

# MONETARY POLICY AND THE STATE OF THE ECONOMY

---

---

## HEARING BEFORE THE COMMITTEE ON FINANCIAL SERVICES U.S. HOUSE OF REPRESENTATIVES ONE HUNDRED EIGHTH CONGRESS FIRST SESSION

—————  
JULY 15, 2003  
—————

Printed for the use of the Committee on Financial Services

**Serial No. 108-48**



U.S. GOVERNMENT PRINTING OFFICE

91-775 PDF

WASHINGTON : 2003

---

For sale by the Superintendent of Documents, U.S. Government Printing Office  
Internet: [bookstore.gpo.gov](http://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

HOUSE COMMITTEE ON FINANCIAL SERVICES

MICHAEL G. OXLEY, Ohio, *Chairman*

JAMES A. LEACH, Iowa	BARNEY FRANK, Massachusetts
DOUG BEREUTER, Nebraska	PAUL E. KANJORSKI, Pennsylvania
RICHARD H. BAKER, Louisiana	MAXINE WATERS, California
SPENCER BACHUS, Alabama	CAROLYN B. MALONEY, New York
MICHAEL N. CASTLE, Delaware	LUIS V. GUTIERREZ, Illinois
PETER T. KING, New York	NYDIA M. VELAZQUEZ, New York
EDWARD R. ROYCE, California	MELVIN L. WATT, North Carolina
FRANK D. LUCAS, Oklahoma	GARY L. ACKERMAN, New York
ROBERT W. NEY, Ohio	DARLENE HOOLEY, Oregon
SUE W. KELLY, New York, <i>Vice Chair</i>	JULIA CARSON, Indiana
RON PAUL, Texas	BRAD SHERMAN, California
PAUL E. GILLMOR, Ohio	GREGORY W. MEEKS, New York
JIM RYUN, Kansas	BARBARA LEE, California
STEVEN C. LATOURETTE, Ohio	JAY INSLEE, Washington
DONALD A. MANZULLO, Illinois	DENNIS MOORE, Kansas
WALTER B. JONES, Jr., North Carolina	CHARLES A. GONZALEZ, Texas
DOUG OSE, California	MICHAEL E. CAPUANO, Massachusetts
JUDY BIGGERT, Illinois	HAROLD E. FORD, JR., Tennessee
MARK GREEN, Wisconsin	RUBEN HINOJOSA, Texas
PATRICK J. TOOMEY, Pennsylvania	KEN LUCAS, Kentucky
CHRISTOPHER SHAYS, Connecticut	JOSEPH CROWLEY, New York
JOHN B. SHADEGG, Arizona	WM. LACY CLAY, Missouri
VITO FOSSELLA, New York	STEVE ISRAEL, New York
GARY G. MILLER, California	MIKE ROSS, Arkansas
MELISSA A. HART, Pennsylvania	CAROLYN MCCARTHY, New York
SHELLEY MOORE CAPITO, West Virginia	JOE BACA, California
PATRICK J. TIBERI, Ohio	JIM MATHESON, Utah
MARK R. KENNEDY, Minnesota	STEPHEN F. LYNCH, Massachusetts
TOM FEENEY, Florida	ARTUR DAVIS, Alabama
JEB HENSARLING, Texas	RAHM EMANUEL, Illinois
SCOTT GARRETT, New Jersey	BRAD MILLER, North Carolina
TIM MURPHY, Pennsylvania	DAVID SCOTT, Georgia
GINNY BROWN-WAITE, Florida	
J. GRESHAM BARRETT, South Carolina	BERNARD SANDERS, Vermont
KATHERINE HARRIS, Florida	
RICK RENZI, Arizona	

ROBERT U. FOSTER, III, *Staff Director*

# CONTENTS

	Page
Hearing held on:	
July 15, 2003 .....	1
Appendix:	
July 15, 2003 .....	43

## WITNESS

TUESDAY, JULY 15, 2003

Greenspan, Hon. Alan, Chairman, Board of Governors of the Federal Reserve System .....	5
--	---

## APPENDIX

Prepared statements:	
Baca, Hon. Joe .....	44
Emanuel, Hon. Rahm .....	45
Greenspan, Hon. Alan .....	47

## ADDITIONAL MATERIAL SUBMITTED FOR THE RECORD

Greenspan, Hon. Alan:	
Monetary Policy Report to the Congress .....	59
Written response to questions from Hon. Spencer Bachus .....	90
Written response to questions from Hon. Rubén Hinojosa .....	92
Written response to questions from Hon. Barbara Lee .....	94
Written response to questions from Hon. Edward R. Royce .....	97
Written response to questions from Hon. Brad Sherman .....	99
Written response to questions from Hon. Patrick Tiberi .....	100



## MONETARY POLICY AND THE STATE OF THE ECONOMY

---

Tuesday, July 15, 2003

U.S. HOUSE OF REPRESENTATIVES,  
COMMITTEE ON FINANCIAL SERVICES,  
*Washington, D.C.*

The committee met, pursuant to call, at 10:02 a.m., in Room 2128, Rayburn House Office Building, Hon. Sue W. Kelly presiding.

Present: Representatives Leach, Bachus, Castle, King, Royce, Lucas of Oklahoma, Kelly, Paul, Gillmor, Ryun, Manzullo, Ose, Biggert, Green, Shays, Shadegg, Miller of California, Hart, Capito, Tiberi, Kennedy, Feeney, Hensarling, Murphy, Brown-Waite, Barrett, Harris, Frank, Kanjorski, Waters, Sanders, Maloney, Velazquez, Watt, Hooley, Carson, Sherman, Meeks, Lee, Inslee, Moore, Gonzalez, Capuano, Ford, Lucas of Kentucky, Crowley, Clay, Ross, McCarthy, Baca, Matheson, Miller of North Carolina, Emanuel, Scott, and Davis.

Mrs. KELLY. This hearing of the committee will come to order.

And good morning, Mr. Chairman. We welcome you back to the Financial Services Committee. You have been good enough to share your views on the state of the economy and your expertise on the conduct of monetary policy three times this year. And I am certain I speak for the other members of this committee when I say that we really appreciate it.

Mr. Chairman, it appears that all signs point toward a solid and controlled recovery spreading through the economy, which has become increasingly more evident as the latter half of this year rolls out. We already have seen the signs of improvement. The economy has just finished one of its best quarters in years. The weaker dollar especially against the euro should be good for the economy in the long run. This should turn consumption upward through retarding imports and increasing exports and other world economies also begin recovering, and we will be interested in your comments about that.

Even though the unemployment numbers released at the beginning of the month contain some news, good news, the overall unemployment—the overall employment was up, and more people are moving from the ranks of resigned-to-not-working, looking for a job, not working and not looking for a job; they are moving into the ranks now, I believe, of looking for those jobs. I think that confidence that there will be a job out there if one looks hard enough is the best indicator that there is a recovery in this economy.

Mr. Chairman, there are, however, some atypical aspects of this nascent recovery, and I hope you will shed some light on those

today. Why, for example, have manufacturing inventories again headed down? Why has the balance of payments inched up, even with a weaker dollar?

And when the rest of the world economy begins to show the signs of recovery, what do we see in our own economy? Without a recovery overseas, will we see a recovery in our own economy? I don't know that our economy can fully rebound without that recovery around the rest of the world.

I am also hoping that you can discuss some other indecipherable aspects of the way the economy is reacting. We are managing to go quite a long time with higher unemployment numbers. Has the economy changed in a fundamental way that the real natural rate of unemployment is sustainable at a lower point than it was a couple of years ago?

We all hope there will be no need to cut the target Federal funds rate any more. Lots of people have watched the rate inch down towards zero—it is 1 percent now—and wonder what sorts of tools you would or—would have used or we will still have to use as the targets drop further? I hope you will be able to spend a little time discussing that also today.

Mr. Chairman, with the busting of the tech bubble you warned us about, the terrorist attacks in late 2001, the corporate scandals and the uncertainty in the run-up to the war in Iraq, I think we can agree that this economy has displayed tremendous resiliency. And with the swift passage of legislation like the PATRIOT Act and Sarbanes-Oxley and a successful war behind us, I think we are all ready for some sustained good news.

So today I am hoping you can tell us that you see no deflation on the horizon; instead, you see strong growth ahead without inflation. This way, businesses may begin to plan for a predictable future, including increased hiring and investing in equipment and technology, so that investors can begin to see a little bit of a recovery in their portfolios or their 401(k)s, and retirees and parents with children entering college can lose a certain sense of anxiety.

Given indicators we see now, I am hopeful that the next time you visit us, we can also talk about all of the elements that led to a strong recovery and not just when a recovery is coming. I think you will agree with me, Mr. Chairman, that would be a welcome hearing.

I thank you again, Mr. Chairman, for appearing before this committee. I look forward to hearing your testimony.

And with that, I yield back the balance of my time and recognize the gentleman from Massachusetts, Mr. Frank.

Mr. FRANK. Thank you, Madam Chair. I want to begin by apologizing to the Chairman of the Federal Reserve. Apparently, I broke the embargo by quoting from the report this morning. I apologize. It is entirely my fault. It is not my staff's fault, it is not George Tenet's fault, the British didn't make me do it. It is my fault, and I am sorry. I will be more careful in the future.

Mr. Chairman, what I talked about were two things in both your statement and in the report that seem to me to put us in a very troubling box. And let me say at this point, I was asked, Well, what are you going to sort of blame the Chairman for this morning? The answer is nothing.

These are not meant to be accusatory to you and the FOMC or the Federal Reserve in any way, but they are dilemmas that we have to address. On page 8 of your statement you note—it is a fairly stark paragraph which says, “One consequence of the improvements in efficiency is, in effect, much higher unemployment than one would expect at this stage.” We have to talk about—obviously, we all want productivity, but do we have a new kind of structural problem we have to address and what do we do about it?

I will say this: I also read, as I was reading this Saturday’s Boston Globe, the State of Massachusetts has just reached a point where people who are in a prolonged state of unemployment lost their second 13-week eligibility. We had a big debate in this Congress recently about whether or not to extend unemployment benefits additionally for people who are unemployed. People on the other side who won and did not want the extension that we wanted said, Well, we don’t want to give people a disincentive to find work.

To the extent that we have got a problem in the economy, which you mentioned, to the extent that increased productivity and cost-cutting needs from the previous period lead to unemployment that is not the fault of the unemployed, I think we have a serious problem. How do we address that?

One way to address that, of course, is through stimulus. We have this problem, but it now looks as if to some extent stimulating the economy as a whole gives us less of a bang for unemployment than we were hoping. But then we run into this very troubling problem.

On page 12 of the Monetary Report it says, “With little change, on balance, in non-Federal domestic saving over this period”—the period is 2000 to 2003—“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 6-1/2 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.”

That is a very stark statement. That is a statement that says, in the first place, the swing has been from 6-1/2 percent to less than 1 percent in national savings caused, according to this statement, entirely by the reversal in the Federal budget, not in non-Federal savings, but the budget deficit.

Take now that we are told by OMB that we are going to get a trillion dollars in debt over the next two years, this year and next year. The new OMB figures if you round them give us a trillion dollars in debt, well over 900 billion; those are probably optimistic. You say here that if this trend is, quote, “not reversed over the longer haul, such low levels could impinge on the formation of private capital.”

So we are not now talking about the earlier debate only—maybe that was a proxy for this, do bigger deficits cause higher interest rates, et cetera—we are talking about a severe depletion of national saving.

So here is our dilemma. We have higher unemployment which would—and persisting not just in number, but as we have all noted, the length of unemployment for some people, unemployment of a particularly socially corrosive nature that hits teenagers, hits

African Americans, the most vulnerable people in the economy. And we have this problem, we are getting this high unemployment despite, as you note in here, an enormous amount of fiscal stimulus and the lowest interest rates in a long time. So this economy is troubled.

We are troubled by the persistence of high unemployment, and we are constrained by deficits, a trillion dollars about to be added in deficits in the next year, and we are constrained by this trend which, if not reversed, will impinge on the formation of private capital.

So I appreciate the chance to hear your responses today. I will, in my questions, suggest some things that we ought to be doing. But dealing with prolonged and persistent unemployment, constrained as we are by a deficit trend that your Monetary Report says has reached a point where it could impinge on the private capital formation, this is not a happy time for the economy and we need to address that.

I thank you, Madam Chair.

Mrs. KELLY. Thank you very much. Mr. King.

Mr. KING. Thank you, Madam Chairlady. I want to join with the others in welcoming Chairman Greenspan back before our committee and thank him for the tremendous job he does for our country. And I think both Mrs. Kelly and Mr. Frank have touched on a number of the points that I intend to make, so I will keep my opening remarks brief.

But I would, Mr. Chairman, ask you if during the course of your testimony today you could expand upon the point that, as Mr. Frank said, is on page 78 of your testimony this morning; and that is the fact that increased productivity may at least for the short term result in not a growth in jobs even if the economic indicators are otherwise up.

For instance, I think over the last quarter the economy has done very well. I think most of the indicators are positive. But there also appears to be the strong possibility that this may well, in fact, be a recovery without any significant increase in jobs. And it is difficult to go up to someone on the street and tell them, The economy is doing great, but you are still out of work. So I am just wondering whether or not this is a result of a built-in productivity which is—I guess there is a cloud in every silver lining—and whether or not that productivity is going to keep job growth from expanding. That is number one.

Number two: Whether or not you do believe that the spectre of deflation has been removed from our economy. Or do you think it is still something that we have to be concerned about? And also if could you just expand on the idea of how much you do think the economy is going to grow, whether or not the indicators are in place, whether or not we have turned the corner; and have we, in effect, removed the possibility of a double-dip recession?

So with all of that, I know that the millions of people watching are more interested in what you have to say than what I have to say. So with that, I yield back the balance of time. Thank you.

Mrs. KELLY. Ms. Maloney.

Mrs. MALONEY. Thank you.

And good morning, Chairman Greenspan. Your testimony today comes at a historic time. At the last meeting of the Federal Open Market Committee the Fed lowered the Federal funds rate by 25 basis points to 1 percent; even with some observers expecting a 50-basis-point cut, the 1 percent Federal fund rate is still the lowest since 1954. And the reduction marked the thirteenth time the Fed has lowered rates since January of 2001.

While the Fed has managed monetary policy to a point where interest rates are at record lows, the Federal Government has suffered the largest Federal fiscal reversal in the history of the United States. In just two years, a projected 10-year budget surplus of 5.6 trillion has turned into a projected deficit of 4 trillion.

Also, two years ago, the Administration projected a 246 billion surplus for fiscal year 2003. We now know, by the Administration's own admission, the deficit this year will exceed 450 billion, the largest in history and a massive liability on America's families.

The cause for this fiscal reversal lies squarely with the Administration's policy. A July report by the Center for Budget and Policy Priorities pointed out that the cost of the Administration's enacted tax cuts, and I quote, "is almost three times as great as the cost of the war in Iraq, Afghanistan and homeland security," end quote.

These deficit numbers are stunningly large and incredibly troubling because of the missed opportunities that they represent. In the short term, over two years of the Administration's economic policies have provided minimal stimulus at a huge, huge cost. Despite the price tag of the tax cuts, many Americans are experiencing prolonged unemployment. The 6.4 percent June unemployment number is the highest since 1994. African American unemployment is even higher at 11.8 percent. In the long term, the tax cuts represent a missed opportunity to prepare for the looming retirement of the baby boom generation, funding for education, environment and homeland security.

Chairman Greenspan, despite my concern over the cost and inefficiency of the Administration's attempts to stimulate the economy, I do hope you have good news for us today. The government has irresponsibly run up our Nation's credit cards, and I hope the American people will get some benefit.

Thank you for appearing before us. It is always a pleasure to hear you.

Mrs. KELLY. Thank you very much, Ms. Maloney.

Mr. Greenspan, Mr. Chairman, we are delighted to have you here. Will you please begin your testimony?

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

Mr. GREENSPAN. Thank you very much, Madam Chairman and members.

Mrs. KELLY. Mr. Greenspan, would you please push the button on that microphone so we can all hear what you have to say.

Mr. GREENSPAN. Madam Chairman, members of the committee, when, in late April, I last reviewed the economic outlook before this committee—

Mrs. KELLY. If you will pull the mike closer to you—pull it forward; there is enough cord there.

Mr. GREENSPAN. I am used to speaking out of both sides of my mouth.

Mrs. KELLY. That is going to change the markets terribly by tomorrow.

Mr. GREENSPAN. Just to repeat, 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 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 FOMC stands prepared to maintain a highly accommodative stance on 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.

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.

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 three years as numerous shocks—a stock price fall, 9/11, and the Iraq war—pummeled consumer sentiment.

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. 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. 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 and bank loans and to roll over 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. 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 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 on line. These actions, in turn, would tend to further boost both 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 five 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 trends of recent years, if continued, would certainly bode well for future profitability. Output per hour in the nonfarm business sector increased 2-1/2 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 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.

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 two 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.

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 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 Com-

mittee 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 trust the remainder of my remarks will be included in the record, and I look forward to answering your questions.

Mrs. KELLY. Without objection.

Thank you very much, Mr. Chairman.

[The prepared statement of Hon. Alan Greenspan can be found on page 47 in the appendix.]

Mrs. KELLY. The Chair will now recognize herself for questions, but first noting that because of the constraints on Chairman Greenspan's time and the desire to get as many members as possible able to ask questions, the Chair will strictly enforce the 5-minute rule. Please take note of that.

Mr. FRANK. I want to associate myself with your strictness.

Mrs. KELLY. Thank you very much, Mr. Frank.

Mr. FRANK. In this context.

Mrs. KELLY. Mr. Chairman, your statement contains a recitation of both household and business balance sheet restructuring. To the extent that you make the overall restructuring of the economy sound nearly as dramatic as that of the late 1970s, which led to a long period of expansion in the U.S. economy and a clear advantage over our foreign trading competitors, is this comparison, in your view, an accurate one?

Mr. GREENSPAN. Madam Chairperson, the evolution of trends within the economy, especially one as dynamic as that of the United States, are almost always different; that is, we do draw on analogies in the past, but it is very rarely that we replicate any close convergence patterns which have prevailed in long periods over the past.

But it is certainly the case that, confronted with a period of low inflation and low-risk premiums and quite favorable financial conditions, we could very well be embarking on a period of extended growth, especially when, as I indicated in earlier testimony, it appeared as though the sharp market declines and decline in economic activity in the year 2000 and into 2001, largely reflected a break in the pattern of capital investment expansion which had not been completed in the sense that a considerable amount of networking had been developed during the 1990s which, according to recent surveys, suggests that it has not been completed.

So if we can ever return to a state of business confidence, there is, in my judgment, as I have indicated previously, a fairly substantial backlog of unexploited profitable investment opportunities in the capital goods markets. And that should, if it occurs, be a signal

of fairly sound economic performance and, doubtless, long-term growth.

Mrs. KELLY. Thank you.

Were you disappointed that the 10-year yields backed up so much after the June Open Market Committee meeting? And to what do you attribute that, and what effect has it had and will it have on our recovery?

Mr. GREENSPAN. Well, we clearly expected that because, you may recall, just prior to that meeting there was an expected probability, as reflected in the Federal funds futures market, of a fairly good chance of a 50-basis-point cut rather than the one we chose, namely 25 basis points. So we clearly expected that the markets would adjust. How much they would adjust was very difficult to anticipate in advance, especially since interest rates had been firming in the days immediately before the meeting as well.

But surprised? No.

Mrs. KELLY. There is going to come a time when the Open Market Committee is going to have to raise rates. Obviously, that is not soon, but what kind of concerns will you have about a fragile recovery at that point? And what kind of precautions do you intend to take?

Mr. GREENSPAN. Well, if the recovery is indeed fragile, as you imply, I would suggest to you it is unlikely that we would be moving rates. As I indicated in my prepared testimony, we would seek a significant improvement in economic performance from what we currently see before that is even on the table.

Mrs. KELLY. Mr. Chairman, natural gas prices are well off their historic highs, but your regular recent comments about the possibility of spiking—of pricing spikes have rattled the markets to some extent. I am wondering why you have been focusing on that issue, and I also wonder why prices are still so high. If there is anything that you would like to speak about that, I would appreciate hearing from you.

Mr. GREENSPAN. The rise in natural gas prices, which I might say to you has essentially, over the long term, been in a significant upward trend, has been having obvious impacts on the economy, on profit margins, on costs of home heating, and a number of other uses, especially in the chemical industry.

It is very clear to us that energy costs are a quite important factor in what is happening to the economy, and as a consequence, are a very important input into monetary policy. So we have been looking at the nature of pressures in energy markets, especially oil and gas, but others as well and as a consequence of that, have been somewhat concerned about what we see, namely, that the continued rise in demand for natural gas in the North American market is clearly putting significant pressure on the ability of production in Canada and in the United States, especially, to meet that demand. And the failure to be able to import significant amounts of additional gas—which, incidentally, we can do in oil when we run into similar problems—has created severe problems with respect to both natural gas price volatility and price levels.

The futures markets, which go out quite a long way, indicate that natural gas prices, as I indicated in my prepared remarks, are projected to go beyond \$4.50 per million BTUs, which is a doubling

from where the long-term expected price was several years ago. And what is even more remarkable is that it is selling at a premium to crude oil, which is very rare.

Mrs. KELLY. Thank you. My time is up.

Mr. Crowley.

Mr. CROWLEY. I thank the gentlelady from New York.

And, Mr. Chairman, good to have you back in front of our committee again. You made reference in your remarks to the fact that the jobless growth, the unemployment rate, has jumped to 6.4 percent, nationwide, of the civilian population. So to sort of point out in my district, or at least the statistics that I have been able to gather from my district, in New York, Queens and the Bronx, Queens is at 6.6 percent and the Bronx is at 9.4 percent; understand that some will be below that number and some will be above that number.

Unfortunately for me, and for the rest of my city as well, we find that those numbers are above the 6.4 percent. And just yesterday the Department of Labor reported that the number of people filing for unemployment benefits for the first time rose by 5,000 new people to 439,000. But the overall number of people collecting unemployment benefits rose to a 20-year high.

This morning, the White House will release its new deficit figures, showing the Nation running to over \$450 billion this year—which, by the way, does not include in that equation the raiding of \$150 billion from the Social Security Trust Fund.

In response to the Administration's release—press release stating how the tax giveaways of this Administration have led to, and I quote, "private forecasters are expecting a higher"—or "expecting a return to higher growth, increased jobs and lower unemployment over the next year and a half." without tax cuts, job losses would continue. In fact, while many economists have been predicting the U.S. economy to grow in the second half of this year, these, in my opinion, awful job loss and unemployment numbers during of this recession have caused many to reconsider their once-positive outlooks on job growth.

In fact, the Wall Street Journal quotes several economists who are looking at lowering their expected growth rates and job creation rates for the rest of the year because of this data. Even Secretary Snow has indicated he predicts that greater job loss should be—could be expected in the coming months.

Seeing that recent economic policies have resulted in over 3.1 billion private sector jobs disappearing, my questions are:

Where is the momentum in this economy? For the past few sessions here, you have projected job growth and wealth creation and all we have seen, at least in my city, is more job loss and the loss of wealth. Will you revise your past statements of economic growth and job creation, or at least would you admit that they may have been mistaken in the past few sessions here?

And secondly, seeing that you are Chair of the Fed now, during the tenure of several Presidents, including the previous Presidency, is this Presidency the weakest job—the weakest in job creation you have ever seen, especially compared with the last Administration?

I will just point out to my colleagues that to escape the black hole of this recession, this Administration will have to create over

500,000 new jobs each month until the end of the year 2003 in order to avoid making this the most protracted period of job loss since the 1930s.

Have the policies of this Administration been the killer to the economy and especially to American jobs?

Mr. GREENSPAN. Well, first of all, Congressman, as I indicated in my prepared remarks and as Congressman Frank also suggested, a significant part in this equation is the productivity numbers. Growth in GDP has been really quite sluggish, but it has been growing. In other words, the economy has been growing.

The problem is that productivity, which is generally a favorable economic factor, has enabled a significant part of the business community to meet rising sales requirements with lowered work forces. And obviously the only way to do that is improved efficiency. We are seeing that process going on. We have seen it going on for quite a good deal of time, and I will tell you it was not anticipated in the sense that with the presumed sluggish rate of growth that we have all been projecting, a weaker growth in productivity was projected and accordingly, a less adverse pattern of employment, arithmetically, naturally would arise from that.

I strongly expect, the growth rate will be picking up in the months ahead and rising above the relevant rate of productivity, then clearly increased workforces will be required to meet the increased growth. That is our forecast that is what I expect to happen and, indeed, what I think the vast majority of economists examining the American economy expect to happen.

Mr. CROWLEY. I appreciate the Chairman's response. I think, though, it does little to inspire those whom I and Mr. King represent in terms of their future of job loss.

I would also like to ask later, in writing, on the deflation issue that you mentioned in your comments.

Thank you, Madam Chair.

Mrs. KELLY. Thank you.

Mr. KELLY. Mr. Leach.

Mr. LEACH. Mr. Chairman, I have two questions. One you might answer based on prior press, one you might prefer not to.

The first one: This committee has given a green light to expanding a little-known charter, the industrial loan charter, to become functionally equivalent to a bank charter and to allow expansion of this charter's use nationwide without Federal Reserve or OCC oversight. Is this sound public policy?

The second question relates to currencies, and the major factor obviously in international trade is the competitive position of currencies. As the world has noted, you are in a flexible exchange rate environment that has strengthened vis-a-vis the dollars; that is helping our exporters, but the Chinese currency remains locked in an unrealistically low, fixed relationship with the dollar. And shouldn't the Chinese currency be subject to market forces and allowed, presumably, in this kind of economic environment, to appreciate in value?

Mr. GREENSPAN. They appear to be very significantly different questions. Let's see if I can join them.

Mr. LEACH. Go ahead.

Mr. GREENSPAN. The industrial loan company issue is really a major problem with respect to commerce and banking in this country. I have always been of the opinion that over the very long run we are going to find that it is going to be very difficult to distinguish between commerce and banking with individual firms, and the issue of the notion of the current policies will become moot.

But, well prior to that, we have a very significant problem which I think we need to address, namely, having now made a major expansion in banking and finance through Gramm-Leach-Bliley and a number of other earlier activities, we have opened up our financial system very aggressively and we need to take time to begin to evaluate how significant those changes are in the world economy and in our own, and what type of regulatory structures are required and what type of risks are we running by our new, very expansionary regulatory initiatives.

It is much too soon at this stage, in my judgment, to make an evaluation of what the consequences of our recent, very expansionary regulatory policies have been. If there is going to be a major change in policy, which, as you know, Gramm-Leach-Bliley implied and indicated that commerce and banking were still to be separated, if we are going to make that very major change—and it is a major change in regulation it is a decision which this committee and your counterparts in the Senate, as well, both bodies, need to make, and it is a crucial decision and should not be determined by, in effect, a relatively small, presumably, act which is currently under discussion. And, indeed it is merely an amendment to a specific act which this committee is evaluating.

Without going into the substance, which would take a while, I merely state to you that if this issue is on the table, what really is being discussed is a very much broader question, which is the issue of commerce and banking and I hope that this committee will not allow that decision to be made inadvertently through another discussion vehicle for which there have not been significant hearings, in my judgment.

With respect to the question of currencies, as you know, there is an agreement within this Administration that with respect to the exchange rate only the Secretary of the Treasury should be discussing the issue. I would note, however, that in order to maintain the existing exchange rate, the People's Bank of China has been accumulating very significant quantities of U.S. dollars, as they are reporting currently and that does suggest that a monetary expansion, which occurs as a consequence of building up their monetary base by the accumulation of dollars, is creating a significant growth in money supply which, over the long run, they will have to address.

Mr. LEACH. Madam Chairman, just one minor comment. Let me suggest to the Chairman—

Mrs. KELLY. Please finish your statement, Mr. Leach, but the time is finished.

Mr. LEACH. There is a separation of powers doctrine in America, but there is no such thing as a separation of economic judgment doctrine.

As one of your greatest admirers, let me suggest, I think it is incorrect for the Fed to allow any economic policy set of judgments

to be the exclusive province of an executive department. The Fed is an independent arm of the United States Government, and I hope you will review the issue of whether the Fed can opine on currency relationships. This is a fundamental economics issue for which the Congress and the American public deserve a full panoply of opinion.

Mr. GREENSPAN. Well, I appreciate that, Mr. Leach. I did not say that we do not engage in discussions with the Treasury on the issue of exchange rates. I merely stipulated that in expressing the views of this government, we have found that it is far better to have a single voice expressing the consensus view of what the government's position is with respect to this policy.

Mrs. KELLY. Mr. Kanjorski.

Mr. KANJORSKI. Thank you, Madam Chairman.

Mr. Chairman, the news reports of the last day indicate that the White House is about to increase its estimate of this year's Federal budget deficit to more than \$450 billion, which exceeds by 50 percent their earlier projection. In President Bush's State of the Union address January 20th, 2003, he said, quote, "This country has many challenges. We will not deny, we will not ignore, we will not pass along our problems to other Congresses, to other Presidents, or other generations. We will confront them with focus and clarity and courage."

First of all, did you get that portion of the State of the Union speech, Mr. Chairman?

Mr. GREENSPAN. Yes.

Mr. KANJORSKI. Do you feel that in light of this unusual increase in our deficit projection that it will be able to be cleared up within this Presidency or within this Congress?

Mr. GREENSPAN. Your previous question, had I heard that particular statement?

Mr. KANJORSKI. I said, Did you get that particular sentence?

Mr. GREENSPAN. I am sorry, I missed the word that you were using.

Mr. KANJORSKI. Get. Get. Did you get that?

Mr. GREENSPAN. In other words, did I look at the remarks before?

Mr. KANJORSKI. Did you look at it and approve it.

Mr. GREENSPAN. Before they were given? The answer is no, I did not.

But did I see them after? I did.

Mr. KANJORSKI. In light of that statement and the enormous increase in deficits and what others, particularly fiscal conservatives, would think, that we have a runaway Federal budget, if you look at, as Mr. Frank indicated, the deficit that will increase in just this year and next year will exceed the entire debt growth of the United States from its very beginning to when Mr. Reagan took office in 1980, well over a trillion dollars.

And what I would like to know from you is, one, is this going to be cleared up in this Congress and in this Presidency, or are we passing something over to the next generation? And is that important? Or do deficits not matter anymore?

Mr. GREENSPAN. Oh, on the contrary, it matters a great deal.

Congressman, I haven't changed my views since I was here in April, on this issue. As you may recall, when the September deadline on extending PAYGO and discretionary caps were on the table, I strongly argued that they should be reinstated; and indeed when the budgetary process, which I thought had created some fairly significant momentum to resolving long-term deficits, began to break down with the surpluses, I argued as best I could for a restoration of some semblance of fiscal responsibility. And I trust that the most recent numbers will push more and more of government in the direction of getting a far more stable long-term fiscal outlook.

Mr. KANJORSKI. Last year, as I think Mr. Crowley indicated, we lost 3,000 overall jobs in the economy. But what people aren't mentioning is that more than 10 percent of those jobs in the manufacturing industry have been lost, amounting to about two-thirds of the job loss in the last three years.

One, I would like to know, is it unimportant for us to have manufacturing jobs to have a successful economy in the future? And if it is important, now that we are down below 15 million manufacturing jobs in our overall economy, where is the minimum that we can go to in manufacturing without losing added value and creation of wealth in our system?

Mr. GREENSPAN. Well, first of all, manufacturing, in broad value sense, has been declining modestly relative to the GDP for quite a long period of time. The actual physical goods included in that manufacturing per real dollar of value has gone down quite appreciably, and what we used to call manufacturing heavy steel mills, big automotive assemblies, has very gradually moved toward impalpable types of values. The distinction between what is a manufactured good and a nonmanufactured good is becoming increasingly more tenuous.

On top of that, the productivity rates in manufacturing are moving up faster than those for the Nation as a whole; and, as a consequence, what we find is that the share of total employment that is engaged in manufacturing is falling even further than the rate of decline in the gross product originating in manufacturing as a percent of total GDP.

Is it important for an economy to have manufacturing? There is a big dispute on this issue. What is important is that economies create value. And whether value is created by taking raw materials and fabricating them into something consumers want, or value is created by various different services which consumers want, presumably should not make any significant difference so far as standards of living are concerned, because the income, the capability to purchase goods is there.

If there is no concern about access to foreign producers of manufactured goods, then I think you can argue it does not really matter whether or not you produce them or not. The main issue here is the question of the security of supply, of those essential types of goods which will always be required by human beings, food, clothing, shelter and the like.

Mr. KANJORSKI. Well, it may matter to the 15 million people that are employed in manufacturing. Should we—

Thank you, Mr. Chairman.

Mrs. KELLY. Thank you, Mr. Kanjorski.

Mr. Bachus.

Mr. BACHUS. Mr. Chairman, on page 5 of your testimony, you acknowledge that the President's recently-passed tax cuts are having a beneficial effect on consumer spending and are lifting the economy.

Mr. GREENSPAN. That is correct, Congressman.

Mr. BACHUS. And you state, going forward, that it appears that will continue to be the case with lowering withholding rates and the child tax credit payments, that it will continue to lift consumer spending and actually have a spillover effect into capital goods spending. Or into—

Mr. GREENSPAN. That is what most models project. I have nothing against cutting taxes. I would just like to be sure that a constituency arises eventually for cutting spending as well, and that has not been the case. And that is one of the reasons why over the longer run, we have had some difficulties in holding budget—

Mr. BACHUS. In other words, tax cuts are good if they are followed up by spending cuts or spending limitations or restrained spending?

Mr. GREENSPAN. Correct.

Mr. BACHUS. So what you would advocate to this committee is that we focus not on—that we don't raise taxes, but that we focus on discipline in our spending habits.

Mr. GREENSPAN. I would like to see the restoration of PAYGO and discretionary caps, which will restrain the expansion of the deficit and indeed ultimately contain it. It did that. Back in the early 1990s, I thought it was quite surprisingly successful in restraining what had been a budget which had gotten out of kilter. I would like to see these restraints reimposed, and by their very nature they will bring back fiscal balance.

Mr. BACHUS. Mr. Chairman, I am very optimistic, I hope you are. You have heard from this committee, members this morning that we are all concerned about the Federal deficit. And we realize we ought to do something about it. And I think that restraining spending and fiscal discipline is the answer.

And I appreciate your cautionary remarks that we do engage in that. BASEL II, if it goes forward on schedule, we will be finalizing that agreement, or the world community, at the first of December. Do you have concerns about us adopting—agreeing to such agreements that will have some effect on our regulatory scheme?

Mr. GREENSPAN. Well, Congressman, I would say that as our financial system, specifically our banking system, evolved fairly rapidly over the years, we have had significant changes in financial technology and in opening up markets, as I indicated earlier.

And it is important that supervision and regulation keep up to date with the changes in banking practice. BASEL I, which as you know was initiated in 1988, is becoming increasingly obsolete and burdensome. We need to change where we are, but we certainly are not going to move the regulation in the United States until we have thoroughly vetted all various options that are required to get agreement amongst the regulatory authorities and a structure which looks to be viable, and indeed is a major improvement over BASEL I.

Obviously we hope to do it in a time frame as expeditiously as possible. But, it is far more important to get it right than to do it quickly.

Mr. BACHUS. Thank you. I am not sure about my time.

Mrs. KELLY. You have 36 seconds.

Mr. BACHUS. Okay. Mr. Chairman, every economic recovery since World War II has been preceded by a stock market recovery. And we are in a stock market recovery now. And Wall Street pundits are saying that actually that is indication that we are having an economic recovery or it will come.

Would you like to comment on that, whether you think that the stock market recovery is, in fact, predicting an economic recovery?

Mr. GREENSPAN. Well, let me just say it is not, I think, wholly accurate that the stock market always predicts correctly. Indeed, there is an old saw that some skeptic once stated a number of years back that the stock market has predicted 10 of the last six recoveries.

I am not saying that is the case at this particular moment. But, there is no question that it is not only an indicator, but more importantly, it changes the cost of capital, so the very rise in equity prices themselves, by lowering the cost of capital for capital investment will, in fact, be a factor in economic recovery.

And indeed that is a view held, as I said, by pretty much most economists looking for economic expansion in the months immediately ahead.

Mrs. KELLY. Thank you, Mr. Bachus. I want to remind members that while we are following the 5-minute rule, without objection all Members may submit written questions, and the hearing will be held open for 30 days following for written questions and responses from the Chairman.

With that we turn to Mr. Frank.

Mr. FRANK. Thank you. Mr. Chairman, I was struck, as I indicated by the comments on page 12 of the monetary policy report, which does suggest fairly severe consequences if we aren't able to get on top of the budget situation. I know there was a suggestion that tax cuts are a good thing, as long as they are accompanied by spending cuts.

I notice on page 13 you note: Federal spending, during the first 8 months of fiscal year 2003, was 6-1/2 percent higher than during the same period last year, and 7-1/2 percent, if you exclude the drop in interest costs because of the drop in interest rates. So what we have got is a situation where revenues have been cut, but spending has gone up significantly.

And I really want to focus on this. What you are saying here is that if we don't reverse the trend that we are in now, and I say this for this reason. Previously there was some conversation, yourself and others, that the real crunch with the deficits would come 2010, 2011 when there is a reversal, and Social Security in particular begins to draw money out rather than put it in. But this does seem to me to suggest that there could be earlier consequences, particularly when we talk about a trillion dollars in two years, back-to-back 2-year deficits are going to be a trillion dollars now.

And what you say here is that this has reduced the national savings, and this is quite striking. National savings down from 6-1/2 percent of GDP to 1 percent of GDP, almost exclusively, I guess, because of the switch in the Federal situation from surplus to deficit, and you say if this continues, it will eventually impinge on the formation of private capital.

When do we have to get this reversed for this to avoid what is a very severe consequence.

Mr. GREENSPAN. Well, I would suggest to you that you can take, as we have over the years, several years of fairly large deficits provided that they turn around at some point within the—

Mr. FRANK. How much time do we have, do you think?

Mr. GREENSPAN. I really, without seeing the details of the latest OMB sets of projections, don't have the feel of exactly what the patterns will be. But, I can say in principle, that it clearly has got to move down significantly from where it is now.

Mr. FRANK. I am not asking you to project the deficits. Mr. Bolten says they are going to drop after 2004. But he wasn't under oath. I am not asking you to project the deficits. I am asking you to tell me, in your view, based on this analysis here in the report, for how many years can we sustain multi hundred billion dollar deficits in a row before we being to get this impingement on private capital formation.

Mr. GREENSPAN. First of all, ultimately you need private savings to finance private investment over the long run. And clearly without private investment, it is difficult to get economic growth.

But, it is also the case that it is not only the amount of private investment that matters, but the nature of the investment itself. Because what we have found in recent years is that half of the productivity increases in this country have been unrelated to the amount of capital stock, meaning capital investment.

It has basically been ephemeral technologies and the shift toward capital investment of a highly productive nature which has enabled these productivity numbers to—

Mr. FRANK. I understand that. But I don't want to swerve. I am quoting your report.

Mr. GREENSPAN. I understand.

Mr. FRANK. Your report also clearly says that the Federal deficit is part of the problem. So let's focus on that part.

Mr. GREENSPAN. I have acknowledged that is indeed the case.

Mr. FRANK. I know. But then you are trying to avoid talking about it. How many years of the deficits of the sort we now have can we sustain before what you say is, it could eventually impinge on the formation of private capital? How many years?

Mr. GREENSPAN. I would say that the major issue, not on private capital, per se, because there are lots of different issues that are involved there, the basic issue—remember—

Mr. FRANK. I am just quoting your report.

Mr. GREENSPAN. I understand. The major issue on fiscal policy is to make sure that the debt as a ratio to income is stable. The question of capital formation, remember, you can import a significant amount of—

Mr. FRANK. I am sorry. But I am disappointed, because I was trying to get you to talk—

Mr. GREENSPAN. You are asking a question which is not answered in the form—

Mr. FRANK. Well, I am quoting—but, there is clearly an aspect of it, and your report documents it, that you are trying to avoid.

Mr. GREENSPAN. You tell me that private savings are zero for a protected period of time, and that we cannot import significant amounts of capital from abroad, then I would say we are having difficulty.

Mr. FRANK. You don't say that in this report, and I think you are not facing up to the implications of your own report. Could I just ask unanimous consent, on behalf of Mr. Baca, to submit a question about unemployment, particularly with regard to Hispanics and African-Americans.

Mrs. KELLY. Without objection, it is in the record. We go now to Mr. Castle.

Mr. CASTLE. Thank you, Madam Chairwoman.

Mr. Chairman, I actually share all of those concerns that everyone has asked you in terms of where we are going. I am afraid that we have not had spending restraint in this Congress, and we have more pending, such as the prescription drug bill, as well as the problems in Iraq, and we have not shown a lot of restraint in terms of tax cutting, and at some point, that is a serious issue. I know you have been asked a lot of questions about that, so I will forego that and go to something else.

But, we are all vitally concerned about that, as it affects monetary policy and the economy of the country. The other area that I am somewhat concerned about today is the area of unemployment. As I always say, if someone is unemployed, their unemployed rate is 100 percent. That is a huge impact on families and individuals in the United States of America. And I have always been more or less a supporter of free trade. I realize that we are probably giving up low-paying jobs, if you like, at the history decade by decade of this country in our lifetimes, you see that has happened, lower income, lower skilled jobs, if you will.

We have always filled it with higher paying, usually higher skilled type of jobs. But, recently, I have become increasingly concerned, not just with the manufacturing jobs, but that we are giving up more and more high skilled jobs, particularly in the computer area and in various other high tech areas that we had not before.

One of the reasons that we are not back filling with new kinds of jobs and new jobs to get the unemployment rate down is that more of these jobs are going overseas with the use of instant communications, computers, et cetera, it is relatively simply to carry out these jobs in other countries other than the United States. And sometimes that proves a lot less expensive even for our own companies here in America.

I would be interested in your viewpoint on that, and if that is the case, what new high skill industries do we see on the horizon that might be a fill for that loss of jobs which we have had?

Mr. GREENSPAN. Well, the problem, Congressman, is that innovation by its nature is unforecastable. That is, there will be new jobs openings at some level of high tech, because what we observe is

that originally we start losing jobs in low tech, high-commodity-type areas and then, we find that—

Mr. CASTLE. If I may interrupt. What is your comfort level that if there are new high tech level jobs, it is unpredictable as to what they will be, and I do agree with that, that they will stay in America? It seems to me there is a much easier transition out of America than there used to be of these jobs.

Mr. GREENSPAN. Well, that question has been coming up for generations, namely how are we going to maintain full employment when we continuously lose jobs, so to speak, abroad, and that has been going on for a very substantial period of time.

The answer to the question is, it will happen. In other words, if anybody had projected 10 years ago that we would run an unemployment rate under 4 percent only several years later, they would have said that was not possible because we are losing jobs.

It is a very difficult question to answer, because we cannot forecast technology effectively. But, what we do know is that if we have a sufficiently flexible labor market and a capital goods market which is functioning appropriately, that jobs will be created. They will be high tech, but we don't know exactly what they will be.

Mr. CASTLE. Let me change subjects. I want to talk about stock options. I believe that you have indicated in the past that the expensing of stock options as a means of giving investors and analysts a way of really understanding the costs of companies was a good concept. And obviously, I think the Microsoft decision was very significant, because that is really a broad-based stock option plan, which they had as opposed to just top management, et cetera.

I would be interested in your viewpoint on the Microsoft decision, and are you willing to make any kind of prediction as to the furtherance of the expensing of stock options. We have had a lot of it in recent months, but will this trigger another round of more companies going to the expensing of stock options voluntarily without the government, either Congress or any of our agencies interfering at all?

Mr. GREENSPAN. Well, what the Microsoft decision did for the company is to lower the leverage of employees in the stock. In other words, obviously getting restricted stock does give you, after time, ownership rights. But the fluctuation in the value of the stock is a much smaller change than the implicit fluctuation in an option on that stock. So stock options have the capacity of very significantly leveraging a rise in stock prices, and they were a highly desirable vehicle when the overall stock market was rising and ceased to be thereafter.

As a general rule, if stock prices are going down or are flat, clearly, the restricted stock is a more significant incentive for employees than are options on that stock.

Mr. CASTLE. Thank you, Mrs. Chairman.

Mrs. KELLY. Thank you.

Ms. Waters.

Ms. WATERS. Thank you very much. Welcome back, Mr. Greenspan. I have two questions I would like to try to get in. The first one continues this discussion about jobs and unemployment. Can you give us any specific examples of how the President's tax cut has created jobs? We know the supply side theory of make the tax

cuts, the money will be put back into inventory and job expansion, et cetera.

But, since we are experiencing this great unemployment in some portions of my district and other districts around the country, can you give us some specific examples of how the President's tax cuts have created jobs? No theory. Specifics. If you don't have any, you can just say that you don't have any.

Mr. GREENSPAN. Well, the basic way in which tax cuts generally create jobs is by increasing capital investment, raising the level of economic growth—

Ms. WATERS. We know the theory.

Mr. GREENSPAN.—and requiring people—and as a consequence, jobs get created in the process. You don't get specific examples except in issues where you have very specific things like accelerated depreciation, which is very important for a specific industry or a specific company, but, so far as general tax cuts are concerned, especially for individuals, their purpose is to broadly increase GDP and jobs generally, and are not focused by their very nature on any specific company or industry.

Ms. WATERS. So you don't have any specific examples. Because, as you said, the theory does not translate into reality.

Mr. GREENSPAN. No, it translates into reality.

Ms. WATERS. Does any of you know that you have ever talked to, can tell you about a company that took its tax cuts and put them back into equipment and expanded job opportunities? Have you heard that in your travels anywhere?

Mr. GREENSPAN. Yes, I have fairly recently.

Ms. WATERS. Could you give me an example of one of those companies?

Mr. GREENSPAN. I don't wish to, largely because it was in private conversations.

Ms. WATERS. I see. Okay. So we don't have any examples today. Maybe we will just keep looking for some. Let me move from there to the deficit. We will probably get a supplemental appropriations bill at some point to deal with the ongoing costs of Iraq. Isn't the Administration low-balling the deficit by failing to include any figure for our ongoing Iraq involvement in its deficit projection? Has the Administration provided you with any information as to what they project the ongoing costs of our involvement in Iraq, what is our current monthly burn rate for our role in Iraq?

If you were to include all of the costs connected with Iraq involvement in your deficit estimates, what would your deficit estimates be?

Mr. GREENSPAN. Well, Congress—

Ms. WATERS. Well, first before you do that, the general question of—I am sorry to interrupt you—do you think we can get true figures about the deficit without having the costs of Iraq factored into it? And then, onto the other part of the question.

Mr. GREENSPAN. I would assume, not having evaluated the OMB submission, which I presume we will get today—

Ms. WATERS. They don't have it as of today. It is not included.

Mr. GREENSPAN. Clearly, the costs of the war in Iraq are in the Defense Department numbers. And one would presume that they

are in the fiscal 2004 numbers as well. I would presume that the burn rate, what was it \$4 billion a month which the Secretary—

Ms. WATERS. How much?

Mr. GREENSPAN. \$3.9 billion. The Secretary of Defense stipulated that, as I vaguely recall in some press conference or something of that nature, that particular number is the rate of that particular month. As he pointed out, it changes from month to month. But, implicit in the Defense Department's submission would be costs of Iraq.

Ms. WATERS. The Administration today will project funding your 2004 budget deficit of between 470 and \$480 billion, even though the Bush Administration's funding year tool for budget submission in February projected a funding year 2004 deficit of 307 billion. Are we to conclude—thank you.

Mrs. KELLY. Thank you.

Mr. Royce.

Mr. ROYCE. Thank you, Madam Chair. Welcome, Chairman Greenspan. As you know, the robust housing market has been really the strength in the U.S. Economy over the last three years. And as a result, many financial institutions have grown their business models around financing the housing market. Are you at all concerned, Mr. Chairman, that these financial institutions have not hedged interest rate risk appropriately in the event of an increase in interest rates, and/or do you think that the financial system is prepared for such a move?

Mr. GREENSPAN. Well, I think that sophisticated chief financial officers engage in various different types of hedging. As best I can judge, markets adjust accordingly. I can't comment on individual behavior, but the tools that various different companies have to adjust to the future are far more formidable than they ever have been. And I would suggest to you that is not a worry of mine.

Mr. ROYCE. All right. Thank you, Chairman Greenspan. I have two other questions. The first would be, in the first quarter of this year, the current account deficit reached an annualized rate of 5.1 percent of our GDP. To finance these continual current account deficits, the United States economy must continue to attract overseas capital at record rates.

In your view, what are the biggest challenges to attracting overseas capital in the United States?

Mr. GREENSPAN. Well, Congressman, there have been very significant amounts of private and public capital, as you know, that have been employed to finance our current account deficit. In the last year or two, an increasing part has represented the accumulation of dollar assets by foreign central banks in an endeavor to stabilize their currencies. But, overall, we have had no difficulty attracting investment, and the flows have obviously been quite significant, because that is where the markets have balanced.

Mr. ROYCE. The last question I was going to ask you is that there is more and more talk that the Fed will start buying longer term maturity Treasury securities to lower interest rates out the curve. And would the Fed consider such actions, and what circumstances would trigger such a policy?

Mr. GREENSPAN. That is part of what we call nontraditional monetary policies, which would occur should we find that it is required

in the months ahead to significantly ease conventional monetary policy, which, if necessary, we would do.

But, it is also clear to us that with a 1 percent Federal funds rate, there is a downside limit, zero being the obviously ultimate lower bound. And if we got to a point where we found conventional policy left us very little room, we have the tools, as I have indicated before this committee before, to move in significant other ways to expand the balance sheet of the Federal Reserve. And one of the vehicles would be moving out on the maturity schedule and purchasing securities, which we might not otherwise be purchasing if our sole purpose was to address the overnight Federal funds rate.

Mr. ROYCE. Thank you, Mr. Chairman. I will ask you one last question. A few years ago, many people were expecting Europe to take the lead in pulling the world economy out of the global slowdown. Instead, Europe has been slower to recover than East Asia or the United States. Are you encouraged by recent moves in European monetary policy and by the reform efforts in Germany, or does more need to be done?

Mrs. KELLY. Mr. Royce, would you please submit that question for the record?

Mr. ROYCE. I will be happy to do that, Madam Chair. Thanks again, Chairman Greenspan.

Mrs. KELLY. Thank you.

Mr. Sanders.

Mr. SANDERS. Thank you, Madam Chair and Mr. Greenspan, nice to see you again.

Mr. Greenspan, I have long been concerned that you are way out of touch with the needs of the middle class and working families of our country, that you see your major function in your position as the need to represent the wealthy and large corporations, and I must tell you that your testimony today only confirms all of my suspicions, and I urge you, and I mean this seriously, because you are an honest person, and I think you just don't know what is going on in the real world.

And I would urge you, come with me to Vermont. Meet real people. The country clubs and cocktail parties are not real America. The millionaires and billionaires are the exception to the rule.

You talk about an improving economy, while we have lost 3 million private sector jobs in the last two years. Long-term unemployment has more than tripled. Unemployment is higher than it has been since 1994. We have a \$4 trillion national debt. 1.4 million Americans have lost their health insurance. Millions of seniors can't afford prescription drugs. Middle class families can't send their kids to college because they don't have the money to do that.

Bankruptcy cases have increased by a record breaking 23 percent. Business investment is at its lowest level in more than 50 years. CEOs make more than 500 times what their workers make. The middle class is shrinking. We have the greatest gap between the rich and poor of any industrialized nation, and this is an economy that is improving. I hate to see what would happen if our economy was sinking.

Now, today you may not have known this. I suspect that you don't. But you have insulted tens of millions of American workers. You have defended over the years, among other things, the aboli-

tion of the minimum wage, one of your policies, and giving huge tax breaks to billionaires. But today you reach a new low, I think, by suggesting that manufacturing in America doesn't matter. It doesn't matter where the product is produced.

We lost 2 million manufacturing jobs in the last two years alone; 10 percent of our workforce. Wal-Mart has replaced General Motors as the major employer in America, paying people starvation wages rather than living wages, and all of that does not matter to you? Doesn't matter if it is produced in China where workers are making 30 cents an hour, or produced in Vermont, where workers can make 20 bucks an hour, it doesn't matter.

You have told the American people that you support a trade policy which is selling them out, only working for the CEOs who can take our plants to China, Mexico and India. You insulted, Mr. Castle. Mr. Castle a few moments ago, a good Republican, told you that we are seeing not only the decline of manufacturing jobs, but white collar information technology jobs. Forrester Research says that over the next 15 years, 3.3 million U.S. Service industry jobs and 136 billion in wages will move offshore to India, Russia, China and the Philippines. Does any of this matter to you? Do you give one whit of concern to the middle class and working families of this country? That is my question.

Mr. GREENSPAN. Congressman, we have the highest standard of living in the world.

Mr. SANDERS. No, we do not. You go to Scandinavia, and you will find that people have a much higher standard of living in terms of health care and decent paying jobs. Wrong, Mr. Greenspan.

Mr. GREENSPAN. May I answer your question?

Mr. SANDERS. You sure may.

Mr. GREENSPAN. For a major industrial country, we have created the most advanced technologies, the highest standard of living for a country of our size. Our economic growth is crucial to us. The incomes, the purchasing power of our employees, our workers, our people, are by far more important than what it is we produce. I submit to you that—may I?

Mr. SANDERS. I am just making faces.

Mr. GREENSPAN. I submit to you that the major focus of monetary policy is to create an environment in this country which enables capital investment and innovation to advance. We are at the cutting edge of technologies in the world. We are doing an extraordinary job over the years, and people flock to the United States. Our immigration rates are very high. And why? Because they think this is a wonderful country to come to.

Mr. SANDERS. That is an incredible answer.

Mrs. KELLY. Mr. Paul.

Mr. PAUL. Thank you, Madam Chairman. Chairman Greenspan, I too am not pleased with the Fed. But, my approach will be slightly different. While here in the Congress, over the past several years, there has been several things that have been pointed out to me that we shouldn't bring up at committees. One is the Constitution and the other, of course, is dollar policy, before the Banking Committee.

You explained earlier that the Secretary of Treasury speaks for the dollar. I find that interesting and a bit ironic, that you have

the monopoly control over the money, creating new money and control over the interest rates. But you don't speak for the dollar, and that is deferred to the Treasury and we know that. But, I think that is sort of academic anyway, because ultimately, the number of dollars you create and the marketplace determines the value of the money.

So no matter what you say or the Secretary of Treasury says, it won't matter a whole lot. But, dealing with the Constitution, I would like to point out to my colleagues and others, that the Constitution is I explicit on the type of monetary system that we have, or are supposed to have. For the past 3two years, we have been operating with a fiat monetary system, and it hasn't done well. And history has shown that fiat money never does well. It always ends badly. And we may be seeing the beginnings of the end of that system; not only nationally, but internationally.

And I think that is something we should give consideration to, but not particularly today, because I have been told that these parts of the Constitution, such as declaring war, are anachronistic, and we just ignore them. I find that sort of sad. But that is the way it is around the Congress too often.

But also I would like to point out that you are concerned about deflation. Of course, your definition of deflation is slightly different than the free market definition, because we believe deflation requires the shrinkage of the money supply, and the increase in the purchasing power of the dollar.

But, anyway you show that decreasing prices are a threat, and therefore you have to print faster than ever, and you have been doing a pretty good job there. Since January of 2001 you have taken M3 from 6.5 trillion up to 8.2 trillion. That is a pretty hefty hunk of new money, \$2.3 trillion of new money. It hasn't done a heck of a lot of good.

So I think that it is interesting that you have this concern, and to address it, you plan to print whatever money is necessary. At the same time, you come to us and say your biggest concern, and this too is entertaining or interesting, that the Chairman of the Federal Reserve isn't talking so much about monetary policy, but he is talking about energy prices, because they are going down and they are deflationary? No, because they are going up and they are inflationary.

So I don't know how we can have it both ways. First we worry about deflation. In the next breath we worry about inflation. Now, my concern and my question, or something I would like you to make a comment on, deals with the fairness of this system. For instance, I think this is very unfair to the elderly. In the old days, under the free market, we encouraged savings.

The elderly have CDs. They used to make 6 percent. Now they make less than 1 percent sometimes. They have lost their purchasing power. At the same time, they are suffering from the increase in the cost of living because of the energy prices going up. And just because low interest rates might help the stock market, might help the housing market, doesn't seem to me to be fair to the elderly who have saved their money, suffered from the inflation that still exists, and at the same time, they lose their income.

And for that reason, I think the system that we work with now is very biased. It is biased toward those who want to consume. We have a system, both the Treasury and the Fed encourages the Fannie Mae/Freddie Mac program of increasing equities and borrowing against it and then suffering the consequences.

Mr. GREENSPAN. And your question?

Mr. PAUL. I would like you to comment on the fairness of what you are doing to the elderly who lose their income.

Mr. GREENSPAN. Well, we have lowered interest rates quite considerably since early 2001. As best we can judge, the consequence of that has been a fairly dramatic expansion in housing, house turnover, and market values of homes from which a significant amount of equity has been extracted. All of that has supported the economy and kept it from edging lower after the very significant shocks that we had as a consequence of the post 2000 period.

As far as I can judge, we have had a really quite extraordinary period having suffered all of those shocks and still showed a resilience and an expansion, which, even though below our desires, has been positive.

We had a very shallow recession, and as a consequence, the recovery has been quite modest. Now, we haven't have it both ways. In other words, you cannot both have high interest rates, which give significant incomes to those who hold interest instruments, and low interest rates, which will stabilize the economy and expand it.

We at the Federal Reserve have chosen to lower the rate structure, because we judged that was the most appropriate way to stabilize what had been an unstable system, and in retrospect, the policy seems to have been quite effective.

Mrs. KELLY. Mrs. Maloney.

Mrs. MALONEY. Thank you, Madam Chairwoman, and Mr. Greenspan. Following up on your statement, and your statement earlier today that you were willing to maintain a highly accommodative stance of policy for as long as needed, and you also said, "with the target funds rate at 1 percent, substantial further conventional easings could be implemented."

Already this morning, Treasury notes have fallen in response to your statement. And my question is, do you have a concern that further rate decreases could have a negative impact on the money market fund industry, and when you reference conventional easings, do you refer only to interest rate reductions or other tools in the Fed's disposal?

And, following up on Mr. Royce's question, how likely is this to occur this year? Do you think that there is a floor, that we will ever reach a floor, or can we just continue reducing down?

Mr. GREENSPAN. Well, Congresswoman, remember that when you are dealing with financial intermediaries, they can expand and contract fairly quickly, because you are only dealing with financial instruments. We have a remarkably resilient financial intermediary system, which, if short term interest rates fall, undoubtedly will put compression on certain institutions. They have shown quite considerable flexibility to absorb that over reasonable periods of time.

So I don't perceive that if it is necessary, there is a downside limit to what we can do conventionally. I don't envisage that that will be necessary. But, to presume that there is a certain level that has often been stated, say 75 basis points, that that is as low as we can go, I think that is mistaken. I do think that we have far more flexibility than is implied in that question.

Mrs. MALONEY. Earlier, you testified that again in response to Mr. Royce's questions, that we have no difficulty attracting foreign investment. And that that has been true up to now. But, what about the future, given the growing deficit, now they are announcing it is 450 billion, the largest in the history of the United States. And what is the impact of the deficit on U.S. Credibility internationally, given that our debt exceeds 4 percent of our GDP, which is higher than the 3 percent ceiling allowed by the European Union, and additionally, our current accounts deficit exceeds 5 percent of the GDP.

In the past, we have had absolutely no difficulty. But, there have been some reports that possibly we could have difficulty in the future, given our economic situation.

Mr. GREENSPAN. It is a relative issue. Remember that the rest of the world is not doing significantly better than we.

Mrs. MALONEY. That is true.

Mr. GREENSPAN. We are still getting a considerable amount of foreign investment coming in because as tepid as our recovery has been, it is still perceived to be superior to most other alternatives. And, as a consequence, we have not experienced any really significant problem in financing what is admittedly a fairly large current account deficit.

I have said in the past that I have always expected that eventually we would adjust, but I have been making that statement for five years, and we have been managing to sustain an ability to attract investment through an expansion period and through a contraction period.

Mrs. MALONEY. Thank you, Mr. Greenspan. But, the rest of the world is not putting massive structural deficits that they confront in the long term as we are putting into effect.

Today they came out saying it is the largest in the history of the United States, the largest deficit they are projecting—all types of economic indicators have projected that it will be much larger, that it doesn't even include the war in Iraq and Afghanistan and homeland security, as we have heard earlier.

So I guess my question is, in relation to the rest of the world, if they are not putting on this massive deficit, and we are, will that not have some impact on their judgment in making their investments in the future?

Mrs. KELLY. Mrs. Maloney, would you please submit that question for the record?

Mrs. MALONEY. Okay. Thank you.

Mrs. KELLY. Mr. Ose.

Mr. OSE. Thank you, Madam Chairman. Mr. Greenspan, first of all, I want—I wanted to welcome you. I do have a question. I want to first apologize for what I consider to be rude treatment of you by some members of this panel. And the manner in which you were addressed was rude. And I apologize for it.

I am tempted to ask questions. You mentioned in your testimony, a discussion that the Board, of the alternatives for implementing monetary policy that were considered to be a low probability for adoption. I am tempted to ask about that. Perhaps I will do that in writing.

I am also very appreciative of the comments you made about the importance of energy to the economy overall. And I do want to just briefly—I want to briefly mention in the context of perhaps the British withdrawing from Yorktown and playing how the world has turned upside down, a discussion of the condition of our economy relative to inflation, to the GDP, to the levels of productivity, to employment levels, to asset utilization rates and the like. I find it fascinating that when we have this inflation at 1 to 2 percent, interest rates at 1 to 2 percent, productivity going through the roof, gross domestic product growing, albeit slowly, employment levels at significantly reduced rates from what we would have had say in the late 1970s or early 1980s, asset utilization rates creeping towards 80. These are all very strong economic indicators. And I compliment you and your colleagues for implementing these successes accordingly.

My question has more of a regulatory nature. I have been following closely the issue of Credit Lyonnais, and its activities in California in the early 1990s, relatively, to buying the bond portfolio from Executive Life. I am curious as to the Federal Reserve's status of any investigation it has undertaken relative to Credit Lyonnais's eligibility to operate in the United States, in particular, the potential approval of the Credit Agricultural acquisition of Credit Lyonnais, and whether the Fed, in fact, intends to grant the new entity a bank license for operation in the United States?

Mr. GREENSPAN. Congressman, I am not clear on what particular discussions are confidential or not. And I would much prefer to answer you for the record on that, if I may.

Mr. OSE. I would be happy to put it to you in writing.

Madam chair, that is all I have. Thank you.

Mrs. KELLY. Thank you.

Ms. Velazquez.

Ms. VELAZQUEZ. Thank you, Mrs. Chairman.

And, Chairman Greenspan, I am having some difficulty in understanding your perspective on budget deficits. I heard your answer to Mr. Kanjorski where you say that we have to deal with expenditures. But, that is one part of the equation.

What about the fact that during this economic situation that we are facing in our economy, and the fact that the money that we are spending in the war with Iraq, that we, this Administration passed a huge tax cut. Can you tell me, do you believe that our Nation will run long-term deficits if we continue to cut taxes in the future?

Mr. GREENSPAN. Well, I have commented on that in the past. I would just merely stipulate that my general view is that over the long run, it is essential to run a fiscal policy which is stable, meaning, effectively that the level of debt to the public, as a ratio to GDP, tends to be relatively flat.

I have also stipulated that I do believe that tax cuts, properly constructed, can be a significant factor in long-term economic growth, but it obviously requires that if you cut taxes and maintain

a viable long-term budget deficit or surplus policy, you have to address spending as well.

And I have been most concerned that after having gained considerable control over spending a decade ago, we have allowed that to slip. And I think that that will be creating major problems for us in the future unless we turn it around, and I trust that the statement that will be forthcoming from the Office of Management and Budget I presume today, will address the longer term concerns that I have.

Ms. VELAZQUEZ. What sort of long-term effects will these long-term deficits have on our economy?

Mr. GREENSPAN. As I have indicated in testimony, back in April here, it is our view that changing long-term deficits do affect long-term interest rates. And accordingly, very substantial deficits projected, which are destabilizing—that is, create a rise in the level of debt relative to GDP—are also likely to be consistent with rising interest rates which would slow economic growth.

Ms. VELAZQUEZ. Mr. Chairman, with the Federal funds rate at 1 percent, many have argued that the Federal Reserve's ability to conduct monetary policy is hindered. What other tools can the Fed use to conduct monetary policy?

Mr. GREENSPAN. Well, as I have indicated previously, should we get to the point, and as I want to emphasize we don't expect that to happen, that we run out of conventional monetary policy which we define as addressing the overnight Federal funds rate, we still have fairly significant expansion capabilities for our monetary base, well beyond what we would do if our sole purpose was addressing overnight interest rates.

And indeed there are numerous ways which I and my colleagues have discussed in various speeches and other fora in recent months.

Ms. VELAZQUEZ. What potential side effects are there of using these other policy tools?

Mr. GREENSPAN. This is one of the issues which we focus on quite considerably. As I have indicated previously, our general evaluation is that inflation is exceptionally well controlled and extraordinarily unlikely, in our judgment, to create a problem in the future. The types of problems which would be created by those types of actions are all generally inflationary in nature, and that is not an issue which we perceived to be something which should be of concern to us at this stage.

Ms. VELAZQUEZ. Thank you.

Mrs. KELLY. Thank you.

Ms. Biggert.

Mrs. BIGGERT. Thank you, Madam Chairman. Mr. Chairman, I have two questions and a short period of time. First of all, I would like to ask your opinion about a matter that relates to the committee's efforts to permanently extend the Fair Credit Reporting pre-emptions. And the bill contains a provision that calls for a free credit report and another provision that calls for credit bureaus to provide credit scores and a summary of how the scores were derived as well as information as to how consumers can improve their credit score.

As a policy matter, do you think—what do you think about the implications of federally mandating the free provision of products such as credit reports and credit scores?

Mr. GREENSPAN. You mean to say that—to make available the credit scores?

Mrs. BIGGERT. This is going to make them available, and the credit—the companies will have to provide these to consumers, at least one free. And this actually is somewhat of a mandate that we will be saying, that they should give their product free, at least one a year.

Mr. GREENSPAN. Yes. We have developed, in part with the technology which we have managed to create, a really quite major consumer credit market which enables individual institutions to fairly well evaluate the credit status of the people to whom they lend.

That has enabled interest rates to borrowers to be lower and credit access to be greater than it otherwise would be. Part of that ability is the development of credit scoring models, which are usually proprietary to individual institutions, and obviously, they are costly to create and function.

And while I can't comment on the individual cases with respect to what the form of the legislation would make those available to various different individual borrowers, I will say to you that it is very important for us to maintain a system which enables those models and those technologies to advance because if they don't, we are probably going to find that interest costs are likely to rise and the availability of credit, to the average consumer is likely to fall.

So we have got a trade off here of trying to improve the system, make it more transparent, remove the mistakes which is crucial, but yet maintain the structure which enables those systems to function in an effective way and in a profitable way so that people will have the incentive to develop still more sophisticated credit-scoring models.

Mrs. BIGGERT. Thank you. Then my second question, in the last week the Administration has proposed shifting how companies calculate pension liabilities from a single interest rate to a yield curve idea. And my question is, what do you see as the macroeconomic effect of these increased contributions? This would be where I think companies are concerned about having to make greater contributions to their defined benefit plans if the Administration's yield curve is used instead of the 30-year Treasury bond.

Mr. GREENSPAN. Yes, it is the developments in defined benefit plans and their accounting and the procedures by which companies make or don't make contributions, which I must say, have gotten unduly complex and in my judgment, are capable of very significant improvement. The suggestions of the Secretary of the Treasury I think do advance the process and would create a superior system, especially after the two year hiatus, than the one we have today. But I do think it is something which probably is capable of quite significant improvement. In other words, a number of the things which FASB employs with the accounting and the IRS strike me as more complex than we need, and I suspect that part of the problem is that the technologies which enable us to do a far more sophisticated process of evaluating the liabilities of workers and the ways of defeasing of those liabilities, have improved meas-

urably, and I think major advances are possible in this area and I hope we proceed to do so.

Mrs. BIGGERT. Thank you.

Mrs. KELLY. Thank you, Mr. Chairman. The Chair will announce that the committee will stand in temporary recess pending these two votes, but that it intends to resume as quickly as possible after the votes. And we appreciate your patience, Mr. Greenspan.

Mr. GREENSPAN. Thank you, Madam Chairman.

[recess.]

Mrs. KELLY. The committee will come to order. We go now to Mr. Watt.

Mr. WATT. Thank you, Madam chair. And Mr. Chairman, welcome. Let me deal with one thing quickly, I hope, and then ask you to comment on something that might take a little bit more time. On page 5 of your testimony, you, and you have said in general, that you think the tax cuts have been beneficial and stimulative. And on page 5 you say that 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. I take it that you think those are stimulating the economy because they are getting right back into the economic flow, at least that is the short term stimulus that we were looking for?

Mr. GREENSPAN. As I tried to indicate in my prepared remarks, Congressman, what they are in the process of doing is increasing disposal income.

Mr. WATT. I take it then that the short term impact of that, the advance rebates and the child tax credits is to get money into people's hands quickly, they put it back into the economy, you are not looking so much at the longer term consequences, savings, investment, that is the stimulative impact that we are talking about.

Mr. GREENSPAN. That is correct, sir.

Mr. WATT. And would I then be correct in assuming that if we were to pass the balance of the refundable child tax credit and get that into the economy, you would think that would be consistent and stimulative also?

Mr. GREENSPAN. That would have very much the same effect.

Mr. WATT. Yes. Okay. The prepared report that Mr. Frank has referred to a couple of times has an interesting comment on page 13, that I am wondering if you could comment a little bit more on the significance of. It says in addition, the change in the distribution of income in the late 1990s which concentrated more income in the upper tax bracket may have been reversed during the past couple of years. There is no elaboration on the significance of this, but there has been a lot of discussion about the growing disparity between rich and poor, and I assume this has something to do with that. How do we effectively, in your opinion, address this growing disparity between rich and poor? And is it important, from your vantage point, to try to address that growing disparity?

Mr. GREENSPAN. Congressman, there was a very significant surge in the latter part of the 1990s owing to a combination of realized capital gains and very significant increases in income, and as a consequence of the exercise of stock options. Indeed, that is one of the reasons why Treasury receipts went up significantly and con-

tributed to the surplus that we experienced. With the stock market turning down after mid 2000, that process went 180 degrees in the other direction. There has been a significant decline in realized capital gains. There has been a marked decline in the incomes engendered by exercise of stock options. And that of course, is disproportionately concentrated in the upper income groups, and as a consequence, the shift toward income inequality which was so evident in the latter part of the 1990s has turned around.

Indeed the actual tax receipts now are relative to incomes exceptionally low. And one must presume that a goodly part of that is coming out of the upper income groups and the lower incomes there, but we won't have those data complete for probably another year or so to get a good judgment as to what has actually occurred in the distribution of income.

With respect to your second question, it has been my view that the less the concentration of income in a society, the more stable it will tend to be. But if there is a significant endeavor on the part of government beyond, say, the tax system that we have, for example, to try to markedly alter the distribution of income, history does tell us that it is often counterproductive. So I think that what we ought to endeavor to do is to move toward as much an equality of income as we can coming from enhanced education, enhanced capabilities, and removal of discrimination where we can in order to balance skills and, therefore, incomes. I think we have a mixed record on that, but that doesn't mean we should stop trying.

Mr. WATT. Thank you, Madam Chairman.

Mrs. KELLY. Mr. Green.

Mr. GREEN. Thank you, Madam Chair. Mr. Chairman, you said earlier that there is a public debate over the value of manufacturing to our economy versus the service sector. Well, you are well known for your understatement. I think you could tell after that that a number of us feel very strongly that manufacturing is crucial, and I think you got a little flavor of that feeling in that debate. Assuming for the moment that manufacturing is crucial to our economic vitality in the long run, what economic policies, what monetary policies do you believe we should examine as we look for ways to add some energy to the manufacturing sector, to address some of the barriers that we believe are out there.

Earlier on, it was alluded that many of us believe there are some problems with currency exchange rates. But what are some of the larger economic policies and monetary policies that we could examine that would help the manufacturing sector.

Mr. GREENSPAN. Well, I think what we are doing in part is the right thing in that what we are trying to do is to concentrate in those areas of manufacturing which are growing fastest. They are essentially the high tech—I guess the proper word is “marginally ephemeral” parts of our manufacturing. As I have testified before this committee before, one of the most unusual things about our economy is that the weight of the GDP, and especially of manufacturing, is actually declining relative to the real value of what we turn out. In other words, we have got more economic value in a few pounds of high tech equipment than we will have, for example, with a ton of raw material of various different types. And what we have succeeded in doing in this country is that even though manu-

facturing as we measure it has been going gradually down relative to the economy as a whole, we have shifted our resources toward those most effective parts of manufacturing. And indeed, one is hard pressed today to find even in old line manufacturing establishments a lack of high tech equipment. You go into a textile weaving plant, and I used to go visit textile plants 50 years ago, and I know they are producing the same product, but I can assure you they are producing it very differently with far more technology and wholly different infrastructure of production.

And what we ought to be doing is more of the same. I don't think it requires incentives, but what it does require is a skilled workforce and an emphasis on meeting consumer demands, which are best met these days by employing a type of technology which virtually all of our manufacturers now, to a greater or lesser extent, are employing.

Mr. GREEN. But you also indicated earlier, if you take a look and try to examine the value of manufacturing to our economy, there may be cases where depending upon the type of manufacturing, the type of goods that we are talking about, there may be a national interest in maintaining the vitality of that sector, nationality security reasons, for reasons of self-sufficiency. We have seen the energy sector, the costs are being dependent upon foreign sources of energy. Isn't it true that it would be in our interest, then, not to simply hope that the shift to high value manufacturing sectors doesn't completely coincide with our national interest? What about the other types of manufacturing? I understand what you are saying over the long haul, but—

Mr. GREENSPAN. This is the reason, Congressman, I mentioned earlier that if we feel secure in importing from broad of types of goods that we used to produce here, then from an economic point of view, it is irrelevant whether we produce it here or abroad. But clearly, that is not the case in certain circumstances, and it obviously is not the case for national security. I wouldn't say, however, self-sufficiency per se is a value because that is indeed counter to the division of labor and globalization, which has been extraordinarily valuable to us.

But national security is. And to the extent that there are national security issues involved, then for much the same reason that we have special programs in the Defense Department and our procurement policies in DOD which recognize that, one can make that argument. But I would not make it for self-sufficiency. I do think it is a valid argument for national security.

Mr. GREEN. Thank you. And thank you, Madam Chair.

Mrs. KELLY. Mr. Sherman.

Mr. SHERMAN. Mr. Chairman, thank you for coming before us again. I know that the 5-minutes rule will be strictly enforced so I would like to lay out a number of questions and invite you and your staff to submit responses for the record, and maybe one or two of them will be worthy of an oral response.

You talked about a quote, "inflation rate" being too low. And I know that in prior testimony to us maybe 3, 4 years ago, actually to the Budget Committee, you put forward the idea that the CPI overstates the rate of inflation by between half a point and 1-1/2 points. So I hope you would respond, for the record, and say okay

with the CPI as our measure of inflation with all its flaws, but as to CPI measured inflation, what is the Fed's target rate of inflation, or what would be the best CPI measured inflation rate for us to have?

Mr. GREENSPAN. I know there has been fears of deflation, and one way to deal with that to cut the Fed discount rate, but you are down to about 100 basis point of cutting left, maximum. So some of my constituents have asked what are the legal—well, they don't phrase it this way, but what are the legal and practical opportunities or impediments to simply printing more green backs and earning some signer and for the Fed and ultimately for the Federal Government?

Mr. GREENSPAN. The lead story today is \$450 billion deficit and we have had several exchanges in which you have talked about a world in which tax cuts are good because they lead to spending cuts. I look forward—

Mr. GREENSPAN. I don't remember making that statement, Congressman.

Mr. SHERMAN. Ah. Let's put it this way: You were not condemning tax cuts, but you believed in a reduced budget deficit—you were against deficits but you weren't against tax cuts.

Mr. GREENSPAN. I am in favor of economic growth, and I do believe that over the long run, certain types of tax cuts do enhance economic growth.

Mr. SHERMAN. Even if appropriations are fixed, and so those tax cuts do lead, at least in the scoring and in their initial impact, to an increased deficit?

Mr. GREENSPAN. No. If they increase the long-term deficits, as I believe I testified before this committee in April, interest rates would rise and very likely limit, if not considerably diminish, any growth that might be achieved.

Mr. SHERMAN. Well, do you know of any tax cut that does not increase the deficit, assuming spending remain fixed, assuming the majority party doesn't have us spend money today, except on the necessities? If spending is fixed, is there any tax cut that is good when a country is—

Mr. GREENSPAN. You mean to say is there a tax cut which pays for itself?

Mr. SHERMAN. Yes.

Mr. GREENSPAN. I doubt it.

Mr. SHERMAN. So if you oppose deficits and if appropriation—if appropriations and spending aren't going to decline, it is hard to find a tax cut that you would support?

Mr. GREENSPAN. I would prefer to find the situation in which spending was constrained, the economy was growing, and that tax cuts were capable of being initiated without creating fiscal problems.

Mr. SHERMAN. I would prefer to find a world in which Julia Roberts was calling me, but that is unlikely to occur. I want to focus, though, on the trade.

Mr. GREENSPAN. She might now.

Mr. SHERMAN. I think we are about equal likely. As long as we are at equal likelihoods, we are running a \$35 billion trade deficit every month. We have talked about this several years in a row.

Imagine the Rip van Winkle disease afflicts you and you do go to sleep and wake up 15 years later. Which would shock you more, waking up in an America that had just continued to run a \$15 billion-a-month trade deficit, 400 billion a year, just things pretty much run for another 15 years the way they have now, or would you be more surprised to learn that the dollar had declined significantly in value 40, 50 cents to the euro? Which of these two scenarios would surprise you more 15 years from now, a decline in the dollar of significant magnitude or a month-after-month continuation of our trade deficit with everybody happy?

Mr. SHERMAN. Thank you, Madam Chair.

Mrs. KELLY. Would you like to submit that?

Mr. SHERMAN. I would like to submit that for the record. I have no further comment. I don't know if the Chairman does.

Mrs. KELLY. Well, I have one comment to make and that is representing the district where Rip van Winkle was, I want to tell you we are very appreciative of your mentioning us today. Thank you very much.

We go now to Mr. Kennedy.

Mr. KENNEDY. Thank you Madam Chairman, and thank you, Mr. Chairman for being here. My question deals with, in your opening testimony, you talked about the advantages of having households stretch out their maturities by paying off their credit debt and putting that on debt that is longer term. You also mentioned that firms were doing that as well. A key concern I have at a time period where we do have deficits projected, and we do have significantly lower rates than we have experienced recently, is this a time for us to consider bringing back a 30-year Treasury bond and moving towards more of a longer maturity for the governments, just as you mentioned its positives that households and businesses have?

Mr. GREENSPAN. This is an issue which Treasury always has under consideration. And there are pros and cons to that. I am conflicted at this particular stage. And I would like to hear the arguments that Treasury is going to be bringing up with respect to that issue at some point. They do it on a continuing basis in the sense of reviewing what the distribution their issuance should be and at what maturity. There are pros to bringing the 30-year back but there is a serious question of whether it is desirable. And frankly, I have not myself come to a conclusion on that.

Mr. KENNEDY. I appreciate that, and I know from the risk protection perspective of an increasing interest rate environment certainly would put our budget in a stronger position. I think we should consider that. I just want to go back to the currency discussion and do it from a little bit different angle. That has to do, you mentioned foreign economies and their effect on our economic growth. We obviously have a significant current account deficit. What type of scenarios would the changes in say, Asian currencies have on the growth of the European economy and their ability to benefit us as well as our ability to get our current accounts more back in line?

Mr. GREENSPAN. Well, it is fairly apparent that the emerging economies of east Asia have been the dynamic elements in everyone's trade balances. It is clear that, from the United States' point of view because of the fact that we have a much higher propensity

to import relative to our incomes than our trading partners do, we tend to chronically go toward trade deficits in the sense that if all economies rose at the same rate, because of the disparity that we have with respect to our propensity to import, we would create a trade deficit which would be increasing through time matched obviously by equivalent trade surpluses in other economies.

So the critical question is not only what happens to exchange rates and not only what happens to various growth rates in these various different regions, but what are changing propensities to import relative to incomes and they are very difficult to project. So all I can suggest is that the less restrictions that exist on trade in both goods and services, the better we all are because there is no doubt in my mind, looking at the advantages of globalization over the last 30, 40 years, that we have all appreciably gained in standards of living owing to the successive reduction in tariffs and the opening up of trade barriers.

And indeed I would argue that we in the United States have been the greatest beneficiaries of the most—of those changes. We have benefited more than anybody else. And therefore, I am very much strongly supportive of continuing the opening up of trade, which we have always been in the fore-front of, and I look forward to increased globalization which I think will be assisting all people with whom we trade but especially ourselves.

Mr. KENNEDY. Would this propensity to import more than others can we have a dollar policy that ultimately does allow the current account to get back in balance at the same time that we have rising economic growth?

Mrs. KELLY. Mr. Kennedy, I would like to ask if you would submit that in writing. Mr. Greenspan has little time. We have agreed to let Mr. Greenspan go because he has things he must do at 1:00. If you would indulge, sir, with a few more minutes of your time, I would like to try to get a few more people who have been waiting patiently to speak. But I would ask members to please keep your questions short and we will try to fit as many of you in as we can. With that we go to you Mr. Meeks.

[Chairman Greenspan subsequently provided the following response for the record.]

[The Treasury Secretary speaks on U.S. dollar policy. Over the long term, the U.S. current account deficit may well have to adjust, although when or how is by no means a certainty. The only thing that is clear is that it cannot keep expanding relative to the size of the economy indefinitely. Change in the foreign exchange value of the dollar are just one mechanism for adjustment; another key mechanism is stronger growth abroad.

I think the main insight with regard to the current account balance and economic growth is the importance of sound fundamental policies aimed at achieving the maximum sustainable economic growth rate. Within a sound fundamental policy framework, the value of the dollar and the level of the current account are determined by the operation of markets based on the opportunities and preferences of individual consumers and investors.]

Mr. MEEKS. Thank you, Madam Chair. Thank you, Mr. Chairman for being here. I will try to do just that. In fact, I will ask two questions and maybe leave one for you to answer on the record later. Previously you came before the committee, we talked about the war, pre war, we talked about how long we would be in Iraq, and what it would cost the economy, et cetera. We now know that you know, despite what I see that is in your statement that we are indefinite, if you listen to some of our Department of Defense, you say we will be there 4 to 5 years, costing is now \$4 billion a month and going up with the tax deficit.

So it seems to me that literally, I don't claim to be an economist, but the little bit that I learned is that the greater the deficit, the more pressure that it puts on interest rates. And our deficits are now just mounting and mounting and mounting, and also there your testimony seeing that the only thing that has kept us afloat really has been the fact that we have had lower interest rates as far as mortgages are concerned, et cetera.

Do you—my first question is, do you foresee a time where that pressure meets and interest rates will soon have to go up, thereby stemming that part of our economy that has kept us afloat? And so that is the first question. Do you see that happening? Do you see it happening any time in the near future?

And my second question, basically, is an offshoot of what Mr. Sherman had asked, you know I have been talking to a number of foreign countries, and it seems to me as though the Euro is growing in strength. And looking at these countries, they are looking to maintain their Euros for their foreign currency accounts in place of a percentage of the dollars. I am interested in this from your perspective. Some say that is good, some say that is bad. Is the result in the decrease in the dollar strength more beneficial to our economy due to the potential rise in exports, or might it eventually challenge the stability and reliability of our dollar?

Mr. GREENSPAN. Well, first with respect to the deficits and interest rates there is a relationship there. But it is long term and it is not something which is on the immediate horizon. What is on the horizon is not yet the period, say, 2011, 12, 13 when we begin to see the major change in the retirement of the baby boomers and a very large pressure on the deficit. It is when that gets on the five-year horizon that history tells us it begins to probably impact on rates. It is something we should keep in mind and not keep leaving for another day because it will come up and get us. But now I would say probably not because one must presume that the current deficits are short term, and if normal extensions of programs are projected out, that deficit should be coming down as a percent of the GDP.

With respect to the current account, as I said before, there is a long history of financing of this, and I think I have said about as much as I can say without getting into the exchange rate issue, which I find a little bothersome, in other words, to comment on the Euro, I can't. I can say this though with respect to your remarks relative to the distribution of currencies: there is no real strong evidence that there has been significant shift out of the dollar into Euros. I think there probably has been some percentage, but not a large run against the dollar. Indeed, if anything, central banks,

in an endeavor to support their own currency vis-a-vis the dollar, have been reasonably heavy purchasers of American dollar instruments, and that is showing up in the stock of assets of the central banks.

But there is no question that the complexity of what determines exchange rates and the allocation of assets is something we don't know as much about as we should. These markets are very complex, and a lot of them work in a very effective way without full knowledge on our part of exactly how they are doing that. There is an invisible hand here, which is obviously working to our advantage, but it is very frustrating because we can't figure out exactly how it is doing it.

Mrs. KELLY. Thank you very much Mr. Chairman. I thought perhaps we could extend this to 1:15. If that is the case, we have 4 minutes.

Mr. GREENSPAN. I can do that.

Mrs. KELLY. Is that possible?

Mr. GREENSPAN. Yes.

Mrs. KELLY. Thank you. We have four people here. We have 10 minutes. If you ask one question please do it and then get on with it. Because you can certainly submit any further questions.

Mr. SHAYS. I will take 3 minutes. Cut me off in 3 minutes, but I have more than one question. Capital terms, long term, short term, you favor two separate tiers. Is it conceivable to move that short term down from a year to six months? Would that be good or bad?

Mr. GREENSPAN. I have always thought that capital gains taxation, as you probably remember, was not something which I thought was very effective taxation for capital formation. So if you can move the short term from a year to 6 months in that context, I would think that would be a desirable thing to do.

Mr. SHAYS. The Treasury and the Federal Reserve is looking at allowing banks to get into real estate. Is this a positive thing or somewhat dangerous, and would you have concern that they are kind of getting into an economic transaction that they shouldn't be?

Mr. GREENSPAN. Well, as you know, the Federal Reserve has been looking somewhat favorably on the issue of increased competition in real estate brokerage and believes that commercial banking would create that. I am aware, however, that economics is not the sole criteria in determining that decision.

Mr. SHAYS. One last area, I voted for free trade with China. I believe in free trade. I don't think you can repeal the law of gravity. But I am concerned that China has basically gotten into value-added type manufacturing. I thought it would be the cheap stuff. And with regard to their currency, I am told by our manufacturers it is 30 to 40 percent overvalued—undervalued. If one, do you agree? And two, what kind of effort should we make to try to have them have a floating system that would more reflect the true value.

Mr. GREENSPAN. Well, remember it is to our advantage for the Chinese economy to enter into the global system. It will be of huge advantage to the United States for even noneconomic reasons. And they are doing that. And there is a good deal more free trade and emerging property rights. If the exchange rate is significantly undervalued, and indeed a reflection of that would be, for example,

their accumulation of dollar assets, if that is indeed the case, the accumulation of dollar assets will expand their money supply to a point which will create problems in managing monetary policy and it will be in their interest to change.

Mr. SHAYS. Thank you. Madam Chairman, thank you for how have you conducted these meetings.

Mrs. KELLY. Thank you.

Mr. Moore.

Mr. MOORE. Thank you, Madam Chairwoman. Chairman Greenspan, can we tax cut our way out of this sluggish economy?

Mr. GREENSPAN. There is no question that the tax cuts which are in place this month have been helpful. Can you tax cut a moribund economy? I doubt it. In other words, if an economy is truly moribund—

Mr. MOORE. I am talking about this economy.

Mr. GREENSPAN. As I have said in my prepared remarks, we believe that we are at a turning point and that our best judgment is that things will be improving. So I wouldn't accept the view that it is a moribund economy. Obviously, the type of tax cuts that are in train at this particular moment will add to expansion if it is underway. So in that regard, is it helping? Yes, I think it is helping.

Mr. MOORE. My real question is will tax cuts by Congress in the next 6 months to 18 months have an appreciable effect on turning around this economy, additional tax cuts?

Mr. GREENSPAN. It depends on the type of tax cuts and the timing and the extent that they affect the deficit.

Mrs. KELLY. Mr. Manzullo.

Mr. MANZULLO. Thank you, Madam Chairman. Mr. Chairman, the National Association for Manufacturers in its white paper released 6 weeks ago made this statement: "if the U.S. manufacturing base continues to shrink at its present rate and the critical mass is lost, the manufacturing innovation process will shift to other global centers. Once that happens, a decline in U.S. living standards in the future is virtually assured." Chinese manufacturing sector grew at 16.9 percent this past year. Their exports are up 32.6 percent. We have lost nearly 3 million manufacturing jobs at the rate of 54,000 a month for at least the past 34 months. The Congressional district I represent led the Nation in unemployment in 1981 at 25 percent. We are now at 11 percent, but because of a huge manufacturing sector. Could you comment on that statement by the NAM?

Mr. GREENSPAN. I think it is incorrect. There are difficulties when you get fast adjustments in structures within an economy. But we have been having a gradual decline in the intensity of manufacturing production in this country for many years. When I first started out as an economic assistant back in the late 1940s, manufacturing was the U.S. economic bulwark. We went through the 1990s with significant losses, and yet we had an unemployment rate under 4 percent. Jobs do get created, they do not get created in manufacturing.

Mr. MANZULLO. Where have they been created?

Mr. GREENSPAN. They have been created in a vast variety of service industries. And obviously, we are not under 4 percent, now we are 6.4 percent. What I am trying to say is over the long run,

the population shifts, and in the United States, it has been increasingly toward high tech activities whether in the service area, software, computer servicing and the like, or in high tech manufacturing, which has been growing quite significantly. I do not deny that some of the very impressive major old line technologies, which we in this country essentially developed, are sharply reduced.

Mr. MANZULLO. They are gone. And even in the engineering jobs associated with manufacturing, those are gone too. Very quickly.

Mr. GREENSPAN. No, but that is in the nature of a dynamic economy, and we do have a dynamic economy.

Mr. MANZULLO. The dynamic economy has gone down the tubes, a recovery without jobs, especially if you lived in my district.

Mr. GREENSPAN. That is a valid statement. I would say if it continued that way, I would find that distressing. I don't believe it will happen though.

Mr. MANZULLO. Roger Ferguson came out to our district to experience machine oil on his hands. Would you like to come out?

Mrs. KELLY. Mr. Manzullo, if you would submit that in writing, we would appreciate that.

Mr. MANZULLO. Just yes or no, but I will send the invitation. Thank you. Thank you, Madam Chairman.

Mrs. KELLY. Mr. Ford.

Mr. FORD. What can we in the Congress do to help stipulate employment? Clearly, that is the theme of the day on both sides of the aisle. What would you recommend we do?

Mr. GREENSPAN. I would say that the major thing to create employment in this country is to get economic growth. And over the years, what to me has been the most effective thing that created growth in this country is in the last quarter century—

Mr. FORD. From a policy standpoint I agree sir. What can we do? I have only about 45 seconds and I have one last point. Just what can we do from here to the end of this session of Congress?

Mr. GREENSPAN. So far as what can be done in the short run, I think it has already been done, and it is in train and it is presumably hopefully starting to work. Over the longer run, I would look at trying to find more ways to deregulate certain aspects of the technology industry and other aspects of the economy, which I think are bottlenecks in the creation of jobs.

Mr. FORD. One of the things that I asked you over and over again is the predicament that States find themselves in. Do you think at some point it may be necessary, in light of the number of States that are cutting services and raising taxes, some States even releasing prisoners to meet budget shortfalls that we may have to provide some kind of relief package for the States? And, if so, when might you believe that is necessary?

Mr. GREENSPAN. That is a decision on priorities which the Congress has to make. It is an issue which—

Mr. FORD. State budget problems affecting the ability for the economy to grow?

Mr. GREENSPAN. Well, the answer is yes. The contraction in budgets, the increase in not deficits but the equivalent in the State and local area has been negative for economic growth. There is no question about that. It is likely to be negative in the next year as well.

Mr. FORD. As I close out, Madam Chair, I would like to submit to the record a unanimous consent request to enter into the record about 30 articles from across the country indicating the steep cuts that are being made by governors and tax increases. And I know there have been points here we have to balance our budget by cutting expenses. And the follow up question to you, when do spending cuts begin to affect economic growth in a detrimental way?

I would love to get your thoughts on that at some point. Thank you for coming. Thank you Madam Chair for allotting us all time to ask questions.

Mrs. KELLY. Without objection but I would like to discuss with the gentlemen about whether or not they all need to be inserted into the record.

Mrs. KELLY. And with that caveat, so moved. We thank you Mr. Greenspan, Chairman Greenspan. We do thank you for your insights that you have offered us today and for your great indulgence. This committee now stands adjourned.

[Whereupon, at 1:17 p.m., the committee was adjourned.]

# **A P P E N D I X**

July 15, 2003

**CONGRESSMAN JOE BACA**

**July 15, 2003**

---

I want to thank all of our panelists for appearing here today. I look forward to hearing your testimony and asking tough but necessary questions regarding the state of our nation's economy.

I am concerned with the current unemployment rate that seems to be rising so fast, especially for Hispanics and African Americans. The overall unemployment rate jumped to the highest level in nine years, 6.4%. The Hispanic rate is now at 8.4%, 3 points higher than whites, and the African American rate is 11.8%. 11.8%.

Over the past months many pundits and forecasters have said that the job market is going to improve, they say things are going to turn around. But I just don't see it.

Hispanics and other minorities are being hit hard. We are out of work at higher rates than ever before. Unemployment benefits are ending. Food banks and hunger organizations report that more people are asking for help.

President Bush claims that his tax cuts will create jobs. But where are they? 56,000 manufacturing jobs were lost in the last month. When are they coming back?

I want to know what the President is going to do about this? Income tax cuts are fine but they don't make sense when people don't have incomes.

We are marching towards a jobless recovery. Industries' profits are rising but Hispanics and other minorities are suffering. No one is hiring. Their benefits are gone. And people don't know what to do. Who is going to help?

Statement of the Honorable Rahm Emanuel  
United States House of Representatives  
Committee on Financial Services  
July 15, 2003

**Hearing on the Conduct of Monetary Policy and the state of the Economy**

I would like to thank Chairman Oxley for holding this important hearing on monetary policy and the state of the economy. I also appreciate that Chairman Greenspan has taken the time to share his views with us on these subjects. Chairman Greenspan's leadership at the helm of the Federal Reserve will help contribute to the economic recovery that our Nation and my hometown of Chicago are seeking.

While we have seen hopeful signs of a recovery in the equity markets over the past few months, this has not translated into new jobs, with many experts now expecting a "jobless recovery," and national unemployment surging to a 9-year high of 6.4% last month. Millions of Americans have spent months searching for work to no avail. In fact, the number of Americans receiving unemployment checks has reached a 20-year high. Overall, the economy has lost 3.1 million private sector jobs since the beginning of the recession two years ago. However, as a number of observers have commented, those numbers are misleading because they do not even reflect the millions of "discouraged" Americans who have stopped looking for work and are no longer counted among the jobless.

This situation is compounded by the difficulties teenagers are having finding summer jobs. In many working families, teenagers pitch in as much as they can. Summer jobs provide spending and tuition money. Unfortunately, teenagers are now confronting the worst summer job market in many years, with the percentage of those holding summer jobs at its lowest in 55 years and the teenage unemployment rate at its highest in a decade.

Meanwhile, in my home state, payroll jobs last month were down from last year's levels in all 10 of Illinois' metro areas. One of my unemployed constituents reminded me recently, "when you hear about a neighbor losing a job, it's a recession. But when you lose *your* job, it's a depression." For tens of thousands of Chicago families, this is a full-fledged depression.

These are not just numbers, Mr. Chairman. They represent people and families with debts and health care needs. They are hurting deeply. They need, want, and expect our national leaders to feel and express a sense of urgency about this economy.

I am also interested in hearing Chairman Greenspan's views on the rapidly increasing federal budget deficit. The White House today is expected to widen its estimate for this year's deficit to more than \$450 billion, which is \$150 billion, or 50 percent higher than its projection only five months ago. These numbers reflect a \$680 billion fiscal reversal

from the \$236 billion surplus in 2000. Additionally, projections by Goldman Sachs indicate that the deficit price tag over the ten-year period of 2004-2013 will be at least \$4.1 trillion. As President Bush's Council of Economic Advisors recently stated, long-term deficits raise interest rates. For working Americans, this will mean higher payments for credit cards, mortgages and automobiles, and a crushing burden for their children.

Mr. Chairman, these are not partisan issues. We face serious financial, fiscal and geopolitical challenges, including the ongoing threat of terrorism, an open-ended commitment in Iraq, and the growing cost of senior entitlements like Social Security and Medicare. We have to consider each of these challenges within the context of a deteriorating fiscal outlook. Former Treasury Secretary Robert Rubin recently stated he believes we are at crossroads unlike any other in recent memory. I am very interested in hearing whether Chairman Greenspan shares that assessment, and whether he believes the combination of the Administration's two tax cuts coupled with low interest rates and a slowly recovering economy will allow us to successfully address those challenges.

I am hopeful that we can work together and address these issues in a balanced, measured, and bipartisan way. Indeed, as economists from Adam Smith to John Maynard Keynes have said, "no country can enjoy sustained living standard growth without investing, and no country can sustain high investment for long without saving." We should begin to travel the path back to fiscal responsibility by making targeted investments in health care, education and the environment, coupled with short term stimulus that will put money in the hands of low-and-moderate income Americans, those who will spend it and provide immediate stimulus to the economy. I strongly encourage Chairman Greenspan to advocate an economic plan that stimulates job creation now – not years into the future – and that focuses resources on those who need help the most right now – not those who are doing fine without it.

Thank you, Mr. Chairman

For release on delivery  
10:00 a.m. EDT  
July 15, 2003

Statement of  
Alan Greenspan  
Chairman  
Board of Governors of the Federal Reserve System  
before the  
Committee on Financial Services  
U.S. House of Representatives

July 15, 2003

Mr. Chairman and members of the Committee, I am pleased to present the Federal Reserve's semiannual 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 4-1/2 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 three years as numerous shocks--a stock price fall, 9/11, 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 five 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 five 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' cash flow 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 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. 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 on line. 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 five 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 2-1/2 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-temper 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 two 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.

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

Board of Governors of the Federal Reserve System



---

**Monetary Policy Report to the Congress**  
Submitted pursuant to section 2B of the Federal Reserve Act

---

July 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.

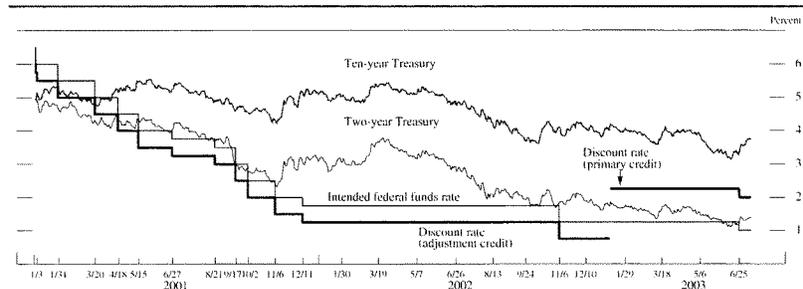
At the time of the June FOMC meeting, the available evidence did not yet compellingly demonstrate that a material step-up in economic growth was under way, though some indicators did point to a firming in spending and a stabilization in the labor and product markets. The Committee concluded that a slightly 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 3¼ 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 1½ 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 1¼ 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 quarter</i>		
Nominal GDP .....	3½–4½	3¾–4½
Real GDP .....	2¼–3	2½–2¾
PCE, chain-type price index .....	1–1½	1¼–1½
<i>Average level, fourth quarter</i>		
Civilian unemployment rate .....	6–6¼	6–6¼
2004		
<i>Change, fourth quarter to fourth quarter</i>		
Nominal GDP .....	4¾–6½	5½–6½
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.

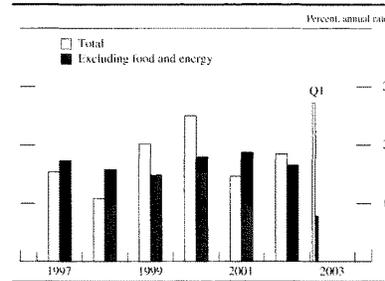
### ECONOMIC AND FINANCIAL DEVELOPMENTS IN 2003

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 1½ 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 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.

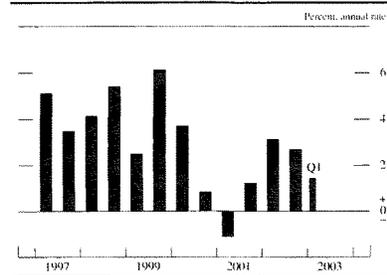
Households and businesses have taken advantage of the decline in intermediate-term and long-term interest rates from their already low levels, mostly by refinancing debt at ever more favorable rates. Partly as a result, household credit quality was little changed over the first half of the year, and 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

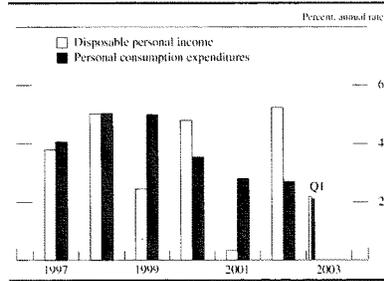
Consumer spending continued to increase in the first half of 2003, though not as quickly as in the past few years. In total, real personal consumption expenditures (PCE) rose at an annual rate of 2 percent in the first quarter and likely posted another moderate advance in the second quarter. Purchases 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 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.

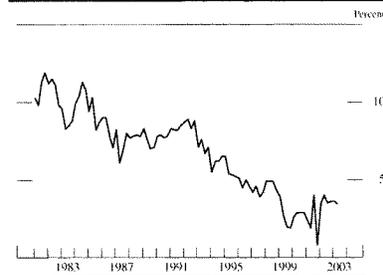
Change in real income and consumption



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

Personal saving rate

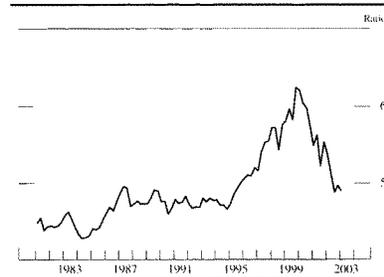


Note: The data are quarterly; the reading for 2003:Q2 is the average for April and May.

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.

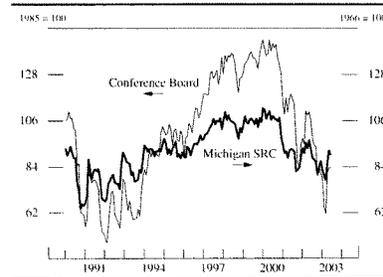
Consumer confidence, which has exhibited some sharp swings in recent years, remained volatile in the first half of 2003. After having declined markedly over the second half of 2002, survey readings from both the Michigan Survey Research Center and the Conference Board took another tumble early this year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

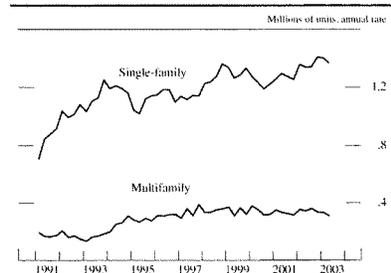
totaled 325,000 units at an annual rate over the first five months of the year, a pace 6 percent below that for 2002 as a whole. In addition, vacancy rates for multifamily rental properties rose further in the first quarter, and apartment rents continued to fall.

#### 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.

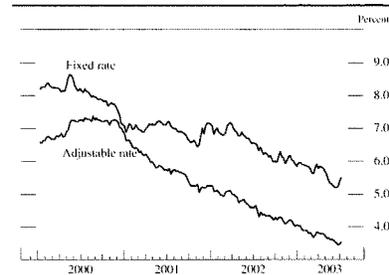
A major use of the proceeds from both cash-out refinancing and home equity loans reportedly has been to pay down credit card and other higher-cost consumer debt. Indeed, in line with those reports, consumer debt advanced

#### Private housing starts



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

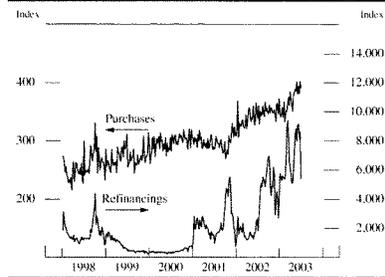
#### Mortgage rates



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

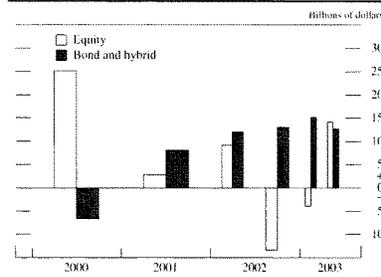
SOURCE: Federal Home Loan Mortgage Corporation.

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.

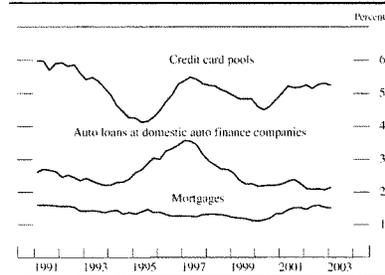
at a relatively subdued 4½ percent annual rate in the first quarter. The growth of revolving debt was about 5 percent at an annual rate, and nonrevolving debt expanded at a 3½ percent annual rate. The growth of consumer debt picked up in the spring; the acceleration in part reflected somewhat higher 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.

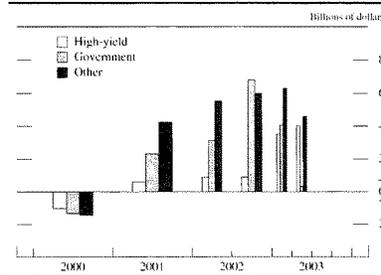
The credit quality of household debt remained fairly stable in the first quarter. The delinquency rates both on residential mortgages and on credit card loans edged down in the first quarter, though persistently high delinquencies among subprime borrowers remain a problem area. Delinquency rates on auto 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.

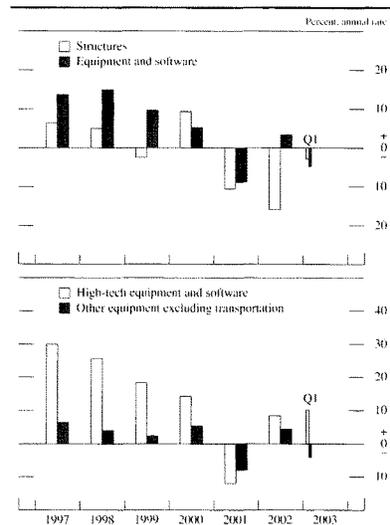
### The Business Sector

#### 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



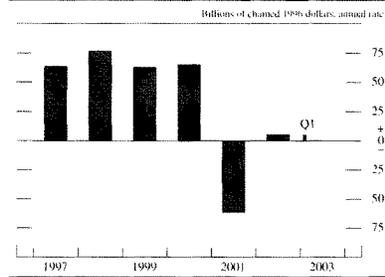
Note: High-tech equipment consists of computers and peripheral equipment and communications equipment.

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.

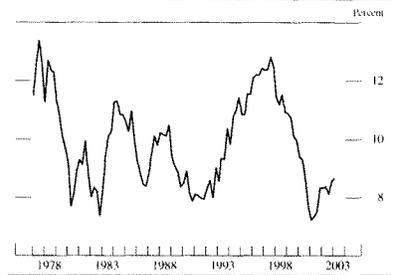
Inventory Investment

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

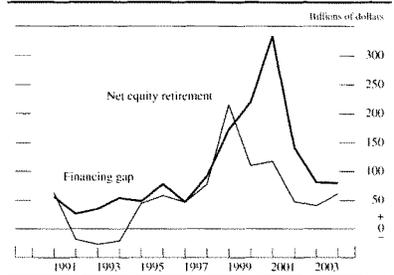


Note: The data are quarterly and extend through 2003:Q1. Profits are from domestic operations of nonfinancial corporations, with inventory valuation and capital consumption adjustments.

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.

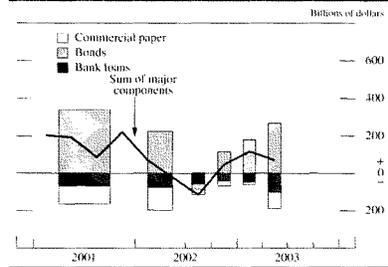
Net equity retirements in the first quarter of 2003 were probably a shade larger than in the fourth quarter of 2002.

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



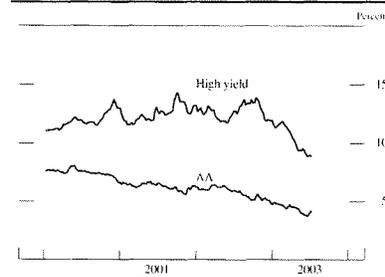
NOTE: Seasonally adjusted annual rate for nonfarm nonfinancial corporate business. The sum of major components is quarterly. Estimates for 2003:Q2 are based on monthly data for April and May.

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-

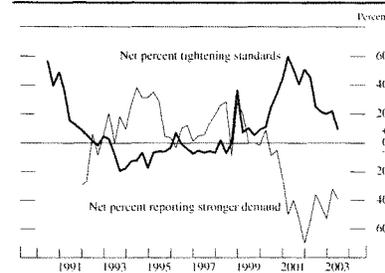
Corporate bond yields



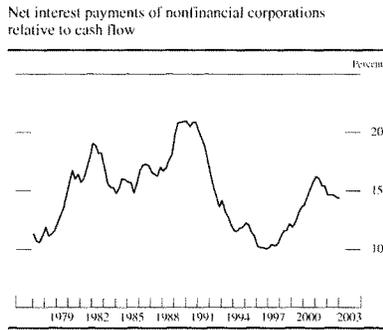
NOTE: The data are weekly averages and extend through July 9 except for the high-yield series, which extends through July 7. The AA rate is calculated from bonds in the Merrill Lynch AA index with seven to ten years of maturity remaining. The high-yield rate is the yield on the Merrill Lynch 175 high-yield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

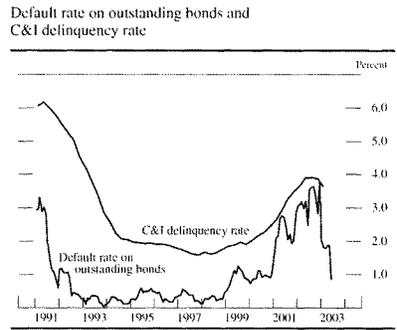
Standards and demand for C&I loans to large and medium-sized firms at domestic banks



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.



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

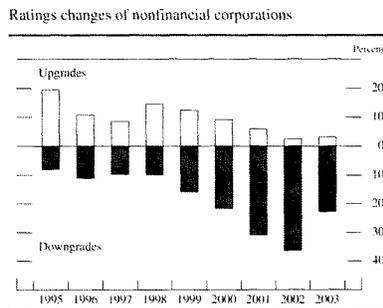


NOTE: The default rate is monthly and extends through June 2003. The C&I delinquency rate is quarterly and extends through 2003:Q1. The default rate for a given month is the face value of bonds that defaulted in the six months ending in that month divided by the face value of all bonds outstanding at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

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-

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.



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.

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.

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.

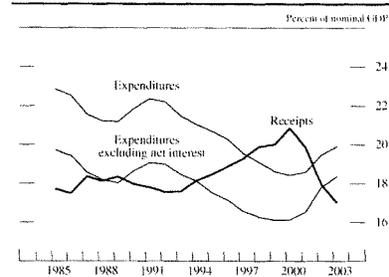
### The Government Sector

#### 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

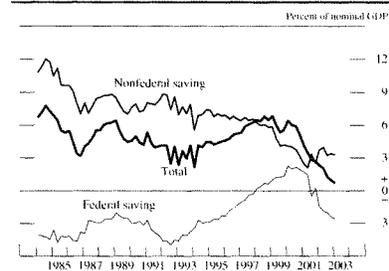


NOTE: The budget data are from the unified budget; through 2002 they are for fiscal years (October through September), and GDP is for Q4 to Q3. For 2003, the budget data are for the twelve months ending in May, and GDP is for 2002:Q2 to 2003:Q1.

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



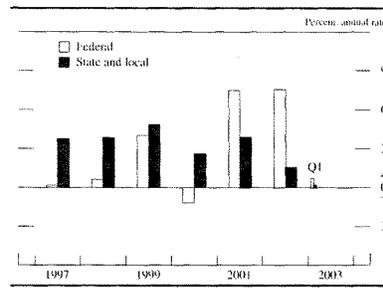
NOTE: The data are quarterly and extend through 2003:Q1. Nonfederal saving is the sum of personal and net business saving and the current surplus or deficit of state and local governments.

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.

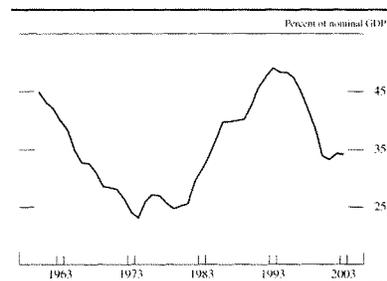
Federal debt held by the public advanced at a 2¼ percent annual rate in the first quarter and remained at just below 35 percent of nominal GDP. During the first half of the year, the Treasury announced several changes in its debt management, including the reintroduction of three-year notes and regular 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.

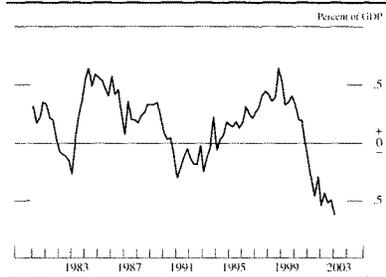
The pace of gross issuance of municipal bonds remained robust in the first half of the year; it was fueled in part by the needs of state and local governments to finance capital spending, which is not subject to balanced budget requirements. Long-term debt issuance was heavily used for new education 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

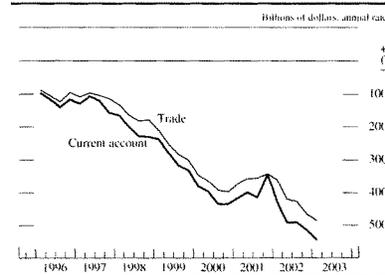
In the first quarter of 2003, the U.S. current account deficit amounted to \$544 billion at an annual rate, or about 5 percent of GDP, a somewhat higher percentage than in any quarter of last year. The deficit on trade in goods and services widened \$22 billion in the first quarter, to \$486 billion,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



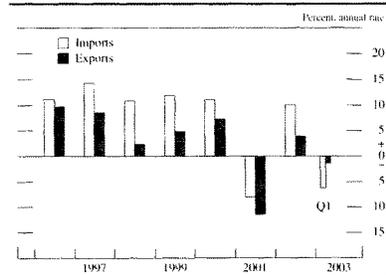
NOTE: The data are quarterly and extend through 2003:Q1.

\$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.

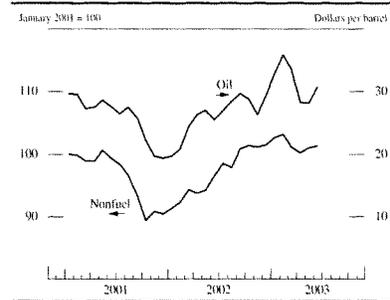
Real exports of goods and services fell 1 1/4 percent at an annual rate in the first quarter; this decline, like that in the previous quarter, reflected in part slow economic growth of our major trading partners. Within this total, exports of goods increased nearly 2 percent after declining sharply in 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.

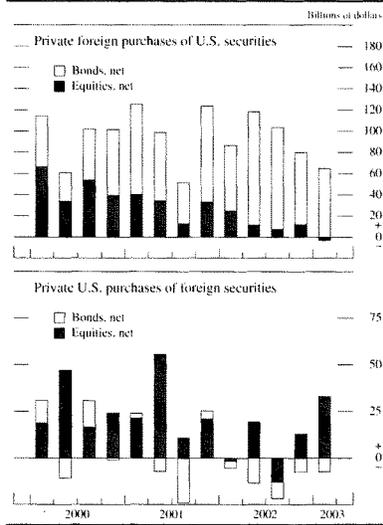
Slight declines in prices of imported capital goods, automotive products, and consumer goods were offset by small increases in other categories.

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.

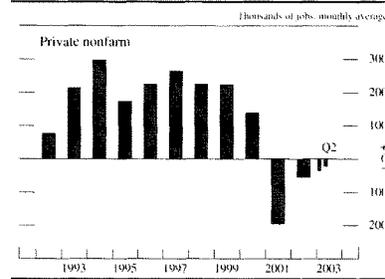
*The Labor Market*

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

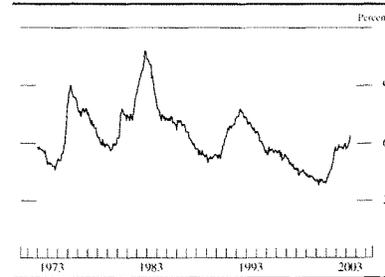
Net change in payroll employment



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.

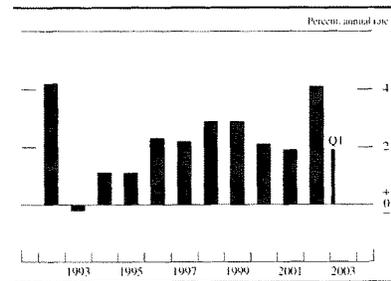
The unemployment rate was little changed in the first quarter, but it subsequently turned up. In June, it stood at 6.4 percent,  $\frac{1}{2}$  percentage point higher than the average in the fourth quarter of 2002 and about  $2\frac{1}{2}$  percentage points above the lows reached in 2000. The rise 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

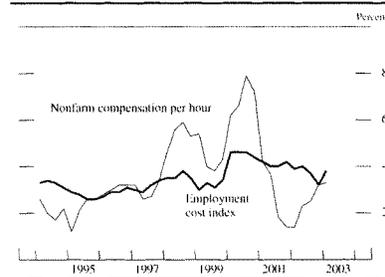
Labor productivity has continued to post solid gains in recent quarters as businesses have remained reluctant to expand their payrolls and instead have focused on cutting costs in an environment of sluggish—and uncertain—demand. According to the currently published data, output per hour worked in the nonfarm business sector rose at an annual rate of 2 percent in the first quarter and  $2\frac{1}{2}$  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  $3\frac{1}{4}$  percent over the twelve months ending in March—only a shade less than over

### Change in output per hour



### 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  $\frac{1}{2}$  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  $3\frac{1}{4}$  percent and roughly in line with the rise indicated by the ECI.

### Prices

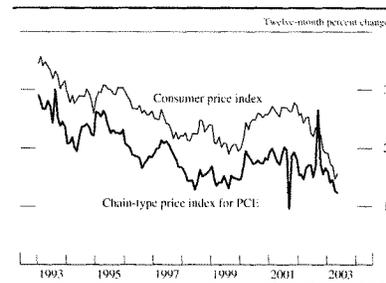
Headline inflation numbers have been heavily influenced by movements in energy prices, but underlying inflation has remained subdued and according to some measures has even moved somewhat lower. Reflecting the surge in energy prices, the chain-type price index for personal

consumption expenditures (PCE) increased at an annual rate of  $2\frac{3}{4}$  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  $1\frac{1}{4}$  percent in May, compared with a reading of  $1\frac{1}{2}$  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  $2\frac{1}{2}$  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



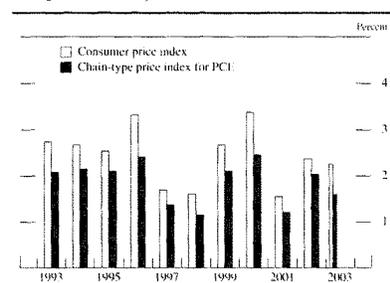
NOTE: The data extend through May 2003.

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  $2\frac{1}{4}$  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  $2\frac{3}{4}$  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  $2\frac{1}{2}$  percent after having risen  $4\frac{1}{4}$  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  $2\frac{1}{2}$  percent in May 2002 to  $1\frac{1}{2}$  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 purchases .....	.8	2.2
Personal consumption expenditures .....	.9	2.2
Excluding food and energy .....	1.5	1.5
Chained CPI .....	.9	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.

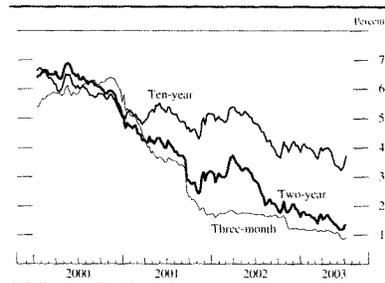
That short burst of optimism was quickly damped by subsequent economic reports that were decidedly less rosy, a jump in oil prices in response to the looming prospect of war in Iraq, and increased tensions with North Korea. Measures of uncertainty, such as implied volatility, moved up in several markets. 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.

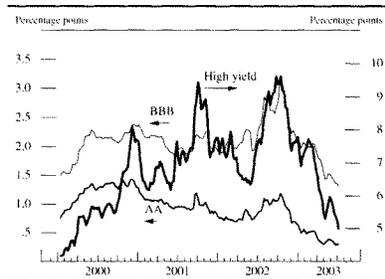
The easing of tensions also put upward pressure on Treasury yields, but additional disappointing economic data offset the diminished safe-haven demands and left

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.

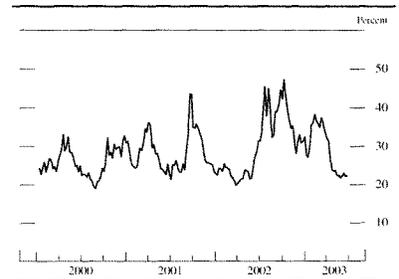
That drop in real interest rates was among several factors providing a boost to equity prices in May and June. Implied volatility of the S&P 100 index, which had been elevated earlier in the year, fell substantially with the conclusion of major hostilities in Iraq; it is now near the bottom of its range 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.

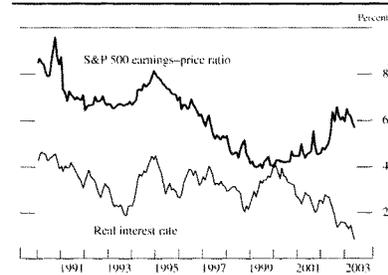
The FOMC decided on June 25 to reduce the target federal funds rate 25 basis points, to 1 percent, but some observers had been anticipating a cut of 50 basis points. In addition, markets appeared to read the Committee's assessment of economic prospects as more upbeat than expected. Partly as a result, 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 15 1/2 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**

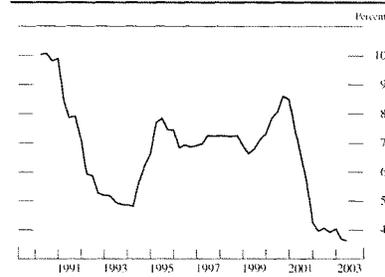
The average interest rate on commercial and industrial loan originations—a substantial majority of which have

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

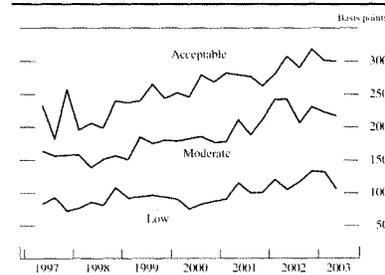


NOTE: The data are quarterly and extend through 2003:Q2. SOURCE: Federal Reserve, Survey of Terms of Business Lending.

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



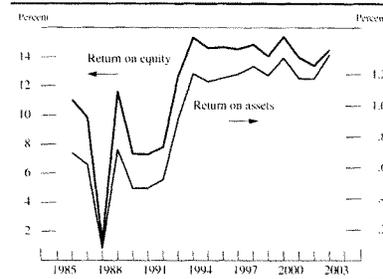
NOTE: The data are quarterly and extend through 2003:Q2. Spreads are over a market interest rate of comparable maturity. Low-risk loans are those in risk categories "minimal" and "low." SOURCE: Federal Reserve, Survey of Terms of Business Lending.

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

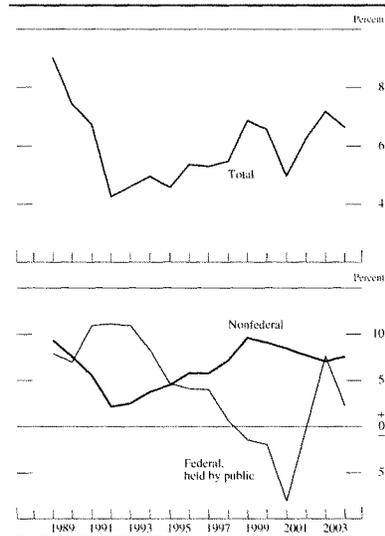
Measures of bank profitability



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

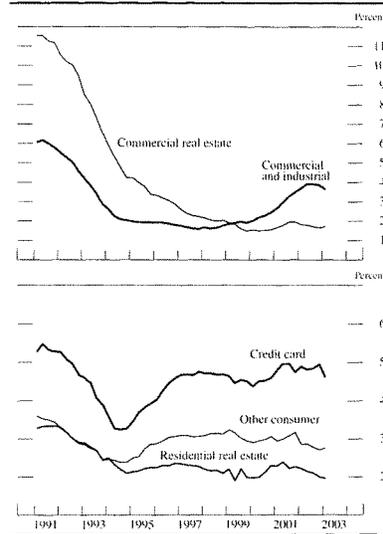
commercial real estate loans and non-credit-card consumer loans were offset by declines in those on residential real estate loans, credit card loans, and business loans. For business and credit card loans, however, the delin-

Change in domestic nonfinancial debt



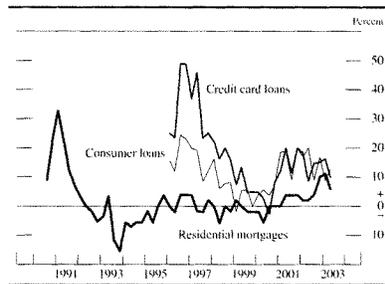
Note: The data are annual; the observations for 2003 are annualized values for Q1. The total consists of nonfederal debt and federal debt held by the public. Nonfederal debt consists of the outstanding credit market debt of state and local governments, households, nonprofit organizations, nonfinancial 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.

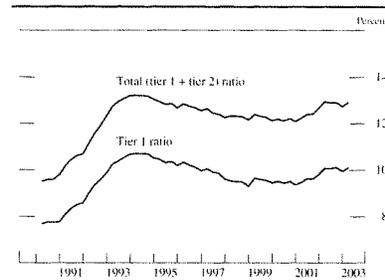
SOURCE: Federal Reserve, Senior Loan Officer Opinion Survey on Bank Lending Practices.

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

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.

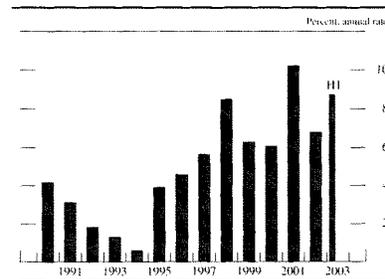
SOURCE: Call Report.

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

Monetary Aggregates

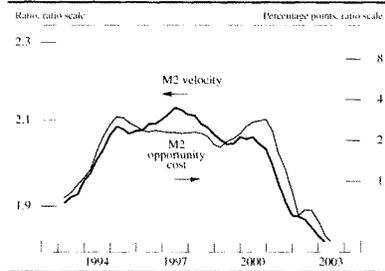
Through the first half of 2003, the growth rate of M2 was buoyed by several factors and remained elevated. The rising level of mortgage refinancing causes money growth to accelerate because the associated prepayments on mortgage-backed securities that are temporarily held in escrow accounts increase 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



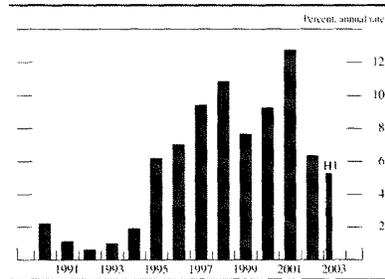
NOTE: The data are quarterly. They extend through 2003:Q1 for velocity and 2003:Q2 for opportunity cost. The velocity of M2 is the ratio of nominal gross domestic product to the stock of M2. The opportunity cost of holding M2 is a two-quarter moving average of the difference between the three-month Treasury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

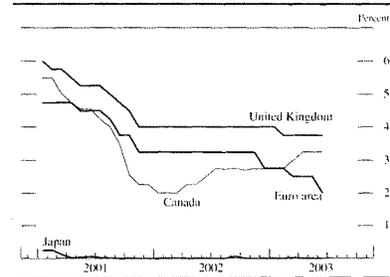
were, in turn, partially the result of an unwinding of the strength late last year and the fact that interest rates paid by those funds declined faster than the interest rates paid by the underlying assets this year. The drop in institutional money funds has been offset by growth in eurodollar deposits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



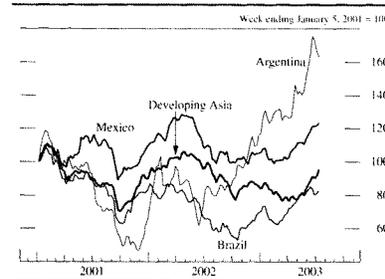
NOTE: The data are as of month-end and extend through June 2003. The interest rates shown are the call money rate for Japan, the overnight rate for Canada, the refinancing rate for the euro area, and the repurchase rate for the United Kingdom.

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

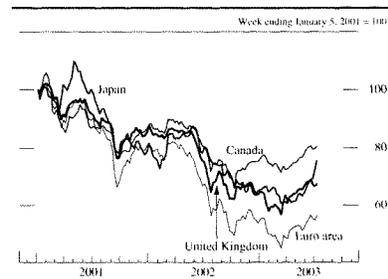
Equity indexes in selected emerging markets



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.

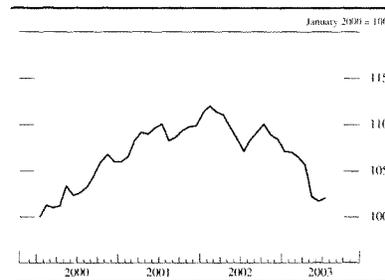
5 percent against the currencies of a broad group of U.S. trading partners. The dollar has declined 13 percent against the Canadian dollar and more than 7 percent on net against the euro but has fallen less than 1 percent versus the Japanese yen. During the first quarter, the dollar appeared to react 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.

Equity indexes in selected foreign industrial countries



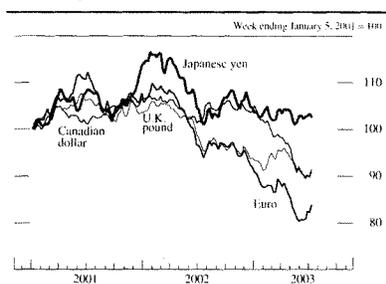
NOTE: The data are weekly. The last observations are the average of trading days through July 9, 2003.

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.

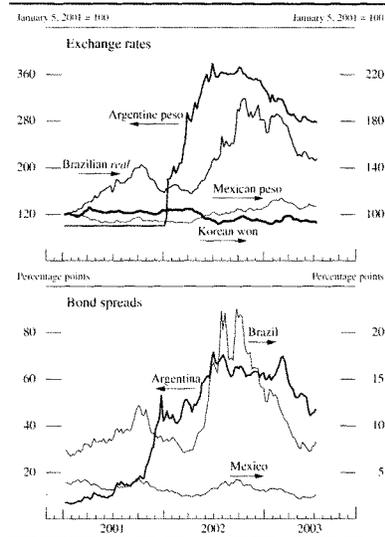
#### Emerging-Market Economics

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 I.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.

Chairman Greenspan subsequently submitted the following in response to questions received from Congressman Spencer Bachus in connection with the House Financial Service Committee hearing of July 15, 2003:

Q.1. The Hispanic population is now 39 million and growing. It will make up a greater proportion of the nation's population in the coming years. Therefore the economic well-being of the country will rely on the strength of Hispanic households. When the largest minority group cannot find jobs, have spent their unemployment benefits and therefore rely on private social service agencies, the economic health of the nation must be affected. How does the greater unemployment rate of Hispanics affect the weak and fragile recovery that our nation is going through? And what can be done to lower the unemployment rates of Hispanics and African Americans?

A.1. As I noted in my midyear report to the Congress, one of the features of the recent economic situation has been the apparent ability of businesses to continue to meet the demand for their products and services while continuing to cut back on workers. The result has been a period of impressive gains in labor productivity; if sustained, this effort by firms to eliminate inefficiencies and reduce costs should bear longer-run benefits for the economy. However, with the pace of overall economic activity having remained subpar, this effort has also meant that demand for labor has remained weak. Through July, hours worked in the private nonfarm economy were still trending lower, and the unemployment rate, at 6.2 percent, was up 1/4 percentage point from its level at the end of 2002 and 2-1/4 percentage points from its recent low in 2000. Over the period from the end of 2000 to the middle of this year, the jobless rate for Hispanic workers rose almost proportionately, reaching 8.2 percent.

Clearly, a sustained pickup in economy activity from the pace seen over the first half of this year will be required to spur businesses to hire and to begin to bring the unemployment rate, overall, back down again. As indicated in the economic projections presented in our midyear report, the Board of Governors and the Federal Reserve Bank presidents expect that process to begin to get under way in the second half of this year as economic activity accelerates and then gains momentum in 2004. Of course, monetary policy is by its nature a blunt tool and cannot be calibrated to differentially affect a particular segment of the population. However, the potential benefits of a sustained period of economic expansion for groups, like Hispanics, with differentially high rates of joblessness are apparent in the experience of the 1990s. During the last expansion, the unemployment rate for Hispanics dropped a bit faster than the overall rate, to 5.6 percent by the end of 2000, the lowest level since the Bureau of Labor Statistics began reporting a separate rate for Hispanics in 1973. Moreover, among Hispanics, the prolonged period of hiring in the 1990s was associated not only with falling joblessness but also, in contrast to the population as a whole, with rising labor force participation.

Q.2. Last month the Federal Reserve reduced the interest rates by  $\frac{1}{4}$  point, to 1%. In general, lower interest rates will make borrowing more affordable. Mortgages and car loans will be cheaper. But this won't help all Americans. Some Hispanics and African Americans don't have access to financial institutions. They aren't able to borrow money. They are not concerned with lower mortgage rates and cheap car loans. They are concerned with paying rent, buying food, and finding a job. They are concerned with living, day-to-day, paycheck-to-paycheck. How does the Federal Reserve's monetary policies help these people? What will the rate cut do for them? What policies are available to aid those who don't have access to financial institutions?

A.2. Evidence from the Surveys of Consumer Finances shows that most Americans are credit users at some time in their life cycles, including most African Americans and Hispanics, and that availability of credit to all Americans has increased over time. Those who currently are credit users, as well as prospective borrowers, should continue to benefit from the reduced cost of credit that has taken place over the past two decades.

More generally, Federal Reserve monetary policy has the goal of promoting maximum employment and stable prices. The components of this goal are internally consistent with one another, and working toward this overall goal, benefits all Americans by promoting the sustainable economic growth that provides them maximum employment opportunities. Moreover, Federal Reserve monetary policy contributes to general financial stability by limiting the scope of financial disruptions that can occur in an interdependent global economic system and preventing their spread outside the financial sector. A financial framework that reduces the potential for systemic disruptions reduces economic risks and promotes a healthy business climate for both small and large businesses that provide the bulk of domestic employment. Monetary policy that encourages employment, stable prices, moderate long-term interest rates and financial stability that reduces risk benefits both borrowers and those who do not borrow.

In addition, the Federal Reserve has programs in place to enforce compliance with the Community Reinvestment Act and the nation's fair lending laws, designed to encourage making credit available to all who are creditworthy, including minorities and those with low and moderate income and living in neighborhoods of people with these characteristics. The Board and the Federal Reserve Banks also have programs in place to encourage financial literacy so that those newly with access to credit, or indeed new to America itself, have the benefit of timely and useful advice in the knowledgeable and wise use of available credit.

Chairman Greenspan subsequently submitted the following in response to questions received from Congressman Rubén Hinojosa in connection with the House Financial Service Committee hearing of July 15, 2003:

Q.1. Chairman Greenspan, when the Mexican peso was devalued in 1994, Treasury Secretary Rubin stepped in to provide a \$12 billion loan to Mexico from the Exchange Stabilization Fund. Mexico repaid the loan by 1997.

However, when the peso was devalued, it had a devastating impact on my District, which borders Mexico and whose businesses are dependent on trade with Mexico.

In light of this situation, the recent elections in Mexico, and some signs of fluctuation in the Mexican peso, I am developing a crisis-management plan for my district to prepare for another potential Mexican currency devaluation. I have contacted your staff about this issue, and they have been very helpful.

My question is this: How would the Federal Reserve react to a devaluation of the Mexican currency?

Would it let Treasury address the issue by using the Exchange Stabilization Fund and remain unengaged?

A.1. In the aftermath of the peso devaluation in the mid-1990s, Mexico adopted a floating exchange rate regime. This action has reduced the probability of a sudden and sharp decline in the Mexican currency. Under the floating regime, the peso's movements are likely to occur more gradually, as markets incorporate judgments about Mexico's economic performance and prospects on a day-to-day basis. Moreover, as investors observe daily exchange rate movements, they are reminded of the need to consider potential exchange rate fluctuations in formulating their investment plans and, as a result, should be less surprised by and more hedged against exchange rate movements that do occur. Mexico has also strengthened its economic performance in a number of other ways in recent years, for example, by implementing policies that have brought inflation down and by deepening its trading relationships with the United States. This progress is reflected in Mexico's investment-grade credit ratings and the fact that spreads on its external debt are quite low compared with those of other emerging-market economies. The result is reduced vulnerability to a disruptive weakening of the peso and to other types of financial crises.

Given that each emerging-market crisis has its own unique features and contours, it is impossible to predict with any certainty the nature of any crisis response. What can be stated with some certainty, however, is that the Treasury would take the lead in

formulating official U.S. policy but would do so in consultation with the Federal Reserve and other entities in the U.S. government.

Q.2. Chairman Greenspan, some contend that the problem for the economy is not short-term interest rates, but longer-term interest rates, which have been going up recently. Is there anything the Fed can do to keep longer-term interest rates down?

A.2. Under its standard operating procedures, the Federal Reserve has direct influence on only one market interest rate--the overnight rate for reserves, known as the federal funds rate. The current level of that rate and market participants' expectations of its future path indirectly affect longer-term yields.

Q.3. What actions are you taking, and can you take, to ensure that the United States does not enter into a long period of deflation similar to the one that has decimated Japan's economy?

A.3. As noted above, the Federal Reserve is holding short-term interest rates at unusually low levels to provide monetary stimulus. In our judgment, this stimulus, combined with other factors tending to buoy growth, should be sufficient to foster a resumption of satisfactory economic expansion and to avert deflation. However, should incoming evidence suggest that further stimulus is required, the Federal Reserve could lower short-term interest rates considerably further. A number of other measures are available to the Federal Reserve, including adjustments to the composition of its asset portfolio.

Chairman Greenspan subsequently submitted the following in response to questions received from Congresswoman Barbara Lee in connection with the House Financial Service Committee hearing of July 15, 2003:

Q.1. As my colleagues on the committee have pointed, since we entered this recession back in January of 2001, the economy has lost 3.1 million jobs, and the unemployment rate has jumped up to 6.4%. This economic downturn has also meant hard times for many of my constituents--as the unemployment rate in Oakland has just hit 11%, and is also contributing to the huge state budget deficits that California and many other states are now facing.

We've now gone through several rounds of tax-cuts with this administration, most recently with the President's "Job's and Growth Plan" that have been unable to provide the necessary stimulus to jumpstart this economy. While over at the Fed, you have overseen 13 interest rate cuts since January 2001 with the same goal in mind. What little growth we have seen has mostly been due to gains in productivity rather than an increase in new hires.

Given the recent jobless data that we've seen in the last month, the legislation that was passed by Congress, and the quarter point cut of the Federal Funds rate, what is your outlook of the unemployment rate as we move into the second half of this year, and the beginning of 2004? Do you expect the unemployment rate to continue to rise in the near term? Are there any other fiscal tools that we should consider using in order to provide an immediate shot in the arm to the economy and encourage job creation?

A.1. The unemployment rate, which now stands at 6.2 percent, has risen 2-1/4 percentage points since its low at the end of 2000. The bulk of the increase occurred during the recession of 2001 owing to a considerable drop-off in aggregate demand. The unemployment rate has continued to edge up this year, on net, as businesses have been reluctant to expand payrolls while the state of the recovery is still uncertain.

In the second half of this year and into next year, we expect the economy to expand as the substantial stimulus from recent tax cuts and accommodative financial conditions should encourage households to spend more freely. This upturn, along with the favorable cost of capital, should persuade firms to be a little less cautious with capital expenditures, inventory re-stocking, and hiring.

The most recent labor market data suggest that firms have not yet begun increasing payrolls even though the economy is expanding. Businesses in recent years have been exploiting productivity gains achieving more production with existing employees for a while before they commit to hiring new workers. Once employment begins to increase, the improving labor market may also appeal more to workers who have temporarily dropped

out of job searching. As these discouraged workers begin to move back into the labor force, the unemployment rate could remain elevated in the short-run. Eventually, however, a growing economy will create enough jobs to substantially lower the unemployment rate. As presented in the Federal Reserve's Monetary Policy Report to Congress, members of the Federal Open Market Committee expected the jobless rate to be between 5-1/2 to 6 percent by the end of next year.

Q.2.) As you know, perhaps the only bright spot in this economy has been in the housing sector, where low interest rates have fueled new home loans and encouraged many existing homeowners to refinance their mortgages. Just yesterday, the Mortgage Banker's Association released a report indicating that a record \$3.4 trillion in new loans are expected to be issued this year. As the prime source of wealth building in this country, it is important for us to continue to facilitate and encourage individuals to not only realize the dream of homeownership, but also to help them keep it in the long-term.

According to the Mortgage Banker's Association National Delinquency Survey, foreclosure rates have been steadily rising in recent years. The percentage of all loans that are 90 days delinquent rose 26% since 2001 and the number of 90 day delinquent sub-prime loans also rose by a staggering 131%. In this context foreclosure is hitting low-income individuals the hardest, as already many are struggling with higher mortgage rates, and are often borrowing against the value of their home in order to pay off other debts.

While these numbers are disturbing enough on their own, when combined with the recent rumblings of an overpriced housing market and a possible housing bubble, they could prove especially devastating to the economy. What is your analysis of the current housing market? To what extent do you believe that we can avoid a letdown in the housing market, and still preserve housing values so that people can continue to borrow against their homes in order to stay afloat?

A.2. As you noted, the housing market has been impressive recently, with real residential spending rising at a 7 percent annual rate on average over the past six quarters, and house prices rising at nearly the same pace. This strength--spurred in good part by extraordinarily low mortgage interest rates--has also likely encouraged substantial consumer spending as households extract equity from their homes.

Over the past several weeks, mortgage interest rates, though still at relatively low levels, have risen nearly 95 basis points. Although it would not be surprising if increases in housing activity and prices slowed in coming months, a full-scale, nationwide contraction, of the type we usually associate with the bursting of an asset price bubble, seems unlikely for several reasons. First, selling a house and moving entails substantial transaction costs, which inhibits speculative transactions. Second, there is not much

evidence of supply overhang: The level of new construction appears to be supported by the formation of new households. Third, mortgage rates have moved higher in part because economic prospects appear to have improved, a development that should support housing spending to some extent.

Insert page 58, line 1386

Chairman Greenspan subsequently provided the following response for the record:

Economic growth has been sluggish over the past two and a half years in the euro area--the twelve countries that use the euro as their currency. The European Central Bank (ECB) has reduced short-term interest rates nearly 3 percentage points since early 2001, to record-low levels. Those rate reductions have provided some stimulus for the euro-area economy and are expected to continue to support growth going forward. Euro-area inflation recently has declined to just below 2 percent, and the ECB has indicated that it will set monetary policy so that inflation remains near that rate over the medium term.

The German economy has stagnated during the past few years. Germany's difficulties partly have reflected those of the global economy, but German stagnation also has owed to the rigidity of its labor markets and the high costs facing German businesses. Firms are reluctant to hire workers because non-wage (pension and health care) labor costs have soared and it is extremely difficult to lay off workers when economic circumstances change. The German government has proposed a series of reforms aimed at boosting employment by improving incentives for the long-term unemployed to find work, increasing the flexibility of the German labor market and reducing the non-wage labor costs facing businesses. The proposed reforms are a step in the right direction, but further measures will be necessary over the next decade. The successful implementation of the proposed reforms can be expected to spur growth in the German economy, but their main direct impact is not expected to be felt until next year and beyond. The progress of reform

appears to have contributed to a recent rise in business and consumer confidence that is a positive sign for the German economy in the near term.

Insert page 88, line 2100

Chairman Greenspan subsequently provided the following response for the record:

Fifteen years is a very long time to look into the future. I think it is unlikely that the trade deficit could continue at recent levels over the next fifteen years. However, at what point it might begin to decline is beyond our ability to predict.

If the deficit were to continue at the rate you suggested, it would imply that investors continue to view the United States as an attractive place to invest. This capital inflow helps to build factories and infrastructure that raise the standard of living of all Americans.

On the other hand, one cannot rule out a future downward adjustment of the trade deficit should the exchange value of the dollar decline. Flexible exchange rates are an important mechanism for facilitating adjustments in the global pattern of demand and production.

Finally, I would note that there are some additional important factors involved. It is possible that the productivity acceleration that America has enjoyed over the past ten years may spread to foreign countries. The resulting increase in foreign growth rates would help boost U.S. exports and thus reduce the trade deficit.

**RISK-BASED PRICING, USE OF CREDIT INQUIRIES IN  
CREDIT SCORING MODELS, AND ADVERSE ACTION NOTICES**

**Risk-Based Pricing**

**Do you think it is important for lenders to be able to review the credit risk of existing customers and adjust the price of open-end credit, either up or down, based on changes to the consumer's risk profile? What would be some of the dangers to prudent underwriting practices if insured depository institutions were not able to make adjustments to the price of credit in the face of a consumer report or other information showing a consumer's deteriorating credit quality?**

Risk-based pricing is a technique that many creditors use to extend credit to consumers at rates tailored to the individual consumer's risk profile. The growth of risk-based pricing is a direct result of creditors having ready access to information gathered by consumer reporting agencies about the borrowing and payment experiences of consumers. Risk-based pricing results in fewer consumers being denied credit, because some consumers with marginal or poor credit histories who previously would have been denied credit now can receive credit at rates that reflect their individual credit risk.

With open-end or revolving credit, where the consumer typically may access additional credit as prior balances are repaid, risk-based pricing is used both at the application stage to determine the initial rate and terms and at subsequent account reviews to adjust the cost of credit to reflect changes in the consumer's risk profile. If creditors were prohibited from adjusting the cost of open-end credit to reflect adverse changes in consumers' risk profiles, the cost of credit for all consumers would likely increase and credit availability would likely decrease, because creditors would need to factor into their credit decisions the likelihood that their initial underwriting assessments of consumer risk will not hold true in the future.

**Use of Credit Inquiries in Credit Scoring Models**

**As part of assessing a potential borrower's overall risk, do you believe that it is legitimate for lenders to consider whether a consumer has triggered several credit inquiries in the recent past? How might this allow the lender to forecast the borrower's future credit risk profile? Can this practice be used by lenders to help them avoid overextending credit to individuals, which may lead to delinquencies or bankruptcies?**

Credit scoring models rely on information to measure the credit risk posed by current and prospective borrowers. In the process of credit evaluation, creditors seek to use information that helps them better distinguish between good and bad credit risks.

Credit scoring systems assign positive and negative weights to particular information items that have demonstrated statistical usefulness in this process.

The number of recent inquiries to consumer reporting agencies are credit criteria statistically associated with creditworthiness in credit scoring models used for credit granting and pricing. An upsurge in recent inquiries for credit may indicate that a borrower is in financial distress. Restrictions on the use of information about inquiries could increase overall risk in the credit system, potentially leading to higher levels of default and higher prices for consumers.

On the other hand, there are circumstances where multiple inquiries to consumer reporting agencies reflect the fact that the consumer is being prudent and shopping for the best terms on a particular type of loan, such as a mortgage. In these instances, the number of recent inquiries generally would not indicate that the borrower is in financial distress. Some credit score developers have revised their models so that multiple inquiries for mortgage loans, for example, made within a certain period of time will be treated as a single inquiry when the pattern of inquiries indicates that the consumer is shopping for the best terms, rather than in financial distress. These types of refinements enhance the usefulness of credit scoring and benefit the credit system as a whole.

#### Adverse Action Notices

**Do you believe that consumers who are granted credit should receive adverse action notices under the Equal Credit Opportunity Act? Do you believe that it would be appropriate to allow the Federal Trade Commission to redefine the entire concept of adverse action under the ECOA?**

The ECOA defines the term "adverse action" to include certain actions taken when a consumer initially applies for credit and certain actions taken after a credit relationship has been established. At the application stage, "adverse action" means a denial of credit or a refusal to grant credit in substantially the amount or on substantially the terms requested by the consumer. Under Regulation B, which implements the ECOA, when a consumer requests specific credit terms and the creditor makes a counteroffer on less favorable terms, adverse action results if the consumer does not accept the terms offered, but does not result if the consumer accepts the counteroffer. Once credit has been extended, "adverse action" means a revocation of credit or a change in the terms of an existing credit arrangement.

Under the ECOA, a consumer against whom adverse action is taken is entitled to a statement of reasons from the creditor. Creditors may satisfy this requirement by giving consumers the statement of specific reasons as a matter of course or by notifying consumers in writing of the right to obtain a statement of reasons and how to obtain it.

The statement of reasons serves two purposes: first, to evidence any unlawful discrimination; and second, to provide an opportunity to cure any erroneous information, including information from a credit report, that the creditor may have relied upon in taking the action.

In 1996, the Congress incorporated the ECOA definition of “adverse action” into the Fair Credit Reporting Act (FCRA). The Board subsequently amended its model forms under Regulation B, which implements the ECOA, to provide creditors with guidance on how to combine the ECOA and FCRA notices into a single notice. To the extent that creditors provide the specific reasons for adverse action (and not the notice of the right to receive them), consumers benefit from a combined notice, because it not only tells them that there may be problems in their credit reports, but also may alert them to the specific problems that the creditor found in their credit reports. A combined notice benefits creditors by reducing costs and simplifying compliance burdens.

The FTC has proposed changing the definition of “adverse action” under the FCRA to cover circumstances where credit is denied or where credit is granted on material terms that are less favorable than otherwise available to the consumer from the creditor based on information in a credit report. Providing adverse action notices to consumers who receive credit might be confusing to consumers or might provide them some educational benefit. In any case, the cost of providing notices to consumers who are granted credit would likely be passed on to consumers in the form of higher credit costs, and these costs may outweigh any potential benefit derived from the added notice.

Credit pricing frequently reflects a tradeoff between variables such as interest rates, fees, points, and other credit terms, such as the amount of the downpayment or the existence of a prepayment penalty. As a practical matter, given the complexity of pricing decisions, it may be difficult to determine when the consumer has not been granted credit on the most favorable terms.

Finally, under the FTC’s proposal, adverse action notices under the FCRA would be provided to consumers only when credit is initially denied or granted at less than the most favorable terms. As noted above, the ECOA definition of “adverse action” applies not only to certain decisions made at the application stage, but also when certain actions are taken after a credit relationship has been established, such as revoking credit or changing the terms of an existing credit arrangement. It is important for consumers to continue to receive adverse action notices when creditors revoke credit or change the terms of existing accounts based on negative information in a credit report. Adverse action notices provided during an existing credit relationship may alert consumers to inaccuracies in their credit reports and to the possibility that they may have become victims of identity theft. Eliminating adverse action notices under the FCRA at the account review stage would remove an important consumer protection.