MICHAEL B. ENZI

The U.S. economy is still the greatest economy in the world. However, there are certain issues that we need to address to ensure that we retain that position. If I had to pick the one single issue that has the greatest impact on the financial affairs of Wyoming, and the rest of our Nation for that matter, I would have choose the state of our Nation's energy development. Every sector of our economy relies on some form of technology that, in turn, relies on electricity and/or fossil fuels to function. Our economy is literally driven, therefore, by our ability to develop and maintain a steady, constant energy supply.

Wyoming's role in this situation is much like the position held by the colonies during America's first years of European settlement. We provide the raw materials, or in other words the feedstock, that makes the rest of our Nation's energy economy function. If my home county, Campbell County, Wyoming, were its own country we would be the third largest coal producing Nation in the world. One-third of our Nation's coal is produced in this one county alone. We also produce more uranium annually than the rest of the Nation combined and have the greatest potential for natural gas development in the entire continental United States. In short, we have what the rest of the Nation needs to keep its technology fueled and running.

Unfortunately, however, most of that energy is now stranded in Wyoming and is inaccessible to the parts of the country that need it. Our natural gas development is being slowed down by the inability to get the gas out of the State. Our electricity runs into bottlenecks where the power lines outside the State do not have enough capacity to carry what we can generate and our coal is being hit with the threat of new regulations and bureaucratic limitations that could eventually slow down exploration and development. All of these limitations are having an effect on the rest of the economy.

I understand Chairman Greenspan has already visited the Hill on a number of occasions and has testified on this issue. I look forward to any additional insights he might offer on how we can bolster our economy by increasing energy stability, and I hope he could address what future role Wyoming can play in meeting our energy demands.

In addition to the importance of natural gas prices on our Nation's economy, we also must ensure that we have a favorable business climate to encourage the creation and growth of our small businesses. For many industries, small businesses represent more than 97 percent of the number of businesses in the industries and the vast majority of them are critically reliant upon access to credit from our financial institutions.

Recently, the Office of Advocacy of the Small Business Administration released an independently conducted study that showed that small businesses are disproportionately affected by a tight Federal monetary policy. Specifically, the study showed that the vital link between small businesses and small community banks can be worsened when community banks have difficulty adjusting to tighter monetary policies and to adverse banking developments and lending conditions. The study also found that community bank capital was capable of stimulating employment about three times compared to large bank capital. While the study cited the importance of SBA loan programs to stabilize lending to small business in tight monetary policy times, I believe that it is more important to keep in mind the effects on small business as the Federal monetary policy is being developed.

Another critical issue for small businesses and our economy is the state of our initial public offering (IPO) market. Recently, news articles cited statistics that China has gained the crown for the IPO market and that Singapore has the fastest growing IPO market. In the first 6 months of this year, each of those countries had more IPO's than the U.S. markets. Last year, Congress took great pains to pass the Sarbanes-Oxley Act to help restore investor confidence in our financial markets, however, it is clear that the IPO market has failed to materialize. I am very concerned that our overall business climate may not be sufficient to encourage the creation and growth of our small businesses.

In addition, recent news articles cite that many of our high-technology jobs may be heading overseas. The combination of the loss of high-technology jobs and of the rise in the overseas IPO markets, is troublesome at best. I would like to hear Chairman Greenspan's perspective on how we can remedy this situation.

Mr. Chairman, thank you again for holding this hearing. I look forward to hearing from Chairman Greenspan.

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

JULY 16, 2003

Mr. Chairman and Members of the Committee, I am pleased to present the Federal Reserve's Semi-Annual Monetary Policy Report to the Congress. When in late April I last reviewed the economic outlook before this Committee, full-scale military operations in Iraq had concluded, and there were signs that some of the impediments to brisker growth in economic activity in the months leading up to the conflict were beginning to lift. Many, though by no means all, of the economic uncertainties stemming from the situation in Iraq had been resolved, and that reduction in uncertainty had left an imprint on a broad range of indicators.

Stock prices had risen, risk spreads on corporate bonds had narrowed, oil prices had dropped sharply, and measures of consumer sentiment appeared to be on the mend. But, as I noted in April, hard data indicating that these favorable developments were quickening the pace of spending and production were not yet in evidence, and it was likely that the extent of the underlying vigor of the economy would become apparent only gradually.

In the months since, some of the residual war-related uncertainties have abated further and financial conditions have turned decidedly more accommodative, supported, in part, by the Federal Reserve's commitment to foster sustainable growth and to guard against a substantial further disinflation. Yields across maturities and risk classes have posted marked declines, which together with improved profits boosted stock prices and household wealth. If the past is any guide, these domestic financial developments, apart from the heavy dose of fiscal stimulus now in train, should bolster economic activity over coming quarters.

To be sure, industrial production does appear to have stabilized in recent weeks after months of declines. Consumer spending has held up reasonably well, and activity in housing markets continues strong. But incoming data on employment and aggregate output remain mixed. A pervasive sense of caution reflecting, in part, the aftermath of corporate governance scandals appears to have left businesses focused on strengthening their balance sheets and, to date, reluctant to ramp up significantly their hiring and spending. Continued global uncertainties and economic weakness abroad, particularly among some of our major trading partners, also have extended the ongoing softness in the demand for U.S. goods and services.

When the Federal Open Market Committee (FOMC) met last month, with the economy not yet showing convincing signs of a sustained pickup in growth, and against the backdrop of our concerns about the implications of a possible substantial decline in inflation, we elected to ease policy another quarter-point. The FOMC stands prepared to maintain a highly accommodative stance of policy for as long as needed to promote satisfactory economic performance. In the judgment of the Committee, policy accommodation aimed at raising the growth of output, boosting the utilization of resources, and warding off unwelcome disinflation can be maintained for a considerable period without ultimately stoking inflationary pressures.

* * *

The prospects for a resumption of strong economic growth have been enhanced by steps taken in the private sector over the past couple of years to restructure and strengthen balance sheets. These changes, assisted by improved prices in asset markets, have left households and businesses better positioned than they were earlier to boost outlays as their wariness about the economic environment abates.

Nowhere has this process of balance sheet adjustment been more evident than in the household sector. On the asset side of the balance sheet, the decline in longer-term interest rates and diminished perceptions of credit risk in recent months have provided a substantial lift to the market value of nearly all major categories of household assets. Most notably, historically low mortgage interest rates have helped to propel a solid advance in the value of the owner-occupied housing stock. And the lowered rate at which investors discount future business earnings has contributed to the substantial appreciation in broad equity price indexes this year, reversing a portion of their previous declines.

In addition, reflecting growing confidence, households have been shifting the composition of their portfolios in favor of riskier assets. In recent months, equity mutual funds attracted sizable inflows following the redemptions recorded over much of the last year. Moreover, strong inflows to corporate bond funds, particularly those specializing in speculative-grade securities, have provided further evidence of a renewed appetite for risk-taking among retail investors.

On the liability side of the balance sheet, despite the significant increase in debt encouraged by higher asset values, lower interest rates have facilitated a restructuring of existing debt. Households have taken advantage of new lows in mortgage interest rates to refinance debt on more favorable terms, to lengthen debt maturity, and, in many cases, to extract equity from their homes to pay down other higher-cost debt. Debt service burdens, accordingly, have declined.

Overall, during the first half of 2003, the net worth of households is estimated to have risen 4½ percent—somewhat faster than the rise in nominal disposable personal income. Only 15 percent of that increase in wealth represented the accumulated personal saving of households. Additions to net worth have largely reflected capital gains both from financial investments and from home price appreciation. Net additions to home equity, despite very large extractions, remained positive in the first half.

Significant balance-sheet restructuring in an environment of low interest rates has gone far beyond that experienced in the past. In large measure, this reflects changes in technology and mortgage markets that have dramatically transformed accumulated home equity from a very illiquid asset into one that is now an integral part of households' ongoing balance-sheet management and spending decisions. This enhanced capacity doubtless added significant support to consumer markets during the past 3 years as numerous shocks—a stock price fall, September 11, and the Iraq war—pummeled consumer sentiment.

Households have been able to extract home equity by drawing on home equity loan lines, by realizing capital gains through the sale of existing homes, and by extracting cash as part of the refinancing of existing mortgages, so-called cash-outs. Although all three of these vehicles have been employed extensively by homeowners in recent years, home turnover has accounted for most equity extraction.

Since originations to purchase existing homes tend to be roughly twice as large as repayments of the remaining balances on outstanding mortgages of home sellers, the very high levels of existing home turnover have resulted in substantial equity extraction, largely realized capital gains. Indeed, of the estimated net increase of \$1.1 trillion in home mortgage debt during the past year and a half, approximately half resulted from existing home turnover.

The huge wave of refinancings this year and last has been impressive. Owing chiefly to the decline in mortgage rates to their lowest levels in more than three decades, estimated mortgage refinancings net of cash-outs last year rose to a record high of more than \$1.6 trillion. With mortgage rates declining further in recent months, the pace of refinancing surged even higher over the first half of this year. Cash-outs also increased, but at a slowed pace. Net of duplicate refinancings, approximately half of the dollar value of outstanding regular mortgages has been refinanced during the past year and a half. Moreover, applications to refinance existing mortgages jumped to record levels last month. Given that refinance applications lead originations by about 5 weeks and that current mortgage rates remain significantly below those on existing mortgages, refinance originations likely will remain at an elevated level well into the current quarter.

We expect both equity extraction and lower debt service to continue to provide support for household spending in the period ahead, though the strength of this support is likely to diminish over time. In recent quarters, low mortgage rates have carried new home sales and construction to elevated levels. Sales of new single-family homes through the first 5 months of this year are well ahead of last year's record pace. And declines in financing rates on new auto loans to the lowest levels in many years have spurred purchases of new motor vehicles.

* * *

In addition to balance sheet improvements, the recently passed tax legislation will provide a considerable lift to disposable incomes of households in the second half of the year, even after accounting for some State and local offsets. At this point, most firms have likely implemented the lower withholding schedules that have been released by the Treasury, and advance rebates of child tax credits are being mailed beginning later this month. The Joint Committee on Taxation estimates that these and other tax changes should increase households' cashflow in the third quarter by \$35 billion. Most mainstream economic models predict that such tax-induced increases in disposable income should produce a prompt and appreciable pickup in consumer spending. Moreover, most models would also project positive follow-on effects on capital spending. The evolution of spending over the next few months may provide an important test of the extent to which this traditional view of expansionary fiscal policy holds in the current environment.

Much like households, businesses have taken advantage of low interest rates to shore up their balance sheets. Most notably, firms have issued long-term debt and employed the proceeds to pay down commercial paper, bank loans, and other short-term debt. Although rates on commercial paper and bank loans are well below yields on new long-term bonds, firms have evidently judged that now is an opportune time to lock in long-term funding and avoid the liquidity risks that can be associated with heavy reliance on short-term funding. At the same time, the average coupon on outstanding corporate bonds remains considerably above rates on new debt issues, suggesting that firms are well positioned to cut their debt service burdens still further as outstanding bonds mature or are called. The net effect of these trends to date has been a decline in the ratio of business interest payments to net cashflow, a significant increase in the average maturity of liabilities, and a rise in the ratio of current assets to current liabilities.

With business balance sheets having been strengthened and with investors notably more receptive to risk, the overall climate in credit markets has become more hospitable in recent months. Specifically, improvements in forward-looking measures of default risk, a decline in actual defaults, and a moderation in the pace of debt-rating downgrades have prompted a marked narrowing of credit spreads and credit default swap premiums. That change in sentiment has extended even to the speculative-grade bond market, where issuance has revived considerably, even by lower-tier issuers that would have been hard-pressed to tap the capital markets over much of the last few years. Banks, for their part, remain well-capitalized and willing lenders.

In the past, such reductions in private yields and in the cost of capital faced by firms have been associated with rising capital spending. But, as yet there is little evidence that the more accommodative financial environment has materially improved the willingness of top executives to increase capital investment. Corporate executives and boards of directors are seemingly unclear, in the wake of the recent intense focus on corporate behavior, about how an increase in risk-taking on their part would be viewed by shareholders and regulators.

As a result, business leaders have been quite circumspect about embarking on major new investment projects. Moreover, still-ample capacity in some sectors and lingering uncertainty about the strength of prospective final sales have added to the reluctance to expand capital outlays. But should firms begin to perceive that the pickup in demand is durable, they doubtless would be more inclined to increase hiring and production, replenish depleted inventories, and bring new capital online. These actions in turn would tend to further boost incomes and output.

Tentative signs suggest that this favorable dynamic may be beginning to take hold. Industrial production, as I indicated earlier, seems to have stabilized, and various regional and national business surveys point to a recent firming in new orders. Indeed, the backlog of unfilled orders for nondefense capital goods, excluding aircraft, increased, on net, over the first 5 months of this year. Investment in structures, however, continues to weaken.

The outlook for business profits is, of course, a key factor that will help determine whether the stirrings we currently observe in new orders presage a sustained pickup in production and new capital spending. Investors' outlook for near-term earnings has seemed a little brighter of late.

The favorable productivity trend of recent years, if continued, would certainly bode well for future profitability. Output per hour in the nonfarm business sector increased 2½ percent over the year ending in the first quarter. It has been unusual that firms have been able to achieve consistently strong gains in productivity when the overall performance of the economy has been so lackluster. To some extent, companies under pressure to cut costs in an environment of still-tepid sales growth and an uncertain economic outlook might be expected to search aggressively for ways to employ resources more efficiently. That they have succeeded, in general, over a number of quarters suggests that a prior accumulation of inefficiencies was available to be eliminated. One potential source is that from 1995 to 2000 heavy emphasis on new and expanding markets likely diverted corporate management from tight cost controls whose payoffs doubtless seemed small relative to big-picture expansion.

However, one consequence of these improvements in efficiency has been an ability of many businesses to pare existing workforces and still meet increases in demand. Indeed, with the growth of real output below that of labor productivity for much of the period since 2000, aggregate hours and employment have fallen, and the unemployment rate rose last month to 6.4 percent of the civilian labor force.

* * *

Although forward-looking indicators are mostly positive, downside risks to the business outlook are also apparent, including the partial rebound in energy costs and some recent signs that aggregate demand may be flagging among some of our important trading partners. Oil prices, after dropping sharply in March on news that the Iraqi oil fields had been secured, have climbed back above \$30 per barrel as market expectations for a quick return of Iraqi production appear to have been overly optimistic given the current security situation.

Also worrisome is the rise in natural gas prices. Natural gas accounts for a substantial portion of total unit energy costs of production among nonfinancial, non-energy-producing firms. And as I noted in testimony last week, futures markets anticipate that the current shortage in natural gas will persist well into the future. Although they project a near-term modest decline from highly elevated levels, contracts written for delivery in 2009 in excess of \$4.50 per million Btu are still at double the levels that had been contemplated when much of our existing gas-using capital stock was put in place.

The timing and extent of the pickup in economic activity in the United States will also depend on global developments. Lethargic growth among many of our important global trading partners is posing some downside risk to the U.S. economic outlook. As has been true for some time, Japan's economy remains in difficult straits, burdened by a weak banking sector and an ongoing deflation, although recent data have seemed somewhat less negative. Economic activity in many European countries—especially Germany—has been soft of late and has been accompanied by a decline in inflation to quite low levels. While Japan and Europe should benefit from global economic recovery, the near-term weakness remains a concern.

* * *

Inflation developments have been important in shaping the economic outlook and the stance of policy over the first half of the year. With the economy operating below its potential for much of the past 2 years and productivity growth proceeding apace, measures of core consumer prices have decelerated noticeably. Allowing for known measurement biases, these inflation indexes have been in a neighborhood that corresponds to effective price stability—a long-held goal assigned to the Federal Reserve by the Congress. But we can pause at this achievement only for a moment, mindful that we face new challenges in maintaining price stability, specifically to prevent inflation from falling too low.

This is one reason the FOMC has adopted a quite accommodative stance of policy. A very low inflation rate increases the risk that an adverse shock to the economy would be more difficult to counter effectively. Indeed, there is an especially pernicious, albeit remote, scenario in which inflation turns negative against a backdrop of weak aggregate demand, engendering a corrosive deflationary spiral.

Until recently, this topic was often regarded as an academic curiosity. Indeed, a decade ago, most economists would have dismissed the possibility that a government issuing a fiat currency would ever produce too little inflation. However, the recent record in Japan has reopened serious discussion of this issue. To be sure, there are credible arguments that the Japanese experience is idiosyncratic. But there are important lessons to be learned, and it is incumbent on a central bank to anticipate any contingency, however remote, if significant economic costs could be associated with that contingency.

The Federal Reserve has been studying how to provide policy stimulus should our primary tool of adjusting the target Federal funds rate no longer be available. Indeed, the FOMC devoted considerable attention to this subject at its June meeting, examining potentially feasible policy alternatives. However, given the now highly stimulative stance of monetary and fiscal policy and well-anchored inflation expectations, the Committee concluded that economic fundamentals are such that situations requiring special policy actions are most unlikely to arise. Furthermore, with the target funds rate at 1 percent, substantial further conventional easings could be implemented if the FOMC judged such policy actions warranted. Doubtless, some financial firms would experience difficulties in such an environment, but these intermediaries have exhibited considerable flexibility in the past to changing circumstances. More broadly, as I indicated earlier, the FOMC stands ready to maintain a highly accommodative stance of policy for as long as it takes to achieve a return to satisfactory economic performance.

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

Accuracy of Credit Reports

Q.1. The Banking Committee is currently considering whether to reauthorize the preemption provisions of the Fair Credit Reporting Act. An issue that has emerged from our hearings is the fundamental importance of the accuracy of the information contained in credit reports.

A.1. The information gathered by credit reporting companies on the borrowing and payment experiences of consumers is a cornerstone of the consumer credit system in this country. Experience indicates that the information assembled and provided by these companies enables our consumer credit and mortgage markets to function much more efficiently than would otherwise be possible. Moreover, automated credit evaluation systems based on that information have improved the overall quality and reduced the cost of credit decisions while expanding the availability of credit. These benefits of the credit reporting system are evident both from comparison with other countries that have less developed information sharing structures, and from statistical analyses demonstrating the usefulness of credit history information for predicting an individual's future performance with new credit.

Q.1.a. Would you agree that accurate reports are essential for the efficient operation of our economy considering the prevalence of their usage and the manner in which risk-based pricing calibrates credit risk to credit price?

A.1.a. Clearly, some minimum degree of accuracy of credit reports is required for such benefits to be realized. Moreover, the more accurate the information assembled by credit reporting companies, the greater the potential to enhance efficiency in the credit granting process, reducing costs to the advantage of both the consumers and creditors.

Although inaccuracy can limit the potential efficiency benefits from a well-developed credit reporting system as well as disadvantage individual consumers who have errors in their credit reports, there are limits to the degree of accuracy that can be obtained without undue costs. Some inadvertent errors inevitably will arise in a system comprising millions of account records and billions of transactions yearly. The fact of some degree of inaccuracy does not necessarily argue that the system is not functioning well, or for strong measures to make changes in the system. Ultimately, the question is the frequency with which errors in credit files actually lead to improper credit-granting decisions.

At present it appears that the system is functioning reasonably well and it is not obvious there are easy ways to improve accuracy substantially without also raising costs. It is always useful to keep in mind the importance of maintaining a system that serves its intended purposes without onerous requirements that inflate costs with only limited benefit.

More important, the FCRA itself has long contained a mechanism whereby consumers are able to review their credit reports without cost in the case of an adverse action based upon a credit

report. More recently, many consumers have availed themselves of opportunities provided by credit reporting companies to review their own reports as frequently as they desire at nominal cost. Over time, both mechanisms should continue to lead to improvements in the quality of information held by the credit reporting companies.

Q.1.b. Does the Federal reserve have any definitive statistics regarding the current level accuracy of credit reports?

A.1.b. The information the Federal Reserve has concerning the accuracy of credit reports was reported in the *Federal Reserve Bulletin* earlier this year. This information was based on a nationwide sample of credit records drawn as of June 1999, and as such may not be representative of the information currently in credit reporting files. These data supported an assessment of the degree to which credit files contain missing and “stale” (nonupdated) information, but did not permit an assessment of the degree to which wrong information is present in credit files. The Federal Reserve does not have any definitive statistics concerning the current level of accuracy of credit reports. A copy of the article in the *Federal Reserve Bulletin* is attached.*

Q.1.c. In light of the significance of this matter, do you believe there should be an effort to obtain information regarding the level of accuracy?

A.1.c. There has been little direct analysis of the degree of accuracy of credit reports; to the extent that studies have been done, they are limited in scope or lacking in statistical rigor. On the other hand, the credit reporting system is operating quite well at present, despite some degree of inaccuracy in credit reporting. It is not clear that the usefulness of an effort to obtain fuller information regarding the level of accuracy would justify the substantial costs such an effort would require.

Potential Weaknesses in the Housing Market

Q.2. The housing market continues to prosper with low interest rates spurring home purchases and refinancings. However, a recent report from the Harvard University Joint Center for Housing Studies cited two concerns. First, the growing number of loans to borrowers with weak credit histories. Second, the number of homeowners who have spent more than 50 percent of their incomes on housing has increased significantly. To the extent these borrowers are concentrated in particular markets or neighborhoods, any economic downturn could lead to an increasing number of late payments, and even foreclosures. Do you share these concerns and how significant are they?

A.2. Recent developments in mortgage markets have provided broader access to mortgage financing for borrowers with lower incomes and less-established credentials for borrowing. As you noted from the report from the Joint Center for Housing Studies, expanding the availability of mortgage credit entails some risks. However, the overall impact of this additional risk on the mortgage market

* Held in the Senate Banking Committee files or available at <http://www.federalreserve.gov/pubs/bulletin/2003/0203lead.pdf>.

and the economy as a whole is likely to be rather small. Data from the Federal Housing Finance Board indicate that the average loan-to-value ratio for mortgages excluding refinancings has decreased from a touch below 80 percent in the mid-1990's to an average of 73 percent so far this year. In addition, mortgages with loan-to-value ratios of 90 percent or more have declined from 27 percent of total mortgages in 1995 to less than 20 percent so far this year. Moreover, house prices generally have risen fairly rapidly in recent years, providing an equity cushion for many mortgagors.

Bank Capital and Credit Extension

Q.3. You mentioned in your testimony that the banks remain well capitalized. How does this compare to previous recessions? Did banks largely manage to avoid overextending credit during the 1990's expansion?

A.3. Bank capital ratios by virtually all measures (including equity relative to problem assets) are significantly higher now than in the prior economic cycle, that is, in the early 1990's. Moreover, 98.4 percent of all insured commercial banks meet the regulatory criteria to be considered "well capitalized," which is the highest percentage in more than a decade of calculating the statistic. As stated in my testimony, this depth and breadth of capitalization leaves banks well-positioned to support economic growth through sound lending.

It appears that banks have largely avoided the temptation to overextend credit in the more recent period. Increases in problem assets and credit losses over the past few years, while significant, have been modest relative to those seen in the last recession. Non-performing assets represent only about 5 percent of the capital and reserves in place to absorb them compared with more than 27 percent at the end of 1991. Indeed, despite somewhat elevated levels of nonaccrual loans, capital ratios have risen significantly during the recent cycle, reflecting both record industry earnings and continuing supervisory attention to capital adequacy. Early indications suggest that credit quality problems may have reached their peak in the fall of last year and have receded gradually since then.

Basel II Capital Accord

Q.4. On July 11, 2003, the banking regulators released proposed rules and guidance relating to the Basel II Capital Accord. It appeared from these releases that the bank regulators are not in total agreement about these standards. What is the process for resolving any disagreements between the regulators regarding the application of these standards?

A.4. Because the Basel II Capital Accord revisions encompass a number of significant and complex issues, interagency differences of opinion are to be expected. In our experience, these differences and the interagency process in place that allows, as a matter of course, for them to be fully aired and discussed, almost invariably result in a better outcome from both a supervisory and industry perspective than would be the case if a single agency was the sole decisionmaker. Each agency has unique insights and experiences it brings to particular issues and it is the agencies' collective belief that it is crucial to the success and the effectiveness of the final

outcome that these be thoroughly considered and debated before a final consensus is achieved.

The agencies have well-established interagency mechanisms for communication and decisionmaking at all levels within the agencies. In particular, for the Basel revision process several chains of communication are in place to develop U.S. views and communicate them consistently to the Basel Supervisors Committee, the industry as a whole, and to other interested parties. For example, interagency staff meetings and conference calls are held almost daily on one or more of the substantive issues raised by the proposed new framework. Senior staff regularly schedules interagency meetings prior to significant Basel meetings (most notably the Basel Supervisors Committee or the Capital Task Force). The agency principal representatives also have scheduled meetings prior to significant international meetings. Through these discussions, the U.S. views on particular issues are formulated. In addition, as is always the case, bilateral discussions on individual issues on an as-needed basis are conducted so that concerns and objectives are appropriately addressed and achieved.

At the current stage of development of the revised Basel Capital Accord, we expect that the agencies will have different views on a number of issues. We are confident that, as we work through these differences, the end result will be the best product for U.S. banking organizations.

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

Q.1. There are many questions as to how the Federal Reserve would conduct monetary policy if it should decide that further easing was appropriate but that further reductions in the Fed funds rate was not appropriate. In testimony before the Joint Economic Committee in May, you stated that the Fed: “do[es] have the capability, should that be necessary, of clearly moving out on the yield curve, essentially moving longer-term rates down and in the process expanding the monetary base and the degree of monetary stimulus.”

In your written testimony at this hearing you also raised that point: “The Federal Reserve has been studying how to provide policy stimulus should our primary tool of adjusting the target Federal funds rate no longer be available. Indeed, the FOMC devoted considerable attention to this subject at its June meeting, examining potentially feasible policy alternatives.”

Chairman Greenspan could you describe in some detail what conclusions have been drawn from your research and conversation during the June meeting? In addition, could you also answer the following specific questions regarding the use of nonprimary tools to provide economic stimulus:

Will the Fed set a target rate at a single point or range along the yield curve as it currently does with the Fed funds rate?

If so:

What point or range along the yield curve will the FOMC target? Will the FOMC announce the target point

or range along the yield curve? Will the FOMC announce the target interest rate for that point or range?

If not:

Will the FOMC specify some other policy variable related to longer term interest rates? If so, what would that policy variable be?

Will the FOMC communicate its decisions in a manner similar to its announcements regarding the Federal funds target rate or will another method of communication be used? If you are contemplating additional or alternative methods of communication, could you please describe how you envision they would operate?

A.1. The Federal Open Market Committee recently released the minutes of its June 24–25, 2003, meeting, at which the issue of unconventional monetary policy tools was discussed. I have attached the relevant section of those minutes for your convenient reference. As that section makes clear, the FOMC believed that the probability that unconventional tools would be needed was quite low. Consequently, the Committee’s discussion of unconventional policies was very general. Apart from agreeing that it would not be appropriate to establish an artificial floor below which the Federal funds rate could not be lowered, the FOMC reached no decisions on specific approaches to unconventional policies. As stated in those minutes, “[t]he members did not see the need at this time to reach a consensus on the desirability of any specific nontraditional approach to the implementation of monetary policy, particularly given the low probability of its near-term use. As experience had shown, at times of economic and financial market stress the specific policy tools used would depend on circumstances. For now, however, they believed that arriving at an understanding of the various options that might be employed prepared them to respond more flexibly and effectively to unanticipated developments.” Consequently, it is not possible to answer your specific questions at present. However, as I indicated at the July hearing, the Federal Reserve will communicate the relevant information to the public in a timely fashion in the event that the adoption of unconventional policies ever proves necessary.

Q.2. The President’s Fiscal Year 2004 Budget includes an increase for the Bureau of Economic Analysis to launch several initiatives: (1) purchase of more real-time data now collected by the private sector, particularly scanner data; (2) collection of missing information on derivatives; (3) meeting international commitments for the collection and presentation of information on international transactions and asset positions; and (4) acceleration of the processing and release of balance of payments data. The BEA also continued to pursue its plan to accelerate the production of input-output tables based on the 2002 economic census. What is your evaluation of these initiatives?

A.2. The Fiscal Year 2003–2007 Strategic Plan prepared by the BEA lays out a well-designed plan for improving the national economic accounts as well as the international accounts. The plan reflects the input of many facets of the BEA’s user community, including the Federal Reserve. The initiatives presented in the Presi-

dent's Fiscal Year 2004 Budget reflect the BEA's requirements for carrying out its strategic plan. The specific initiatives you mention in your question will help BEA achieve two laudable objectives: (1) improve the reliability and timeliness of GDP and related measures, and (2) meet the commitments of the United States to the International Monetary Fund to increase the transparency, timeliness, and accuracy of data on our international investment position. Achieving these objectives will provide important benefits to the formulation and the implementation of monetary and financial policy at the Federal Reserve.

**Excerpt from Minutes of the Federal Open Market Committee
June 24-25, 2003**

The Committee discussed at length alternative means of providing monetary stimulus should the target Federal funds rate be reduced to a point where there was little or no latitude for additional easing through this conventional policy instrument. The members agreed that current economic conditions and the prevailing stances of monetary and fiscal policy made the need to use unusual monetary policy tools a quite remote possibility. Even so, they believed it was useful to discuss that possibility because of the implications for financial markets and institutions and for the conduct of monetary policy of reducing short-term interest rates to very low levels. An environment involving such interest rates could have adverse repercussions on the functioning of some sectors of the money market, but the members agreed that the potential extent of such disruptions would not be sufficient to prevent the Committee from taking advantage of the full scope of conventional easing of the Federal funds rate, should that become necessary. Beyond that, a variety of nonconventional measures for further easing was available. In this regard, the members discussed the advantages and disadvantages of various approaches that, possibly employed in some combination, would alter the size and composition of the System's balance sheet. They also considered aspects of the Committee's communications as a means of underscoring to the public its willingness to follow a sufficiently accommodative path of monetary policy for as long as necessary to foster improved economic performance. The members did not see the need at this time to reach a consensus on the desirability of any specific nontraditional approach to the implementation of monetary policy, particularly given the low probability of its near-term use. As experience had shown, at times of economic and financial market stress the specific policy tools used would depend on circumstances. For now, however, they believed that arriving at an understanding of the various options that might be employed prepared them to respond more flexibly and effectively to unanticipated developments. While considerable uncertainty surrounded each individual policy option, the members agreed that the effectiveness of these alternative tools, along with the 125 basis points of conventional easing still available, would allow monetary policy to combat economic weakness and forestall any unexpected tendency for a pernicious deflation to develop.

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

Q.1. The last time the FOMC met, you cut the Fed funds rate by 25-basis-points. The markets did not react well because they were expecting a 50-basis-point cut. Yesterday, you indicated that more cuts will be made in the near future. Why didn't you just cut the rate by 50-basis-points last time the FOMC met?

A.1. The Federal Open Market Committee judged at the time of the June FOMC meeting that a 25-basis-point reduction in the Federal funds rate, in the context of a substantial previous easing of monetary policy, a stimulative fiscal policy, and strong growth in productivity, would be sufficient to foster satisfactory growth in economic activity. The economic data that have since come in hand have tended to confirm that judgment.

I did not indicate that more rate cuts will be made in the future. Rather, my point was that they could be made if circumstances warrant.

Q.2. I want to get back to your testimony of last week on Natural Gas Prices. Do you feel the high prices that we have had and expect in the future are largely because of past Federal Government policies? Specifically, do you agree that in the past we have encouraged demand for natural gas by giving incentives to use it for electricity generation and for other uses without increasing supply by allowing for new drilling?

A.2. We cannot on the one hand encourage the use of environmentally desirable natural gas in this country while being conflicted on larger imports of liquefied natural gas (LNG) and new wells. Such contradictions are resolved only by debilitating spikes in price.

Q.3. Would opening up the Artic National Wildlife Refuge (ANWR) help the demand side?

A.3. Unquestionably, the more oil and gas that we get down into the lower 48 the better for meeting our energy needs. I realize that there is a very difficult tradeoff between maintaining the pristine nature of the wilderness in the ANWR and the economic value of producing the oil and natural gas that is located there. The tradeoff is a value judgment that is up to Congress to make on behalf of the American people.

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

Manufacturing

Q.1. Many small manufacturing companies in my State feel that they are under assault (principally from China) and if the trend continues there will be few, if any, manufacturing (mostly textile manufacturing) jobs left in America. On the other hand, large manufacturing companies like the fact that they can do more business in China. How do we balance out the needs of both the large and small manufacturing concerns? What should I tell my constituent companies?

A.1. Economists generally believe that the extent of a country's openness to trade and its integration with the rest of the world exert positive influences on its economic growth and standard of living. Among other things, international trade allows the United States to purchase goods abroad at lower cost than we could produce them at home. This raises our standard of living both directly, by reducing costs, and indirectly, by allowing us to specialize in products in which we are most competitive. In some cases, the opportunity to buy raw materials and intermediate inputs at lowest global cost is the key to success for both large and small U.S. manufacturing concerns. Moreover, less competitive operations shrink while capital investment contributes to the expansion of competitive enterprises that embody cutting-edge technologies; this process of "creative destruction" leads to higher productivity and higher incomes. International trade, it should be added, is not a one-way street: Not only does an open global trading system allow us to import more and at lower cost, but it also allows us to access foreign markets and sell more of our product abroad.

It is certainly the case that as the adjustment engendered by international trade proceeds, some industries that were once thriving but are now less competitive will experience distress. This may lead to factories being shut down and workers being laid off. However, the proper response to the distress of particular sectors is not to inhibit international competition, thereby limiting the growth potential of the economy as a whole. Rather, we should focus our response on enhancing job skills and retraining workers. If necessary, selective income maintenance programs could also be employed for those workers for whom retraining is problematic. More generally, establishing the conditions for sustained economic growth—macroeconomic stability, a strong financial system, and institutions that support market-driven private investment—should allow the U.S. economy to fully exploit the benefits of international trade while easing any associated transitional difficulties.

Q.2. I understand that in an answer yesterday to Representative Mark Green, you said you had visited textile factories in the 1970's and also recently. Based upon this recent visit, you said you had noticed how technology had become an integral part of manufacturing. I think you also said that as long as we have technology we could be self-sufficient, and that "one pound of technology versus one ton of raw materials," means we have shifted resources to our most effective parts. Am I quoting you correctly and what is your overall view of what is happening to the manufacturing sector?

A.2. Modern technology has become an integral part of U.S. manufacturing in two ways. First, all products that we manufacture are now produced with far more technology and appropriately different infrastructure than used to be the case. Second, the composition of U.S. manufacturing has been shifting toward goods that make greater use of high technology in their manufacture. However, I would not argue that technology makes the United States self-sufficient. Self-sufficiency is not, in itself, a valuable goal. Rather, the specialization that goes with globalization has been extremely valuable to our economy and living standards. Where national security is a concern, producing particular goods here rather than importing

them from abroad may be essential. In other cases, the key objective is to raise the productivity of American workers in whatever they are producing.

Effects of State Budget Deficits

Q.3. Just yesterday, in *The Washington Post* a lead story entitled “Budget Woes Trickle Down” discussed a lady who said “her taxes are going up so much that, at 70, she may have to sell her house to pay them.” The article goes on to say that State and local governments, to meet their Federal responsibilities in education, health care, and homeland security obligations, are either having to make cuts or raise taxes. In February, the National Conference of State Legislatures said States’ current budget gaps have grown to a total of nearly \$26 billion [for this year]. What is more, the shortfall projected for fiscal 2004, the budget year that States are now planning for, is forecast to be at least \$68.5 billion—and probably will rise significantly since 11 States had no projections.” Chairman Greenspan, what impact will the State and local governments decisions to either cut programs or raise taxes have on an economic recovery?

A.3. In the short-run, State and local government decisions to cut spending or raise taxes would tend to reduce aggregate demand and slow (other things held constant) the growth of output a bit. However, in comparison to other factors that recently have had a positive effect on aggregate demand and the economy (such as the recent Federal tax cut and added spending for the Iraq war and homeland security), the adjustments that States and localities will need to make to restore budget balance are small. Indeed, the effects of an improving economy on State and local tax receipts likely will produce a significant portion of the required adjustment.

Moreover, in the longer run, improved State and local budget balances also have a positive effect on national saving and the economy. In particular, the increased saving will set the stage for future productivity gains by keeping long-term interest rates low and encouraging investment.

**For use at 10:00 a.m., EST
Tuesday
July 15, 2003**

Board of Governors of the Federal Reserve System



Monetary Policy Report to the Congress

July 15, 2003

Letter of Transmittal



BOARD OF GOVERNORS OF THE
FEDERAL RESERVE SYSTEM
Washington, D.C., July 15, 2003

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

Contents

	<i>Page</i>
Monetary Policy and the Economic Outlook	1
Economic and Financial Developments in 2003	4

Monetary Policy Report to the Congress

*Report submitted to the Congress on July 15, 2003,
pursuant to section 2B of the Federal Reserve Act*

MONETARY POLICY AND THE ECONOMIC OUTLOOK

The subpar performance of the U.S. economy extended into the first half of 2003. Although accommodative macroeconomic policies and continued robust productivity growth helped to sustain aggregate demand, businesses remained cautious about spending and hiring. All told, real gross domestic product continued to rise in the first half of the year but less quickly than the economy's productive capacity was increasing, and margins of slack in labor and product markets thereby widened further. As a result, underlying inflation remained low—and, indeed, seems to have moved down another notch. In financial markets, longer-term interest rates fell, on net, over the first half of the year as the decline in inflation and the subdued performance of the economy led market participants to conclude that short-term interest rates would be lower than previously anticipated. These lower interest rates helped to sustain a rally in equity prices that had begun in mid-March.

During the first quarter of the year, the economy's prospects were clouded by the uncertainties surrounding the onset, duration, and potential consequences of war in Iraq. War-related concerns provided a sizable boost to crude oil prices; as a result, households faced higher bills for gasoline and heating oil, and many firms were burdened with rising energy costs. These concerns also caused consumer confidence to sag and added to a general disinclination of firms to spend, hire, and accumulate inventories. Caution was apparent in financial markets as well, and investors bid down the prices of equities in favor of less-risky securities.

The swift prosecution of the war in Iraq resolved some of these exceptional uncertainties but by no means all of them. Nonetheless, oil prices receded, and the improvement in the economic climate was sufficient to cause stock prices to rally, risk spreads on corporate securities to narrow, and consumer confidence to rebound. At the same time, the incoming economic data—much of which reflected decisions made before the war—remained mixed, and inflation trended lower. At the conclusion of its May meeting, the Federal Open Market Committee (FOMC) indicated that, whereas the risks to the outlook

for economic growth were balanced, the risk of an unwelcome substantial fall in inflation from its already low level, though minor, exceeded that of a pickup in inflation. In the weeks that followed, market participants pushed down the expected future path of the federal funds rate, which contributed to the fall in longer-term interest rates and a further rise in equity prices.

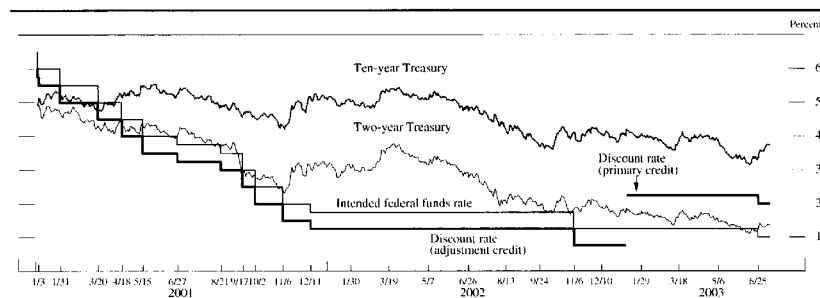
At the time of the June FOMC meeting, the available evidence did not yet compellingly demonstrate that a material step-up in economic growth was under way, though some indicators did point to a firming in spending and a stabilization in the labor and product markets. The Committee concluded that a slightly more expansive monetary policy would be warranted to add further support to the economic expansion. The Committee's assessment and ranking of the risks to the outlook for economic growth and inflation were the same as in May.

The Federal Reserve expects economic activity to strengthen later this year and in 2004, in part because of the accommodative stance of monetary policy and the broad-based improvement in financial conditions. In addition, fiscal policy is likely to be stimulative as the provisions of the Jobs and Growth Tax Relief Reconciliation Act of 2003 go into effect and as defense spending continues to ramp up. Severe budgetary pressures are causing state and local governments to cut spending and to increase taxes and fees, but these actions should offset only a portion of the impetus from the federal sector. Moreover, the continued favorable performance of productivity growth should lift household and business incomes and thereby encourage capital spending. Given the ongoing gains in productivity and the existing margin of resource slack, aggregate demand could grow at a solid pace for some time before generating upward pressure on inflation.

Monetary Policy, Financial Markets, and the Economy over the First Half of 2003

During the weeks before the January meeting of the FOMC, geopolitical developments and the uneven tone of economic data releases created substantial uncertainty. Businesses had continued to reduce their payrolls and postpone capital expenditures. However, the absence of fresh revelations of lapses in corporate governance or accounting problems and some increased appetite for risk

Selected interest rates



NOTE: The data are daily and extend through July 9, 2003. The dates on the horizontal axis are those of scheduled FOMC meetings and of any intervening policy actions. On January 9, 2003, the Federal Reserve changed

the main credit program offered at the discount window by terminating the adjustment credit program and beginning the primary credit program.

on the part of investors helped push down yields on corporate debt, which encouraged firms to issue bonds to reduce their financing costs and restructure their balance sheets. Meanwhile, moderate gains in household income and historically low mortgage rates underpinned still-considerable demand for housing. Retail sales, particularly those of motor vehicles, also were strong at the end of 2002 despite some drop-off in consumer confidence. Core inflation seemed to be on a declining trend, although the foreign exchange value of the dollar had depreciated, and top-line inflation was being boosted by a sizable run-up in energy prices. The substantial slack in resource utilization, as well as the solid gains in labor productivity, led members to the view that consumer price inflation—by then already very low—was unlikely to increase meaningfully. Against that backdrop, the Committee members continued to believe that economic fundamentals were in place to support a pickup in the growth of economic activity during the year ahead. Accordingly, the FOMC decided at the January meeting to leave interest rates unchanged and assessed the risks as balanced with respect to its dual goals of sustainable economic growth and price stability.

In subsequent weeks, economic performance proved disappointing. The increasing likelihood of war in Iraq was accompanied by a steep rise in crude oil prices and considerable volatility in financial markets. For much of that period, investors sought the relative safety of fixed-income instruments; that preference induced declines in yields on Treasury securities and high-quality corporate bonds and a drop in stock prices. Consumer outlays also softened after January, although low mortgage rates and rising incomes were still providing support for household spending. Businesses continued to trim workforces and cut capital spending.

When the Committee met on March 18, full-scale military conflict in Iraq seemed imminent. In an environment of considerable uncertainty, the FOMC had to weigh whether economic sluggishness was largely related to worries about the war, and hence would lift once the outcome was decided, or was indicative of deep-seated restraints on economic activity. The Committee, which reasoned that it could not make such a distinction in the presence of so much uncertainty, left the funds rate unchanged and declined to characterize the balance of risks with respect to its dual goals. However, the Committee noted that, given the circumstances, heightened surveillance would be particularly informative, and it held a series of conference calls during late March and April to discuss the latest economic developments.

Some of the uncertainty was resolved by the quick end to major military action in Iraq. Equity prices and consumer confidence rose while oil prices and risk spreads on corporate debt fell. Fiscal policy seemed set to become even more stimulative given the prospect of increased spending on defense and homeland security as well as the likely enactment of additional tax cuts. Part of the federal stimulus, however, was thought likely to be offset by the efforts of state and local governments to close their budget gaps.

Economic reports were generally disappointing. Industrial production declined in March, and capacity utilization fell to a twenty-year low. The employment reports for March and April indicated that private non-farm payrolls had continued to fall. Although order backlogs for nondefense capital goods had risen recently, businesses generally remained reluctant to invest in new capacity.

In light of the financial and policy stimulus already in place, the FOMC left the federal funds rate unchanged at

its May meeting. To provide more specific guidance about its views, the FOMC included in its announcement separate assessments of the risks to the outlook for economic growth and inflation as well as the overall balance between the two. The Committee viewed the upside and downside risks to economic growth as balanced, but it perceived a higher probability of an unwelcome substantial fall in inflation than of a pickup in inflation from its current low level. The Committee considered that the overall balance of risks to its dual objectives was weighted toward weakness. That said, members concluded that there was only a remote possibility that resource utilization would remain so low that the disinflation process would cumulate to produce a declining overall price level for an extended period.

Financial market participants reacted strongly to this characterization of risks, believing that the Committee's focus on leaning against appreciable disinflation implied that monetary policy would be more accommodative and remain so for longer than previously thought. Investors pushed down the expected path of the federal funds rate in the weeks following the meeting. Intermediate- and long-term interest rates fell significantly and spurred another round of long-term bond issuance. The resulting decline in real interest rates helped sustain the rally in equity prices.

Between the May and June meetings, a few tentative signs suggested that the pace of economic activity might be firming. Industrial production and retail sales edged up in May, available data indicated that employment had stopped declining, residential investment remained strong, and survey measures of consumer sentiment and business conditions were well above the levels of earlier in the year. Financial conditions had improved markedly, but businesses reportedly remained somewhat averse to new investment projects, in part because of significant unused capacity. They also seemed reluctant to expand their workforces until they viewed a sustained pickup in aggregate demand as more certain.

With inflation already low and inflation expectations subdued, the Committee judged that it would be prudent to add further support for economic expansion, and it lowered the target for the federal funds rate 25 basis points, to 1 percent. The FOMC continued to view the risks to economic growth as balanced and again noted that the minor probability of substantial further disinflation exceeded the probability of a pickup in inflation from its current low level. But because of the considerable amount of economic slack prevailing and the economy's ability to expand without putting upward pressure on prices, the Committee indicated that the small chance of an unwelcome substantial decline in the inflation rate was likely to remain its predominant concern for the foreseeable future.

Economic Projections for 2003 and 2004

The members of the Board of Governors and the Federal Reserve Bank presidents, all of whom participate in the deliberations of the FOMC, expect economic activity to accelerate in the second half of this year and to gather additional momentum in 2004. The central tendency of the FOMC participants' forecasts for the increase in real GDP over the four quarters of 2003 spans a narrow range of 2½ percent to 2¾ percent, which, given the modest increase in real GDP in the first quarter, implies a noticeable pickup in growth as the year progresses. The central tendency for projections of real GDP growth in 2004 spans a range of 3¾ percent to 4¾ percent. The civilian unemployment rate is expected to be between 6 percent and 6¼ percent in the fourth quarter of 2003 and to decline to between 5½ percent and 6 percent by the fourth quarter of 2004.

Inflation is anticipated to be quite low over the next year and a half. The chain-type price index for personal consumption expenditures (PCE) rose 1¼ percent over the four quarters of 2002, and most FOMC participants expect inflation to run somewhat lower this year and then to hold fairly steady in 2004. The central tendency of projections for PCE inflation is 1½ percent to 1½ percent in 2003 and 1 percent to 1½ percent in 2004.

Economic projections for 2003 and 2004

Indicator	Federal Reserve Governors and Reserve Bank presidents	
	Range	Central tendency
2003		
<i>Change, fourth quarter to fourth quarter¹</i>		
Nominal GDP	3½–4¾	3¾–4½
Real GDP	2½–3	2½–2¾
PCE chain-type price index	1–1¾	1¼–1½
<i>Average level, fourth quarter</i>		
Civilian unemployment rate	6–6¼	6–6¼
2004		
<i>Change, fourth quarter to fourth quarter¹</i>		
Nominal GDP	4¾–6½	5½–6¼
Real GDP	3½–5¼	3¾–4¾
PCE chain-type price index	¾–2	1–1½
<i>Average level, fourth quarter</i>		
Civilian unemployment rate	5½–6¼	5½–6

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

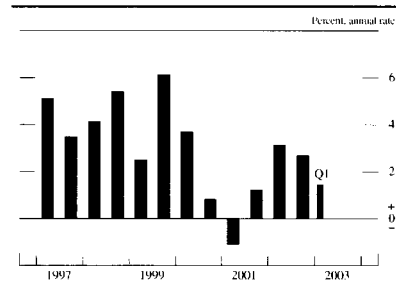
**ECONOMIC AND FINANCIAL DEVELOPMENTS
IN 2003**

Economic activity in the United States remained sluggish in the first half of 2003. Businesses continued to be reluctant to undertake new projects given the unusual degree of uncertainty in the economic environment, and the softness in activity abroad crimped the demand for U.S. exports. However, consumer spending grew moderately, housing activity retained considerable vigor, and defense spending picked up. Real GDP rose at an annual rate of just 1½ percent in the first quarter and appears to have posted another modest gain in the second quarter. With output growth remaining tepid and labor productivity rising at a fairly robust pace, firms continued to trim payrolls in the first half of 2003, though job losses in the private sector were a little smaller than they had been, on average, in 2002.

For much of the first half of the year, headline inflation news was shaped by movements in energy prices, which soared during the winter, retreated during the spring, and more recently firmed. Core inflation—which excludes the direct effects of food and energy prices—was held to a low level by slack in resource utilization and continued sizable advances in labor productivity.

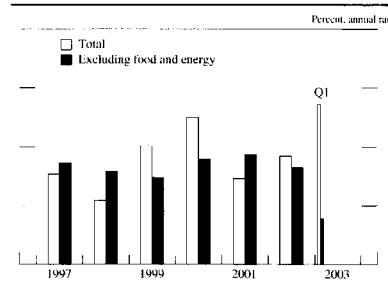
As a result of slow economic growth and the prospect that inflation would remain very subdued, the federal funds rate was maintained at the accommodative level of 1¼ percent for much of the first half of the year. Intermediate- and longer-term yields declined, in some cases to their lowest levels on record. Equity prices, which through mid-March had fallen in response to weaker-than-expected economic news and rising geopolitical tensions, began a broad rally as it became clear that the war in Iraq would begin imminently. The apparent increase in investors' appetite for risk also helped push down risk spreads

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.

Change in PCE chain-type price index



NOTE: The data are for personal consumption expenditures (PCE).

on corporate bonds and triggered inflows to equity and high-yield bond mutual funds. Since the beginning of the year, the foreign exchange value of the dollar has depreciated nearly 5 percent against the broad group of currencies of our major trading partners.

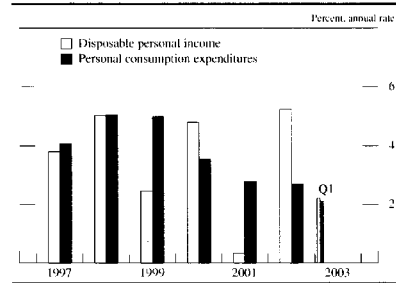
Households and businesses have taken advantage of the decline in intermediate-term and long-term interest rates from their already low levels, mostly by refinancing debt at ever more favorable rates. Partly as a result, household credit quality was little changed over the first half of the year, and household debt continued to expand at a rapid pace as mortgage interest rates fell to their lowest levels in more than three decades. Business balance sheets strengthened noticeably, and many measures of corporate credit performance showed some improvement. Still, net borrowing by businesses continued to be damped by the softness in investment spending.

The Household Sector

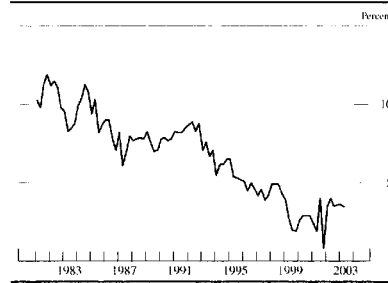
Consumer Spending

Consumer spending continued to increase in the first half of 2003, though not as quickly as in the past few years. In total, real personal consumption expenditures (PCE) rose at an annual rate of 2 percent in the first quarter and likely posted another moderate advance in the second quarter. Purchases of new light motor vehicles were sustained by the automakers' use of increasingly aggressive price and financing incentives. Spending on goods other than motor vehicles rose briskly in the first quarter, though that was largely because of the high level of spending around the turn of the year; the data through May suggest a further increase for this category in the second quarter. In contrast, outlays on services rose only slowly over the first five months of the year as weakness lingered in a number of categories, including air travel and recreation.

Change in real income and consumption



Personal saving rate



NOTE: The data are quarterly; the reading for 2003:Q2 is the average for April and May.

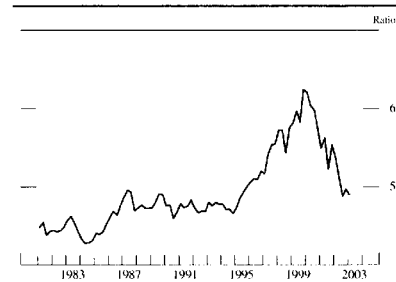
The rise in real consumption expenditures so far in 2003 has about matched the growth in real disposable personal income (DPI), which has been restrained by the poor job market and by the surge in consumer energy prices early in the year. Real DPI rose about 2½ percent at an annual rate between the fourth quarter of 2002 and May after having increased at a considerably faster pace in 2002; the larger increase in real DPI in 2002 in part reflected the effects of the tax cuts enacted in 2001.

Among other key influences on consumption, household wealth grew about in line with nominal DPI in the fourth quarter of 2002 and the first quarter of 2003 after having fallen sharply over the preceding two years. While the rebound in the stock market in the second quarter should help the wealth-to-income ratio recoup some of the ground it lost earlier, households likely have not yet completed the adjustment of their spending to the earlier

drop in wealth. Meanwhile, the high level of mortgage refinancing in recent quarters has bolstered consumer spending by allowing homeowners to reduce their monthly payments, pay down more costly consumer debt, and in many cases cash out some of the equity that has accumulated during the upswing in house prices over the past few years. Reflecting these influences, the personal saving rate averaged 3½ percent over the first five months of the year—about the same as the annual average for 2002 but more than 1 percentage point above that for 2001.

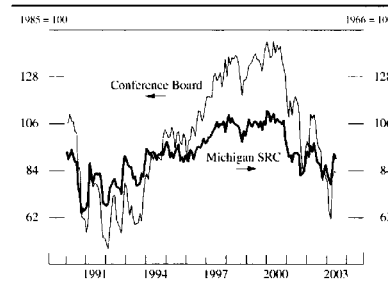
Consumer confidence, which has exhibited some sharp swings in recent years, remained volatile in the first half of 2003. After having declined markedly over the second half of 2002, survey readings from both the Michigan Survey Research Center and the Conference Board took another tumble early this year on concerns about the

Wealth-to-income ratio



NOTE: The data are quarterly and extend through 2003:Q1. The wealth-to-income ratio is the ratio of household net worth to disposable personal income.

Consumer sentiment



NOTE: The data are monthly and extend through June 2003. SOURCE: University of Michigan Survey Research Center and The Conference Board.

potential consequences of a war in Iraq. With the combat in Iraq largely over and the stock market recovering, confidence rose appreciably, on net, in the spring.

Residential Investment

Housing activity remained robust in the first half of this year, as very low mortgage interest rates apparently offset much of the downward pressure from the soft labor market. In the single-family sector, starts averaged an annual rate of 1.39 million units over the first five months of the year—2 percent greater than the rapid pace for 2002 as a whole. In addition, sales of new and existing homes moved to exceptionally high levels. According to the Michigan survey, consumers' assessments of homebuying conditions currently are very favorable, mainly because of the low mortgage rates.

The available indicators provide differing signals on the magnitude of recent increases in home prices, but, in general, they point to smaller gains than those recorded a year or two ago. Notably, over the year ending in the first quarter, the constant-quality price index for new homes rose just 2½ percent, one of the lowest readings of the past few years. Meanwhile, the four-quarter increase in the repeat-sales price index for existing homes, which topped out at 8½ percent in 2001, was 6½ percent in the first quarter. Still, the share of income required to finance the purchase of a new home, adjusted for variations over time in structural characteristics, has continued to move down as mortgage rates have dropped, and it is now very low by historical standards.

Activity in the multifamily sector appears to have slipped somewhat this year, perhaps in part because the strong demand for single-family homes may be cutting into the demand for apartments. Multifamily starts

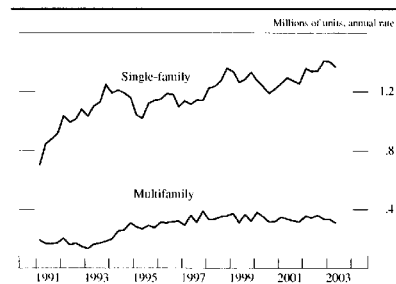
totaled 325,000 units at an annual rate over the first five months of the year, a pace 6 percent below that for 2002 as a whole. In addition, vacancy rates for multifamily rental properties rose further in the first quarter, and apartment rents continued to fall.

Household Finance

Household real estate debt grew rapidly in the first half of the year with the support of the brisk pace of home sales, rising home prices, and falling mortgage interest rates. Indeed, according to Freddie Mac, the average rate on thirty-year conventional home mortgages fell sharply until June, though it has edged back up in recent weeks and now stands at about 5½ percent. Applications for mortgages to purchase homes rose well above the already elevated level of last year. Sales of existing homes, in particular, add significantly to the level of mortgage debt because the purchaser's mortgage is typically much larger than the seller's had been. The pace of mortgage refinancing—which adds to borrowing because households often increase the size of their mortgages when they refinance—set consecutive quarterly records in the first and second quarters of 2003 in response to the declines in mortgage rates. According to Freddie Mac, more than 40 percent of the refinancings in the first quarter were “cash-out” refinancings, and the amount of equity extracted likely set a record in the first half of this year. The combination of rising home prices and low interest rates also energized home equity lending during the first half of 2003.

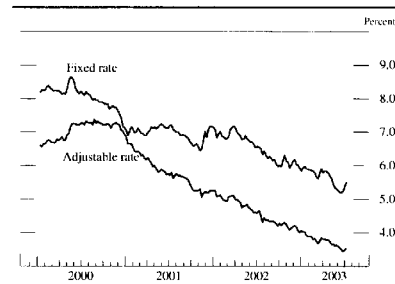
A major use of the proceeds from both cash-out refinancing and home equity loans reportedly has been to pay down credit card and other higher-cost consumer debt. Indeed, in line with those reports, consumer debt advanced

Private housing starts



NOTE: The data are quarterly; the readings for 2003:Q2 are the averages for April and May.

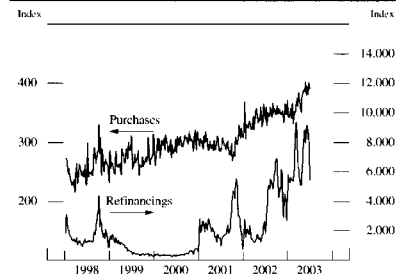
Mortgage rates



NOTE: The data, which are weekly and extend through July 3, 2003, are contract rates on thirty-year mortgages.

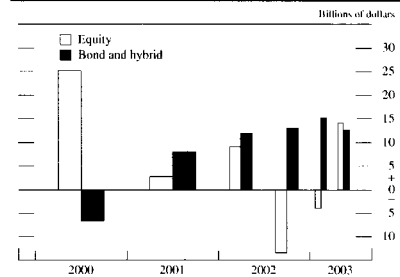
SOURCE: Federal Home Loan Mortgage Corporation.

Mortgage applications for purchases and refinancings



NOTE: The data are weekly and extend through July 4, 2003. The index for purchases is seasonally adjusted by Federal Reserve Board staff.
SOURCE: Mortgage Bankers Association.

Mutual fund investment flows



NOTE: Data are expressed at a monthly rate. Estimates for 2003:Q2 are based on monthly data for April and May.
SOURCE: Investment Company Institute.

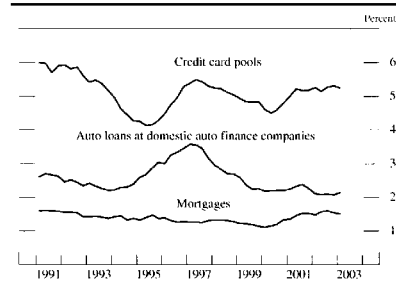
at a relatively subdued 4½ percent annual rate in the first quarter. The growth of revolving debt was about 5 percent at an annual rate, and nonrevolving debt expanded at a 3½ percent annual rate. The growth of consumer debt picked up in the spring; the acceleration in part reflected somewhat higher motor vehicle sales that boosted the nonrevolving component, which in turn offset a deceleration in revolving credit. Meanwhile, the average interest rates charged on credit cards and on new car loans at auto finance companies this year have remained near the low end of their recent ranges.

In total, household debt grew at a 10 percent annual rate in the first quarter, a pace about unchanged from last year's. Despite the marked rise of this debt over the past several quarters, the aggregate debt-service burden of households ticked down in both the fourth quarter of 2002

and the first quarter of this year—periods during which borrowing rates fell and the average maturity of household debt rose. Although households continued to borrow at a rapid pace in the second quarter, the declines in mortgage interest rates and an elevated level of refinancing imply that the debt-service burden was likely little changed.

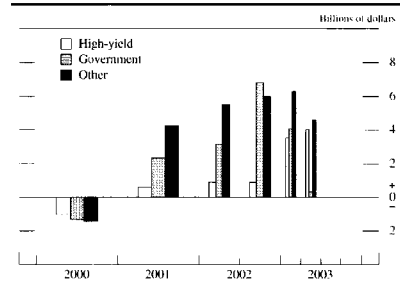
The credit quality of household debt remained fairly stable in the first quarter. The delinquency rates both on residential mortgages and on credit card loans edged down in the first quarter, though persistently high delinquencies among subprime borrowers remain a problem area. Delinquency rates on auto loans at captive finance companies have edged up in recent months from their very low levels of the past few years. However, lenders probably anticipated some increase as the plethora of new

Delinquency rates on selected types of household loans



NOTE: The data are quarterly and extend through 2003:Q1.
SOURCE: For mortgages, the Mortgage Bankers Association; for auto loans, the Big Three automakers; for credit cards, Moody's Investors Service.

Bond mutual fund investment flows



NOTE: Data are expressed at a monthly rate. Estimates for 2003:Q2 are based on monthly data for April and May.
SOURCE: Investment Company Institute.

vehicle loans issued in late 2001 and early 2002 seasoned. The fact that a large number of households declared bankruptcy in the first half of the year suggests that some households continue to experience considerable distress.

In a continuation of the trend during the second half of 2002, households invested heavily in bond mutual funds—and relatively safe bond funds at that—during the first quarter of 2003 and disinvested from equity funds. However, starting in March, households showed a growing willingness to purchase shares of riskier funds. As corporate credit quality improved and risk-free interest rates fell to record lows, a significantly larger portion of the investment in bond mutual funds flowed into corporate bond funds—including high-yield funds—at the expense of government bond funds. Inflows to equity mutual funds reportedly resumed in mid-March and continued through June.

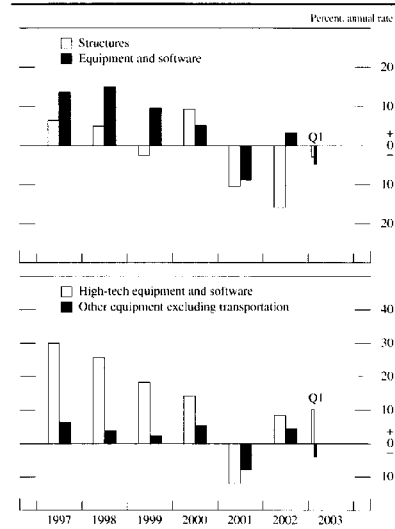
The Business Sector

Fixed Investment

Investment in equipment and software (E&S) continues to languish. Firms reportedly remain reluctant to undertake new projects because of the uncertainty about the economic outlook and heightened risk aversion in the wake of last year's corporate governance and accounting problems. Excess capacity—in addition to being a factor weighing on nonresidential construction—also is limiting demand for some types of equipment, most notably in the telecommunications area. But other key determinants of equipment spending are reasonably favorable. The aggressive actions taken by firms over the past few years to boost productivity and trim costs have provided a lift to corporate profits and cash flow. In addition, low interest rates and a rising stock market are helping hold down firms' cost of capital, as is the partial-expensing investment tax incentive. In addition, technological advances continue to depress the relative price of computers at a time when stretched-out replacement cycles have apparently widened the gap between the latest technology and that embodied in many of the machines currently in use.

Real spending on E&S fell at an annual rate of nearly 5 percent in the first quarter. The outlays were restrained by a sharp decline in spending on transportation equipment, especially motor vehicles; excluding that category, spending posted a small gain. Real outlays on high-tech equipment and software rose at an annual rate of about 11 percent in the first quarter, a bit faster than they had in 2002. Real purchases of computers and peripheral equipment remained on the moderate uptrend that has been evident since such spending bottomed out in 2001, and outlays on communications equipment picked up after

Change in real business fixed investment



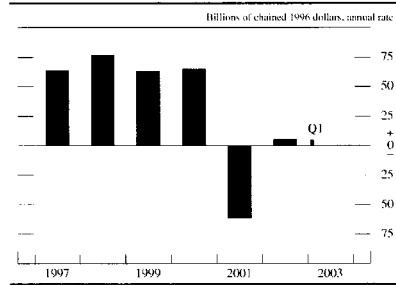
Note. High-tech equipment consists of computers and peripheral equipment and communications equipment.

an extended period of weakness. Meanwhile, investment outside the transportation and high-tech areas dropped back a bit.

Real E&S spending appears to have turned up in the second quarter, in part because of a step-up in the pace of real computer investment. However, incoming data suggest that outlays on communications equipment did not repeat their first-quarter spurt. The data on shipments of capital goods point to moderate increases in spending outside of high-tech and transportation in the second quarter; moreover, backlogs of unfilled orders for equipment in this broad category have risen some this year after having declined over the preceding two years.

Nonresidential construction remained weak in the first half of 2003. Although real construction outlays were off only a little in the first quarter, they had fallen nearly 16 percent in 2002, and partial data for the second quarter point to continued softness. The downturn in spending has been especially pronounced in the office sector, where vacancy rates have surged and rents have plunged. Spending on industrial facilities also has fallen dramatically over the past couple of years; it has continued to contract in recent quarters and is unlikely to improve much in the absence of a significant rise in factory operating rates.

Change in real business inventories



Construction expenditures on other commercial buildings (such as those for retail, wholesale, and warehouse space), which had declined less than did outlays for other major categories of nonresidential construction over the past couple of years, moved up in the first quarter of 2003, but they too have shown some renewed softness lately. One bright spot is the drilling and mining sector, in which outlays have risen sharply this year in response to higher natural gas prices.

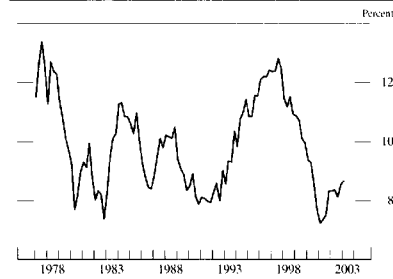
Inventory Investment

Most businesses have continued to keep a tight rein on inventories after the massive liquidation in 2001. Real inventory investment in the first quarter was a meager \$5 billion at an annual rate and occurred entirely in the motor vehicle industry, where sagging sales and ambitious production early in the year created a noticeable bulge in dealer stocks, especially of light trucks. In the second quarter, the automakers reduced assemblies and expanded incentives to bolster sales, but these steps were sufficient only to reduce stocks a little, and inventories remained high relative to sales through June. Apart from the motor vehicle industry, firms reduced stocks, on net, over the first five months of 2003, and, with only a few exceptions, inventories appear reasonably well aligned with sales.

Corporate Profits and Business Finance

Before-tax profits of nonfarm, nonfinancial corporations grew at a 6½ percent annual rate in the first quarter of 2003, and they constituted 8½ percent of the sector's first-quarter GDP, the highest proportion since the third quarter of 2000. Focusing on the companies that make up the S&P 500, earnings per share for the first quarter were up

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

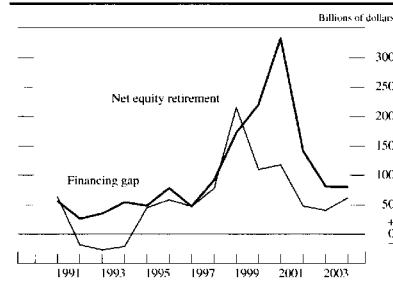


Note. The data are quarterly and extend through 2003:Q1. Profits are from domestic operations of nonfinancial corporations, with inventory valuation and capital consumption adjustments.

about 7 percent at a quarterly rate from the fourth quarter of 2002 and were 11 percent higher than four quarters earlier. Although oil companies accounted for the majority of the four-quarter increase, earnings from the financial, utility, and consumer durable sectors were also strong and exceeded the market's conservative expectations by larger-than-usual margins. The recent depreciation of the dollar substantially boosted revenues of U.S. multinational corporations, but the hedging of currency risk likely limited the extent to which sales gains showed through to profits.

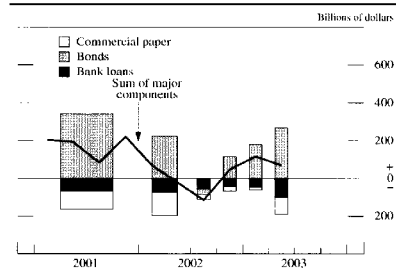
Net equity retirements in the first quarter of 2003 were probably a shade larger than in the fourth quarter of 2002.

Financing gap and net equity retirement at nonfarm nonfinancial corporations



Note. The data are annual through 2002; for 2003, they are estimates based on data from 2003:Q1. The financing gap is the difference between capital expenditures and internally generated funds. Net equity retirement is the difference between equity retired through share repurchases, domestic cash-financed mergers, or foreign takeovers of U.S. firms and equity issued in public or private markets, including funds invested by venture capital partnerships.

Major components of net business financing



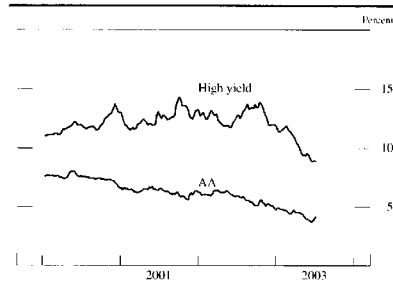
NOTE.— Seasonally adjusted annual rate for nonfarm nonfinancial corporate business. The sum of major components is quarterly. Estimates for 2003:Q2 are based on monthly data for April and May.

as the decline in gross new issuance more than offset lower gross retirements. Equity retirements from cash-financed mergers were a bit below their pace in the past two years, and share repurchases appear to be running somewhat slower as well. Volatile and declining equity prices in the first quarter brought initial public offerings (IPOs) to a standstill during the first four months of this year. One small IPO was undertaken in May, and another one came to market in June. With regard to seasoned equity offerings, a war-related lull in March and April held the average monthly pace of issuance this year well below last year's level. Most of these offerings have been from energy firms and utilities that have used the proceeds primarily to reduce leverage and increase liquidity.

The net debt growth of nonfinancial corporate business was just 3 percent at an annual rate in the first quarter, as rising profits and lower outlays for fixed and working capital held down corporations' need for external funds. Nonetheless, low interest rates continued to attract firms to the bond market during the first half of 2003, and issuance ran well ahead of its rate of the second half of 2002. Moreover, a large fraction of the issues were from below-investment-grade firms, which likely were responding to the even sharper fall in their borrowing rates than investment-grade firms enjoyed. A substantial portion of the proceeds of recent bond issues have been slated to pay down commercial paper and commercial and industrial (C&I) loans, and each of those components contracted markedly during the first half of the year. Another factor contributing to the weakening in demand for C&I loans this year was the absence of merger and acquisition activity, according to the Federal Reserve's Senior Loan Officer Opinion Survey on Bank Lending Practices.

The runoff in C&I loans appears related more to a decrease in demand than to a tightening of supply condi-

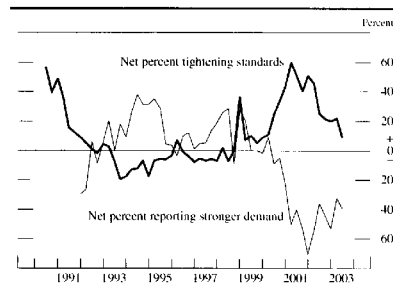
Corporate bond yields



NOTE.— The data are weekly averages and extend through July 9 except for the high-yield series, which extends through July 7. The AA rate is calculated from bonds in the Merrill Lynch AA index with seven to ten years of maturity remaining. The high-yield rate is the yield on the Merrill Lynch 175 high-yield index.

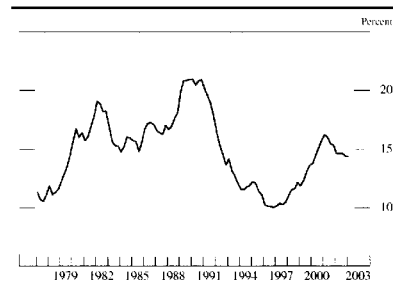
tions, and bank credit appears to remain available for qualified business borrowers. The net fraction of banks in the Senior Loan Officer Opinion Survey that reported having tightened lending standards and terms on C&I loans during the first part of the year decreased markedly, and the Survey of Small Business by the National Federation of Independent Business showed that the net percentage of small businesses believing credit had become more difficult to obtain hovered near the middle of its recent range. Moreover, in the April Senior Loan Officer Opinion Survey, a number of banks reported that they had eased lending terms in response to increased

Standards and demand for C&I loans to large and medium-sized firms at domestic banks



NOTE.— The data are based on a survey generally conducted four times per year; the last reading is from the April 2003 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.

Net interest payments of nonfinancial corporations relative to cash flow

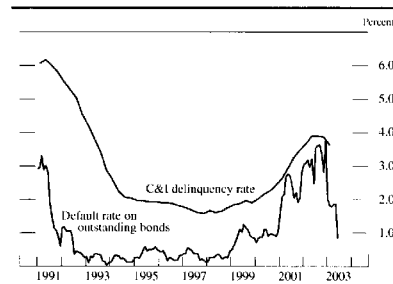


NOTE: The data are quarterly and extend through 2003:Q1.

competition for C&I loans from nonbank lenders. Indeed, data from Loan Pricing Corporation indicate that nonbank financial institutions purchased a record amount of new syndicated loans during the first quarter of this year; the buyers were reportedly attracted in part by improving liquidity in the secondary loan market.

The decline in both short- and long-term interest rates, combined with slow increases in total business debt, contributed to a further reduction in the net interest burden of nonfinancial corporations during the first quarter. Moreover, by issuing bonds and paying down short-term debt, businesses have substantially lengthened the overall maturity of their debt, thus reducing their near-term repayment obligations. These developments, together with higher profitability, have helped most measures of corporate credit performance to improve this year. The num-

Default rate on outstanding bonds and C&I delinquency rate



NOTE: The default rate is monthly and extends through June 2003. The C&I delinquency rate is quarterly and extends through 2003:Q1. The default rate for a given month is the face value of bonds that defaulted in the six months ending in that month divided by the face value of all bonds outstanding at the end of the calendar quarter immediately preceding the six-month period.

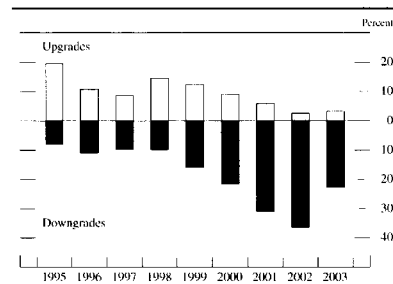
ber of ratings downgrades continued to exceed upgrades but by a notably smaller margin than last year. The six-month trailing bond default rate declined considerably in the first half of the year. The four-quarter moving average of recovery rates on defaulted bonds improved a bit in the first quarter, although it remained at the low end of its range of the past several years. The delinquency rate on C&I loans at commercial banks also moved down some in the first quarter, albeit to a level well above that of the late 1990s.

Commercial Real Estate

The growth of debt backed by commercial real estate remained robust this year despite some deterioration in that sector's underlying fundamentals. In the first quarter of 2003, the expansion of debt was driven by lending at commercial banks and was spread about equally across broadly defined types of commercial real estate loans. Although the issuance of commercial-mortgage-backed securities (CMBS) slowed somewhat in the first quarter from the rapid pace of the second half of last year, issuance appears to have rebounded strongly in the second quarter.

Despite continued increases in vacancy rates and declines in the rents charged for various types of commercial properties, the credit quality of commercial mortgages has yet to show appreciable signs of deterioration. At commercial banks, delinquency rates on commercial mortgages edged up only slightly in the first quarter of 2003 from their historically low levels of recent years.

Ratings changes of nonfinancial corporations



NOTE: Data are at an annual rate; for 2003, 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 CMBS, which were stable in 2002 at about the midpoint of their recent range, have also risen just a bit this year. Respondents to the April 2003 Senior Loan Officer Opinion Survey attributed the resiliency of the credit quality of commercial real estate loans in part to borrowers' ability to refinance at lower interest rates; they also mentioned that the many borrowers with substantial equity positions in the mortgaged properties have an extra incentive to remain current. Banks also pointed to their having tightened lending standards and terms, including maximum loan-to-value ratios, well in advance of the current downturn.

In line with the assessment that, to date, credit quality in the sector remains good, spreads on CMBS over Treasuries have remained in the lower half of the ranges observed over the past few years. Market reports indicate that CMBS issuers generally have had access to terrorism insurance for the underlying properties, and the cost of that insurance has come down significantly. In addition, newly formed pools that include high-profile properties reportedly have been diversified to further protect investors from losses due to acts of terrorism.

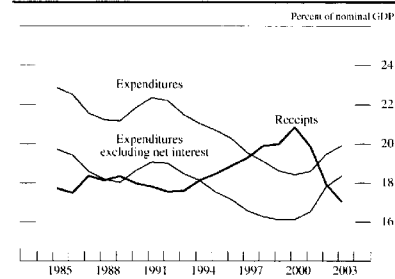
The Government Sector

Federal Government

The federal budget deficit has widened significantly as a consequence of the persistent softness in receipts and legislative actions affecting both spending and taxes. Over the first eight months of the current fiscal year—October to May—the deficit in the unified budget was \$292 billion, nearly \$150 billion larger than that recorded during the comparable period last year. Moreover, recent policy actions are projected to boost the deficit significantly over the remainder of the fiscal year. In particular, receipts will be reduced appreciably by several provisions of the Jobs and Growth Tax Relief Reconciliation Act of 2003, including advance refund checks for the 2003 increment to the child tax credit, downward adjustments to withholding schedules for individual taxpayers, and the sweetening of the partial-expensing investment incentive for businesses. In addition, outlays will be boosted by the supplemental appropriations for defense and foreign aid and by additional grants to the states. If the latest projection from the Congressional Budget Office is realized, the unified deficit will increase from \$158 billion in fiscal 2002 to more than \$400 billion in fiscal 2003.

The deterioration in the unified budget 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). Indeed, net federal saving, which accounts for the depreciation of government capi-

Federal receipts and expenditures

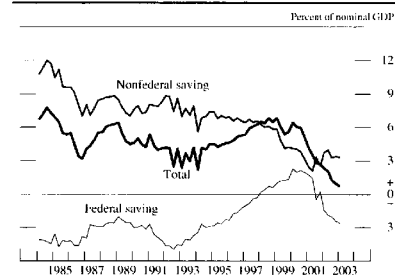


NOTE: The budget data are from the unified budget; through 2002 they are for fiscal years (October through September), and GDP is for Q4 to Q3. For 2003, the budget data are for the twelve months ending in May, and GDP is for 2002:Q2 to 2003:Q1.

tal. fell from a high of a positive 2 percent of GDP in 2000 to a negative 2½ percent of GDP in the first quarter of 2003. With little change, on balance, in nonfederal domestic saving over this period, the downswing in federal saving showed through into net national saving, which was equal to less than 1 percent of GDP in the first quarter, compared with the recent high of 6½ percent of GDP in 1998. If not reversed over the longer haul, such low levels of national saving could eventually impinge on the formation of private capital that contributed to the improved productivity performance of the past half-decade.

Federal receipts in the first eight months of the current fiscal year were nearly 3 percent lower than during the comparable period of fiscal 2002 after adjusting for some shifts in the timing of payments during the fall of 2001. Individual receipts were especially weak: Although

Net national saving



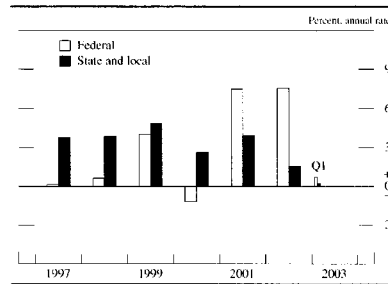
NOTE: The data are quarterly and extend through 2003:Q1. Nonfederal saving is the sum of personal and net business saving and the current surplus or deficit of state and local governments.

withheld taxes, which tend to move in line with wages and salaries, held up fairly well (after adjusting for changes in tax law) during this period, nonwithheld payments, which are more sensitive to capital income, dropped sharply. This spring's net final payments, which are largely payments on the previous year's liabilities, were exceptionally soft for a second year in a row; in combination with the information on withheld and estimated payments, they imply that individual liabilities continued to shrink as a percentage of the NIPA tax base in 2002. The substantial drop in the ratio of liabilities to NIPA income over the past couple of years reflects in part a reversal of the capital gains bonanza of the late 1990s and the tax reductions enacted in 2001. (Capital gains are not included in the NIPA income measure, which, by design, includes only income from current production.) In addition, the change in the distribution of income in the late 1990s, which concentrated more income in the upper tax brackets, may have been reversed some during the past couple of years.

Federal spending during the first eight months of fiscal year 2003 was 6½ percent higher than during the same period last year; excluding the drop in net interest outlays, spending was more than 7½ percent higher. Spurred by the war in Iraq, defense spending has moved up another 15 percent thus far this year; outlays for homeland security have risen briskly as well. Expenditures for income security programs, which include the temporary extended unemployment compensation program, also have risen at a fairly rapid rate. Though growth in spending on Medicare and Medicaid, taken together, has slowed a bit this year, the rising cost and utilization of medical care continue to put upward pressure on these programs.

Expenditures for consumption and gross investment, the part of federal spending that is included in GDP, rose

Change in real government expenditures on consumption and investment



just slightly in real terms in the first quarter as a sizable increase in nondefense purchases was nearly offset by a surprising decline in defense spending. The dip in defense spending followed several quarters of large increases; with the supplemental appropriation in place, defense spending in the second quarter appears to have resumed its rapid growth.

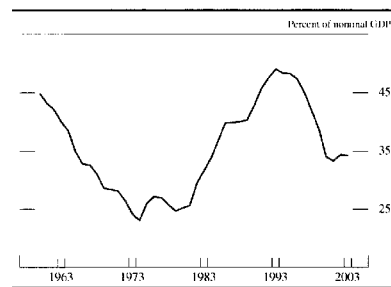
Federal debt held by the public advanced at a 2¼ percent annual rate in the first quarter and remained at just below 35 percent of nominal GDP. During the first half of the year, the Treasury announced several changes in its debt management, including the reintroduction of three-year notes and regular reopenings of certain five-year and ten-year notes, to position itself better to address the widening federal deficit. These steps have the consequences of lengthening the average maturity of its outstanding debt and trimming the size of some of its auctions. The Treasury also noted that it would be increasing the frequency and size of its auctions of inflation-indexed securities.

Beginning in February 2003, the Treasury needed to take steps to avoid exceeding the level of the statutory debt ceiling and employed several accounting devices to which market participants have become accustomed. It also temporarily suspended the issuance of the type of Treasury debt instrument in which the proceeds of advance refundings by state and local governments are allowed to be invested. No adverse reaction in financial markets was apparent during this period, however, and a bill increasing the debt ceiling \$984 billion, to \$7.384 trillion, was enacted on May 23.

State and Local Governments

On the whole, the budget situation at state and local governments remains grim. Like the federal government,

Federal government debt held by the public



Note: Through 2002, 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 2003:Q1. Excludes securities held as investments of federal government accounts.

states and localities were running sizable budgetary surpluses in the late 1990s and now face large deficits. After having enacted a series of tax reductions in the second half of the 1990s, they subsequently saw their receipts eroded by weak incomes and the falling stock market. At the same time, these entities boosted their outlays considerably, in large part because of rising health care costs and increased demands for security-related spending. The fiscal difficulties have been especially acute at the state level. And although local governments generally have fared somewhat better, many are now facing reductions in assistance from cash-strapped states. According to the NIPA, the state and local sector's aggregate current deficit rose to about \$50 billion in 2002—or 1/2 percent of GDP, the largest annual deficit relative to GDP on record—and that gap exceeded \$65 billion at an annual rate in the first quarter of 2003.

Almost all states and most localities are subject to balanced budget and other statutory rules that force them to address fiscal imbalances. These rules typically apply to operating budgets, and governments have taken a variety of actions to meet their budgetary requirements for fiscal 2003 and to pass acceptable budgets for fiscal 2004, which started on July 1 in most states and many localities. Strategies have included drawing upon accumulated reserves, issuing bonds, and, in some cases, using one-time measures such as moving payments into the next fiscal year and selling assets. Increases in taxes and fees also have become more widespread. Still, spending restraint has remained an important component of the adjustment. Governments—especially at the state level—have held the line on hiring and have limited their outlays for a variety of other goods and services. In the NIPA, real expenditures for consumption and gross investment in the state and local sector rose only 1/2 percent over the

year ending in the first quarter, compared with increases averaging more than 3 1/2 percent per year over the preceding five years. Available data point to continued softness in such spending in the second quarter.

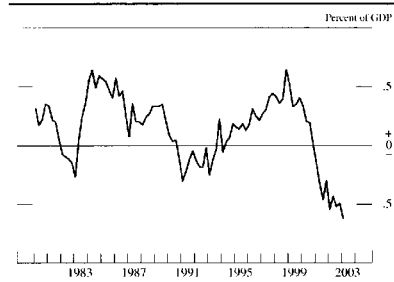
The pace of gross issuance of municipal bonds remained robust in the first half of the year; it was fueled in part by the needs of state and local governments to finance capital spending, which is not subject to balanced budget requirements. Long-term debt issuance was heavily used for new education and transportation projects. Declining yields on municipal debt and high short-term borrowing demands also provided important impetus to debt issuance. Despite continued fiscal pressures on many state and local governments, the credit quality of municipal bonds has shown some signs of stabilizing. Although the spread of BBB-rated over AAA-rated municipal bond yields has widened somewhat, the number of municipal bond upgrades by S&P has slightly exceeded the number of downgrades so far this year. The yields on municipal bonds declined more slowly than the yields on Treasury securities of comparable maturity over much of the first half of the year; these moves lowered the yield differential from the tax-advantaged status of municipal securities.

The External Sector

Trade and the Current Account

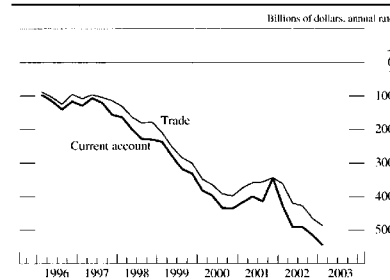
In the first quarter of 2003, the U.S. current account deficit amounted to \$544 billion at an annual rate, or about 5 percent of GDP, a somewhat higher percentage than in any quarter of last year. The deficit on trade in goods and services widened \$22 billion in the first quarter, to \$486 billion, as the value of imports rose more than that of exports. U.S. net investment income registered a

State and local government current surplus or deficit



NOTE: The data, which are quarterly, are on a national income and product account basis and extend through 2003:Q1. The current surplus or deficit excludes social insurance funds.

U.S. trade and current account balances



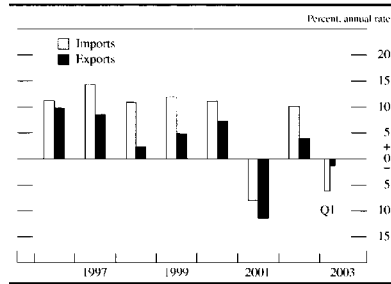
NOTE: The data are quarterly and extend through 2003:Q1.

\$16 billion surplus in the first quarter, little changed from the previous quarter but significantly larger than the outcome for last year as a whole. The increase over last year is attributable primarily to lower net interest and dividend payments. Net unilateral transfers and other income were a negative \$74 billion, down from a negative \$67 billion in the fourth quarter.

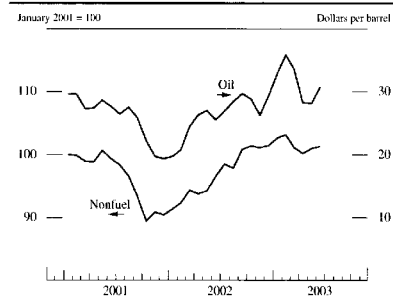
Real exports of goods and services fell 1 1/4 percent at an annual rate in the first quarter; this decline, like that in the previous quarter, reflected in part slow economic growth of our major trading partners. Within this total, exports of goods increased nearly 2 percent after declining sharply in the fourth quarter of last year. Moderate increases in most trade categories were partly offset by a decrease in exports of capital goods (particularly aircraft and computers). Meanwhile, real exports of services declined about 8 percent in the first quarter, mainly because of a drop in receipts from foreign travelers. Prices of exported goods and services, which rose nearly 4 percent at an annual rate in the first quarter, were boosted by rising prices of services and industrial supplies (mainly goods with a high energy component). Prices of exported capital goods, automotive products, and consumer goods showed little change in the first quarter.

U.S. real imports of goods and services declined 6 1/4 percent at an annual rate in the first quarter following four quarters of increases. Imports of oil, other industrial supplies, aircraft, and services (primarily U.S. travel abroad) all dropped sharply. Imports of automotive products decreased for the second consecutive quarter, but imports of machinery and consumer goods rose. The price of imported goods jumped 12 percent at an annual rate in the first quarter, mainly resulting from spikes in the prices of natural gas and oil. The price of imported goods excluding fuels rose about 2 percent in the first quarter, the fourth consecutive quarter of small increases, in part because of the depreciation of the dollar since early 2002.

Change in real imports and exports of goods and services



Prices of oil and of nonfuel commodities



NOTE: The data are monthly and extend through June 2003. The oil price is the spot price of West Texas intermediate crude oil. The price of nonfuel commodities is a weighted average of thirty-nine primary-commodity prices from the International Monetary Fund.

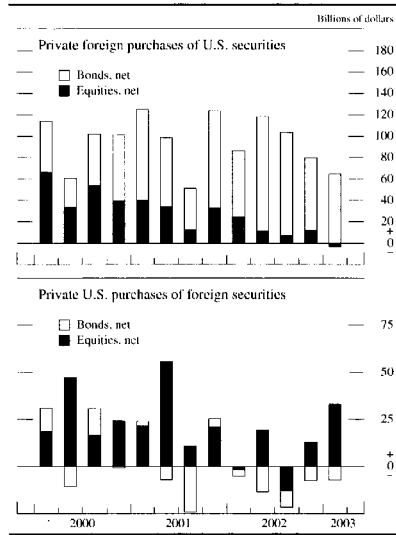
Slight declines in prices of imported capital goods, automotive products, and consumer goods were offset by small increases in other categories.

The spot price of West Texas intermediate crude oil rose to a twelve-year high of nearly \$38 per barrel in mid-March as the United States moved closer to war in Iraq and as a nationwide strike slowed Venezuelan oil production to a trickle. With the commencement of military action in Iraq and the relatively rapid conclusion of the war, prices fell to less than \$26 per barrel by late April. Downward pressure on prices was also exerted by increased production from some OPEC countries, particularly Saudi Arabia, Kuwait, and Venezuela, where oil production recovered substantially relative to the first quarter. In early June, oil prices moved back above \$30 per barrel after it became apparent that Iraqi exports of oil would return more slowly than market participants had previously expected.

The Financial Account

The U.S. current account deficit continued to be financed in large part by private flows into U.S. bonds and by foreign official inflows. Private foreign purchases of U.S. securities, which slowed in the latter part of 2002, stepped down a bit more in the first quarter of 2003, owing in part to weaker demand for U.S. equities. In contrast, inflows into the United States from official sources, which surged in 2002, picked up further in the first half of 2003 partly in response to downward pressures on the foreign exchange value of the dollar. U.S. residents, who had sold foreign securities on net last year, recorded sizable net

U.S. international securities transactions



SOURCE: Department of Commerce and the Federal Reserve Board.

purchases in the first quarter of this year: Relatively large purchases of foreign equities outweighed further sales of bonds.

Direct investment into the United States, after being restrained in 2002 by a slowdown of global mergers and acquisitions, picked up in the first quarter of 2003, as merger activity resumed. U.S. direct investment abroad was steady in 2002 and the first quarter of 2003.

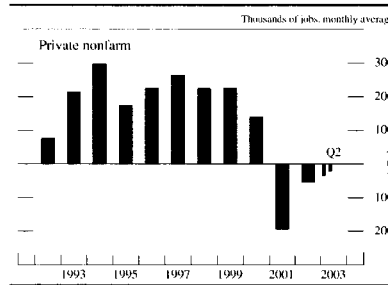
The Labor Market

Employment and Unemployment

The demand for labor has weakened further this year, though the pace of job losses appears to have slowed somewhat. After having fallen an average of 55,000 per month in 2002, private payroll employment declined 35,000 per month, on average, in the first quarter of 2003 and 21,000 per month in the second quarter. The civilian unemployment rate, which had been fluctuating around 5½ percent since late 2001, was little changed in the first quarter but moved up in the spring. In June, it stood at 6.4 percent.

The manufacturing sector has continued to shed jobs this year. On average, factory payrolls fell 55,000 per

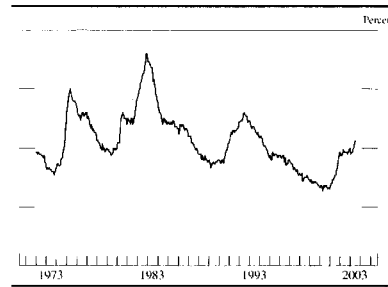
Net change in payroll employment



month over the first half of 2003—essentially as fast as over 2002 as a whole. Employment declines were widespread, but the metals, machinery, and computers and electronics industries continued to be especially hard hit. The weakness in manufacturing also cut into employment at help-supply firms and at wholesale trade establishments, although help-supply jobs increased noticeably in May and June.

Apart from manufacturing and related industries, private employment increased slightly, on net, in the first half after having been about unchanged in 2002. Employment in the financial activities sector rose briskly, in part because of the boom in mortgage refinancings. Construction employment, which had been essentially unchanged, on net, since 1999, remained soft in the first quarter but posted a sizable gain in the second quarter. Employment in the information sector, which includes telecommunications, publishing, and Internet-related services, continued to decrease, though a shade less rapidly than over the preceding two years. Demand for workers in retail

Civilian unemployment rate



NOTE: The data extend through June 2003.

trade, leisure and hospitality, and transportation and utilities remained lackluster.

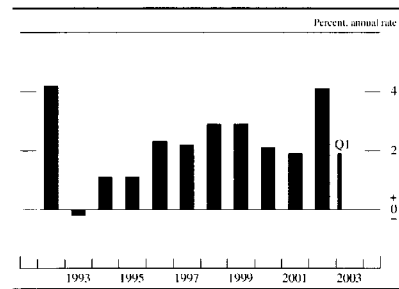
The unemployment rate was little changed in the first quarter, but it subsequently turned up. In June, it stood at 6.4 percent, 1/2 percentage point higher than the average in the fourth quarter of 2002 and about 2 1/2 percentage points above the lows reached in 2000. The rise in the unemployment rate over the spring was chiefly driven by the ongoing softness in labor demand. Most recently, it also coincided with an uptick in labor force participation. That uptick notwithstanding, the participation rate has trended down over the past couple of years, a slide mainly reflecting declines for adult men and younger persons.

Productivity and Labor Costs

Labor productivity has continued to post solid gains in recent quarters as businesses have remained reluctant to expand their payrolls and instead have focused on cutting costs in an environment of sluggish—and uncertain—demand. According to the currently published data, output per hour worked in the nonfarm business sector rose at an annual rate of 2 percent in the first quarter and 2 1/2 percent over the four quarters ending in the first quarter. Though the recent gains are down from the very rapid increases in late 2001 and 2002, they are similar to those achieved in the second half of the 1990s. However, whereas the earlier productivity gains were driven importantly by an expansion of the capital stock, the recent gains appear to have come mainly from efficiency-enhancing changes in organizational structures and better use of the capital already in place.

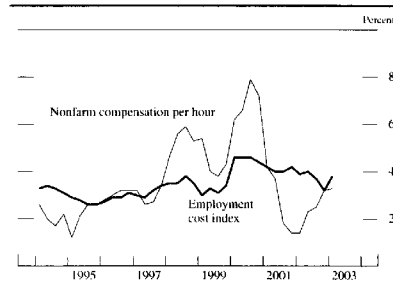
The employment cost index (ECI) for private nonfarm businesses increased about 3 1/4 percent over the twelve months ending in March—only a shade less than over

Change in output per hour



NOTE: Nonfarm business sector.

Measures of change in hourly compensation



NOTE: The data extend through 2003: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.

the preceding year but more than 1/2 percentage point below the increases of a few years earlier. The deceleration in hourly compensation over the past few years has been concentrated in wages, for which gains slowed from about 4 percent per year in 2000 and 2001 to 3 percent over the year ending this March. The slowing in wage growth primarily reflects the effects of the soft labor market and lower rates of price inflation; in addition, employers may be exerting more restraint on wages to offset some of the upward pressure on total compensation from rising benefit costs. The increase in benefits was especially sharp in the first quarter of 2003; in that period, employers stepped up their contributions to defined-benefit retirement plans in response to declines in the market value of plan assets, and health insurance costs continued to increase rapidly. In total, benefit costs rose 6 percent over the year ending in March.

The growth in compensation per hour in the nonfarm business sector—an alternative measure of hourly compensation based on the NIPA—has swung widely in recent years. Fluctuations in the value of stock option exercises, which are excluded from the ECI, likely have contributed importantly to these swings. In any event, the increase in this measure over the year ending in the first quarter was 3 1/4 percent and roughly in line with the rise indicated by the ECI.

Prices

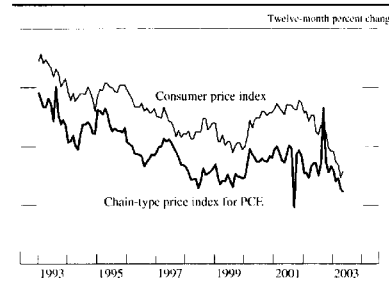
Headline inflation numbers have been heavily influenced by movements in energy prices, but underlying inflation has remained subdued and according to some measures has even moved somewhat lower. Reflecting the surge in energy prices, the chain-type price index for personal

consumption expenditures (PCE) increased at an annual rate of 2½ percent in the first quarter, about 1 percentage point faster than the increase over 2002 as a whole; this index moved down in April and May as energy prices retreated. PCE prices excluding food and energy—the so-called core PCE price index—were nearly unchanged during the spring, and the twelve-month change in this series stood at 1½ percent in May, compared with a reading of 1¾ percent over the preceding twelve months.

In the main, the quiescence of underlying inflation reflects continued slack in labor and product markets and the robust productivity gains of recent years. In addition, inflation expectations have remained in check—and, indeed, may have subsided a bit further. For example, according to the Michigan Survey Research Center, the median expectation for inflation over the coming year was running about 2 percent in May and June, compared with 2½ percent to 3 percent over much of the preceding few years. Readings on this measure had been considerably higher earlier in the year, when energy prices were rising, and it is difficult to know whether the decline of late was driven chiefly by the retreat in energy prices during the spring. Non-oil import prices posted a sizable increase in the first quarter after having been little changed in 2002, but the first-quarter rise was due largely to a spike in the price of imported natural gas, which should not have much effect on core consumer price inflation. Given the decline in the dollar from its peak in early 2002, non-oil import prices will probably trend up modestly in coming quarters.

PCE energy prices rose sharply in the first quarter but turned down in the spring, a pattern largely mirroring the swings in crude oil prices. Gasoline prices, which had already been elevated in late 2002 by weather-related supply disruptions, increased further early this year as

Change in consumer prices excluding food and energy



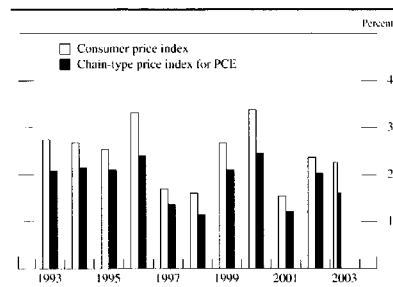
NOTE: The data extend through May 2003.

crude oil costs rose and wholesale margins remained large; by June 1, gasoline prices had reversed that increase, and they have changed little, on net, since that time. Natural gas prices also soared in early 2003 as tight inventories were depleted further by unusually cold weather; since the unwinding of February's dramatic spike, prices have held in a narrow range. Inventories of natural gas have increased significantly of late, but they are still low enough to raise concerns about the possibility of future price spikes in the event of a heat wave later this summer or an unusually cold winter. Reflecting the higher natural gas input costs, PCE electricity prices rose substantially over the first five months of 2003 after having fallen some in 2002.

Increases in core consumer prices of both goods and services have slowed over the past year, with the deceleration most pronounced for goods. Prices for core PCE goods fell 2¼ percent over the year ending in May after having decreased 1 percent over the preceding twelve months. Meanwhile, the rise in prices for non-energy services totaled 2½ percent over the year ending in May, a little less than over the preceding period. Among the major types of services, the price of owner-occupied housing was up only 2½ percent after having risen 4¼ percent over the preceding period. But prices for some other types of services accelerated. Most notably, the prices of financial services provided by banks without explicit charge turned up after having decreased over the preceding two years; because these prices cannot be derived from market transactions and thus must be imputed, they are difficult to measure and tend to be volatile from year to year.

Increases in the core consumer price index (CPI) also have been very small recently, and the twelve-month change in this measure slowed from 2½ percent in May 2002 to 1½ percent in May 2003—a somewhat greater

Change in consumer prices



NOTE: Change for 2003 is from December 2002 to May 2003 at an annual rate; changes for earlier periods are from December to December.

Alternative measures of price change

Percent

Price measure	2001 to 2002	2002 to 2003
<i>Chain-type</i>		
Gross domestic product	1.4	1.6
Gross domestic purchases8	2.2
Personal consumption expenditures9	2.2
Excluding food and energy	1.5	1.5
Chained CPI9	2.5
Excluding food and energy	1.9	1.4
<i>Fixed-weight</i>		
Consumer price index	1.3	2.9
Excluding food and energy	2.5	1.8

Note. Changes are based on quarterly averages and are measured from Q1 to Q1.

deceleration than in core PCE prices. The greater deceleration in the CPI is primarily accounted for by its narrower scope and different weighting structure than the PCE measure. In particular, it excludes the imputed prices of financial services rendered without explicit charge as well as several other categories for which market prices are not available; these non-market-based prices have accelerated notably recently. In fact, when the nonmarket categories are stripped from the core PCE index, the remaining components show a deceleration close to that in the core CPI. Another consideration is that housing costs have a much larger weight in the CPI than in the PCE index, partly because of the CPI's narrower coverage. Thus, the smaller price increases for housing services of late have a bigger damping effect on core CPI inflation, just as the hefty increases in this category in 2001 and 2002 tended to lift the CPI relative to the PCE index.

Broader price measures likewise point to low inflation over the year ending in the first quarter. In particular, the chain-type price index for GDP rose only 1½ percent over that period, about the same as during the comparable period four quarters earlier. Meanwhile, the price index for gross domestic purchases—which is defined as the prices paid for consumption, investment, and government purchases—increased 2¼ percent, up from ¾ percent during the preceding period. The upswing mainly reflects the effect of higher energy prices and roughly matches the acceleration in total PCE prices; the price indexes for construction and government purchases also recorded somewhat larger increases than they had over the preceding period.

U.S. Financial Markets

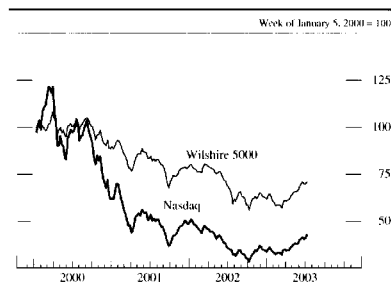
On balance, major stock indexes have climbed noticeably this year, government and corporate interest rates have declined, and risk spreads, which had dropped significantly late last year, have fallen further.

Before the War in Iraq

The year began on an optimistic note in financial markets, in part owing to the release of a surprisingly strong report from the Institute for Supply Management and the announcement of a larger-than-expected package of proposed tax cuts, which included elimination of the personal federal income tax on many corporate dividend payments. In addition, yields and risk spreads on corporate bonds had dropped significantly in the fourth quarter of 2002, partly in reaction to the absence of new revelations of accounting irregularities and to the improved outlook for corporate credit quality. Money market futures rates apparently embedded an expectation that the FOMC would begin increasing the federal funds rate as early as mid-summer 2003.

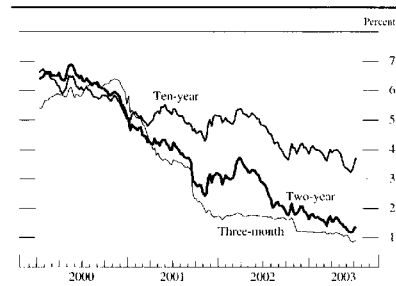
That short burst of optimism was quickly damped by subsequent economic reports that were decidedly less rosy, a jump in oil prices in response to the looming prospect of war in Iraq, and increased tensions with North Korea. Measures of uncertainty, such as implied volatility, moved up in several markets. Major equity indexes slid and by mid-March were off about 4 percent to 9 percent from the beginning of the year. Investors also came to believe that the onset of FOMC tightening would occur later than they had earlier believed, a shift in perception that was reflected in lower yields on Treasury bonds. Yields on investment-grade corporate bonds fell about in line with those on Treasuries, and investors appeared to be substituting high-quality bonds for equities as part of a broader flight to fixed-income securities over this period. By contrast, yields on below-investment-grade bonds rose a bit, on balance, between mid-January and mid-March, a move that left their risk spreads higher as well.

Major stock price indexes



Note. The data are weekly averages and extend through July 9.

Interest rates on selected Treasury securities



NOTE: The data are weekly averages and extend through July 9.

After the War in Iraq

Once it became clear that military action in Iraq was imminent, a robust rally erupted in both the equity and bond markets, as some of the uncertainties apparently dissipated and investors began to show a greater appetite for riskier assets. Equity indexes jumped about 8 percent in the two weeks bracketing the President's ultimatum to Saddam Hussein, and prices climbed an additional 3 percent through the end of April, partly on the release of generally better-than-expected earnings reports for the first quarter. Gains in share prices were fairly widespread and included technology, defense, petroleum, and especially financial companies.

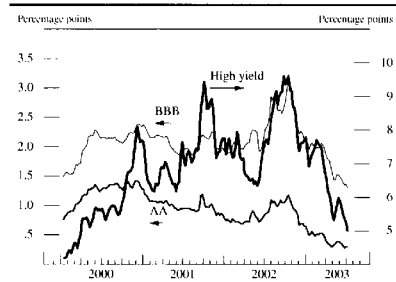
The easing of tensions also put upward pressure on Treasury yields, but additional disappointing economic data offset the diminished safe-haven demands and left

those rates down, on balance, during the period covering the war in Iraq and its immediate aftermath. Yields on corporate bonds also declined, in part because of strengthened corporate balance sheets, the reduction in uncertainty, and perhaps because investors began to search for higher returns. Moreover, according to one widely used measure, spreads on speculative-grade bonds tumbled about 150 basis points, to about 520 basis points, from mid-March until mid-May, and then fluctuated somewhat before ending June near that level. The rally in below-investment-grade bonds was particularly evident in sectors that had previously experienced some of the greatest widening of spreads—telecom, energy trading, and utilities; the interest in these sectors further indicated investors' increased appetite for risk.

A stubbornly sluggish economy and rapid growth of productivity muted both inflation and inflation expectations, inducing the FOMC to begin pointing to a further substantial decline in inflation as a concern at its May meeting. Market participants took this to imply that short-term rates would be held along a lower path for longer than they had previously expected. This shift in expectations triggered a further decline in intermediate- and long-term yields. With long-term inflation expectations apparently only little changed, the decline in yields translated into a sizable decline in real interest rates.

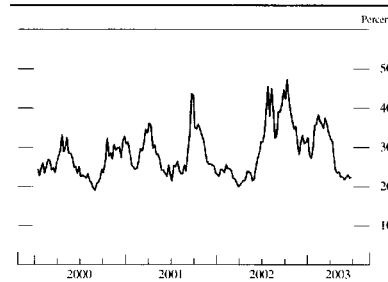
That drop in real interest rates was among several factors providing a boost to equity prices in May and June. Implied volatility of the S&P 100 index, which had been elevated earlier in the year, fell substantially with the conclusion of major hostilities in Iraq; it is now near the bottom of its range of the past several years. Moreover, downward revisions to analysts' earnings expectations for the year ahead have been the smallest since early 2000. The tax package passed in late May, which included a

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



NOTE: The data are weekly averages and extend through July 9 except for the high-yield series, which extends through July 7. The spreads compare the yields on Merrill Lynch AA, BBB, and 175 indexes with the yield on the ten-year off-the-run Treasury note.

Implied S&P 100 volatility



NOTE: The data are weekly averages and extend through July 9. The series shown is the implied volatility of the S&P 100 stock price index as calculated from the prices of options that expire over the next several months. SOURCE: Chicago Board Options Exchange.

cut in taxes on capital gains and dividends, may have provided some additional impetus to equity prices.

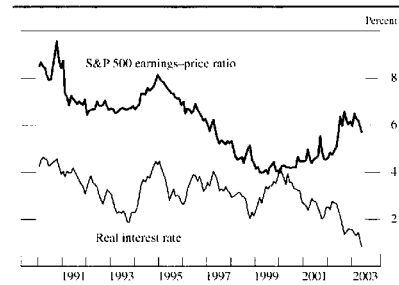
The FOMC decided on June 25 to reduce the target federal funds rate 25 basis points, to 1 percent, but some observers had been anticipating a cut of 50 basis points. In addition, markets appeared to read the Committee's assessment of economic prospects as more upbeat than expected. Partly as a result, yields on longer-dated Treasury securities reversed a portion of their previous decline in the weeks following the meeting. Yields on high-quality corporate bonds rose about in line with Treasuries over the same period, but yields on speculative-grade bonds edged up only slightly, and risk spreads narrowed further. Forward-looking economic indicators were generally positive, and stock price indexes—the Nasdaq, in particular—continued to trend higher.

On net, the constant-maturity yield on the two-year Treasury note has fallen 24 basis points this year, to 1.37 percent as of July 9, while the yield on the ten-year Treasury bond has fallen 10 basis points, to 3.73 percent. Over the same period, the Wilshire 5000 is up 15½ percent, and the Nasdaq has surged more than 30 percent. As a result of the decline in real interest rates, the spread between the twelve-month forward earnings-price ratio for the S&P 500 and the real ten-year yield remains wide despite the run-up in stock prices.

Shorter-term Debt Markets

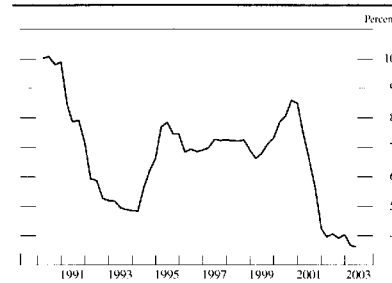
The average interest rate on commercial and industrial loan originations—a substantial majority of which have

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



NOTE: The data are monthly and extend through June 2003. The earnings-price ratio is based on I/B/E/S consensus estimates of earnings over the coming year. The real rate is estimated as the difference between the ten-year Treasury rate and the five-year to ten-year expected inflation rate from the FRB Philadelphia survey.

Average C&I loan rate, domestic banks

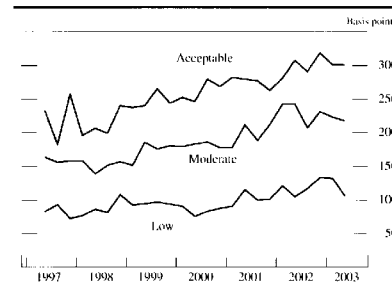


NOTE: The data are quarterly and extend through 2003:Q2. SOURCE: Federal Reserve, Survey of Terms of Business Lending.

adjustable interest rates—has fallen to its lowest level since the start of the Federal Reserve's Survey of Terms of Business Lending in 1977. The survey also indicates that risk spreads on these loans receded a bit over the first half of 2003 after having trended up for most of the past several years. Prices in the secondary loan market have risen this year, reportedly in part because some of the large inflows to high-yield mutual funds were used to purchase distressed loans and because of the expectation that many outstanding loans would continue to be prepaid with the proceeds of bond refinancing.

Interest rates on commercial paper also dropped to very low levels in the first half of 2003. Risk spreads in this market were relatively stable and near the bottom of the range observed over the past several years, in part because of businesses' efforts to strengthen their balance sheets and improve their liquidity.

C&I loan rate spreads, by internal risk rating



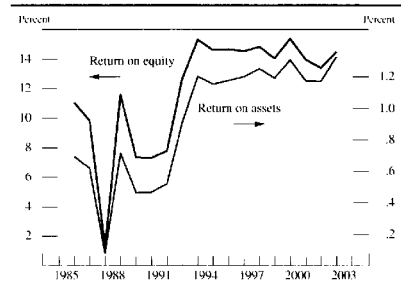
NOTE: The data are quarterly and extend through 2003:Q2. Spreads are over a market interest rate of comparable maturity. Low-risk loans are those in risk categories "minimal" and "low." SOURCE: Federal Reserve, Survey of Terms of Business Lending.

Debt and Financial Intermediation

The debt of all domestic nonfinancial sectors—government, businesses, and households—grew at a 6½ percent annual rate in the first quarter, down from 8 percent in the fourth quarter of 2002 but still well in excess of the growth of nominal GDP. The proportion of the new credit supplied by depository institutions rose significantly in the second half of last year and remained at about 25 percent in the first half of this year. In large part, the jump reflects the sector’s support of the booming mortgage market—through both direct lending and the acquisition of mortgage-backed securities—which has more than offset weak business lending. At commercial banks, revenues from mortgage-related activities reportedly helped sustain profits in the first quarter at the elevated levels of the past several years despite some erosion in net interest margins.

The delinquency rate on all loans and leases at banks edged down further during the first quarter, to its lowest level in two years. Increases in the delinquency rates on

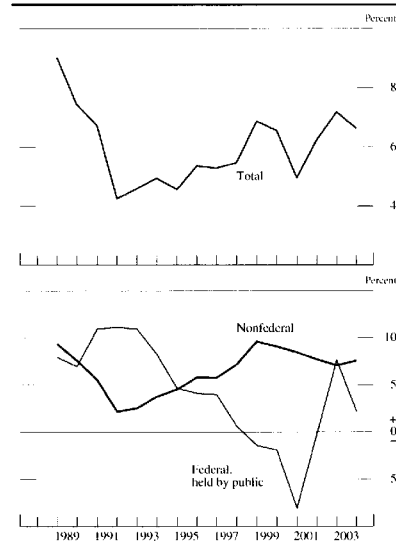
Measures of bank profitability



NOTE: Through 2002 the data are annual; for 2003 they are seasonally adjusted data for Q1 at an annual rate.
SOURCE: Call Report.

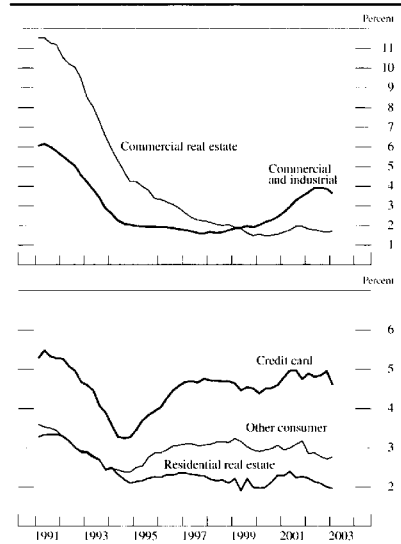
commercial real estate loans and non-credit-card consumer loans were offset by declines in those on residential real estate loans, credit card loans, and business loans. For business and credit card loans, however, the delin-

Change in domestic nonfinancial debt



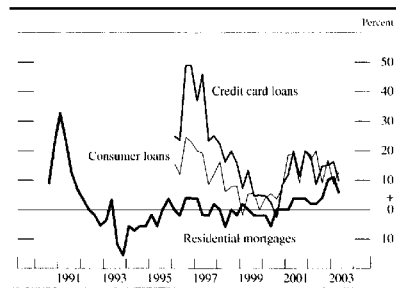
NOTE: The data are annual; the observations for 2003 are annualized values for Q1. The total consists of nonfederal debt and federal debt held by the public. Nonfederal debt consists of the outstanding credit market debt of state and local governments, households, nonprofit organizations, nonfinancial businesses, and farms. Federal debt held by the public excludes securities held as investments of federal government accounts.

Delinquency rates on selected types of loans at banks



NOTE: The data are quarterly, seasonally adjusted, and extend through 2003:Q1.
SOURCE: Call Report.

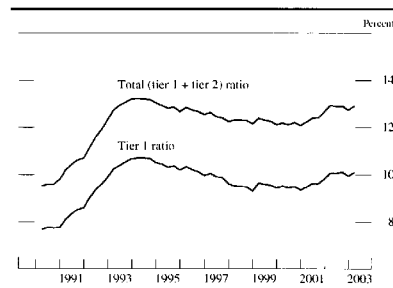
Net percentage of domestic banks tightening standards on loans to households



NOTE: The data are based on a survey generally conducted four times per year; the last reading is from the April 2003 survey. 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.

Regulatory capital ratios of commercial banks



NOTE: The data, which are quarterly and extend through 2003:Q1, are ratios of capital to risk-weighted assets. Tier 1 capital consists primarily of common equity and certain perpetual preferred stock. Tier 2 capital consists primarily of subordinated debt, preferred stock not included in tier 1 capital, and a limited amount of loan-loss reserves.

SOURCE: Call Report.

quency rates at banks remain elevated, and the recent improvement likely reflects, in part, the effect of the tightening of lending standards and terms that has been reported for some time now in the Senior Loan Officer Opinion Survey. On a seasonally adjusted basis, the ratio of loan-loss provisions to assets declined in the final quarter of last year, and it was about unchanged from that still-elevated level in the first quarter of 2003. In addition to the buffer against future losses provided by their high profitability and substantial provisions, virtually all banks—98 percent by assets—remain well capitalized.

Among nondepository financial institutions, issuers of asset-backed securities provided about 13 percent of the total credit extended to domestic nonfinancial sectors in the first quarter. The share of net lending supplied by mutual funds increased notably to almost 10 percent in the first quarter, and with the continuation of strong flows to bond mutual funds, they likely were large suppliers in the second quarter as well. Meanwhile, available data suggest that insurance companies likely accounted for about 7 percent of total credit extended during the first half of the year, a proportion near the top of the range seen since the mid-1990s.

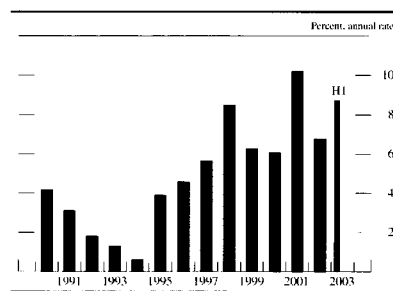
Government-sponsored enterprises (GSEs) provided 11 percent of the net lending (net acquisition of credit market instruments) in the first quarter, an amount roughly in line with their level in the second half of 2002. The duration gaps in the portfolios of the housing GSEs were maintained near their targets. In early June, Freddie Mac replaced its top three executives amid questions about its accounting practices. The spreads on longer-term Freddie Mac debt widened a bit, and its stock price declined sharply; the prices of Fannie Mae securities also declined

but to a lesser extent. On net, there appears to be little, if any, spillover into broader financial markets.

Monetary Aggregates

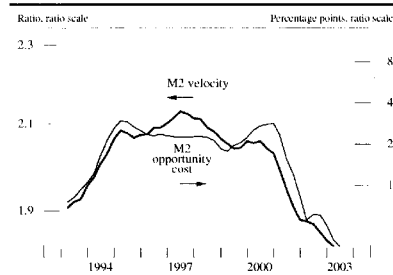
Through the first half of 2003, the growth rate of M2 was buoyed by several factors and remained elevated. The rising level of mortgage refinancing causes money growth to accelerate because the associated prepayments on mortgage-backed securities that are temporarily held in escrow accounts increase liquid deposits. Demand for M2 was also supported by the decline in short-term market interest rates, which further reduced the opportunity cost

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.

M2 velocity and opportunity cost



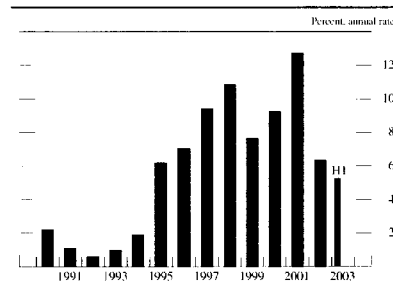
NOTE: The data are quarterly. They extend through 2003:Q1 for velocity and 2003:Q2 for opportunity cost. The velocity of M2 is the ratio of nominal gross domestic product to the stock of M2. The opportunity cost of holding M2 is a two-quarter moving average of the difference between the three-month Treasury bill rate and the weighted average return on assets included in M2.

of holding money. Precautionary demand for safe and liquid M2 assets also likely buttressed the growth of M2 in the run-up to the war in Iraq.

In contrast, mutual fund flows related to the bond market rally and the post-war pickup in the stock market may have siphoned funds from M2. Retail money market mutual funds and small time deposits both experienced net outflows during the first half of the year. While some of that money continued to feed the extraordinary growth of liquid deposits, it is likely that a portion was redirected to long-term mutual funds.

After having weakened significantly in 2002, growth of M3 slowed further in the first half of 2003. Much of this year's slowdown can be attributed to rapid runoffs of institutional money market mutual funds. The runoffs

M3 growth rate



NOTE: M3 consists of M2 plus large-denomination time deposits, balances in institutional money market funds, repurchase-agreement liabilities (overnight and term), and eurodollars (overnight and term).

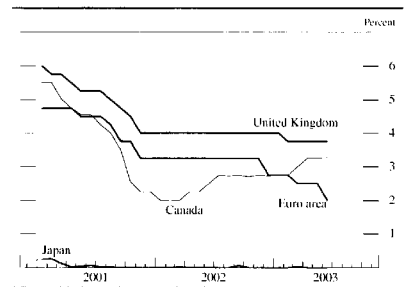
were, in turn, partially the result of an unwinding of the strength late last year and the fact that interest rates paid by those funds declined faster than the interest rates paid by the underlying assets this year. The drop in institutional money funds has been offset by growth in euro-dollar deposits and repurchase agreements.

International Developments

Economic activity abroad was sluggish in the first quarter of 2003, with real output in the euro area and Japan little changed from the previous quarter. Geopolitical uncertainties, higher oil prices, slow growth in the United States, persistent weakness in global high-tech sectors, and continued negative wealth effects from past declines in equity prices all weighed on foreign growth. Foreign economic expansion appeared to remain weak in the second quarter despite the reduction in uncertainty associated with Iraq. Indicators suggest that manufacturing activity abroad has not picked up; instead, industrial production declined in April and May, on average, relative to the first quarter in Japan, Germany, and France. Concerns over the spread of the SARS virus appear to have hurt growth in the second quarter in several Asian developing economies and in Canada.

Central banks in several major foreign industrial countries moved to ease monetary policy during the first half of this year. The European Central Bank and the central banks of the United Kingdom, Sweden, Switzerland, Norway, and New Zealand all cut official interest rates. The pace of monetary easing in Europe picked up toward midyear, when inflation pressures dissipated amid growing slack, currency appreciation vis-à-vis the dollar, and the decline in oil prices after the conflict in Iraq. In con-

Official interest rates in selected foreign industrial countries



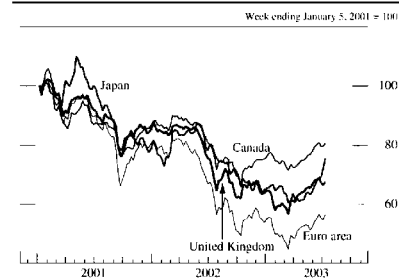
NOTE: The data are as of month-end and extend through June 2003. The interest rates shown are the call money rate for Japan, the overnight rate for Canada, the refinancing rate for the euro area, and the repurchase rate for the United Kingdom.

trast, the Bank of Canada raised interest rates twice in the spring, in a continued effort to contain inflation. The Bank of Canada left rates unchanged in June, however, in response to a sharp appreciation of the Canadian dollar and a drop in Canadian inflation in April, some slackening of demand in labor markets in May, and concerns about the pace of activity in the United States. The Bank of Japan (BOJ) maintained short-term interest rates at near-zero levels, further expanded its target for current account balances held by financial institutions at the BOJ, and took some additional measures to add stimulus to the economy.

In the first quarter, foreign financial markets were influenced by heightened anxieties ahead of the war in Iraq, but those concerns appeared to diminish as the war proceeded. Foreign equity prices declined in the first quarter, but they have since recovered. Broad stock indexes for the major industrial countries are up on balance since the beginning of the year but, with the exception of Japan, they have gained less than in the United States. Long-term interest rates in most foreign industrial countries fell during the first half of the year because prospects for inflation diminished, growth sputtered, and market participants began to expect that policy interest rates would remain low for an extended period. Asset prices in emerging markets, particularly in Latin America, picked up during the first half of this year; equity prices rose significantly, and risk spreads on emerging-market bonds narrowed. Bonds issued by a number of emerging-market economies included collective action clauses (CACs) that are designed to facilitate a debt restructuring in the event of default; this development had little noticeable effect on spreads.

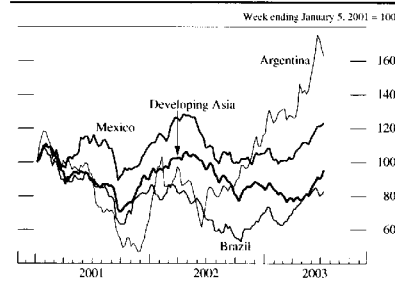
The dollar's foreign exchange value continued to decrease in the first half of 2003. Since the end of 2002, the dollar has depreciated on a trade-weighted basis nearly

Equity indexes in selected foreign industrial countries



Note: The data are weekly. The last observations are the average of trading days through July 9, 2003.

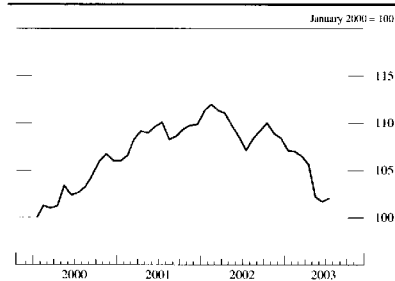
Equity indexes in selected emerging markets



Note: The data are weekly. The last observations are the average of trading days through July 9, 2003. Developing Asia consists of China, Hong Kong, India, Indonesia, Malaysia, Pakistan, the Philippines, Singapore, South Korea, Taiwan, and Thailand.

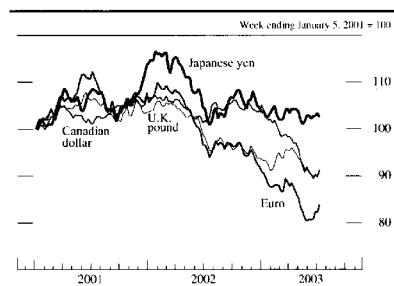
5 percent against the currencies of a broad group of U.S. trading partners. The dollar has declined 13 percent against the Canadian dollar and more than 7 percent on net against the euro but has fallen less than 1 percent versus the Japanese yen. During the first quarter, the dollar appeared to react to concerns about the war in Iraq, falling when news indicated a heightened risk of hostilities and strengthening as concerns appeared to abate. After the resolution in April of major hostilities, the dollar fell further, and market commentary focused more on the financing needs posed by the large and growing U.S. current account deficit.

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 9, 2003. 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.

U.S. dollar exchange rate against selected major currencies



NOTE: The data are weekly. Last observations are the average of trading days through July 9, 2003. Exchange rates are in foreign currency units per dollar.

Industrial Economics

The euro-area economy stagnated in the first quarter of 2003. Consumer spending continued to expand at a modest rate and inventory investment grew, but business fixed investment fell sharply and exports declined. The German economy contracted in the first quarter and continued to underperform the euro-area average, in part owing to a fiscal tightening undertaken to bring the budget deficit into line with limits set out in the euro area's Stability and Growth Pact. The rise in the exchange value of the euro over the past year has begun to hurt euro-area manufacturers: exports have leveled off while imports have continued to rise. Recent indicators have shown little rebound in the pace of euro-area activity following the conclusion of the Iraq war, and business and consumer sentiment have remained sour. Core inflation has slowed from its 2002 peak, and headline inflation, which was temporarily boosted by oil prices, recently has fallen to the 2 percent upper limit of the ECB's definition of price stability.

Economic growth in the United Kingdom slowed to a crawl in the first quarter, but recent indicators—such as consumer confidence and industrial production—suggest that the pace has been somewhat stronger during the past few months. Growth of consumption has slowed but continues to be held up by a strong labor market and by past gains in housing prices, although lately these prices have decelerated.

The Japanese economy barely grew in the first quarter after expanding almost 2½ percent in 2002. Business investment continued to grow in the first quarter, and private consumption increased despite stagnating incomes; however, residential and public investment both fell

sharply, and exports declined because of the weak global economy. The severity of consumer price deflation lessened somewhat, partly because of the spike in energy prices. Japanese banks continued to be weighed down by bad loans.

Canada's economy maintained a moderate pace of expansion in the first quarter, but recent indicators suggest that growth of real GDP slowed in the second quarter. First-quarter growth was supported by continued strength in domestic demand, as Canada's strong labor and housing markets kept propelling the economy. However, exports declined in the first quarter, largely because of a drop in exports of industrial supplies and forestry products to the United States. More recently, employment declined slightly in April and May, and the unemployment rate moved up. The outbreak of the SARS virus in Toronto hurt Canadian travel and tourism, and weak U.S. demand slowed the Canadian manufacturing sector. In June, employment rebounded, but the gain was almost all in part-time work, and manufacturing employment continued to fall.

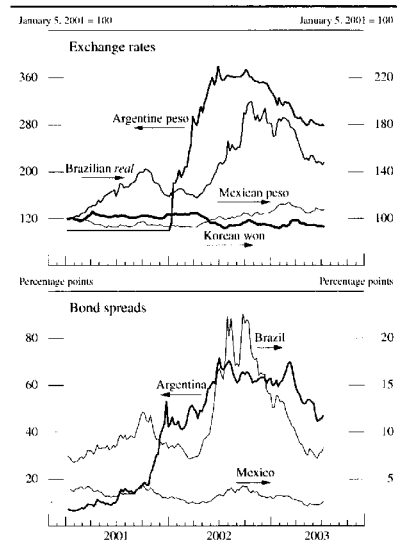
Emerging-Market Economies

Economic growth in the Asian developing countries slowed in the first quarter, brought down by weakness in business investment and consumer spending. In South Korea, growth of real GDP turned negative in the first quarter after a rapid expansion in 2002. Tensions with North Korea contributed to a decline in consumer and business sentiment, but these indicators have stabilized in the past couple of months. The Hong Kong economy also contracted, following strong growth in the second half of last year. The SARS outbreak held down both personal consumption and tourism in the first quarter, and even more negative effects are likely to be seen in the second-quarter data. Although the Chinese economy has also been adversely affected by SARS, it has been sustained by strong export growth and investment. Chinese inflation has moved back into positive territory on a twelve-month basis, largely owing to higher prices for energy and food.

The Mexican economy contracted in the first quarter, and exports and business confidence have declined in recent months. Consumer price inflation has come down recently, a decline helped in part by the net appreciation of the Mexican peso since early March. Measures of inflation expectations suggest that market participants expect the central bank to come close to achieving its inflation target this year.

Brazilian economic growth stagnated in the first quarter largely as a result of the tightening of macroeconomic policies in response to the financial crisis that erupted in

U.S. dollar exchange rates and bond spreads
for selected emerging markets



NOTE: The exchange rate data are weekly averages that are indexed to the week ending January 5, 2001. Last observations are the average of trading days through July 9, 2003. Exchange rates (top panel) are in foreign currency units per dollar. Bond spreads (bottom panel) are the J.P. Morgan Emerging Market Bond Index (EMBI+) spreads over U.S. Treasuries.

mid-2002. The growth slowdown largely reflected a continued weakening in domestic demand, but exports also deteriorated. Monthly inflation has come down since early this year, and Brazil's central bank recently lowered slightly its benchmark interest rate. The Lula administration's efforts to implement social security and tax reforms have bolstered investor confidence. Financial conditions in Brazil have improved markedly: Equity prices have risen more than 20 percent so far this year, the *real* has gained more than 20 percent against the U.S. dollar, and credit spreads on Brazilian government debt have narrowed more than 600 basis points.

The Argentine economy has started to turn around from the sharp contraction that occurred in the wake of the devaluation and default in late 2001, but the level of economic activity remains far below pre-crisis levels, and many of Argentina's structural problems have not been addressed. The Argentine peso appreciated more than 20 percent against the dollar during the first half of the year. In July, Argentina implemented controls on short-term capital inflows in an effort to stabilize the appreciating currency.



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

ALAN GREENSPAN
CHAIRMAN

June 25, 2003

The Honorable Tim Johnson
United States Senate
Washington, D.C. 20510

Dear Senator:

I am writing in response to your request for the Board's views on several questions related to the federal supervision of insured industrial loan companies (ILCs). As you know, a special exemption under federal law permits any type of firm, including a commercial or retail organization, to own an insured ILC and operate it without being subject to the type of consolidated supervision and restrictions generally applied to the corporate owners of insured banks.

Your letter highlights the important public policy issues that are raised by proposals that would expand the powers of ILCs operating under this special exemption by authorizing these institutions to offer business checking accounts and open *de novo* branches nationwide. The Board has opposed these expansions of ILC powers because they are inconsistent with the basis on which the exception for ILCs was granted--that they were limited-purpose institutions. Granting ILCs essentially full banking powers while allowing their corporate owners to retain their special exception would be contrary to the nation's policies of maintaining the separation of banking and commerce and requiring the consolidated supervision of companies that own full-service insured banks.

Responses to the specific questions posed in your letter are enclosed. I hope this information is helpful.

Sincerely,

A handwritten signature in black ink, appearing to be "Alan Greenspan", written over the word "Sincerely,".

Enclosure

1. Why is consolidated supervision important to the safety and soundness of insured banks and the stability of the U.S. financial system?

Consolidated supervision is a supervisory framework that provides a supervisor the tools needed--such as reporting, examination, capital and enforcement authority--to understand, monitor and, when appropriate, restrain the risks associated with an organization's consolidated or group-wide activities. Consolidated supervision is a fundamental component of bank supervision in the United States and, increasingly, abroad. This is so because it provides important protection to the insured banks within the overall organization as well as the federal safety net that supports those banks. In addition, consolidated supervision aids in the detection and prevention of financial crises and, thus, mitigates the potential for systemic risk in the financial system.

History demonstrates that financial trouble in one part of a business organization can spread rapidly to other parts of the organization. This is particularly true if the parent holding company has weak financial or capital resources because the parent may well seek, or be required, to divert financial resources from a healthy subsidiary to aid either the parent or an ailing subsidiary. In the financial sector, examples of the propensity for financial difficulties to cascade among affiliates are many and include BCCI and Drexel Burnham Lambert, as well as numerous individual cases within the Texas banking crises of the 1980s.

Advances in information and communication technology, moreover, now allow holding companies to operate and manage their organizations on an integrated basis with little regard for the corporate boundaries that typically define the jurisdictions of supervisors. Thus, large, complex organizations typically maximize synergies and efficiencies within the overall organization by managing their operations based on lines of business that may cut across several different legal entities. In addition, these organizations increasingly rely on centralized processes to manage and control the risks that flow from their overall activities on a consolidated basis.

Risks that cross legal entities and that are managed on a consolidated basis cannot be monitored properly through supervision directed at any one, or even several, of the legal entity subdivisions within the overall organization. In order to fully understand and assess these risks, a supervisor must be able to analyze a business line on a consolidated basis across the organization, and then determine how the risks are transferred to and managed by the organization and its individual legal components. This process is particularly crucial to understanding the risks to and of banks that are part of a much larger organization. For example, an industrial loan company or other bank owned by a large firm may be partially or entirely dependent upon affiliates for critical services, such as computer support, treasury operations, accounting, personnel, management and even premises. Moreover, banks that are part of a large organization sometimes have no business independent of the bank's affiliates. For example, the bank's loans and deposits

may be derived or solicited largely through or from affiliates. In these situations, it is particularly important that an agency have authority to examine the entire organization, address its capital strength and enforce safe and sound policies and operations throughout the organization and across affiliates.

Consolidated supervision provides the Board with both the ability to understand the financial strength and risks of the overall banking organization and the authority to address significant management, operational, capital and other deficiencies within the overall organization *before* these deficiencies pose a danger to subsidiary insured banks and the federal safety net. As the Treasury Department noted in its 1991 report and recommendations on modernizing the financial system, umbrella oversight of a financial company that controls an insured bank "is necessary to protect the insured depository [institution] from affiliate risk. Umbrella oversight is designed to identify problems in the holding company or affiliates that are likely to cause difficulties for the insured bank, and to apply remedial action."¹

Consolidated supervision not only helps prevent bank failures, it also provides important tools for managing and resolving bank failures if and when they do occur. The Board has found the knowledge, understanding and authority that come from consolidated supervision to be essential aids in ensuring that the effects of a bank failure are contained and do not spread to the financial system more broadly.

These benefits explain why Congress for many years has generally required that the corporate owners of U.S. insured banks be subject to consolidated supervision. Experience with BCCI, which lacked a single supervisor capable of monitoring its diverse activities, motivated Congress to extend this requirement in 1991 to foreign banks seeking to enter the banking business in the United States.

These benefits also explain why consolidated supervision of financial groups that include banks now is broadly recognized as an international best practice. The Basel Committee on Banking Supervision has formally endorsed the important role that consolidated supervision plays in the supervision of banks and their groups and the International Monetary Fund and World Bank now evaluate countries for their compliance with this key international standard. In fact, the principles of consolidated supervision for financial groups are now embodied in the legal and regulatory structures of many countries, including the member countries of the European Union, and numerous other countries are working to incorporate consolidated supervisory requirements into their laws and regulatory practices.

¹ Modernizing the Financial System: Recommendations for Safer, More Competitive Banks at 61 (1991).

2. What are the differences between consolidated supervision of a holding company and supervision of a bank by the appropriate federal banking agency?

There are important and material differences between the statutory authority granted to the Federal Reserve to supervise bank holding companies and their affiliates and the authority granted to the other federal banking agencies regarding affiliates of insured banks. In addition, there are significant differences in the manner and scope of the consolidated supervision of bank holding companies and their affiliates conducted by the Federal Reserve in comparison to the more limited supervision of affiliates of insured banks conducted by the other federal banking agencies.

The Bank Holding Company Act (BHC Act) establishes a comprehensive framework for the supervision of bank holding companies and their nonbank subsidiaries. The hallmarks of this supervisory framework are broad grants of authority to the Board to examine and obtain reports from bank holding companies and each of their subsidiaries, establish consolidated capital requirements for bank holding companies and take supervisory actions with respect to bank holding companies and their nonbank subsidiaries for unsafe or unsound practices or violations of law. No other federal banking agency has similar authority to supervise bank holding companies or their nonbank subsidiaries in such a complete manner.

Examinations. The BHC Act grants the Board broad authority to examine any bank holding company and any subsidiary of a bank holding company at any time. In addition to reviewing transactions and relationships between a bank holding company or subsidiary and its depository institution affiliates, this authority allows the Board to examine the bank holding company and any nonbank subsidiary of the bank holding company in order to monitor *their* operations and financial condition. It also allows the Board to examine these companies to assess the operational risks within the organization that may pose a risk to the safety and soundness of any depository institution affiliate and the company's or subsidiary's systems for monitoring and controlling those risks. In addition, it allows the Board to examine a bank holding company and any of its subsidiaries for compliance with any statute that the Board has authority to enforce. Under the broad examination authority conferred by the BHC Act, the Board may at any time examine any nonbank subsidiary of a bank holding company, whether or not it engages in transactions or has relationships with a depository institution affiliate.²

² In the case of certain functionally regulated subsidiaries of bank holding companies, the BHC Act directs the Board to rely to the fullest extent possible on examinations of the subsidiary conducted by the functional regulator for the subsidiary, and requires the Board to make certain findings before conducting an independent examination of the functionally regulated subsidiary. 12 USC 1844(c)(2)(B).

Pursuant to this authority, the Federal Reserve conducts examinations of all large, complex bank holding companies on a routine basis. Because the Board is authorized to examine the bank holding company and all of its subsidiaries, the Board is able to review the organization's systems for identifying and managing risk across the organization and its various legal entities and the overall financial strength of the organization. If this review indicates that deficiencies exist, the Board, through the examination or enforcement process, may require the organization to enhance its risk management policies, procedures or systems in order to protect the safety and soundness of the overall organization or its depository institution subsidiaries.

The Federal Reserve's history of supervising holding companies has allowed it to develop significant expertise and specialized examination techniques that are particularly suited to evaluating the overall financial stability of a holding company and the extent to which financial weaknesses of the parent organization or its nonbank affiliates may have a material effect on the safety and soundness of depository institution affiliates. Accordingly, the supervisory process for well managed and well capitalized holding companies often is different from the more intrusive supervision applied to banks directly. In particular, the degree and nature of supervision are tailored to an assessment of the financial, operational, legal, compliance, reputational and other risks of the organization as a whole and the organization's ability to identify and manage these risks across the organization and its various legal entities. This combination of legal authority and expertise allows the Federal Reserve to focus its supervisory efforts on entities within the overall organization that, because of their size, activities, condition, or importance to the organization, may have a material effect on the safety and soundness of the organization and its depository institution affiliates, regardless of whether or not the subsidiary has direct relationships or transactions with its depository institution affiliates.

In contrast, the appropriate federal banking agencies for insured banks are authorized to examine affiliates of banks (other than subsidiaries of the bank) *only* to the extent necessary to disclose the relationship between the bank and the affiliate and the effect of the relationship on the bank. This examination authority, while important and valuable in supervising the insured bank, is more limited than the authority granted under the BHC Act.

Capital. Key among the authorities granted to the Board is the authority to establish consolidated capital requirements governing bank holding companies. Consolidated capital requirements are an important tool for helping to ensure that bank holding companies are a source of financial strength, not weakness, for their subsidiary insured depository institutions.

Indeed, among the contributing factors in the failure of an FDIC-insured industrial loan company (ILC) in 1999 were the unregulated borrowing and weakened capital position of the corporate owner of the ILC and the inability of any federal supervisor to examine

the parent holding company to determine its financial strength. The FDIC incurred losses estimated at nearly 50 percent of the assets of the ILC as a result of that failure.

In that case, the corporate parent--which was exempt from the BHC Act and, consequently, not subject to the Board's examination or capital requirements--borrowed a significant amount of funds without capital support and down-streamed those funds to the ILC. The parent company expected this debt to be repaid through income received from the operations of the ILC. In an effort to generate sufficient income to repay the debt incurred by the parent company, the ILC quickly expanded its activities and took on significant additional risk. This ultimately led to the failure of the ILC. In the FDIC Inspector General's report reviewing the causes of this failure, which was forwarded to the Board, the Inspector General noted that, because the corporate parent of the ILC was exempt from the BHC Act, no federal supervisor had examined the parent holding company and the regulatory capital requirements that would have limited the borrowings of the parent did not apply.

Enforcement authority. The Board also has broad authority under the BHC Act and the Federal Deposit Insurance Act to take supervisory actions, including issuing cease and desist orders and imposing civil money penalties, against any bank holding company and any nonbank subsidiary of a bank holding company that engages in an unsafe or unsound practice or violates any law. No other federal banking agency is authorized to take an enforcement action against a bank holding company.³

The appropriate federal banking agency for an insured bank that is owned by a company that is not a bank holding company has limited authority to take enforcement actions against the corporate owner if the owner engages in an unsafe or unsound practice *in conducting the business of the bank*. Thus, unsafe and unsound practices that weaken the corporate owner of a bank, for example by significantly reducing the capital of the parent company, and practices that represent violations of law by the corporate owner are generally beyond the scope of the enforcement authority of the appropriate federal banking agency for an insured bank.

While ILCs are subject to supervision by the primary federal banking agency in the same manner as other insured banks, the supervisory framework established in the BHC Act does not apply to the corporate owners of ILCs. Consequently, despite the fact that many ILCs are owned by large and complex organizations, organizations that own an insured ILC in reliance on the ILC exception are not subject to consolidated supervision at the holding company level by any federal banking agency.

³ The BHC Act also authorizes the Board to order a bank holding company to divest any nonbank subsidiary if the Board finds that continued ownership of the subsidiary presents a serious risk to the financial safety, soundness or stability of an affiliated bank and is inconsistent with sound banking principles or the purposes of the BHC Act.

3. In 1987, industrial loan companies (“ILCs”) were granted an exemption from the definition of “bank” in the Bank Holding Company Act. This exemption allows the corporate owners of an ILC to operate outside the consolidated supervision requirements of U.S. law. The exemption also allows an ILC to be owned by any type of commercial company.

a. What were the initial justifications for this exception? Do you believe these justifications remain valid today?

One of the primary purposes of the Competitive Equality Banking Act of 1987 was to close the so-called “nonbank bank” loophole, which allowed commercial and other firms to acquire and operate FDIC-insured banking institutions without being subject to the supervisory regime established by Congress in the BHC Act. Accordingly, these amendments expanded the definition of “bank” in the BHC Act to include: (1) any FDIC-insured bank (regardless of the activities it conducts); and (2) any banking institution that both offers transaction accounts and makes commercial loans (regardless of whether it is FDIC-insured).⁴ Consequently, as a general matter, any company owning a “bank” under this definition is a bank holding company and subject to consolidated supervision.

In 1987, Congress also adopted certain exceptions from this new and broad definition of “bank” for specific types of institutions. Importantly, banks operating within these exceptions were subject to several restrictions that were intended to ensure that the institution did not become a full-service bank.⁵

One of the exceptions adopted in 1987 permits a company to acquire an FDIC-insured industrial loan company (“ILC”) chartered in certain states (primarily Utah, California and Colorado) without being subject to the supervisory and activity restrictions generally applicable to bank holding companies under the BHC Act. The statute generally provides that an ILC may operate under this exception if, among other things, the ILC either has assets of less than \$100 million or does not accept demand deposits that the depositor may withdraw by check or similar means for payment to third parties.⁶

⁴ Transaction accounts include demand deposits and other deposits that the depositor may withdraw by check or similar means for payment to third parties or others, such as negotiable order of withdrawal (NOW) accounts.

⁵ For example, exceptions were added for limited-purpose banks that restrict their operations to credit card or trust and fiduciary activities. Banks operating under the credit card or trust exceptions are prohibited from accepting demand deposits or offering NOW accounts to individuals or businesses. Credit card banks also are prohibited from making commercial loans or having more than one deposit-taking office.

⁶ An ILC chartered in a grandfathered state also is exempt if the ILC was in existence on August 10, 1987, and has not experienced a change in control since that date.

At the time this exception was adopted in 1987, ILCs generally were small, locally-owned institutions that had only limited deposit-taking or lending powers under state law. In 1987, the majority of ILCs had less than \$50 million in assets and the largest ILC had assets of less than \$400 million. Moreover, at that time, the grandfathered states were not actively chartering new ILCs. For example, Utah had a moratorium on the chartering of new ILCs.

Many things have changed since 1987. Several grandfathered states have enhanced the ILC charter to allow ILCs to conduct nearly all of the powers of state-chartered commercial banks. In addition, several grandfathered states have begun actively to charter new ILCs and promote ILCs as a method of avoiding the requirements of the BHC Act.

As a result, there has been a recent rise in both the number and size of ILCs operating under the exception. For example, in 1997, Utah lifted its moratorium on the chartering of new ILCs, allowed ILCs to call themselves "banks," and permitted ILCs to exercise nearly all of the powers of state-chartered commercial banks. Since that time, the number of Utah-chartered ILCs has nearly tripled, and the aggregate amount of assets controlled by Utah-chartered ILCs now is more than *twice* the aggregate total assets of all the banks, savings associations and credit unions chartered in that state.⁷ In fact, one ILC operating under the exception now has more than \$60 *billion* in assets and more than \$50 *billion* in federally insured deposits. An additional eight exempt ILCs each have more than \$1 billion in assets and collectively control more than \$13.5 billion in insured deposits. Several large commercial companies, including General Motors, General Electric, Pitney Bowes, BMW, Volkswagen and Volvo, now own ILCs under this exception and use these banks to support various aspects of their global commercial operations.

In light of these developments, the Board believes it would be inappropriate for Congress to further expand the powers of exempt ILCs by authorizing ILCs to offer NOW accounts to businesses or granting ILCs the ability to branch *de novo* across state lines. NOW accounts are functionally indistinguishable from demand deposits and a federal authorization for ILCs to offer business NOW accounts would essentially allow ILCs to operate as full-service commercial banks.⁸

In addition, granting ILCs the right to engage in *de novo* interstate branching would allow these institutions to operate a nationwide banking franchise. The ILCs currently

⁷ All asset and deposit data are as of June 30, 2002.

⁸ Although, as noted above, Utah law allows an ILC chartered in that state to exercise all of the powers of a state-chartered commercial bank, the Utah Banking Commissioner has not authorized any ILC to offer business NOW accounts. The proposed federal authorization of business NOW accounts would allow Utah-chartered ILCs to offer business NOW accounts without the Commissioner's consent.

owned or acquired in the future by a commercial or retail firm could, for example, establish a branch office at every location of the parent company across the United States under this proposal.

These proposals would essentially allow companies, including commercial companies, to own a full-service, nationwide, FDIC-insured bank without being subject to the supervisory framework that Congress has mandated for the corporate owners of all other full-service insured banks. Thus, these proposals would have precisely the result that Congress sought to prevent when it closed the "nonbank bank" loophole in 1987, and would promote competitive *inequality*, rather than competitive equality, in the financial marketplace.

It is also worth emphasizing again that these large insured ILCs with unregulated parents could be placed at significant risk by the operations or difficulties of their parent. Any subsequent losses to the FDIC ultimately have the potential of taxpayer liability and increased deposit insurance premiums for insured bank subsidiaries of regulated bank holding companies.

b. What are the implications of this exemption and recent legislative initiatives to expand the powers of ILCs for this nation's policy of maintaining the separation of banking and commerce?

The United States has a tradition of maintaining the separation of banking and commerce. This policy was reaffirmed most recently in the Gramm-Leach-Bliley Act, where Congress closed the unitary thrift loophole that previously allowed commercial firms to control an FDIC-insured savings association.

Several concerns historically have motivated Congress's approach to the mixing of banking and commerce. These include the concern that the affiliation of banks and commercial firms might create conflicts of interests that interfere with the role of banks as independent financial intermediaries or allow the formation of economically dominant conglomerates. Another concern has been that a bank within a commercial organization might be called upon to support a commercial affiliate in financial distress, thus exposing the bank, the federal safety net and the taxpayer to the risks of the commercial affiliate.

While it is true that technological and marketplace innovations have blurred the line between banking and commerce, the decision of whether, when or how combinations of banking and commerce should be allowed remains an important decision and one that, in our view, should be made by the Congress only after a full and informed debate on the topic. The recent experience of Japan and other Asian countries highlights the supervisory and economic issues associated with broad mixings of banking and commerce.

The ILC exception in the BHC Act allows any type of commercial, retail or other firm to own and operate a federally insured bank. As discussed above, several large commercial firms, including General Motors, General Electric, Pitney Bowes, BMW, Volkswagen and Volvo, already have taken advantage of this exception to acquire an insured bank. Furthermore, although California recently amended its law to prohibit commercial firms from acquiring a California-chartered ILC after September 1, 2002, other states, such as Utah, continue to allow any type of firm to acquire ILCs chartered in their states. Accordingly, there is potentially no limit on the number or type of firms that may acquire an insured bank under this exception.

Certain proposals pending before Congress would authorize exempt ILCs to offer NOW accounts to businesses and establish branches on a *de novo* basis nationwide. These proposals essentially would allow commercial firms to own and operate a full-service, insured bank on a nationwide basis. The branching proposal, for example, would allow commercial firms that currently own an ILC or any other commercial firm that acquires an ILC in the future to establish branches of the ILC at the company's offices, stores and retail outlets across the country. Similarly, the NOW account proposal would allow ILCs to offer business checking accounts and operate as the functional equivalent of a full-service insured bank. Accordingly, these proposals have the potential to enhance significantly the attractiveness of ILCs to commercial and retail firms and to undermine seriously the separation of banking and commerce.