S. HRG. 107–132

FEDERAL RESERVE'S FIRST MONETARY POLICY REPORT FOR 2001

HEARING

BEFORE THE

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

ONE HUNDRED SEVENTH CONGRESS

FIRST SESSION

ON

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

FEBRUARY 13, 2001

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

U.S. GOVERNMENT PRINTING OFFICE

75–191 PDF WASHINGTON : 2001

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

COMMITTEE ON BANKING, HOUSING, AND URBAN AFFAIRS

PHIL GRAMM, Texas, *Chairman*

RICHARD C. SHELBY, Alabama
ROBERT F. BENNETT, Utah
WAYNE ALLARD, Colorado
MICHAEL B. ENZI, Wyoming
CHUCK HAGEL, Nebraska
RICK SANTORUM, Pennsylvania
JIM BUNNING, Kentucky
MIKE CRAPO, Idaho
JOHN ENSIGN, Nevada

PAUL S. SARBANES, Maryland
CHRISTOPHER J. DODD, Connecticut
TIM JOHNSON, South Dakota
JACK REED, Rhode Island
CHARLES E. SCHUMER, New York
EVAN BAYH, Indiana
ZELL MILLER, Georgia
THOMAS R. CARPER, Delaware
DEBBIE STABENOW, Michigan
JON S. CORZINE, New Jersey

WAYNE A. ABERNATHY, *Staff Director*
STEVEN B. HARRIS, *Democratic Staff Director and Chief Counsel*
LINDA L. LORD, *Chief Counsel*
MARTIN J. GRUENBERG, *Democratic Senior Counsel*
GEORGE E. WHITTLE, *Editor*

C O N T E N T S

TUESDAY, FEBRUARY 13, 2001

	Page
Opening statement of Chairman Gramm	1
Opening statements, comments, or prepared statements of:	
Senator Sarbanes	2
Senator Bennett	4
Senator Miller	5
Senator Ensign	5
Senator Corzine	5
Senator Hagel	6
Senator Stabenow	6
Senator Allard	7
Prepared statement	53
Senator Johnson	7
Senator Bayh	8
Senator Dodd	8
Senator Reed	9
Senator Shelby	30
Senator Carper	41
Senator Schumer	44
Senator Bunning	53

WITNESS

Alan Greenspan, Chairman, Board of Governors of the Federal Reserve System, Washington, DC	10
Prepared statement	53
Response to written questions of:	
Senator Bunning	58

ADDITIONAL MATERIAL SUPPLIED FOR THE RECORD

Monetary Policy Report to the Congress, February 13, 2001	60
A *New York Times* Article by Robert Rubin, "A Prosperity Easy to Destroy," dated February 11, 2001	92

FEDERAL RESERVE'S FIRST MONETARY POLICY REPORT TO CONGRESS FOR 2001

TUESDAY, FEBRUARY 13, 2001

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

The Committee met at 10:00 a.m., in room SH–216 of the Hart Senate Office Building, Senator Phil Gramm (Chairman of the Committee) presiding.

OPENING STATEMENT OF SENATOR PHIL GRAMM

Chairman GRAMM. The Committee will come to order. Let me thank our Members for coming. This is an important hearing—The first of our new hearings on monetary policy under the Federal Reporting Act of 2000.

As our colleagues and Chairman Greenspan will remember, for many years we had a semiannual report under the Humphrey-Hawkins Act, which required the Fed to report on many economic factors that are no longer as relevant in the year 2001 as they were in the 1970's.

We were able to work out a bipartisan agreement to change the focus of the report and, as a result of that bipartisan effort, today, we are holding our first hearing.

I want to thank Senator Sarbanes for his leadership in helping us reach a bipartisan agreement that would allow these hearings to move forward. I am also glad that we have agreed—except under circumstances where the Banking Committee in the house of Congress that does not hold a primary hearing feels that it is necessary to have the Federal Reserve Chairman present the whole thing again—that we will have reduced four hearings a year for Chairman Greenspan down to two.

Knowing that he is a busy man, trying to keep the economy strong, doing God's work in that effort, I think that is an important achievement. So, we are here today to hear a report on the American economy.

In my opinion, since roughly 1982, when the Reagan program became operational, we have been virtually in a 19-year golden era in America.

Not only do we have higher real incomes, not only do we have an abundance of consumer goods at lower prices and higher quality than at any other time in history, but this expansion has been so strong that people who once were considered unemployable are now viable, functioning members of the labor force.

In this environment, we were able to reform welfare and require that people leave welfare and go to work, and they have done it, and have not only benefited the taxpayer with lower welfare expenditures, but, most importantly, benefited themselves by earning the dignity that comes from being self-supporting.

It is hard to imagine anything more important than keeping this economic expansion going.

Chairman Greenspan, as always, we look forward to hearing what you have to say and to working with you to do what we have to do to maximize the chances that this economic expansion will continue to create jobs and growth and opportunity for all of our people. And so, I want to welcome you to the Committee.

Let me say to you and to our colleagues, I have to run downstairs around 10:30 to introduce a friend of mine from Texas who's been nominated to a high post.

I will ask Senator Sarbanes to preside during my absence and, hopefully, by the time we allow everybody to give an opening statement, I will have had time to go down and do that and come back.

But if I miss part of your statement, I will have trusty aides here listening.

So let me welcome you today and recognize Senator Sarbanes.

OPENING STATEMENT OF SENATOR PAUL S. SARBANES

Senator SARBANES. Well, thank you very much, Mr. Chairman.

I join you in welcoming Alan Greenspan back before the Senate Banking Committee. We look forward to receiving the Federal Reserve's semiannual monetary policy report to Congress under the legislation that we were able to pass at the end of the last Congress, legislation which gave a permanent reauthorization to this semiannual monetary report, something which I understand the Fed was supportive of, and also reauthorize a number of other reports under the jurisdiction of this Committee.

I want to express my appreciation to Senator Gramm for his cooperation in that effort that enabled us to resolve that issue, I think much to the advantage of everyone.

These monetary policy reports and the public testimony before Congress by the Federal Reserve Board Chairman serve a critical oversight function and I am glad we are carrying it forward without interruption.

Much has changed since Chairman Greenspan appeared before this Committee last July 20 to testify on the Fed's previous monetary policy report. Two months prior to that appearance, on May 16 of last year, not yet a year, the Fed completed the last and longest half-point of a series of six interest rate increases—increases—that have been initiated on June 30, 1999. Between June 30, 1999 and May 16, 2000, the Fed took the interest rates up 6 times. While many of us were searching for some visible evidence of inflation in the economy to support such a move, the Fed said they were concerned about inflationary pressures developing as a result of strong consumer demand and tight labor markets.

While the Fed's Open Market Committee did not raise rates again after May 16, it maintained a position through November 15 of last year—in other words, just 3 months ago—that the economic risk continued to be weighted, and I quote them, mainly toward

conditions that may generate heightened inflation pressures in the foreseeable future.

It was not until the Federal Open Market Committee meeting on December 19, less than 2 months ago, that the FOMC shifted its position to the view that the economic risks were weighted, "mainly toward conditions that may generate economic weakness in the foreseeable future." And of course, as we all know, thereafter, the Fed lowered interest rates half a point on January 3 and lowered interest rates another half point again on January 31.

In his testimony last July 20, Chairman Greenspan also emphasized the importance of not dissipating the budget surpluses of the Federal Government. He stated—"by substantially augmenting national saving, these budget surpluses have kept real interest rates at levels lower than they would have been otherwise. This development has helped foster the investment boom that in recent years has contributed greatly to the strengthening of U.S. productivity and economic growth. The Congress and the Administration have very wisely avoided steps that would materially reduce these budget surpluses. Continued fiscal discipline will contribute to maintaining robust expansion of the American economy in the future."

And Chairman Greenspan also stated—"I would say that anything, whether it is tax cuts or expenditure increases which significantly slows the rise in surpluses, or eventually eliminates them, will put the economy at greater risk than I would like to see it exposed to."

Now as we all know, in his testimony before the Senate Budget Committee on January 25, just a few weeks ago, the Chairman changed all of this.

Business Week said, and I now quote them in their editorial on February 19—In his Senate testimony on January 25, Federal Reserve Chairman Alan Greenspan appeared to give his blessing to massive tax cuts that extend well into the decade.

Despite his caution, the predictions of budget surpluses are subject to a relatively wide range of error. His benediction—*Business Week's* word—his benediction changed the political climate in Washington and set off a tax cut frenzy that is now veering out of control.

And earlier, with reference to that very point in that editorial, *Business Week* had said: "The great tax cut stampede is on, and two things could get trampled under foot—restraint and common sense."

Conservatives, liberals, the business roundtable and lobbyists of all kinds are demanding their fair share. A mindless, bloated, something-for-everyone tax cut may result. Before Washington gets swept away and does something that the country regrets for years to come, it might be wise to step back and consider a few simple truths. And some of those truths, I think, were outlined in a very pointed and succinct way by Alice Rivlin, the former Vice Chair of the Federal Reserve Board, as well as the former director of both CBO and OMB, who testified before the Senate Budget Committee and stated, and I quote her:

I believe that the currently projected 10-year surpluses are good guesses, the best available guesses. But they are by no means guaranteed.

Moreover, the 10-year horizon is too short. We need to respond now to the looming demographic pressures of the years beyond 2011.

I believe committing to a massive tax cut now, especially one undertaken to counter a temporary downturn in the economy, would be short-sighted.

We have time to see whether the surpluses turn out to be as large as currently projected and to debate whether public needs have priority over private spending.

Ms. Rivlin also pointed out that:

> Since a tax reduction that overstimulates the economy is almost impossible to reverse, the likely result will be that the Federal Reserve will have to raise interest rates. If we want to promote economic growth, we would be better off with lower interest rates and tighter fiscal policy than with the opposite combination.

In my view, we are at a crossroads in the conduct of fiscal policy. Over the past 8 years, the United States has maintained remarkably disciplined fiscal policy. That fiscal policy, in turn, has given the Federal Reserve the room to run an accommodating monetary policy that has allowed the economy to sustain the longest expansion in U.S. history. This economic expansion brought unemployment down to 4 percent, helped turn U.S. budget deficits into surpluses, produced an expansion in investment that has led to rising levels of productivity, which in turn has kept inflation at low levels.

It is the reason the Fed had the flexibility to move quickly and aggressively last month to lower interest rates to respond to the economic slowdown. All of that could now be placed at risk.

I hope we find it within ourselves to consider carefully the judgments we make in the coming months and act prudently to preserve the hard-won gains we have made over the past 8 years.

Mr. Chairman, I look forward to hearing Chairman Greenspan's testimony this morning on this and other issues.

Thank you very much.

Chairman GRAMM. Thank you, Senator Sarbanes.

Senator Bennett.

OPENING STATEMENT OF SENATOR ROBERT F. BENNETT

Senator BENNETT. Thank you, Mr. Chairman.

I will try to be brief, but I could not resist noting an article that appeared today in *The New York Times* on the Op Ed page, that I think sounds a note that we ought to keep in mind as we get into this discussion of the economy. It is entitled, "An Irrational Case of Dread." And if I may, I would like to quote a little from it.

My colleague from Maryland has quoted from *Business Week*, maybe an unusual source from a Democrat.

I will quote from *The New York Times,* an unusual source for a Republican.

[Laughter.]

He says, "It is very hard for outsiders to believe that the United States, with housing starts at over 1.5 million units and an unemployment rate at little more than 4 percent, is in trouble."

Why are Americans complaining about a broader economic outcome that in principle was strongly desired just a year ago?

The steady drumbeat of worry over the past few months has come almost exclusively from economists who specialize in the stock market, especially the NASDAQ. There is far less gloom among the American corporate economists I speak to in non-financial companies, people whose main business is to advise top managers on longer-term trends that drive decisions like whether to build new factories or buy equipment.

And finally, he says: Viewed from outside the country, there are a few signs of serious weakness in the American economy, just clear evidence that it has come back down to earth from a period of very fast growth before there could be real damage from a permanent rise in inflation.

Only 6 months ago, most American economists still wanted to see the economy cool off. Because the Federal Reserve has done its job well by raising interest rates at the right time, there should be celebration, not trepidation.

I think that is a very salutary way to greet the Chairman of the Federal Reserve Board, saying that, yes, things have slowed down a little.

No, we are not going into the tank.

And looking at it from the standpoint of Europe, and this particular byline is Frankfurt, U.S. economic worries look—well, the quote is, from Europe: U.S. Economic Worries Are Hard To Fathom.

Many times it is important for us when we look just at ourselves, to look around at others and see where we are in comparison to others and realize that confidence in the American economy is not a bad thing to have at this particular time.

And I share that with you, Mr. Chairman, and look forward to the reactions and comments of Chairman Greenspan.

Chairman GRAMM. Thank you, Senator Bennett.

Senator Miller.

COMMENT OF SENATOR ZELL MILLER

Senator MILLER. I don't have any comments at this time. Maybe some questions later.

Chairman GRAMM. Senator Ensign.

COMMENT OF SENATOR JOHN ENSIGN

Senator ENSIGN. I will wait for questioning. Thank you.

Chairman GRAMM. Senator Corzine.

OPENING STATEMENT OF SENATOR JON S. CORZINE

Senator CORZINE. Thank you, Mr. Chairman.

I join my colleagues in welcoming Chairman Greenspan. I compliment you on your exceptional leadership over the years. As a former field hand in the financial services world and markets for 25 years, I could not respect your judgment, objectivity and the results more readily.

But as Senator Sarbanes remarked in his opening comments, I am concerned about some of the interpretations that came out of the Budget Committee hearings. And I hope that we will have a chance today to have some clarification about some of those.

As the most junior Member on this side of the aisle, I will keep my opening remarks to an irreducible minimum. But I do want to ask specific questions about specific tax cuts. Importantly, the size of those tax cuts within the fiscal framework that we face.

Specifically, I hope to have some clarification whether you believe we should separate a stimulus-focused tax cut from structural tax adjustments. And under what circumstances you believe those should be scaled in, phased in, whatever term one would want to use, given the uncertainties that we may face in projecting a 10-year fiscal policy framework.

But I am very, very pleased to be here and look forward to your comments.

Chairman GRAMM. Thank you, Senator Corzine.

Senator Hagel.

OPENING STATEMENT OF SENATOR CHUCK HAGEL

Senator HAGEL. Mr. Chairman, thank you.

I would just note that, Mr. Chairman, even for your high standards, you have stimulated an unusually high degree of interest in the last few weeks, and an even more interesting degree of interpretation of what you have said.

I look forward to some clarity and cogent interpretation of exactly what you said and what your intent was as you testified before our Budget Committee a couple of weeks ago.

As always, we are glad you are here. Thank you.

Thank you, Mr. Chairman.

Chairman GRAMM. Senator Stabenow.

Senator STABENOW. Thank you, Mr. Chairman.

OPENING STATEMENT OF SENATOR DEBBIE STABENOW

Chairman Greenspan, it is a pleasure to hear your views on the economy and the budget for the second time since, as you know, I am a member of the Budget Committee and did have an opportunity to hear directly your comments just a number of days ago. As you said in your testimony before the Budget Committee, our economic performance of the past 5 to 7 years is without precedent, and I would agree.

However, it is important to note, you admonished us to maintain fiscal responsibility and to pay down our national debt.

I believe that somehow has gotten lost in other discussions.

You also warned us about the uncertainty of a 10-year budget forecast. And while you did advocate some type of tax reduction, you also urged us to use some type of trigger mechanism to make sure that we actually pay down the national debt to its lowest possible level first. And I hope you will speak to that trigger mechanism today in your testimony.

Overall, your Budget Committee testimony was balanced and prudent. But many advocates and those in elected office have highlighted only one side of your testimony, and as you know, are using it to promote a very large tax cut that would spend the entire surplus, rather than focusing on paying down the debt or other priorities, or even looking at the possibility of the slightest forecasting error.

And I am looking forward to your addressing that today.

I hope today's hearing will provide us an opportunity to clarify some of this confusion and to set the record straight on your message of fiscal responsibility and discipline and the importance of paying down the national debt.

I think we very much need to hear your message in totality and I am looking forward to it.

Thank you.

Chairman GRAMM. Thank you.

Senator Allard.

COMMENT OF SENATOR WAYNE ALLARD

Senator ALLARD. Thank you, Mr. Chairman. I would like to make a brief comment. And I would like to just make my formal statement a part of the record.

Chairman GRAMM. It will be made a part of the record.

Senator ALLARD. And just, again, welcome, Chairman Greenspan, to this Committee.

I did hear your testimony before the Budget Committee. I thought it was pretty clear. I did not think there was any real confusion there. And I also found in your testimony, if you want to be vague, you can be decidedly vague and it is obvious that you are being vague.

So I am looking forward to your testimony. You are going to be on a new format—focusing on monetary policy instead of the old Humphrey-Hawkins format, which, in my view, is a welcome change.

Mr. Chairman, I am looking forward to your testimony.

Thank you.

Chairman GRAMM. Thank you.

Senator Johnson.

OPENING STATEMENT OF SENATOR TIM JOHNSON

Senator JOHNSON. Thank you, Mr. Chairman, and welcome to Chairman Greenspan.

I will be very brief. Just a quick observation.

One is that I did very much appreciate your testimony before the Budget Committee not long ago. And I would share some thoughts expressed by Senator Sarbanes and also by Senator Stabenow relative to the aftermath of your testimony before the Budget Committee.

I think the message about tax reductions was heard loud and clear. The media has made much of it. And those words have been used for the promotion of that goal.

I think your cautionary observations about the stimulating effect to the economy of tax cuts was not apparently heard terribly well.

I think your cautionary remarks about fiscal responsibility and the uncertainty of 10-year projections on budget surpluses has not been discussed enough and it has not been heard as well as it ought to be.

And I think that your observation about trigger mechanisms is something that we need to pursue further as well.

I think that there is going to be a very significant tax cut enacted by this Congress. In fact, I believe that there is room within the budget for a larger tax cut for middle-class families than that

which has been proposed by President Bush, but within parameters that involve less total cost for tax relief.

It seems to me that it is incumbent on those of us who deal with the specifics of a budget that we use some prudence and some humility relative to the 10-year projections and that we take care to see to it that while tax relief is part of the total mix, that in fact there are adequate resources left over for education, debt reduction, defense, Social Security, Medicare, and so on, and that this be a properly balanced strategy that we embark upon here during this Congress.

My fear, frankly, is that there is a greater risk of the Government backing into the bad old days of red ink—and we are not very far removed from those days—than there is of accumulating wildly excessive surpluses 10 years down the road.

I believe that while both of those are legitimate concerns, as you have expressed to us, the balancing is something that has to be done by the policymakers. And I think that the policymakers need to listen a little more carefully to the full context of your statement than was necessarily the case following your testimony to the Budget Committee.

So I look forward to further elaboration and your testimony today.

Chairman GRAMM. Senator Bayh.

OPENING STATEMENT OF SENATOR EVAN BAYH

Senator BAYH. Thank you, Mr. Chairman.

Harboring no illusions that we have gathered here today to listen to me, I am going to wait for the question period to express my comments.

It is my hope, however, Mr. Chairman, that either in your presentation or in response to questions, you can give us some guidance in how to make decisions of great consequence in an atmosphere of substantial uncertainty, and perhaps suggest some steps that can be taken to reduce the uncertainty, thereby increasing the prospect that our decisions will be prudent ones.

Thank you.

Chairman GRAMM. Senator Dodd.

OPENING STATEMENT OF SENATOR CHRISTOPHER J. DODD

Senator DODD. Thank you, Mr. Chairman, and welcome to you, Mr. Chairman, and to the Committee.

And just to underscore, I would hope today, Mr. Chairman, you might take some time to offer some clarifications, to the Budget Committee testimony. I thought it was very good testimony. But you don't control how the media reports on your testimony and what the headlines may be or may not be.

But, obviously, I think for many of us here, I don't know of anyone—maybe there are people who are just adamantly opposed to any tax cuts. I think most of us believe that there is plenty of room for a tax cut in the coming years, even where there is some doubt about the size of future surpluses, but with some degree of proportionality and where it would be targeted or how it would be paid for.

I hope we can have some discussion on it.

There is already—the 1.6 that has been introduced, and obviously, fiscal policy has a direct bearing on monetary policy. That number is moving up.

You have already had Members of Congress talking about add-ons to that that go between $500 billion and a trillion to what is already been proposed.

Interest groups are lining up to express their concerns. We have watched this process over the years. It is not the first time we have been through it. And there are real dangers here that we could take what has been a very good economy—much of the responsibility for that goes to you.

Your leadership over the past 8 years has been remarkable. And it is not without reason that most people attribute your leadership as the reason we have had an unprecedented economic growth and success in this country throughout its history. You really deserve a great deal of credit.

And for those of us who have been around here for the past couple of decades and who have listened to the words of Yogi Berra with that deja vue all over again, there is some legitimate concern that we are back visiting the early 1980's, when similar remarks were being made about what tax cuts would do then, similar promises made about what happened on the spending side of the equation, and then to watch it all sort of evaporate, creating the mess that we saw in the late 1980's and very early 1990's.

I just want to add my voice to the voices of Senators Sarbanes and Tim Johnson and others I think you will hear from today about this aspect.

I know your responsibility is to talk about the overall economy. But this is such a big issue, it is so important. It has such long-term implications for our country.

The opportunity to leave to the next generation a gift that none of us imagined we could ever give them, to virtually burn the national debt, the national mortgage.

I cannot think of a greater gift that this generation could give to the next generation, as it grapples with the problems of the 21st Century. And we are very close to achieving that. My hope is that that would be very much on our minds as we weigh the pros and cons of the President's proposal on taxes.

I thank you once again for being here and look forward to your testimony.

Senator SARBANES [presiding]. Senator Reed.

OPENING STATEMENT OF SENATOR JACK REED

Senator REED. Thank you very much, Senator Sarbanes.

Welcome, Chairman Greenspan.

Your Budget testimony, either wittingly or unwittingly, advanced the case for a tax cut. The issue that confronts most of us today, and it is reflected in the comments of my colleagues, is the size of that tax cut. And I would hope that you could provide some specificity and some details with respect to your views in this regard.

But, again, echoing my colleagues, your stewardship over the last several years has given us the opportunity to do many things, just one of which is a tax cut.

We appreciate your comments on both priorities and size and other issues related to the policy choices we face ahead of us.

Thank you, Mr. Chairman.

Senator SARBANES. Thank you, Senator Reed.

Chairman Greenspan, we are happy to receive your statement now.

OPENING STATEMENT OF ALAN GREENSPAN, CHAIRMAN, BOARD OF GOVERNORS, FEDERAL RESERVE SYSTEM

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

I appreciate the opportunity this morning to present the Federal Reserve's semiannual report on monetary policy.

The past decade has been extraordinary for the American economy and monetary policy. The synergies of key technologies markedly elevated prospective rates of return on high-tech investments, led to a surge in business capital spending, and significantly increased the underlying growth rate of productivity. The capitalization of those higher expected returns boosted equity prices, contributing to a substantial pick up in household spending on new homes, durable goods, and other types of consumption generally, beyond even that implied by the enhanced rise in real incomes.

When I last reported to you in July, economic growth was just exhibiting initial signs of slowing from what had been an exceptionally rapid and unsustainable rate of increase that began a year earlier.

The surge in spending had lifted the growth of the stocks of many types of consumer durable goods and business capital equipment to rates that could not be continued. The elevated level of light vehicle sales, for example, implied a rate of increase in the number of vehicles on the road hardly sustainable for a mature industry. And even though demand for a number of high-tech products was doubling or tripling annually, in many cases new supply was coming on even faster. Overall, capacity in high-tech manufacturing industries rose nearly 50 percent last year, well in excess of its rapid rate of increase over the previous 3 years. Hence, a temporary glut in these industries and falling prospective rates of return were inevitable at some point. Clearly, some slowing in the pace of spending was necessary and expected if the economy was to progress along a balanced and sustainable growth path.

But the adjustment has occurred much faster than most businesses anticipated, with the process likely intensified by the rise in the cost of energy that has drained business and household purchasing power. Purchases of durable goods and investment in capital equipment declined in the fourth quarter. Because the extent of the slowdown was not anticipated by business, it induced some backup in inventories, despite the more advanced just-in-time technologies that have in recent years enabled firms to adjust production levels more rapidly to changes in demand. Inventory-sales ratios rose only moderately, but relative to the levels of these ratios implied by the downward trend over the past decade, the emerging imbalances appeared considerably larger. Reflecting these growing imbalances, manufacturing purchasing managers reported last month that inventories in the hands of their customers had risen to excessively high levels.

As a result, a round of inventory rebalancing appears to be in process. Accordingly, the slowdown in the economy that began in the middle of 2000 intensified, perhaps even to the point of growth stalling out around the turn of the year. As the economy slowed, equity prices fell, especially in the high-tech sector, where previous high valuations and optimistic forecasts were being reevaluated, resulting in significant losses for some investors. In addition, lenders turned more cautious. This tightening of financial conditions, itself, contributed to restraint on spending.

Against this background, the Federal Open Market Committee (FOMC) undertook a series of aggressive monetary policy steps. At its December meeting, the FOMC shifted its announced assessment of the balance of risks to express concern about economic weakness, which encouraged declines in market interest rates. Then on January 3, and again on January 31, the FOMC reduced its targeted Federal funds rate ½ percentage point, to its current level of 5½ percent. An essential precondition for this type of response was that underlying cost and price pressures remained subdued, so that our front-loaded actions were unlikely to jeopardize the stable, low inflation environment necessary to foster investment and advances in productivity.

The exceptional weakness so evident in a number of economic indicators toward the end of last year—perhaps in part the consequence of adverse weather—apparently did not continue in January. But with signs of softness still patently in evidence at the time of its January meeting, the FOMC retained its sense that the risks are weighted toward conditions that may generate economic weakness in the foreseeable future.

Crucial to the assessment of the outlook and the understanding of recent policy actions is the role of technological change and productivity in shaping near-term cyclical forces as well as long-term sustainable growth.

The prospects for sustaining strong advances in productivity in the years ahead remain favorable. As one would expect, productivity growth has slowed along with the economy. But what is notable is that, during the second half of 2000, output per hour advanced at a pace sufficiently impressive to provide strong support for the view that the rate of growth of structural productivity remains well above its pace of a decade ago.

Moreover, although recent short-term business profits have softened considerably, most corporate managers appear not to have altered to any appreciable extent their long-standing optimism about the future returns from using new technology. A recent survey of purchasing managers suggests that the wave of new on-line business-to-business activities is far from cresting. Corporate managers more generally, rightly or wrongly, appear to remain remarkably sanguine about the potential for innovations to continue to enhance productivity and profits. At least this is what is gleaned from the projections of equity analysts, who, one must presume, obtain most of their insights from corporate managers. According to one prominent survey, the 3- to 5-year average earnings projections of more than a thousand analysts, though exhibiting some signs of diminishing in recent months, have generally held firm at a very high level. Such expectations, should they persist, bode well for contin-

ued strength in capital accumulation and sustained elevated growth of structural productivity over the longer term.

The same forces that have been boosting growth in structural productivity seem also to have accelerated the process of cyclical adjustment. Extraordinary improvements in business-to-business communication have held unit costs in check, in part by greatly speeding up the flow of information. New technologies for supply-chain management and flexible manufacturing imply that businesses can perceive imbalances in inventories at a very early stage—virtually in real time—and can cut production promptly in response to the developing signs of unintended inventory building.

Our most recent experience with some inventory backup, of course, suggests that surprises can still occur and that this process is still evolving. Nonetheless, compared with the past, much progress is evident. A couple of decades ago, inventory data would not have been available to most firms until weeks had elapsed, delaying a response and, hence, eventually requiring even deeper cuts in production. In addition, the foreshortening of lead times on delivery of capital equipment, a result of information and other newer technologies, has engendered a more rapid adjustment of capital goods production to shifts in demand that result from changes in firms' expectations of sales and profitability. A decade ago, extended backlogs on capital equipment meant a more stretched-out process of production adjustments. Even consumer spending decisions have become increasingly responsive to changes in the perceived profitability of firms through their effects on the value of households' holdings of equities. Stock market wealth has risen substantially relative to income in recent years—itself a reflection of the extraordinary surge of innovation. As a consequence, changes in stock market wealth have become a more important determinant of shifts in consumer spending relative to changes in current household income than was the case just 5 to 7 years ago.

The hastening of the adjustment to emerging imbalances is generally beneficial. It means that those imbalances are not allowed to build until they require very large corrections. But the faster adjustment process does raise some warning flags. Although the newer technologies have clearly allowed firms to make more informed decisions, business managers throughout the economy also are likely responding to much of the same enhanced body of information. As a consequence, firms appear to be acting in far closer alignment with one another than in decades past. The result is not only a faster adjustment, but one that is potentially more synchronized, compressing changes into an even shorter timeframe.

This very rapidity with which the current adjustment is proceeding raises another concern, of a different nature. While technology has quickened production adjustments, human nature remains unaltered. We respond to a heightened pace of change and its associated uncertainty in the same way we always have. We withdraw from action, postpone decisions, and generally hunker down until a renewed, more comprehensive basis for acting emerges. In its extreme manifestation, many economic decision-makers not only become risk adverse, but attempt to disengage from all risk. This precludes taking any initiative, because risk is inherent in every action. In the fall of 1998, for example, the desire

for liquidity became so intense that financial markets seized up. Indeed, investors even tended to shun risk-free, previously issued Treasury securities in favor of highly liquid, recently issued Treasury securities.

But even when decisionmakers are only somewhat more risk adverse, a process of retrenchment can occur. Thus, although prospective long-term returns on new high-tech investment may change little, increased uncertainty can induce a higher discount of those returns and, hence, a reduced willingness to commit liquid resources to illiquid capital investments.

Such a process presumably is now under way and arguably, may take some time to run its course. It is not that underlying demand for Internet, networking, and communication services has become less keen. Indeed, as I noted earlier, some suppliers seem to have reacted late to accelerating demand, have overcompensated in response, and then have been forced to retrench—a not-unusual occurrence in business decisionmaking.

A pace of change outstripping the ability to adjust is just as evident among consumers as among business decisionmakers. When consumers become less secure in their jobs and finances, they retrench as well.

It is difficult for economic policy to deal with the abruptness of a break in confidence. There may not be a seamless transition from high to moderate to low confidence on the part of businesses, investors, and consumers. Looking back at recent cyclical episodes, we see that the change in attitudes has often been sudden. In earlier testimony, I likened this process to water backing up against a dam that is finally breached. The torrent carries with it most remnants of certainty and euphoria that built up in earlier periods.

This unpredictable rending of confidence is the one reason that recessions are so difficult to forecast. They may not be just changes in degree from a period of economic expansion, but a different process engendered by fear. Our economic models have never been particularly successful in capturing a process driven in large part by nonrational behavior.

Although consumer confidence has fallen, at least for now it remains at a level that in the past was consistent with economic growth. And as I pointed out earlier, expected earnings growth over the longer-run continues to be elevated. If the forces contributing to long-term productivity growth remain intact, the degree of retrenchment will presumably be limited. Prospects for high productivity growth should, with time, bolster both consumption and investment demand. Before long in this scenario, excess inventories would be run off to desired levels.

Still, as the FOMC noted in its last announcement, for the period ahead, downside risks predominate. In addition to the possibility of a break in confidence, we don't know how far the adjustment of the stocks of consumer durables and business capital equipment has come. Also, foreign economies appear to be slowing, which could dampen demands for exports; and, although some sectors of the financial markets have improved in recent weeks, continued lender nervousness still is in evidence in other sectors.

Because the advanced supply-chain management and flexible manufacturing technologies may have quickened the pace of adjust-

ment in production and incomes and correspondingly increased the stress on confidence, the Federal Reserve has seen the need to respond more aggressively than had been our wont in earlier decades. Economic policymaking could not, and should not, remain unaltered in the face of major changes in the speed of economic processes. Fortunately, the very advances in technology that have quickened economic adjustments have also enhanced our capacity for real-time surveillance.

As I pointed out earlier, demand has been depressed by the rise in energy prices as well as by the needed slowing in the pace of accumulation of business capital and consumer durable assets. The sharp rise in energy costs pressed down on profit margins still further in the fourth quarter. About a quarter of the rise in total unit costs of nonfinancial, nonenergy corporations reflected a rise in energy costs. The 12-percent rise in natural gas prices last quarter contributed directly, and indirectly through its effects on the cost of electrical power generation, about one-fourth of the rise in overall energy costs for nonfinancial, nonenergy corporations; increases in oil prices accounted for the remainder.

In addition, a significant part of the margin squeeze not directly attributable to higher energy costs probably has reflected the effects of moderation in consumer outlays that, in turn, has been due in part to higher costs of energy, especially for natural gas. Hence, it is likely that energy cost increases contributed significantly more to the deteriorating profitability of nonfinancial, nonenergy corporations in the fourth quarter than is suggested by the energy-related rise in total unit costs alone.

To be sure, the higher energy expenses of households and most businesses represent a transfer of income to producers of energy. But the capital investment of domestic energy producers, and, very likely, consumption by their owners, have provided only a small offset to the constraining effects of higher energy costs on spending by most Americans. Moreover, a significant part of the extra expense is sent overseas to foreign energy producers, whose demand for exports from the United States is unlikely to rise enough to compensate for the reductions in domestic spending, especially in the short run. Thus, given the evident inability of energy users, constrained by intense competition for their own products, to pass on much of their cost increases, the effects of the rise in energy costs does not appear to have had broad inflationary effects, in contrast to some previous episodes when inflation expectations were not as well anchored. Rather, the most prominent effects have been to depress aggregate demand. The recent decline in energy prices and the further declines anticipated by futures markets, should they occur, would tend to boost purchasing power and be an important factor supporting a recovery in demand growth over coming quarters.

The members of the Board of Governors and the Reserve Bank presidents foresee an implicit strengthening of activity after the current rebalancing is over, although the central tendency of their individual forecasts for real GDP still shows a substantial slowdown, on balance, for the year as a whole. The central tendency for real GDP growth over the four quarters of this year is 2 to 2½ percent. Because this average pace is below the rise in the economy's

potential, they see the unemployment rate increasing to about 4½ percent by the fourth quarter of this year. The central tendency of their forecasts for inflation, as measured by the prices for personal consumption expenditures, suggests an abatement to 1¾ to 2¼ percent over this year, from 2½ percent over the year 2000.

Mr. Chairman, I would appreciate the full comments that I have written appear in the record, and I look forward to your questions.

Chairman GRAMM. Mr. Chairman, thank you for your comments.

I had the idea in listening to some of my colleagues that they at least perceived that you had been misquoted in your testimony before the Budget Committee. But I have noted in the past, when you thought people had misinterpretad your comment, you issued a clarification. I saw no clarification as a result of that testimony.

In your opinion, were your views misconstrued?

Chairman GREENSPAN. Mr. Chairman, I do think that because of the complexity of the issue which I addressed in the Senate Budget Committee—complex of necessity because things are changing in ways that we had not been required to evaluate previously—that a number of the reports that I saw were quite selective of the general position that I took. But I don't find that unusual. I find that sort of more general rather than otherwise.

I don't know what to do about it. I just repeat myself, sometimes creating, I suspect, somewhat more complexity than is necessary. But I can only tell you what it is I believe when you ask me questions and hope for the best.

Chairman GRAMM. Well, let me ask you some of those questions.

In listening to many people comment on where we are, I hear people talk about the need for prudence, the protection of Social Security and Medicare, uncertainty about projections.

But as you are aware, last week on Thursday, the Congressional Budget Office issued their estimate as to what had happened to the 10-year projection of spending between August and January.

And in that 6-month period, they concluded that Congress and the President had added $561 billion to the new projected 10-year spending.

Do you find that alarming?

Chairman GREENSPAN. I do, Mr. Chairman, as indeed I indicated in the Senate Budget Committee hearing because while I have raised issues with respect to prudence in accumulating private assets in Federal Government accounts and, hence, to the need to be careful about creating very substantial surpluses after the debt has been eliminated, I indicated that we could very readily fall back into a very heavy set of deficits if all of the prudence which had been built up with great difficulty over the last decade or so, I must say, and with very considerable success, is dissipated.

Chairman GRAMM. Obviously, if we did the same thing in the next 12 months we did in the last 6 months, we would have spent the entire Bush tax cut.

So it is fair to say that you are alarmed about the decline in fiscal discipline on the spending side.

Chairman GREENSPAN. I said so in my prepared remarks before the Budget Committee and reiterated them during the question and answer period.

Chairman GRAMM. Let me ask another question.

Continually, the point is made—in questioning the ability of the tax cut to stimulate the economy—that because the tax cut is phased in we wouldn't be putting much money into people's pockets immediately, even if the child exemption and rate cuts were retroactive.

But it seems to me that what is missed in this analysis is an understanding that consumers are rational.

You have talked now for several years about a wealth effect coming from the stock market. But the reality is that wealth effect is largely in IRA's, 401(k)'s, and mutual funds that people are not going to touch until they retire 20 and 30 years from now.

Yet, each quarter, as people have gotten those statements—I know because it is happened to me—each quarter, they have looked at those numbers and said, my God, I am much richer than I thought I was.

And as a result, they responded to it.

So is it not true that, just as if you and I have the same income and we are young workers, but you know that you are going to inherit $100 million and I know I am going to inherit nothing, based on rational expectations, with the same income, we have greatly different spending patterns?

Is it not true that if you implement a tax cut, even if they don't have the money yet, we can expect people to respond to that in their behavior, both as consumers, investors, savers, et cetera?

Chairman GREENSPAN. Mr. Chairman, I would suspect that that is in fact the case, though I am not aware of what the evidence is with respect to how predominant that particular phenomenon is.

I do know it exists on the corporate side, where you get capital appropriations moving in advance of the enactment or the implementation of a tax cut because merely knowing what the schedule of rates of return are going to be after tax has a significant impact on what one does with respect to deciding to invest or not.

I don't know of any particular studies, though they may very well exist, on the issue of how individuals respond in contemplation of a tax cut.

Chairman GRAMM. But you do believe, based on what you have observed in the last few years, that the run-up in equity values——

Chairman GREENSPAN. Well, there is no question that that is indeed the case.

Chairman GRAMM [continuing]. Has clearly had an impact on consumption.

Chairman GREENSPAN. But the run-up in equity values in real time actually produced a value which the individuals could see at that particular point and knew that they owned. And I am not sure how one necessarily translates that into expectations of particular tax cuts. But, obviously, when they are in place, and one contemplates their actual availability, I have no question that what you are saying is accurate.

Chairman GRAMM. One final question, and then I will move to my colleagues.

You have not changed your position that, if we are going to do a tax cut, the most effective tax cut is an across-the-board cut, where the poorest worker and the richest worker all get a tax cut?

Chairman GREENSPAN. Mr. Chairman, let me separate an issue here. In the Budget Committee hearings I indicated that I did not want, nor should I take a position on, any specific tax cut. And I am not and have not.

It is certainly the case, as I have answered before this Committee in the past, that I think from the point of view of economic efficiency, recognizing there were other reasons to change taxes, that marginal tax rate reductions have always in my mind been the most effective way to enhance economic activity. But I was not in the Senate Budget Committee actually responding to a question which related to any particular tax recommendations that were currently in play.

Chairman GRAMM. Senator Sarbanes.

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

Mr. Chairman, first I would like to have included in the Committee record the article by Robert Rubin that appeared in Sunday's *New York Times,* entitled, "A Prosperity Easy To Destroy," and the first paragraph of which reads: I had not intended to get involved in the public debate on fiscal policy at this point. But I feel so strongly that a tax cut of the magnitude proposed is a serious error in economic policy that I felt a need to speak.

And then goes on, I think, with a very penetrating analysis of this issue, and I commend this article to my colleagues.

I think Rubin, more than any single person, is the one who helped to bring about fiscal discipline and bears a good deal of the credit for the prosperity that we have enjoyed during his tenure as the Secretary of the Treasury.

Chairman GREENSPAN. I agree with that, Senator.

Senator SARBANES. Thank you. Chairman Greenspan.

Second, I would like to quote from an article in *Newsweek* by their Wall Street editor, Alan Sloane, and I am just going to quote from it for a moment.

A pie-in-the-sky policy. It is folly to slash taxes based on rosy budget projections that are certain to be wrong, why tax-cut fever needs to chill.

And then he goes on to say—there are times when even the born contrarians among us wonder if we have taken leave of our senses or if the rest of the world has, which is how I feel about the bum's rush for getting to make huge tax right now based on iffy long-term budget projections, an economic slowdown and the supposed imprimatur of Federal Reserve Board Chairman Alan Greenspan.

What is the hurry? Why not wait a while and see how the economy plays out?

Treating long-term projections like they are facts is folly. For heaven's sakes, even the great Greenspan screwed up a short-term forecast last fall by not seeing that the economy was softening.

That mistake is why he's cutting interest rates so sharply, an economic cardiologist trying to keep his patient from croaking.

So answer me this.

If the plugged-in, experienced Greenspan could not forecast the economy 4 months ahead, how can anyone think the Congressional Budget Office, or anyone, can foresee the economy 10 years ahead? Especially when the CBO, whose surplus projections are the heart

of Bush's tax-cut case, regularly devotes an entire chapter in its report to the uncertainty of budget projections?

History makes my case for me.

Until a few years ago, experts predicted huge deficits as far as the eye could see. Now they predict huge surpluses.

A year ago, the CBO projected a $3.1 trillion, 10-year surplus. Six months ago, $4.6 trillion. Last month, $5.6 trillion.

Why should we treat today's numbers as right when yesterday's was so wrong?

I think Senator Dodd stated this tax cut well. I think most Members of the Congress are open to doing some tax-cutting. But the question is, in what magnitude, and how is it distributed, which are obviously very, very basic questions.

This tax cut now that the President has proposed, if you count in the interest cost of it, and the necessity to adjust the alternative minimum tax, is going to cost over $2 trillion.

And of course, people want to add on to it, of course.

Some of the leadership up here has said it should be even larger. All the interest groups are mobilizing.

I used taking the cover off the punchbowl. I probably should have said, the maitre'd allowing the crowd to get at the buffet table because they all want to grab a piece of what is on the buffet table.

So we are now talking of well in excess of $2 trillion.

Now the Chairman asked you a question about $560 billion in spending.

Chairman GRAMM. In 6 months.

Senator SARBANES. I would like to ask you, don't you find a tax cut of well over $2 trillion and building all the time, do you find that alarming?

Chairman GREENSPAN. As I said earlier, I am not going to comment on anybodys particular tax cut or structure of it. But let me just read the last paragraph of my Budget Committee testimony, which really relates to this issue. It said:

> But let me end on a cautionary note. With today's euphoria surrounding the surpluses, it is not difficult to imagine the hard-earned fiscal restraint developed in recent years rapidly dissipating. We need to resist those policies that could readily resurrect the deficits of the past and the fiscal imbalances that followed in their wake.

I tried to stay with that position in my last testimony and trust I can maintain it today as well. I want to reemphasize as I did at the Budget Committee that I am speaking for myself on fiscal matters, except when these are cleared in detail with the Federal Open Market Committee. And the only thing that has been cleared are my monetary policy comments. So in all questions I have with respect to fiscal policy, I am on my own. I don't want to commit others. And even having said that, there is a very significant limit to which I think I ought to be engaged in.

Senator SARBANES. Do you think it is possible for the Chairman of the Federal Reserve, particularly one that has assumed kind of legendary dimensions now, to come in and make a statement and say, this is me as an individual?

Chairman GREENSPAN. Yes, it is.

Senator SARBANES. If you weren't Chairman of the Fed and coming in as an individual, I don't know how much weight your comments would carry.

But you come before us, you say—well, I am giving this as an individual. But I look at you and I see you as Alan Greenspan, an individual. But I also see you as the Chairman of the Federal Reserve and a distinguished Chairman of the Federal Reserve, who has held that position now for a great number of years. And obviously, your comments are going to be seized upon and interpreted.

Someone said to me, well, maybe Alan Greenspan did not fully appreciate what the press would do with his comments.

I said, you have to be kidding. Alan Greenspan is a very wily, experienced Washington hand and he obviously could anticipate what would be done with his comments, despite all the qualifiers and modifications and caveats that were in your statement.

Chairman GREENSPAN. Senator, let me just say that I fully understand what you are saying and I don't disagree with it. But I do want to make the point because I think it is in all fairness that I am not speaking for a number of the people in the Federal Open Market Committee. I frankly do not know where they stand. But it is important for us to do that. Indeed, it is important for all of us to indicate when we are speaking for the Committee and when we are not.

All of the members of the FOMC go out and make speeches and give their own views on a number of different issues. But they invariably say, "I am speaking for myself." That is the only point I wish to make. I hope I succeed. If I failed, that is for you to judge.

Chairman GRAMM. Well, I think more people know Greenspan than know the Federal Reserve Board.

So speaking for yourself does carry some weight.

Senator Bennett.

Senator BENNETT. Thank you, Mr. Chairman.

In my opening comment, I wanted to talk about confidence and I think the Chairman in his prepared remarks talked about the importance of confidence and why we can indeed have some confidence that even in this time of slowdown, the economy is not going into the tank. Therefore, it is clear we are going to turn this into a debate about taxes, and I cannot resist getting into the debate.

Let me respond briefly to the article quoted where he said the projections are certain to be wrong.

I will stipulate that they will be wrong. They always have been. They always will be. And there is no possible way of changing that.

If I may be personal for just a moment, I made my mark in business with a reputation of being a good forecaster. And I could forecast what was going to happen in my business in my market with my customers with some certainty for about 3 months out.

I was really good if I could get 6 months and, boy, if I hit it right for a year, I was a genuine hero. To forecast an $8-, $9-, $10-, $12-trillion economy 10 years in advance is beyond anybody's capability.

But the point I think we have to recognize here is that just because I could not forecast accurately did not mean I did not have to make a decision.

It did not mean I did not have to take a risk. It did not mean I did not have to lay out a strategic direction for the company that I headed with the best information that I had. And we as policymakers are faced with exactly the same challenge. Just because we know these forecasts are not going to be exactly right doesn't mean we must be paralyzed before our inability to make firm decisions.

And the projections are certain to be wrong. They could be too high. They could be way too low.

The Budget Committee has said that the surplus could be as high as $9 trillion, not $5.6. Or it could be as low as $1 trillion.

And tough as it is for a businessman to be facing his shareholders and bet the company on what is going to work or what is not, it is even worse if the businessman says, since I cannot know with certainty, I won't decide. I won't make any choice. And that is a guaranteed way to fly the company right into the sea.

I think we have a responsibility here, given the likelihood of very substantial surpluses, to face the question of what is going to happen to that money.

And I think Chairman Gramm has said, if we do not move ahead with the tax cut, the money is going to be spent by the government and we will see fiscal restraint disappear. And we have seen it disappear over the last 6 months, and I have been part of it, as one of the appropriators. I have seen it happen in the Appropriations Committee, and the stampede to spend was almost irresistible.

Mr. Chairman, I would like your reaction to this. I think you are saying that a prudent thing for us to do would be to deal with that stampede to spend by returning some of the money to the source from whence it came. We can always go back to that source if we need the money and say, we made a mistake and we need to make a mid-course correction.

We have had two major tax cuts with President Kennedy and President Reagan. And in that same period of time, we have had, what, 8, 9, 10 major tax increases, one of them under President Clinton.

We have demonstrated as a Congress, we know how to raise taxes. We know how to raise taxes better than we know how to cut them.

So aren't you saying——

Chairman GRAMM. Senator Bennett, the Democrats are disagreeing. They are saying they know how to raise them better than you do.

[Laughter.]

You had better put a caveat in there.

[Laughter.]

Senator BENNETT. We won't get into that.

Chairman GRAMM. They are all yelling at me over here and saying, we, we, we.

Senator BENNETT. I will hear the heckling from the crowd and step down from my soapbox.

Would you comment on that dichotomy of what happens to the surplus on the assumption from the very best sources we have that there will be a very significant one, and what it is we should be doing?

Chairman GREENSPAN. Well, Senator, let me expand on some of the notions that you have put forth, which I think are really quite crucial to economic policy, specifically fiscal policy, and that is the fact that over the years, we have developed a budgetary process which requires us to make judgments of the future.

I remember 30, 40 years ago when the so-called uncontrollables or entitlements were really very low. And the major problem that the budget process confronted was the spin-out of various different military procurement items which often lasted 2 or 3 years. But it was extraordinarily rarely the case that what the economy was doing 3 or 4 years out was wholly relevant to the budget process.

That has dramatically changed in recent years in which we are making judgments which have implications 10, 20 years out, and unless we are aware of what they are and try to handle them, we are setting up a projection of fiscal policy which could very readily go awry.

I was particularly impressed with the implications of what would happen, not 10 years from now, but as early, under the current services budget, as 2006. Because in 2006, if indeed the current services budget functions as a projection of what is going on in the real world—and it is one of the best estimates we could make—fully granting the very wide range of error—then we run out of Federal debt to pay down. And we end up with a situation which, if you take their numbers literally, is we are in the year 2006 with a unified budget surplus of about $500 billion, or thereabouts.

If—and I underline the word if—you believe as I do that it is not a good idea to have private assets accumulated in Federal Government accounts, then the problem arises that, as of that particular point, if you wait to address it, you have to reduce the surplus by half a trillion dollars. And we may at that particular point be in a significant upswing in economic activity and confronted with the need to create a huge stimulus to the economy which could very readily destabilize the system.

It is those data which led me to conclude that the issue is not one that we can readily wait for a year or two to decide how one handles that. That does not mean that one needs to act today. But I would suggest to you that the Congress needs to think about this issue well in advance of the events that are materializing. And if we are to address what is really an extraordinary event—no one would have even credibly believed 5 or 7 years ago that we would be at a point when we were running out of U.S. Treasury securities to buy back or to pay back on. We are ever more credibly moving in that direction.

And the basic issue that I wished to put on the table in the Budget Committee hearing was to recognize that this is something new and it requires a wholly new set of views as to how fiscal policy is run. And the sooner it is addressed, the better. Waiting for 1 or 2 years I think is a mistake. That doesn't mean we need to do something right away with respect to it. But I do think that that issue has got to be addressed. It has very profound implications for the rest of this decade and into the next decade.

And as you point out, we really have no choice but to make a forecast because not making a forecast is effectively trying to duck an issue for which we are making very major commitments. And

implicit in any action that the Congress takes is a forecast. The only question is with all of its weaknesses, is it the best forecast that can be made? Or is it suboptimal, leading to suboptimal policy? And I would argue it is important that, as difficult as it is to forecast, we have no choice, as you point out, and we should do the best that we can.

Senator BENNETT. Thank you, Mr. Chairman.

Chairman GRAMM. Senator Miller.

Senator MILLER. Mr. Chairman, you have already answered and commented on most of the questions that I had. I would like to ask my question, though in a somewhat different way.

It seems that all of us around this table are talking about fiscal restraint. We are all for fiscal restraint.

But it seems to me like the definition of fiscal restraint is sort of like pornography—it is in the eye of the beholder.

Some around this table see fiscal restraint as not cutting taxes too much. Others see fiscal restraint as not spending too much.

And the fact of the matter is that if we have the last 4 years to look at, Congress and the President both used various tactics—namely, advanced appropriations and obligations, payment delays and emergency designations and specific legislative direction, to significantly boost discretionary spending, while at the same time remaining statutorily compliant with the spending caps enacted by the Budget Enforcement Act of 1990.

If we go over what we have done the last 4 years in discretionary spending—in other words, if the current trend in discretionary spending were to continue into the future, would this not cause significant budgetary problems?

Chairman GREENSPAN. Well, that is an arithmetical question, Senator, and I think it is more of, if I may put it that way, a rhetorical question, because, obviously, if you take the numbers which were appropriated in the last two fiscal years, and you add them, then the concerns that I have about running a unified budget surplus, accumulating private assets in Federal Government accounts, is mispositioned, if I may put it that way.

Senator MILLER. Thank you.

Chairman GRAMM. Thank you, Senator Miller.

Senator Ensign.

Senator ENSIGN. Thank you, Mr. Chairman.

Actually, I have several questions. I find it interesting, though, on some of your comments, I saw a movie recently called "Finding Forrester." It reminds me a little bit about when he wrote the book way in the past and then all of the people in the future tried to discern what he really meant when he said.

And that seems to be what your comments always are. People try to discern what your comments truly meant when you said whatever you said.

I always get a kick out of reading what people will say in tomorrow's papers about what you said today.

I want to go to one question and it has to do with what Senator Miller talked about, about the way we all look at fiscal discipline.

I thought that was very insightful. And it leads into one question that I had.

Some have talked about triggers for, if we do have a tax cut now, that there would be some kind of trigger mechanism.

When I was on the Ways and Means Committee, it seems to me that some of the trigger mechanisms that were talked about over there, some of them were destabilizing trigger mechanisms. And I would like you to address that.

But also, the possibility of, if we are going to have trigger mechanisms on tax cuts, would trigger mechanisms on spending cuts also be in order?

Chairman GREENSPAN. You know, it might not be a bad idea, Senator, if I answered your question by in fact reading what I actually said on this issue in the Budget Committee, which addresses specifically your question:

> In recognition of the uncertainties in the economic and budget outlook, it is important that any long-term tax plan or spending initiative for that matter, be phased in. Conceivably, it could include provisions that in some way would limit surplus-reducing actions if specified targets for the budget surplus and Federal debt were not satisfied.

Now, what I am obviously referring to is the desirability of eliminating the Federal debt, which is still frankly, my first priority because I think that it has had an extraordinarily important impact on the economy, on the financial markets, on long-term interest rates, and on economic growth. The change that has occurred is we are running out of debt to retire. And if that is indeed the case, then priorities, of necessity, must shift. But if it is not going to be happening, then we shouldn't be shifting priorities.

In effect, the terminology which I employed is essentially one which tries to look at, say, the net debt of the U.S. Government to the public, which is actually the unified public debt plus a few other accrual items minus tax and loan account deposits of the Treasury, the deposits at the Federal Reserve, and a number of other types of financial assets. That is the number we are trying to bring down effectively to absolute minimums.

If there were a trigger which were built into both tax and spending programs, to the extent that they were phased, it ensures that we achieve what I think should be the first priority—namely, to eliminate the debt.

Senator ENSIGN. Getting to your whole idea about the U.S. Government owning private assets, in the future, we have all of these various trust funds that we have as debt into the future generations.

When we are looking—obviously, not the subject of the hearing today, but just something to think about for the future for us when we are talking about especially the biggest liability that we will have on our books will be Social Security.

If in fact we don't want to have the money set aside and earning interest some place in some kind of Federal accounts, would that not then argue, if it is a bad idea for the Federal Government to own those assets, would it not be a good idea for individuals, private accounts, similar to the Thrift Savings Plan that Federal employees have, wouldn't that be, to make sure that we have those, we don't keep building up these huge debts because a debt is a debt, regardless—as long as it is a future obligation, it is still a debt.

Would that not be a way to handle that?

Chairman GREENSPAN. One of the reasons why I thought it is important to put this issue on the table is not strictly the immediate impacts that it has with respect to policy relevant to spending and receipts. But it also has some very profound implications depending on the way the Congress comes out, on such things as trust funds within the Federal Government. And it is fairly evident to me at least that we have been able, as a number of people have argued, when we have defined contribution plans, to have them in the government. Indeed, I have a piece of it in the sense of the thrift investment accounts that the Federal Reserve employees have.

But I see what I own every month. And as a consequence of that, it would be almost impossible as far as I could see for there to be political maneuvering to get that fund to invest in some Congressman's or Senator's State where a company is in difficulty and they are seeking some form of support.

I would suspect if that were the case and the company's name appeared on the form, there would be an awful lot of very negative comments. And I think that is the reason why we have been able to maintain the defined contribution plans effectively in place.

If the Social Security trust fund or, more exactly, if Social Security were a defined contribution program, you could build up assets in the trust fund, private assets, without the political problems that I foresee would occur if that is not the case. But I might add, parenthetically, if you are going to do that, then the question of why not put it in the private sector obviously immediately emerges.

The real difficulty arises when you have defined benefit obligations of the Federal Government in which they are guaranteed annuities to various individuals in our society whose availability is wholly independent of what assets are held in the trust fund. It is an unequivocal guarantee of the Federal Government. Social Security benefits do not depend on what the rate of return on that fund is. They are irrevocable obligations as far as I can judge, even though, legally, one can argue they are not. But I perceive of no credible possibility that they are not. If that is the case, then the question arises as to the assets that are built up in these funds indeed being subject to political manipulation.

I indicated in my Senate testimony I saw very little possibility that we would be able to avoid fully the accumulation of private assets and hoped that they would be put in a fund in a manner in which, because the fund would ultimately reverse, it is not an irrevocable, long-term commitment. But the ideal would be to find ways to delimit the political exposure that I think private assets held by the Federal Government would create. And it is a major issue which I think that the Congress has got to address.

I will say to you, you may agree or disagree that it is desirable to have private assets in Federal Government accounts. But I don't see how the issue can be avoided. If we are effectively going toward zero debt, there is no alternative with a unified budget surplus and effectively zero debt, to accumulating private assets, claims against the private sector. I said in the Budget Committee, I view budget deficits as a preemption of private capital and, hence, an undercutting of economic growth in a quite similar manner, although I grant it is not exactly the same as having claims on private assets

in the Federal Government which are subject to political decisions as distinct from private market economic ones.

Senator ENSIGN. Thank you, Mr. Chairman.

Chairman GRAMM. Senator Corzine.

Senator CORZINE. Thank you, Mr. Chairman.

I have really two areas of questions that I would like to follow up with this discussion on investments.

I think the whole debate about whether we have an irrevocable obligation in Social Security is a very profound debate that has to be addressed in the context of the demographic changes that are going to occur over the next few years.

But cannot we eliminate some of that political exposure by investing in index funds and things that potentially would allow for a continuation of defined benefit effort, not unlike what we see in State pension funds and other methods around the country?

Chairman GREENSPAN. Senator, I think it helps in part.

But you have to be careful with index funds because, for example, you are dealing with to a very large extent, and almost of necessity, publicly traded securities. Even if you go from, say, the S&P 500 all the way to the Wilshire 5000, you are picking up publicly traded securities and essentially discriminating against those business investments which are not publicly traded.

And so, while I would certainly grant you that it is far more difficult to manipulate in any way an indexed fund, the misallocation of capital that I think occurs as a consequence of that is something that would be very wise for us to try to avoid. If the numbers were small, obviously, it is not an issue. But we are not talking about small numbers. We are talking about extraordinarily large numbers—multitrillion dollars of accumulation. And having been in Washington on and off since the late 1960's, I have seen too many potential occasions where the political pressures to use governmental funds is virtually overwhelming.

So I think it is worthwhile having a discussion to see whether in fact one can credibly insulate the markets from political manipulation. My own impression is that, at the end of the day, you will fail. That is, the pressures become overwhelming, at least in my judgment.

Senator CORZINE. My fear is that that would change the basic nature of Social Security in that irrevocable obligation, I think is the term you used.

Let me ask, with regard to the Social Security trust funds and others, which I think really tie into this purchase of, buy-down of publicly-held debt, it strikes me that, like Senator Bennett, it is hard to predict how all this world is going to work.

But it looks like out just beyond that 10-year cliff, we are going to have demands on the Social Security trust fund and Medicare trust fund that are going to put us back in the red.

Again, making predictions 10 years out is pretty hard. But making them out 15—we can look at the demographics and we are going to see major changes.

It seems to me we are letting sort of the tail wag the dog a little bit about this short-term intermediate period when we have an obvious major fiscal demand coming down the pike that everyone generally recognizes.

And it seems to me that we ought to be very cautious about how we handle the intermediate fiscal period. And shouldn't we go slow at that, both whether it is through expenditures or on tax cuts?

Chairman GREENSPAN. Senator, I think that with the change in the underlying productivity projections, a significant alteration in the post-2011 outlook occurs. If you take some of the implications of the CBO numbers and, indeed, what I suspect is going to be the Social Security trustees' report when it comes out in March, we are going to find that we get into the year 2011 when the baby boomers just start to come on, we will see two things.

We will see, as you point out quite correctly, a very marked increase in the total number of retirees and a very substantial rise in benefits. But we start 2011 with a very large Social Security surplus, and the level of the assets in the Social Security trust fund at that point engenders a rate of interest which is quite substantial. And even though the actual receipts don't go up, the extensive rise in benefits is significantly offset by the rise in interest. So, the net increase in Social Security assets continues to rise in many different ways certainly through 2020 and beyond—which means, in effect, that we do not have in that context, if you believe the numbers, a Social Security deficit and therefore, not necessarily a unified budget deficit in that forecast.

But I grant you, when you get out that far, it is a very loose set of circumstances. But the presumption that we all had that it was going to be inevitable when we started to get into the baby boom retirees, that we were going to run into a very significant financing problem, which I think was the most credible forecast even 6 months ago, is subject to question.

I think that it all rests on what one perceives as the appropriate productivity rate of change, the type of technologies that we are going to have. And relatively small changes in that, as you well know, have very marked effects.

So I would say, rather than indicate that this is an inevitable problem, as my good friend Alice Rivlin raised, I think it is now subject to significant question. It may at the end of the day turn out that, indeed, that is not precisely as you characterized it. But I do think that what we are learning with these changing productivity numbers is a major alteration; how we view our future, how we view Social Security, how we view our fiscal affairs, have to be readdressed in this context.

The Congress is going to have to make very key judgments. And ultimately, there is no one else but the Congress to basically make those judgments. As difficult as they are and as prone to error as Senator Bennett has said, which I agree, we have no choice but to make these judgments. And implicit in a judgment is a forecast.

Chairman GRAMM. Senator Hagel.

Senator HAGEL. Thank you, Mr. Chairman.

Chairman Greenspan, you alluded briefly in your testimony to the global economy.

In your opinion, how captive is the continued, the sustained economic growth of this economy tied to the dynamics of the global economy?

Chairman GREENSPAN. Well, Senator, there is just no question that one of the characteristics—I should say, one of the fallouts

from the remarkable changes in information technology has been a very dramatic globalization of finance. And that in turn has created a very substantial integration of the economies of the United States, Europe, and Far East in ways that had never been perceived before. So we are all interrelated with one another. And to the extent that there is general weakness abroad, it does impact us. To the extent that we are in a weak state, it affects them. And there is a general interaction.

So I do think that the extent of globalization which has proceeded in the last 10 or 15 years has essentially made a world economy a realistic notion. Senator Corzine was a big player in that before he, I think, demoted himself to the Senate of the United States.

Senator HAGEL. That is when he had a real job.

[Laughter.]

You know, Mr. Chairman, that we are going to be faced with a number of decisions here in this year regarding trade relationships.

Any thoughts on, as we embark on that debate, that surely will be stimulating, on the trade issue and connecting that to your comments regarding the global economy?

Chairman GREENSPAN. Senator, I think that one of the very few things that American, indeed, European and most Asian economists, agree on is that open markets and free trade enhance the standard of living of all participants. One can look at the really quite extraordinary rise in trade as a percent of GDP in the world which necessarily implies that, on average, the proportion of imports to domestic demand is rising all over the world. And I think we all see that as a process which has been a major factor in enhancing standards of living most everywhere. And increasing evidence demonstrates that those economies which open themselves up to competition prosper, those that do not fail.

Senator HAGEL. Thank you. I know you prefer not to get drug back into this tax cut swamp, but let me see if I can broaden this a bit.

Your testimony today, as it was before the Budget Committee a couple of weeks ago, was very complete with the balanced approach of how we continue to grow and sustain this growth, anchored by productivity.

The commitments that we are continuing to take on and those commitments will grow. The prescription drug benefit plan will most likely be incorporated into Medicare.

As you add in responsible monetary fiscal policy, control of spending, do you see a place for significant tax cuts as part of that effort to sustain the kind of growth that we are going to have to sustain to make good on the commitments for these out-years for the programs that we have committed our country to?

Chairman GREENSPAN. Senator, my focus on tax cuts as such in the Budget Committee discussion was related to the issue of returning monies to taxpayers because the alternative was to employ them as private assets held in Federal Government accounts.

I was not addressing the issue of the economic effectiveness of tax cuts in promoting productivity and the like. There is a long discussion which one can have with respect to that, but I was not raising that as a reason for cutting taxes. I was basically indicating

that the alternative of collecting the revenues and then employing them as claims against the private sector struck me as not something which is desirable if economic efficiency in this country is our goal.

Senator HAGEL. Thank you.

Mr. Chairman, thank you.

Chairman GRAMM. Senator Stabenow.

Senator STABENOW. Thank you, Mr. Chairman. Once again, we appreciate your being here today with us.

If I might just talk more about the tax policies that you were suggesting in terms of a trigger so that we continue to reduce our debt to the lowest possible effective Federal debt.

And in speaking about a trigger, I notice that you also spoke about phasing in paying down the debt and an effective trigger for the point at which we are phasing that in and making sure that we are not going back into debt at some later point.

But I wonder if you could speak to the policy that some have suggested that we make the tax cut proposed by the Administration retroactive to the beginning of this year, and whether or not that was the type of phase-in that you were referring to.

Chairman GREENSPAN. Senator, the only purpose of the phase-in in the context of my testimony was to avoid doing nothing and then finding ourselves in, say, 2005 with the necessity of a huge reduction in a unified budget surplus, which could occur at a time when it would be wholly inappropriate to have a very large fiscal stimulus, especially of the size, the order of magnitude that we are talking about.

So my notion about phasing in was to start taking actions now to endeavor to avoid having to act very abruptly in 3 or 4 years from now. But in order to make certain that it was not actions which prevented the reduction in the debt from occurring, make them contingent. That is the full nature of my argument and my concerns.

How that is done or by whatever means is not something which I think I have any particular knowledge of or expertise in. But I do know that from an economic policy point of view, if the decision is made not to accumulate very large amounts of private assets, then that issue of phase-in is crucial.

Senator STABENOW. Would you want to speak directly to the notion of retroactive tax cuts?

Chairman GREENSPAN. I think I answered that in the Senate Budget Committee. It is not an issue which I have views of strongly or otherwise. I did say in the Budget Committee that it is most unlikely that if we go through a regular recession, that any tax cut can be enacted sufficiently quickly to alter the probability of whether we will indeed find ourselves in a recession.

But I also pointed out that in the event—and it is a low-probability event—that we not only go into a recession, but stay there for an extended period of time, then it is better to have had lower taxes than otherwise. In short, it would be insurance against a low probability event which indeed is what insurance is essentially about. But the issue of retroactivity doesn't really phase into that period, as best I can see it.

Senator STABENOW. Mr. Chairman, you spoke of 2006 as the point in which your estimation, we will have reached the effective——

Chairman GREENSPAN. I am sorry. This is the estimation of both OMB and CBO.

Senator STABENOW. Yes. Absolutely. And I have the CBO report with me now as we look at what we expect at that point in terms of that.

And you were indicating in your testimony about $500 billion that you believed would be available at that time.

I am wondering if in fact that is the range that you believe that we have in which to look at tax cuts or spending or other policies of this Congress, if that number of $500 billion was stated in that context?

Chairman GREENSPAN. Senator, these are not my estimates. For example, CBO's baseline budget projection for the fiscal year 2006 is $505 billion. The number can be higher. It can be lower. The point that I think is important is that, unless you have productivity growth very significantly below what both the previous administration's OMB or currently CBO is using, you are going to get a number of that order of magnitude.

Senator STABENOW. My reason for raising that is it is my understanding from your testimony that you are not retracting your feeling about paying down the national debt. You believe that we will pay it down sooner than originally anticipated—2006 being the number.

And that the question is, what will be available after that point? And what policies should we enact addressing that accumulation of surpluses?

And I heard you indicate, as was done with CBO, that we have about $500 billion.

I am assuming not to put us back into debt, that you would be suggesting that we look at that number in terms of the flexibility of our decisionmaking.

Chairman GREENSPAN. Well, remember that $500 billion is for 1 year only, and that the notion of a current services budget is not what is legally available to the Congress to appropriate. That number is actually a larger number.

Senator STABENOW. I understand.

Chairman GREENSPAN. In other words, at this particular point, you have discretionary spending which, by definition, means that the Congress has got to enact a law to instigate it. But because there is a general presumption that these types of outlays will continuously be forthcoming—you are not going to cut the Defense Department down. You are not going to cut the Postal Service—not the Postal Service. That is the wrong example.

[Laughter.]

Because they are part of the off-budget problem. But you cannot cut down a number of things. And so, we make a general judgment as to what these numbers are likely to be. And it gives you what is generally called the current services budget, which is what is available if you make the assumption that discretionary spending is going to rise at, say, the rate of inflation or the rate of population, and the entitlement programs are essentially continued.

That is what is available to either cut taxes or institute new programs. And what these numbers are is basically the starting point. A lot of people have argued, well, you know, there are so many different commitments. We are not going to get to these budget surpluses. And the answer is very likely we are not because they will be partly reduced by tax cuts and/or spending increases.

But in order to get a framework to know where to start and how to allocate various funds, there is really no alternative but to do something such as CBO has done or OMB does. We have long-term commitments. We have to meet them. We have to make rational judgments as best we can, with all of the errors that are involved. But the process which CBO and OMB have developed I think is by far the most sensible way of going at it.

Senator STABENOW. I realize I am out of time, Mr. Chairman I would just hope that Chairman Greenspan, before you leave today, that you will reiterate those policies as you say in your last paragraph of your Budget Committee testimony, that we need to resist those policies that could readily resurrect the deficits of the past.

And I hope you will take the opportunity today to speak again about what those policies are for us.

Chairman GREENSPAN. If I could just say very quickly, it is not any individual policies. It is the sum of a lot of policies which lead in that direction.

Chairman GRAMM. Senators, let me say that I am going to leave Senator Allard in charge here. I am going to recognize Senator Shelby. And then we will just run down the list until we run out of people.

If at any point, Mr. Chairman, you want to take a break for a moment, if you will let Senator Allard know.

Senator Shelby.

OPENING STATEMENT OF SENATOR RICHARD C. SHELBY

Senator SHELBY. Thank you.

Mr. Chairman, a lot of people seem to be a little hesitant regarding the economy as a whole. And I know it depends on how they are looking at it.

But consumer confidence is very important.

Is it time to hunker down—I believe that was the phrase that was used earlier. Or is it a time to be a little cautious? Or is it time to be bullish? Or what?

Because what you say today and how you say it, as you well know, is going to be interpreted many, many ways. And people are looking for everything in the world out of your utterances.

What would you say to the American consumer looking at the economy today, seeing lay-offs here, lay-offs here. And not in every sector but in some.

Chairman GREENSPAN. Senator, I think that it is always important to first start with what is the longer-term outlook.

Senator SHELBY. Absolutely.

Chairman GREENSPAN. And the longer-term outlook, as I have reiterated many times, in my judgment, is undiminished in the sense that by any measure that I can see, we are only partway through one of the most remarkable periods of technological advance which is crucial to productivity growth and, indeed, to all of

the deliberations we are having with respect to the budget. It really gets back to that question.

What tends to happen, however, is that while the technologies change and create an accelerating environment for economic activity, as I point out in my prepared remarks we human beings react in a somewhat negative way to change when it occurs in a pronounced way.

And so, it is perfectly credible to find, for example, as I think we see today, that there are a number of business people who fully perceive the longer-term profitability of these new high-tech investments as pretty much fairly accurate and achievable. But they are concerned about the uncertainty and they develop concerns about the immediate future. And even though they perceive the future in a very positive way, they tend to pull back. It is a wholly human, normal reaction. And what that does is it brings the economy down.

But if indeed those underlying trends are still there, as I firmly believe, it is just a matter of time before that sort of malaise dissipates and the system comes back. If you look at American economic history, it always has those characteristics. And if we focus on the longer term, as a number of business people have and have continued to invest right through this period, it is my impression that it is they who will end up at the end of the day with the best positions in their markets to exploit over the longer run.

Senator SHELBY. Mr. Chairman, could you in a sense perhaps look at the economy like a long-distance race. The runners or some of the runners are going—if the economy is the runner—is going to get its second wind because they are trained for the long haul. We are in it for the long haul.

And those that are in it for the long haul, which is all of us, we are going to be rewarded if we stay the course.

Chairman GREENSPAN. I agree with that, Senator. I have no doubt that, at a minimum, the turgid economic growth which we experienced from the early 1970's through the, say, early 1990's, is not something that we are about to replicate in any sense that I can envisage over the next 10 years.

Senator SHELBY. Mr. Chairman, have you thought about at all, and if you haven't, maybe we can talk about it some other time, the further reduction of the capital gains rate from 20 percent to 10 percent, based on the holding period, like if you held an asset 1, 2, 3, 4, or up to 10 years, reduce it accordingly.

Some economists believe that this would unburden the taxpayers who are holding onto as much as $7½ trillion in capital assets.

Chairman GREENSPAN. Senator, that is something that this and the Finance Committee I guess are going to have to address. It is a complex issue.

Senator SHELBY. Very complex.

Chairman GREENSPAN. Unlike other tax cuts, there is the obvious question of whether you lose revenue when you cut the capital gains tax. If indeed there is a capacity to unleash unrealized gains and hence to have them realized and the tax paid. There is that question, which is a crucial one because, in this particular context, where there is such a major debate with respect to fiscal responsibility, it is important to distinguish various different types of cuts

and what their impact will be on revenues, as well as on the deficit or the surplus.

Senator SHELBY. Sure. We will talk about it again.

Thank you.

Senator ALLARD [presiding]. Senator Bayh.

Senator BAYH. Thank you. And thank you, Mr. Chairman.

I was struck by your dialogue with Senator Corzine that perhaps our focus on budget estimating is misplaced and instead we should focus upon the predictability and accuracy of productivity growth estimating, since that has such a profound impact upon the budget forecasts.

But I suspect that may be a topic for another day.

I want to just briefly go back to the comments that I made at the outset of the hearing.

It seems to me that our challenge as public policymakers is to decide how best to make decisions of great consequence in an environment of inherent and substantial uncertainty.

And it seems to me that the answer is to proceed with a fair amount of caution and an attempt to reduce the uncertainty in any way that we can.

Senator Bennett used the analogy of a businessman making a decision and occasionally having to bet the company's future.

Sometimes that is unavoidable. But when you do those kinds of things, I think you owe it to those interested in the success of the company to be as prudent as you possibly can be, and to do everything you can to make sure that your decisions are correct.

You, Senator Sarbanes and others have both explicitly and implicitly mentioned the variability of the forecasts that we deal with.

They varied greatly in the last 6 months. I notice that many States—and during my years as governor, we had biannual budgets. They were always inaccurate, on the upside or the downside.

Many States are now going through that process.

Ten-year estimating, it seems to many of us, is in reality guesswork disguised as science, it is so inherently unreliable.

Considering that, it seems to me that we need to look for ways in which to reduce the uncertainty and ensure that we are making our decision based upon hard facts rather than unstable estimates.

And given all that as prelude, I would like to dwell upon the idea of the trigger mechanism that has been raised by some others as perhaps one idea that can take some of the guesswork, some of the uncertainty out of our decisionmaking, and increase the probability that we are making prudent decisions.

I would like to follow up on your budget testimony. You were kind enough to reread some of it here today.

My understanding is that the trigger mechanism, as has been suggested, is one way to ensure that the budget will remain balanced, that we will place a premium upon paying down the debt, and therefore, increase the chances that we are being fiscally responsible.

Is that your intent in floating the possibility of such an idea?

Chairman GREENSPAN. Yes, Senator. Just remember that to the extent that the net debt goes down, that number is very close to what the unified budget surplus is.

So, in a sense, you don't need to do both. In my judgment, it is far better to work off the debt numbers which are less capable of manipulation. And as a consequence of that, you get the full effect of the lower debt and the advantages of the lower debt and the savings that accrue as a consequence of the unified budget surplus.

Senator BAYH. That was my understanding of the idea. I think it is commendable for those reasons.

I see that Senator Ensign has reentered the room. I would just make a subsidiary point.

The Senator raised the question about uncertainty, and I have occasionally heard this raised by others with regard to the trigger mechanism.

I would only respond by saying that uncertainty is unavoidable and inherent in making some of these decisions.

The question is not whether we will eliminate uncertainty, but whether a trigger mechanism will reduce the amount of uncertainty.

And I believe that it will.

My second question, Mr. Chairman, involves this.

I approach the idea of a trigger mechanism as an attempt to reconcile two different strands of fiscal conservatism.

The first strand believes in balancing budgets and avoiding deficits and public debt where possible.

The second favors reducing taxes when the alternative to tax cuts is nonessential discretionary spending.

Is my perception of the trigger mechanism as a way to reconcile these two different strands a good way to look at this?

Chairman GREENSPAN. Well, I think the way you put it originally, Senator, is the correct one: Namely, what it tends to do is to reduce the uncertainty that is attendant upon making a decision irrevocably for an extended period of time.

If you construct a mechanism which enforces an automatic revisiting of that initial decision, you effectively remove a very substantial amount of the uncertainty that is involved in it.

But let me point out one issue that one must consider. Having contingent tax cuts or expenditure outlays has a downside, which is that it creates an element of uncertainty on those who are dependent on those programs, either the tax or the spending program. And what you have to do is to determine how one trades off the uncertainties that are engendered against for the people who are the recipients of those programs against the overall degree of uncertainty that is attendant upon making these types of budgetary projections.

Senator BAYH. Yes. I understand we have to reconcile some of the macroeconomic uncertainty with the uncertainty created for individuals in their own decisionmaking.

As someone else in the panel had previously mentioned after the tax reductions of the early 1980's, we then had nine tax increases.

So it seems to me that there is some, again, inherent level of uncertainty. And what we are attempting to do is get the big picture right and then as best we can, try and limit the amount of individual uncertainty, any mechanism would create.

Mr. Chairman, I just have one other question.

Not surprisingly, the idea of a trigger mechanism has been the subject of some criticism.

Interestingly enough, to me, it is been criticized from both those on the further left and those on the further right, suggesting that maybe we are right about where we ought to be from a public policy standpoint.

Those on the left seem to be worried that a trigger would limit the ability to engage in discretionary spending in future years.

Those on the right suggest that we would not get tax cuts because those on the left would engage in discretionary spending.

Now, they both cannot be right. And it seems to me that in fact, what a trigger mechanism does is to establish what I would call a hierarchy of priorities.

First, debt reduction, as you have pointed out.

Second, a presumption that where surpluses did materialize, tax cuts could go into place.

Third, that where a compelling case could be made for additional discretionary spending, such investments could be permissible.

I view this as really both the left and the right being somewhat in error, that the tax cuts would go into place unless we returned to deficits and debt, which few would argue would be prudent.

But that the left is also in error because spending could be considered if a compelling case could be made, as should be made to the taxpayers to justify the taking of their hard-earned resources.

Is that a good way to look at this?

Chairman GREENSPAN. Senator, let me just add something which I think is important. In order to reduce the uncertainty that the recipients of either spending programs or tax cuts have, I would assume that you would not want to reverse previous decisions.

In other words, if you have, for example, taxes going down, that once they are there, they are then irreversible, in a sense. It is only the next tranche that would be affected. It would be, I think, most difficult, if not wholly inappropriate, to find that if you ran into a problem with the trigger, that you rescind previously initiated tax cuts. That would be utterly inappropriate.

Senator BAYH. I agree, Mr. Chairman. And my last comment would be, I thank you for making that.

The way I had envisioned this is that the first phase of the tax cut would go into place immediately and be irrevocable. And that future phases of the tax cut would go into place depending upon the realization of the surplus. So even if you did not hit it in a particular year, and it was realized in a subsequent year, then the further tax reductions would go into place.

I had not envisioned in fact rolling back previously-enacted tax reductions, so thank you for raising that point and giving me the opportunity to clarify it.

Thank you.

Senator ALLARD [presiding]. Mr. Chairman, I will now take my time.

I would just make an observation here at the start.

Over the last two previous years, I have noticed that many of my colleagues in the Senate who feel like it is not appropriate to cut taxes, when we get toward the end of the spending year, more than

willingly vote for increased spending. And that is usually in the discretionary area.

I would just point out that this President here has indicated a willingness to try and reduce, hold down spending, as he moves forward, particularly the rate of growth in spending.

And in recent years, discretionary spending has grown. Particularly when I look at the last budget year, last year, when we were debating this year's budget, we increased spending over a 10-year period over $500 billion.

How important is it that we keep the growth of spending in line? And does rapid spending growth actually threaten any plans we may have to pay off the debt?

And I may add, I think my position would be very parallel to what you are saying, is that my number-one priority is pay down the debt. Next would be cut taxes. But the least desirable would be an increase in spending.

I wish you would comment on that, please.

Chairman GREENSPAN. Senator, I think one of the really quite important advances in budgetary policy in this country occurred with the PAYGO and caps that we all early on thought were not really enforceable because a majority of both houses could basically overthrow them.

The really remarkable sequence of events in the past decade or so in which those actual budgetary controls worked was a major element in restraining government outlays, producing the surpluses, and all of the great advantages that accrued from them.

With the advent of surpluses, the budget controls broke down badly. And I think that if the Congress can put them back in place in an effective manner, it would be a very important public policy advance.

It has only been 2 years when they have ceased to function in an effective way and hopefully, now confronted with longer-term judgments which must be made, that as a part of any budgetary process which is resurrected for the 2002 budget, some form of budget controls can be put in place replicating as close as one can to those which were really quite so effective in years past.

Senator ALLARD. Recent numbers show we have a negative savings rate in the United States.

My question is, do you view this as a threat to our prosperity? And what actions might the Congress take to reverse this trend?

Is it to cut taxes or is there some other approach?

Chairman GREENSPAN. Senator, as best we can judge, if you took a survey of the average American household and asked whether they thought they were saving inappropriately low amounts, the answer would be no. And the reason is, quite appropriately, they are looking at their 401(k)'s and a variety of other assets, all of which have risen until very recently. And the consequence of that is that they perceive that they were saving and that they would therefore spend as necessary, maintaining what they perceived as necessary for their retirement or for their children's education, or whatever.

Now that the rise in household wealth has turned down, one would expect the substitution of household wealth for savings out of income would now turn in the other direction. So that most peo-

ple who look at this phenomenon would expect the savings rate to move from negative to positive as a consequence of the flattening out and slight decline in the equity holdings of households.

So, I don't think that I would argue that any particular policies of government are required to address that issue until we see how it all works out after the so-called wealth effect adjustment is fully embodied in the savings rate and we actually see where it is, see, in effect, where households perceive their rates are, before any policies are initiated to try to change it in a significant way.

Senator ALLARD. Mr. Chairman, my time is expiring here.

I just would ask you to conclude with one brief comment on capital gains rates.

Is it appropriate at this time to look at a reduction in capital gains rates in sort of economic growth or reduction?

I would like to have you comment on it.

Chairman GREENSPAN. Senator, I think that you will find that in my past discussions before this Committee on that issue, I have always argued that capital gains taxation is a poor means of raising revenue. I think that taxes on capital of the form which that is is not something which I would consider to be an appropriate economic form of taxation.

To be sure, there are noneconomic reasons for putting such a tax on, according to the vast majority of people who support it. So I would merely say to you that if you eliminate it or move it down, keep the context of what the appropriate fiscal policy overall should be in the time ahead. And I would be careful about merely getting a list of various taxes which, in the abstract, would be very nice to have, without seeing what they are relative to the whole fiscal policy outlook.

Senator ALLARD. Thank you, Mr. Chairman. I appreciate your comments.

Senator Dodd.

Senator DODD. Thank you, Mr. Chairman. And thank you again, Chairman Greenspan. You are very patient once again with your time up here. And I will try and go through some of these rather quickly. A lot of the questions have been raised. Senator Corzine's questions I think went to the heart of that issue.

I think the quote you gave is that at preemptive smoothing of the glide path to zero Federal debt, is really, as I read this, that is the core of your support for a tax cut.

Chairman GREENSPAN. Correct.

Senator DODD. And so, when I read statements that the reason for this tax cut is necessary, is to kick-start the economy, that would be an improper and unwise policy. There is nothing in this to kick-start the economy in this particular tax package.

Chairman GREENSPAN. The problem, basically, is not what is in the package. It is really the time it takes to implement the issue, which is I think the crucial——

Senator DODD. That is my point.

Chairman GREENSPAN. Yes.

Senator DODD. There is nothing in the way that this is arranged that is going to kick start an economy based on—by the time it gets implemented, it is usually—it is outside the timeframe when such a kick-start might actually occur.

Chairman GREENSPAN. Except for the low probability that any recession that might occur is prolonged. It is only under those conditions that I envisage it to be an insurance premium, in effect, because we use insurance for low probability events. And in that regard, it would act positively. But aside from that, I have not been able to find the useful means of employing it to fend off a recession.

In other words, if a recession is going to happen—and I must say to you it is not happened yet—it is very unlikely to be affected one way or the other by what tax policy is going to be because the determination of a trigger as to when—I shouldn't use the word trigger—the determination of the point at which the markets determine whether we are flattening out or stabilizing or falling, that is way before the implementation of any tax cut that I can envisage happening.

Senator DODD. And you haven't changed—I mean, the definition of when a recession is occurring, is it still the classical definition of two quarters?

Chairman GREENSPAN. It is roughly that. The only difficulty that you are going to have in these types of definitions is that when somebody examines when a recession begins, it is usually well before the economy actually breaks down. In other words, the economy will often start moving lower and a great deal of the time will then start back up. And so, that particular peak will never be discussed as the peak of the business cycle. But if it goes down and continues down, you only recognize that you are in a recession well off the peak. But in retrospect, it will always be that the beginning of the recession is supposedly at that peak.

My argument is that, indeed, we really weren't in a recession in that short period. It is only when the break in confidence occurs that any meaningful definition of a recession is there. But that is not the usual definition. The usual definition, as you indicated, is any two quarters of negative economic growth.

Senator DODD. And we are not in a recession.

Chairman GREENSPAN. At the moment we are not.

Senator DODD. And the likelihood of it is a very, very, very, very low probability.

Chairman GREENSPAN. Well, I don't want to give probabilities. I will say, as I said at the Senate Budget Committee, that a breaking of consumer confidence or business confidence such that you get a significant erosion in economic activity is always a low-probability event. But it is of significant moment that we should take whatever actions we can to reduce the probability that it will occur.

Senator DODD. Just two quick points.

I made the point at the outset of the hearing that I think virtually all the Democrats I know, and Republicans, believe that there is room in this surplus for a tax cut.

Someone had the line, which I identify with, I am for as large a tax cut as we can afford, underscoring what we can afford. And that is how I feel. And I think others may share that view.

I want to raise two points with you.

One is, you have raised in your testimony the problems with energy, global energy issues which are looming on the horizon.

Japan's economy is not recovering—you did not raise that in your testimony, at least indirectly, that that is still a serious issue given it is a major trading partner.

There are issues involving global markets and how strong they will be down the road which you touched upon.

The concern I have, obviously, and you raised this a bit with Senator Hagel, is there are some clouds on the horizon that raise some serious questions about the continued kind of growth of the economy?

And I worry about that. I relate that to the second point, the one that my colleague from Indiana raised, the triggering mechanism.

I have concerns about triggers because I think one of the values of tax cuts is to some degree the certainty of them, that there is an anticipation that occurs.

And that if you start reining back in, your having trigger mechanisms, that in itself creates its own dynamic.

Wouldn't it be wiser to try and come up with a tax cut proposal that was responsible and fit, rather than one that you built in a mechanism that would have to rein in, given the uncertainty that that creates in markets?

Chairman GREENSPAN. Senator, let me just say with respect to the first part of your implied question, the very nature of the complexity of the world in which we are makes it very difficult, as I indicated in my prepared remarks, to forecast any particular recession. That does not mean that they don't happen. Obviously, they do happen. And what we try to do is, without trying to put a specific probability at any particular time, that from here forward, we are going to go into a recession. We tried that, but not with any great success.

So I don't find the notion of trying to say what is the probability of a recession a terribly meaningful concept because the truth of the matter is we never really know for sure what that number is because we cannot see the process by which the system breaches.

But because you have that particular problem, and indeed, the international circumstances which you suggest, it is important whenever addressing economic policy, whether fiscal or monetary, to try to reduce the levels of uncertainty in policymaking for precisely the reason that we do not know at any particular point what the probabilities of a recession over X number of months will be.

And I would say for those reasons, if for no other reasons, it is important to find particular fiscal policy mechanisms, whether for initiated expenditure programs or tax cuts, to find vehicles which reduce the risks which are associated with them.

I think triggers have advantages. They have disadvantages. And it is got to be for the Congress to make judgments as to which outweighs the other.

Senator DODD. Some of my friends are for A, some of my friends are for B.

And I am for my friends.

[Laughter.]

Chairman GREENSPAN. I fully subscribe to that point of view.

[Laughter.]

Senator SARBANES. We have come to realize that.

[Laughter.]

Senator DODD. Thank you.

Senator ALLARD. Senator Reed.

Senator REED. Thank you very much, Senator Allard.

Thank you, Mr. Chairman, for your testimony.

Let me take up the issue of this stampede to spending that we have been witnessing in the last several years.

According to the Congressional Budget Office, Federal spending as a percentage of gross domestic product has declined since 1992, from a little over 22 percent to a little over 18 percent, and that with their baseline figures, the projections for the economy and for spending, the decline is going to continue.

Isn't that a more relevant way to look at the level of Federal spending than absolute increases year to year?

Chairman GREENSPAN. Remember that goodly part of the fall in the ratio is a consequence of, one, defense expenditures coming down, two, the fact that the economy has risen so dramatically so that the denominator of the ratio has been really very impressive.

But, certainly, yes, the notion of the impact of Federal spending on the economy is a function of what that ratio is. But the appropriations that one can make have very significant impacts on the forward levels of discretionary expenditures and it is quite conceivable that you can turn that ratio around quite quickly in a relatively short period of time.

I think it is really quite important to think in terms of not only that ratio, but the underlying appropriations process, plus the denominator, merely what is going on in the economy, to come to conclusions on policy questions.

Senator REED. Well, I assume you are going to keep the denominator very robust. And you have done so far and we are very comfortable with that denominator.

Chairman GREENSPAN. We certainly will endeavor to accommodate you.

Senator REED. Thank you, Mr. Chairman.

Mr. Chairman, let me just take up another issue. Borrowing from Senator Dodd's phrase and your phrase, that preemptive smoothing of the glide path seems to be the operational emphasis behind your advice of cutting taxes to avoid a shock at 2005 or 2006 of a $500 billion stimulus.

Chairman GREENSPAN. Yes.

Senator REED. There are several alternative glide paths. One is a tax cut. One is simply spending money over that time.

From an economic standpoint, is there any difference?

Chairman GREENSPAN. The only difference gets down to the question of how you view the effect of government expenditures on the economy versus tax cuts on the economy.

Arithmetically, there is obviously no difference. Either one will affect it the same way. So the question really gets down to a judgment of the size of Government expenditures to the economy, coupled with the whole series of guarantees and economic preemptions which occur as a consequence of the regulatory system. In other words, there is a general sense of how much private sector resources are effectively preempted by the Federal sector, either through expenditures, guarantees, or regulatory actions. And you have to make a judgment as to whether the impact on the economy

from tax cuts or Government expenditures is a plus or a minus, in addition to the noneconomic questions which obviously arise with respect to both of those issues.

In other words, if you ask me from a strictly economic point of view, I have always argued and continue to argue that we are far better off when confronted with this type of situation to cut taxes rather than increase expenditures. I have always said in the next sentence that economics are not the only set, not the only criteria that are involved in making these judgments.

But what I do think is required is to constrain expenditures because, in my judgment, it is very easy for expenditures to get out of hand and run up very rapidly. And that is a judgment which is based on observation on my part, as well as data. But there are others who could have different views.

So I am really giving you my own point of view on that issue. But from the point of view of the question, the answer is it doesn't make any difference whether it is expenditures or taxes.

Senator REED. It seems, again, this is the difficulty you have as being both the Chairman of the Federal Reserve and being someone with very profound and insightful personal views, is that, oftentimes, your perspective is taken as sort of speaking ex cathedra about economics, when in fact, a lot of it is insights about congressional dynamics and the stickiness of cutting expenditures versus raising taxes.

And I think that is sometimes confused.

Chairman GREENSPAN. I try to make that distinction. Senator. I try to make that distinction as best I can. Sometimes I suspect I don't succeed, but I try.

Senator REED. But returning to your initial response, from a strictly tactical standpoint, tax cuts and increased expenditures will get you to that point where you do not have the fiscal shock in 2005 or 2006.

Chairman GREENSPAN. That is correct, Senator.

Senator REED. Thank you. One of the other aspects of this debate about tax cuts is how you do it.

And there has been a proposal about a rebate. In fact, if your goal is simply to eliminate the excess revenues for both economic reasons and public policy reasons, one approach is a rebate.

Do you have any comments on a rebate approach, where everyone will receive a certain amount of money?

Chairman GREENSPAN. Not really, Senator. We have had rebates in the past. Indeed, when I was chairman of the Council of Economic Advisers in 1975, we did initiate a rebate. And the purpose was to address the recession that was developing in that particular period. I don't have any comment on the appropriateness of it. The pros and cons I think are reasonably self-evident.

Senator REED. There was a suggestion by the Chairman that you were in favor of across-the-board income tax cuts.

Do you have a position? Is that an accurate assessment of your view?

Chairman GREENSPAN. It is, in the sense that I have often been asked in this Committee, when confronted with the desire to cut taxes from an economic point of view, what do I view as the most efficient means to come at the tax cuts? I have always argued that

from what I can gather, marginal tax rate cuts are the superior way to come at that issue.

Senator REED. In order to ensure that the poorest workers receive the benefit as well as the richest workers, should that tax cut be refundable?

Otherwise, there is a whole class of very poor workers who pay no taxes, receive no benefits, and there is equally a number of high-income taxpayers who don't work in the conventional sense.

Chairman GREENSPAN. Well, it is a question of how you view refundable tax credits, which will often appear on the expenditure side as an outlay. As you know, the earned income tax credit, where it is unrelated to the actual tax form, is on the expenditure side. So you really cannot make the distinction. And that is a judgment that you have to make.

Senator REED. Thank you, Mr. Chairman.

Senator ALLARD. In the Committee, where we are right now, it looks like we have Senator Carper and then Senator Schumer has just walked in.

And then we will draw it to a close.

Senator SARBANES. Are we going to have a second round?

Senator ALLARD. The Chairman had laid out earlier that he just wanted to go ahead and complete this round and then we would go ahead—I think Chairman Greenspan has a schedule and what not, that we would go ahead and adjourn.

Senator SARBANES. Well, if we have time, Mr. Chairman, I have just a couple of questions I would like to put to the Chairman before he gets away.

We don't get him here that often and we would like to—I guess the phrase is, milk him for all he's worth while we have him here.

[Laughter.]

Senator ALLARD. I think if you have a couple of questions, I think that is acceptable.

Senator Carper.

OPENING STATEMENT OF SENATOR THOMAS R. CARPER

Senator CARPER. Thank you, Mr. Chairman.

Chairman Greenspan, as we come to the end of this hearing, first of all, let me just thank you for being here today, for your testimony again.

And maybe more important, thank you for your service to the people of our country.

One of the values for me of a hearing of this nature is to find some areas where we agree on some things. And I just want to kind of go back over what I have gleaned from your testimony today and see if I have gotten it right.

One of the things that I have understood you to say is that the direction of our Nation's debt and turning deficits into surpluses is something that has been a real positive for economic growth in this country.

I understand you to say that economic growth in this country has slowed, but it has not tanked.

And I think, to quote you, you said that the central tendency for real gross domestic product growth over the four quarters of this year is 2 to 2½ percent.

I can remember a time not that long ago when 2 to 2½ percent GDP growth was actually considered pretty darn good.

I have gleaned from your testimony that productivity growth continues, albeit, at a somewhat slower rate than it did over the last several years.

And that the long-term prospects for economic growth over the next decade or so are actually quite encouraging.

I have sensed from your testimony today that you believe inflation remains at bay. And while we always want to be cognizant of it, mindful of it, it is not now an imminent threat to our economy.

I understand from your testimony today that the surplus forecasts, while they are robust in the years to come, are not always written in stone. And I think you mentioned at one point that the difference between what was forecast for deficits in 1995 and what we actually realized in surpluses in 2000, I think, the swing was about $500 billion.

Chairman GREENSPAN. That is what I commented on at the Budget Committee, that is correct.

Senator CARPER. Okay. And I think I have understood you to say that, given the fact that we have some extra money on the table, extra revenues on the table, that one of the good ways to make sure that we spend the money prudently, which is left for spending, is to return some of it to the taxpayers of this country.

Those are very helpful things for us to know, as we in this Committee and the Congress and the President attempt to fashion a budget, a fiscal policy for our country, budget policy for our country, and adopt changes in taxes.

Where we don't agree is in the following area.

If you could give me a little bit of further guidance on this, it would be helpful.

First of all, if real GDP growth for the year actually turns out to be 2 or 2½ percent, the issue of whether or not we need to cut taxes at this point in time in order to stimulate the economy, or whether or not the Fed, the Federal Open Market Committee, is perfectly capable of using monetary policy, interest rate cuts, to help us ease through this slowdown and to return to a stronger growth, that question is before us.

And we are going to go from here, and the Democrats, we are going to meet over lunch and try to figure out which way to go.

There is some who say, no, we ought to cut taxes now. It should be retroactive.

There are others who say, no, that is not appropriate. Let's let the monetary policy work and make the tax cuts phase in a bit further down the line.

Any help you can give us on that point?

Chairman GREENSPAN. Well, Senator, the position I have taken, on the basis of the experiences I have had over the years, is that recessions, when they occur, tend to more often than not be over reasonably quickly, and that the timeframe for enacting tax legislation almost invariably is longer than that. But there are some cases in which, when recessions take hold, they extend themselves. They sit there for a while and are more prolonged than you anticipate. Under that condition, which I submit is a relatively low prob-

ability, a tax cut having been in place for a period of time is good rather than bad.

So what it is, as I indicated before, is it is an insurance policy. It is basically doing something against a relatively low probability outcome—that is, the protracted nature of a recession. And the usefulness of that will basically depend on what is the size of the tax cut, where is it located, and what the economic outlook is.

I haven't raised that as a crucial issue because I think that the particular point that I was raising as to why I believe tax cuts are important, is to address this technical problem with respect to the accumulation of assets in the Federal government. So my argument is really quite independent of the issue of economic stimulus, though I recognize that it has certain obvious relationships to it.

Senator CARPER. Thank you. My only other question is this.

In my little State of Delaware, we cut taxes 7 years in a row during my time as Governor, sometimes rates at the top, sometimes rates at the bottom, sometimes in between. We cut taxes for businesses and individuals.

We had a four-part litmus test for tax cuts that we adopted.

One of the things that we are wrestling with within our own caucus, and I presume my Republican friends are as well, is a set of core principles on which tax cuts should be based.

If you will, a litmus test.

The four that we used in my State were the following:

One, the cuts should be fair; Two, they should promote or enhance economic growth; Three, to the extent that they can, we should simplify the Tax Code, not make it more complex; And the fourth is that the cuts should be consistent with the balanced budget and sustainable throughout the full business cycle.

But those four things—fairness, promoting economic growth, simplicity, and sustainability throughout the full business cycle and consistent with a balanced budget.

Really, the litmus test that we used.

Can you just give us a little guidance, I know my time is expired, but just a little guidance on the kind of principles, whether Democrats or Republicans, that our tax cut policy should be based on?

Chairman GREENSPAN. Well, I think in a very interesting way, it depends on where one starts.

Going back from, say, the purview of 1995, for example, with what appeared at that point to be about a 1½ percent trend growth rate in productivity, it appeared as though the level of taxation was essentially consistent with a balanced budget over the longer run at full employment.

And what has happened is that productivity growth has accelerated quite significantly, and so, the existing set of tax rates has engendered a very much more rapid rise in revenues. As I said at the Senate Budget Committee, that productivity over the past 5 to 7 years has risen at about a 3-percent rate, which is twice what it had been previously, and revenues have gone up 2½ times, the difference being that the rise in the productivity has elevated earnings, expectations, and created a permanent, higher level of asset values, which spilled over into tax liabilities when realized gains were involved, or even when they weren't.

And so that what you have got at this point is, as a consequence of the acceleration in productivity, a much higher rate of receipts than one had anticipated. And so, I think the Congress is confronted with the choice of whether in fact you give back what in retrospect turned out to be an unintended excessive level of receipts, or whether those are employed for other purposes these are the key judgments which I think in this particular debate are critical, and these are political judgments. These are judgments which only the Congress can make.

Senator CARPER. Thank you so much.

Senator ALLARD. The Senator from New York, Senator Schumer.

COMMENTS OF SENATOR CHARLES E. SCHUMER

Senator SCHUMER. Thank you, Mr. Chairman. And thank you, Mr. Greenspan, for your patience, as well as all your other great attributes.

I would like to ask a few questions.

One is, how big a tax cut is too big?

One of the worries that many of us have is that we will repeat 1981. People start off with a good plan and it just snowballs.

I think the way things work in Washington, when Republicans propose $2 trillion in tax cuts, and Democrats propose $1 trillion in tax cuts, you don't end up with $1.5. You end up with $3 trillion in tax cuts.

I am just worried. I support deficit reduction above tax cuts.

I take it you would say that that priority is reasonable.

Chairman GREENSPAN. I would say, Senator, that we do not wish to go back into unified budget deficits.

Senator SCHUMER. Right. So the question is, given the numbers that you have been talking about, when do we get to a level where it is too high?

Chairman GREENSPAN. I repeat—if we project our way back into a deficit, I think it would be a mistake.

Senator SCHUMER. And let me just ask you another question because I think there has been some miscalculation here.

When you do a tax cut, is it not fair to add into that tax cut, the amount of the debt payment that will have to increase because the Government has less revenues?

Chairman GREENSPAN. Yes. In other words, all calculations with respect to the issue of what the level of the debt will be, indeed whether you have a surplus or a deficit, has in it implicitly the level of the debt and the interest payments.

Senator SCHUMER. Right.

Chairman GREENSPAN. Clearly, if you alter the timeframe of any particular expenditure or tax program, it is going to affect all of those items.

Senator SCHUMER. So just to take a hypothetical, if someone were to propose a $1.6 trillion tax cut—I don't want you to comment on a specific plan—with the decline in marginal rates, the CBO and others would say that that would increase debt service over the 10 years by $400 billion, then the fair number that the tax cut would cause would not be 1.6, but would be 2.

And we can change the numbers. I just wanted to be accurate in the ratios.

Chairman GREENSPAN. Yes. Obviously, in order to get the full accounting of any particular initiative, whether it is a tax cut or expenditure increase—what in effect you do is you take the impact of that cut or the expenditure increase and try to infer what the total effect on the budget is, including interest and debt.

Senator SCHUMER. Right.

Chairman GREENSPAN. But there is also a very debatable issue, which now gets to the question of whether you are doing a static estimate or a dynamic estimate.

Senator SCHUMER. Right.

Chairman GREENSPAN. There are going to be those who argue that those actions will impact on the tax base itself and there will be a feedback effect. And having been involved in those debates now for too many decades, it is a very difficult issue to resolve. But I think what is important is not what numbers you put on a particular program, but what are its implications.

Senator SCHUMER. Right.

Chairman GREENSPAN. For example, there are a lot of people who would argue that because of doing a dynamic evaluation of a tax cut, the actual net reduction will be less.

Senator SCHUMER. Right. Although the dynamic argument in 1981 did not serve us very well.

Chairman GREENSPAN. Dynamic arguments presupposed that expenditure cuts were to occur, which did not, plus the tax effects which you referred to. So that those projections were really off by very substantial amounts.

Senator SCHUMER. You see, I am someone who would support a significant tax cut, but the way I look at the Bush tax cut, we are almost already in that unified deficit because it is $1.6 trillion of cuts. It is $400 billion of deficit—increased debt spending. There is $100 billion of extenders which everyone believes we are going to renew. And there is the fix of the AMT, which is $200 billion, which, again, everybody thinks we have to do. Otherwise 25 or 30 percent—this is the individual AMT.

So then, if you do what the President has talked about and moved it up to March of this year because of the stimulus, you are at 2.7.

Well, if the surplus is 2.6, and those things which almost everyone thinks either have to be added in by the inexorable numbers of math or just the political realities, you are already perilously close to putting us back into debt before we spend another nickel on anything else.

And nobody believes—the President just called for an increase in military spending, which I think everybody would support—that we are not going to be there.

I am not asking you to comment on the specifics. I know those are the ground rules.

But could you comment on—is it fair for any of us to be worried that a large sweeping proposal at the beginning, without all the ramifications counted, that we get back into the debt cycle that we were in.

You must have thought about that a lot. You have been one of the architects, publicly, as well as, privately, of helping us bring the debt down and to turn the deficit into surplus.

And to me, you make a distinction between tax cuts and spending. I think both of those are downhill. Those are easy. Those are the id of budget politics. The superego of budget politics, the hard thing, is debt reduction.

I just worry that we are going to lose that very, very quickly, as all these other factors are added in.

Could you just comment on whether my worries are well-founded? What do you think about them?

Chairman GREENSPAN. Well, Senator, if we had the ideal way to evaluate budgets and tax and expenditure programs, we would do it in what economists call a dynamic model, in which you not only calculate all the effects that you are referring to, but the interaction of all the tax and expenditure programs on what is going on in the economy as a whole and therefore, by altering the tax base, you are going to alter both expenditures and tax receipts from the initial conditions. Ideally, that is what we would like to do. Regrettably, our models have not been sufficient——

Senator SCHUMER. You don't have very good dynamic models.

Chairman GREENSPAN. We don't. But the point at issue is that most dynamic models will indicate that tax cuts will engender a larger tax base. The orders of magnitude will differ and they depend very much on the specification of the model itself.

But, ideally, if you took the standard which I just put forth, in which whatever is done does not engender a budget deficit, a unified budget deficit, then the question is, what is the outcome of that evaluation? And I think it is a very difficult one. It raises difficult questions.

I think the issues you raise are very much appropriate and to the point. The issue of static versus dynamic evaluation is really much to the point. And hopefully, over the years, we have learned a little, we have learned some, but we haven't learned enough. And I trust that in the future, we will be able to handle these issues far more facilely.

But I would certainly not want to argue that the issues you are raising are inappropriate. And indeed, they are.

Senator ALLARD. The Senator's time has expired.

Senator SCHUMER. Thank you, Mr. Chairman.

Senator ALLARD. And Senator Sarbanes had asked for the opportunity to ask a couple more questions, then I want to draw this to a close.

Senator do you have one or two?

If we are going to drag this one, maybe we would better give the Chairman an opportunity to stretch or whatever.

Are you okay? Okay. Very good.

Senator Sarbanes.

Senator SARBANES. The Chairman has done enough of this to know that if he stretches and comes back——

[Laughter.]

You had the latter part of your statement simply included in the record and did not present it to the Committee this morning.

That is the part that deals with government debt repayment and the implementation of monetary policy.

I gather the conclusion I am to draw out of that section, though, is the very last sentence, which says:

In summary, although a reduced availability of Treasury securities will require adjustments, in the particular form of our open market operations, there is no reason to believe that we will be unable to implement policy as required.

Is that correct?

Chairman GREENSPAN. That is correct, Senator.

Senator SARBANES. So we don't have a major worry on that score.

Chairman GREENSPAN. We have been working on this problem for quite a while. The alternatives available to us should Treasury debt effectively go to zero, are quite numerous and we do not see any technical problems in being able to implement monetary policy.

Senator SARBANES. Now I want to ask a bit about monetary policy and fiscal policy.

The Fed itself is giving us the central tendency for real GDP growth this year of 2 to 2½ percent.

The blue chip economic indicators recently released a survey. They said 1 percent in the first quarter, 2 percent in the second, three percent in the third, 3½ percent in the fourth, which comes out to essentially where the Fed seems to be.

Now, a tax cut, of course, would hit later. It is not going to hit right away.

How much thinking is there at the Fed that it may be necessary in the future to raise interest rates in order to slow down an economy which has been overly stimulated by tax cuts?

Chairman GREENSPAN. As I said before, Senator, what we must do is respond to the economy as it evolved. We are confronted with far more than tax cuts or tax increases or expenditure changes in endeavoring to get a view of the economy against which policy would be implemented. In a technical sense, other things equal—and I emphasize, other things equal—the greater the budget surplus, the lower interest rates would be, which is what I testified many times before this Committee, and would just repeat it.

There are, however, innumerable other things going on in the economy—namely the energy difficulties, which I address in my prepared remarks, and this extraordinary change in just-in-time inventorying and the adjustment process itself, which we have to address. But before we address, we have to understand.

And in that regard, the tax cut question is not a major issue, largely because its order of magnitude is not a very substantial one—it is an average tax cut.

And therefore——

Senator SARBANES. It depends on which one you are talking about. We don't know where it is going yet.

Chairman GREENSPAN. To be sure.

Senator SARBANES. Yes.

Chairman GREENSPAN. Of the various different tax proposals which I have heard, none of them go outside a certain range where considerations——

Senator SARBANES. Now let me ask you because I don't want to impose on my colleagues.

In early January, you took the Fed funds rate down without a meeting of the Federal Open Market Committee, as I recall.

Is that correct?

Chairman GREENSPAN. No, it is not, Senator. We actually did have a telephone conference. And we had a regular meeting and voted on the change.

Senator SARBANES. On the Federal funds, as well as the discount window, which you did a few days later?

Chairman GREENSPAN. Correct, Senator.

Senator SARBANES. Okay. So that was not a Chairman's action under some previous authority.

Chairman GREENSPAN. It was not.

Senator SARBANES. Now the next regularly scheduled meeting is for March 20.

Chairman GREENSPAN. That is correct.

Senator SARBANES. But you leave open, then, I guess, on the basis of the January precedent, acting in the period between now and March 20, before a Federal Open Market Committee meeting.

Chairman GREENSPAN. We will always have that prerogative, Senator.

Senator Sarbanes. Thank you, Mr. Chairman.

Senator ALLARD. The Senator from Connecticut.

Senator SARBANES. Can I close with just one observation?

I have to put this in the record. Mr. Chairman, I am not going to ask you to answer it. But I really want to present it to you.

You have argued that one reason that you have done this change in position on how high you put the priority of the debt reduction, that you see it going down to a minimum level and that this has caused you some concern.

But CBO's projections last July, before you made the statements that had you on the same path as in the past, showed the public debt going to its irreducible minimum level in mid-2007 and net debt going to zero in early 2009.

Their new projections show it going to its irreducible level in late 2006 and net debt going to zero in early 2008.

So the point hasn't changed very much.

Chairman GREENSPAN. That point hasn't. But what has changed is the credibility of the productivity numbers which, as I indicated in the Budget Committee hearing and, indeed, reiterated this morning, we did not have a true test of structural productivity growth throughout this expansion period because even though we could statistically make reasonably good judgments, at the end of the day, you could not really be certain until you had a weakening in the economy and then were able to observe what happened to productivity.

And so, it is the last 6 months of the year 2000 in which productivity held up far higher than any of the models based on the previous data would have indicated. It was only on seeing that that the whole notion that we were really going to reduce the debt effectively to zero became credible. Prior to then, we were dealing with projections with much larger ranges of error than we have today.

Senator ALLARD. Senator Sarbanes.

Senator SARBANES. The 6 month period of a slowing economy is adequate to reach a conclusion that the productivity performance will track what it was in a growing and expanding economy.

Is that correct?

Chairman GREENSPAN. Obviously, it is not conclusive. It adds a very major element of evidence to the marketplace.

Senator ALLARD. Senator Dodd.

Senator DODD. Let me just pick up on that. That is a critical point.

The points that Senator Corzine raised about what happens with Social Security after the year 2010 is a legitimate issue in terms of whether or not we are actually going to be at that accumulating private assets at the Federal level, at the national level.

And the second issue was the issue of productivity rates and the miracle of this new productivity.

And the Economist has a piece in this February issue which I think gets to the point that Senator Sarbanes was raising.

It goes on—the only possible economic justification for Mr. Greenspan's views is that the new economy has produced a productivity miracle, a permanent increase in the underlying rate of productivity, growth that is capable of being sustained through a downturn.

If that were true, the public debt might indeed be paid off early and the Social Security and Medicare costs more manageable.

Such a miracle may be occurring, it says, but no one is sure, and given that the downturn is only just begun, there is no strong evidence yet to justify 10 years' worth of huge tax cuts on the basis of a guess about productivity growth derived from a few quarters' figures, can only be considered, in their words, a reckless gamble.

And since the tax cuts needs not be so vast, an unnecessary one.

Chairman GREENSPAN. You want me to respond to that?

Senator DODD. Yes.

Chairman GREENSPAN. Okay. I am not going to argue for any particular tax cut.

Senator DODD. I understand that.

Chairman GREENSPAN. But what I do argue is that these last 6 months have been quite important because had we not gotten the type of response that we have got, then it would have raised very serious questions about the extent to which what we were dealing with was cyclical productivity and not structural.

Prior to the last 6 months, to be sure, our underlying statistical evaluations lent great credibility to the notion that productivity growth had indeed accelerated from the earlier period.

The last 6 months are a different type of evidence. Now I don't deny that in the event the economy weakens, that productivity could temporarily turn negative. That is not what the issue is.

The issue is, granted the history of the last 10 or 15 years, what type of productivity change would you expect if there was not structural change of moment in productivity and what would you expect in the event that there was? And what I am saying is that the numbers, as crude as they are, are sufficiently persuasive that something different has happened.

Now that is not the same thing as saying that we are going to get X percent of productivity for the next 10 years. That is not what I am arguing. I am just saying that if the underlying evidence is accurate, it means that the capital investments which we have put into our system over the last 7, 8 years, those capital investments have created an underlying capital stock which we now see

as quite productive. And the only way you can determine that is what is the productivity of that stock.

You can invest an awful lot of money irresponsibly, or whatever, and you will not be getting a return from it. What I am saying is we are now seeing that there is a return and it is suggestive of the fact that that capital stock is indeed as efficient as we suspected it was.

If that is the case, then the probability of productivity growth being in excess of where it was from say, 1973 to 1995, is increasing and increasing sufficiently substantially that has made my concern about these surpluses just disappearing moot.

And if you want to trace where my arguments have come from with myself, if you want to put it that way, it is trying to answer the question of can we depend upon productivity growth to generate surpluses which we don't have yet. They are on paper. And I have concluded that the changes that we have seen to date raise a sufficiently high degree of credibility without arguing it is certain, to address public policy in a different way.

Senator ALLARD. Senator Reed.

Senator REED. Just one follow-up. Again, I am told that the Fed really relies on OMB and CBO. Do you have a different surplus number over the next 10 years that you are relying on as a result of your last statement than CBO and OMB?

Chairman GREENSPAN. Let me put it to you this way: The numbers that I am relying on publicly are CBO and OMB. I wouldn't be had we not scrubbed the numbers ourselves and taken a close look. We get somewhat different numbers. But the point is that the numbers that OMB—this is, remember, the last administration's OMB, and current CBO—the underlying assumptions that are being employed are credible.

Senator DODD. And I assume your numbers, the Fed numbers, are higher than the 5.6.

Chairman GREENSPAN. I don't wish to say.

Senator DODD. I have one more question, Mr. Chairman. I don't know whether my colleagues will let me address it.

Senator ALLARD. If Senator Schumer would like to yield some time to the Senator from Connecticut.

Senator DODD. Just a quick one. I really should have raised this earlier.

There was this piece—I don't know. I have so many papers in front of me here—on the bond investors who focus on Treasury auctions with the possible ending of the 30-year issuance question.

I gather that the Treasury borrowing advisory committee has supported the idea of discontinuing the 30-year bonds.

What effect is this going to have on the bond markets?

Chairman GREENSPAN. We have had the 30-year bond for a long period of time and it is been a remarkable anchor in the long-term bond market and been especially important for holdings overseas as well as in the United States.

In recent years, as the probability that the outstanding debt would decline rose, the 30-year bond took on a scarcity premium. And as you may recall, the interest rates came down quite appreciably. That induced significant problems with respect to the underlying benchmark status of that particular issue. Indeed if I were

to think about this question, I would call Senator Corzine and ask him how he would view the particular problem because he had to deal with the particular issue of whether you are working off a 10-year benchmark or a 30-year benchmark.

I think the reason why his former colleagues were advocating the elimination of the 30-year bond is that, with the reductions that have occurred, we are in a position where it no longer serves the use that it did, that the 10-year Treasury is becoming increasingly the benchmark. And there is a general presumption that if dollar-denominated issues of more than 10 years are required, that the private sector is very likely to create them.

So there is no doubt that, other things equal, it would be better to have a large Treasury debt outstanding so that those of us who deal in the financial markets have easy benchmarks and easy means of pricing and funding, but, in my judgment, the value of reducing the debt to zero is so great that the costs involved to the bond community or to the Federal Open Market Committee and our System Open Market Account that the trade-off very clearly says by far the most important thing is to get the debt down, and we will handle the problem as best we can.

Senator DODD. I appreciate that. And I thank you once again for reiterating what you have now on two or three occasions this morning, this afternoon, that the primary goal is still to get that national debt down to zero.

Chairman GREENSPAN. I have not changed my view on that in the slightest.

Senator DODD. No, I know you haven't.

Chairman GREENSPAN. As soon as we can get it to zero, the better. And the great advantages that we have achieved as a consequence of that over the years have been really quite remarkable.

Senator DODD. I agree with you. As I said earlier, I cannot think of a better gift that we could give to a younger generation than to burn that national mortgage.

Senator ALLARD. I would just observe at this time, for those people who are so against the debt, is running a deficit on time.

Senator Schumer.

Senator SCHUMER. I just have one final question that hasn't been asked. And I just want to get the Chairman's opinion on it, although I certainly am glad like the others to hear that debt is number one.

I am worried that we are going to get away from that, as my questions before indicated, reducing debt.

Credit crunch. In New York, we hear a lot of talk now about a credit crunch in various phases of the market, not just in high-yield bonds, but in other places, too.

What is the outlook for credit quality and availability? Should we be concerned?

What should we do?

Chairman GREENSPAN. Senator, there were difficulties at the beginning of the year as a consequence of a very significant erosion in the latter part of December. We had problems with so-called secondary commercial paper, the so-called A2/P2 paper. We had difficulties with so-called junk bonds and the spreads were very wide. They have since come down quite appreciably.

We have had, as you know, evidence of tightening credit conditions by our commercial banks. They are tightened.

They have put some pressure on some borrowers. But, overall, the quality of credit is easing, if anything. And I don't consider that there are serious problems out there.

There are the usual credit quality problems you have when the rates of growth fall down. But, again, we are not in a position where anything terribly worrisome is occurring. And we hope that, as this pall of uncertainty which has gripped the economy gradually dissipates, as it will eventually—I don't know when, but I know that it always has—then the markets ease up and we are back to normal. But we are nowhere near where we were at some point in 1998, which was really marginally scary.

Senator SCHUMER. Thank you, Mr. Chairman.

Senator ALLARD. Senator Corzine.

Senator CORZINE. Yes, thank you, Mr. Chairman.

Remarkable display of objectivity and, I think, acumen, even on the 30-year bond, Mr. Chairman.

There was one clarification that I would love to hear you comment on that you mentioned a number of times.

The preference for tax cuts versus expenditures is clearly a priority that you talk about. But, certainly, there must be some expenditures—FAA computers, computer systems for wire transfers that the Fed might want at some point in time.

There are instances where expenditures produce productivity that I think some clarification on how you look at that as opposed to a black and white statement.

Chairman GREENSPAN. I think that is a very good point. I am very glad you raise it, Senator. Obviously, there are innumerable types of activities which you can engage in in which expenditure projects do have a very clear rate of return in the sense of what they can do to the economy, leaving aside the secondary issues of the broader indirect relationships like education and all of that.

I would just say that it is important to scrub all expenditure programs to be sure that they are efficient, effective, and they work. There is, regrettably, too little of that in my experience. And rather than draw the line unequivocally, I do think that the weight of the evidence is very heavy on giving back taxes that you don't need rather than spend them. Having said that, there is no question that there are a lot of projects which very readily are quite desirable.

The Defense budget is a crucial issue in which those types of evaluations are very important and very difficult.

Senator CORZINE. Thank you.

Senator ALLARD. Okay. We will go ahead and call it to a close.

I would just make the comment that it seems like we have two sets of standards—one that gets applied to tax cuts and a different standard that gets applied to spending.

It will be interesting to see how our budget deliberations go as we move through the year. So we will go ahead and call the hearing to a close.

[Whereupon, at 1:16 p.m., the hearing was adjourned.]

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

PREPARED STATEMENT OF SENATOR WAYNE ALLARD

I want to welcome Chairman Greenspan. It is a pleasure to serve on both the Banking and Budget Committees where I get the opportunity to frequently hear from the Chairman.

We operate today under a new format, with the Fed Chairman focusing on a report on monetary policy. This makes more sense than the old Humphrey-Hawkins format, and is a welcome change.

I expect that in addition to a thorough review of monetary policy, we will also have a heated discussion of tax and budget policy.

As I have stated repeatedly in these forums, I support a plan to use the surplus to pay off the national debt. However, as the Chairman pointed out during his recent Budget Committee testimony, we now have a projected surplus over the next decade that will accommodate both debt reduction and tax relief.

With a nearly $6 trillion surplus, there is certainly room for a $1.6 trillion tax cut. This assumes of course that we keep Federal spending growth in check.

I look forward to Chairman Greenspan's testimony.

PREPARED STATEMENT OF SENATOR JIM BUNNING

Mr. Chairman, I appreciate your calling this hearing and I appreciate Chairman Greenspan's willingness to come before the committee to testify today.

While I am relieved Chairman Greenspan finally lowered lending rates in January, I am very concerned that the Fed's action has come too late. I believe the Nation's economy showed signs of slowing throughout the fourth quarter of last year, and I was absolutely flabbergasted the FOMC did not lower rates in December. Now we are in a period of economic slowdown that looks more and more like a recession. I do not believe this slowdown was inevitable. I do believe that the FOMC's actions can only be classified as too little, too late.

I have made no secret of my concerns that the FMOC, and especially the Chairman, seems to be focusing on inflation fires that do not exist. I fear that the Chairman's preoccupation with inflation has caused the FMOC to get behind the curve.

Chairman Greenspan, I realize the job you have is a very difficult one, we essentially ask you to predict the future by watching the present and researching the past. Your track record, although I have not agreed with every decision the Fed has made, is generally sound. But I believe you missed the boat on this current economic slowdown; quicker action by the FOMC may have prevented it.

I believe the FOMC should drop rates further. Banks are tightening credit standards because of the fear of a worsening economy. In fact, on February 5, 2001, the Federal Reserve Board said in its January 2001 Senior Loan Officer Opinion Survey on Bank Lending Practices, "In general, banks indicated that the most important reason for tightening standards and terms were a worse economic outlook and a reduced tolerance for risk." The Fed should drop rates further to pump new capital into the economy. There is no threat of inflation on the horizon; it is way past time to jumpstart the economy.

As the Chairman of the Subcommittee on Economic Policy, I would like to invite the Chairman to come before our subcommittee soon to testify about the Fed's policies. I hope that you will be able to find time in your schedule to come talk to us.

Once again, Mr. Chairman, I thank you for holding this hearing and I thank Chairman Greenspan for testifying. I have submitted a few questions for the record. I look forward to the Chairman's answers.

Thank you Mr. Chairman.

PREPARED STATEMENT OF ALAN GREENSPAN

CHAIRMAN, BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM

FEBRUARY 13, 2001

I appreciate the opportunity this morning to present the Federal Reserve's semiannual report on monetary policy.

The past decade has been extraordinary for the American economy and monetary policy. The synergies of key technologies markedly elevated prospective rates of return on high-tech investments, led to a surge in business capital spending, and significantly increased the underlying growth rate of productivity. The capitalization of those higher expected returns boosted equity prices, contributing to a substantial

pickup in household spending on new homes, durable goods, and other types of consumption generally, beyond even that implied by the enhanced rise in real incomes.

When I last reported to you in July, economic growth was just exhibiting initial signs of slowing from what had been an exceptionally rapid and unsustainable rate of increase that began a year earlier.

The surge in spending had lifted the growth of the stocks of many types of consumer durable goods and business capital equipment to rates that could not be continued. The elevated level of light vehicle sales, for example, implied a rate of increase in the number of vehicles on the road hardly sustainable for a mature industry. And even though demand for a number of high-tech products was doubling or tripling annually, in many cases new supply was coming on even faster. Overall, capacity in high-tech manufacturing industries rose nearly 50 percent last year, well in excess of its rapid rate of increase over the previous 3 years. Hence, a temporary glut in these industries and falling prospective rates of return were inevitable at some point. Clearly, some slowing in the pace of spending was necessary and expected if the economy was to progress along a balanced and sustainable growth path.

But the adjustment has occurred much faster than most businesses anticipated, with the process likely intensified by the rise in the cost of energy that has drained business and household purchasing power. Purchases of durable goods and investment in capital equipment declined in the fourth quarter. Because the extent of the slowdown was not anticipated by businesses, it induced some backup in inventories, despite the more advanced just-in-time technologies that have in recent years enabled firms to adjust production levels more rapidly to changes in demand. Inventory-sales ratios rose only moderately; but relative to the levels of these ratios implied by their downtrend over the past decade, the emerging imbalances appeared considerably larger. Reflecting these growing imbalances, manufacturing purchasing managers reported last month that inventories in the hands of their customers had risen to excessively high levels.

As a result, a round of inventory rebalancing appears to be in progress. Accordingly, the slowdown in the economy that began in the middle of 2000 intensified, perhaps even to the point of growth stalling out around the turn of the year. As the economy slowed, equity prices fell, especially in the high-tech sector, where previous high valuations and optimistic forecasts were being reevaluated, resulting in significant losses for some investors. In addition, lenders turned more cautious. This tightening of financial conditions, itself, contributed to restraint on spending.

Against this background, the Federal Open Market Committee (FOMC) undertook a series of aggressive monetary policy steps. At its December meeting, the FOMC shifted its announced assessment of the balance of risks to express concern about economic weakness, which encouraged declines in market interest rates. Then on January 3, and again on January 31, the FOMC reduced its targeted Federal funds rate ½ percentage point, to its current level of 5½ percent. An essential precondition for this type of response was that underlying cost and price pressures remained subdued, so that our front-loaded actions were unlikely to jeopardize the stable, low inflation environment necessary to foster investment and advances in productivity.

The exceptional weakness so evident in a number of economic indicators toward the end of last year (perhaps in part the consequence of adverse weather) apparently did not continue in January. But with signs of softness still patently in evidence at the time of its January meeting, the FOMC retained its sense that the risks are weighted toward conditions that may generate economic weakness in the foreseeable future.

Crucial to the assessment of the outlook and the understanding of recent policy actions is the role of technological change and productivity in shaping near-term cyclical forces as well as long-term sustainable growth.

The prospects for sustaining strong advances in productivity in the years ahead remain favorable. As one would expect, productivity growth has slowed along with the economy. But what is notable is that, during the second half of 2000, output per hour advanced at a pace sufficiently impressive to provide strong support for the view that the rate of growth of structural productivity remains well above its pace of a decade ago.

Moreover, although recent short-term business profits have softened considerably, most corporate managers appear not to have altered to any appreciable extent their long-standing optimism about the future returns from using new technology. A recent survey of purchasing managers suggests that the wave of new on-line business-to-business activities is far from cresting. Corporate managers more generally, rightly or wrongly, appear to remain remarkably sanguine about the potential for innovations to continue to enhance productivity and profits. At least this is

what is gleaned from the projections of equity analysts, who, one must presume, obtain most of their insights from corporate managers. According to one prominent survey, the 3- to 5-year average earnings projections of more than a thousand analysts, though exhibiting some signs of diminishing in recent months, have generally held firm at a very high level. Such expectations, should they persist, bode well for continued strength in capital accumulation and sustained elevated growth of structural productivity over the longer term.

The same forces that have been boosting growth in structural productivity seem also to have accelerated the process of cyclical adjustment. Extraordinary improvements in business-to-business communication have held unit costs in check, in part by greatly speeding up the flow of information. New technologies for supply chain management and flexible manufacturing imply that businesses can perceive imbalances in inventories at a very early stage—virtually in real time—and can cut production promptly in response to the developing signs of unintended inventory building.

Our most recent experience with some inventory backup, of course, suggests that surprises can still occur and that this process is still evolving. Nonetheless, compared with the past, much progress is evident. A couple of decades ago, inventory data would not have been available to most firms until weeks had elapsed, delaying a response and, hence, eventually requiring even deeper cuts in production. In addition, the foreshortening of lead times on delivery of capital equipment, a result of information and other newer technologies, has engendered a more rapid adjustment of capital goods production to shifts in demand that result from changes in firms' expectations of sales and profitability. A decade ago, extended backlogs on capital equipment meant a more stretched-out process of production adjustments.

Even consumer spending decisions have become increasingly responsive to changes in the perceived profitability of firms through their effects on the value of households' holdings of equities. Stock market wealth has risen substantially relative to income in recent years—itself a reflection of the extraordinary surge of innovation. As a consequence, changes in stock market wealth have become a more important determinant of shifts in consumer spending relative to changes in current household income than was the case just 5 to 7 years ago.

The hastening of the adjustment to emerging imbalances is generally beneficial. It means that those imbalances are not allowed to build until they require very large corrections. But the faster adjustment process does raise some warning flags. Although the newer technologies have clearly allowed firms to make more informed decisions, business managers throughout the economy also are likely responding to much of the same enhanced body of information. As a consequence, firms appear to be acting in far closer alignment with one another than in decades past. The result is not only a faster adjustment, but one that is potentially more synchronized, compressing changes into an even shorter time frame.

This very rapidity with which the current adjustment is proceeding raises another concern, of a different nature. While technology has quickened production adjustments, human nature remains unaltered. We respond to a heightened pace of change and its associated uncertainty in the same way we always have. We withdraw from action, postpone decisions, and generally hunker down until a renewed, more comprehensible basis for acting emerges. In its extreme manifestation, many economic decisionmakers not only become risk averse but attempt to disengage from all risk. This precludes taking any initiative, because risk is inherent in every action. In the fall of 1998, for example, the desire for liquidity became so intense that financial markets seized up. Indeed, investors even tended to shun risk-free, previously issued Treasury securities in favor of highly liquid, recently issued Treasury securities.

But even when decisionmakers are only somewhat more risk averse, a process of retrenchment can occur. Thus, although prospective long-term returns on new high-tech investment may change little, increased uncertainty can induce a higher discount of those returns and, hence, a reduced willingness to commit liquid resources to illiquid fixed investments.

Such a process presumably is now under way and arguably may take some time to run its course. It is not that underlying demand for Internet, networking, and communications services has become less keen. Instead, as I noted earlier, some suppliers seem to have reacted late to accelerating demand, have overcompensated in response, and then have been forced to retrench—a not—unusual occurrence in business decisionmaking.

A pace of change outstripping the ability of people to adjust is just as evident among consumers as among business decisionmakers. When consumers become less secure in their jobs and finances, they retrench as well.

It is difficult for economic policy to deal with the abruptness of a break in confidence. There may not be a seamless transition from high to moderate to low confidence on the part of businesses, investors, and consumers. Looking back at recent cyclical episodes, we see that the change in attitudes has often been sudden. In earlier testimony, I likened this process to water backing up against a dam that is finally breached. The torrent carries with it most remnants of certainty and euphoria that built up in earlier periods.

This unpredictable rending of confidence is one reason that recessions are so difficult to forecast. They may not be just changes in degree from a period of economic expansion, but a different process engendered by fear. Our economic models have never been particularly successful in capturing a process driven in large part by nonrational behavior.

Although consumer confidence has fallen, at least for now it remains at a level that in the past was consistent with economic growth. And as I pointed out earlier, expected earnings growth over the longer-run continues to be elevated. If the forces contributing to long-term productivity growth remain intact, the degree of retrenchment will presumably be limited. Prospects for high productivity growth should, with time, bolster both consumption and investment demand. Before long in this scenario, excess inventories would be run off to desired levels.

Still, as the FOMC noted in its last announcement, for the period ahead, downside risks predominate. In addition to the possibility of a break in confidence, we don't know how far the adjustment of the stocks of consumer durables and business capital equipment has come. Also, foreign economies appear to be slowing, which could dampen demands for exports; and, although some sectors of the financial markets have improved in recent weeks, continued lender nervousness still is in evidence in other sectors.

Because the advanced supply chain management and flexible manufacturing technologies may have quickened the pace of adjustment in production and incomes and correspondingly increased the stress on confidence, the Federal Reserve has seen the need to respond more aggressively than had been our wont in earlier decades. Economic policymaking could not, and should not, remain unaltered in the face of major changes in the speed of economic processes. Fortunately, the very advances in technology that have quickened economic adjustments have also enhanced our capacity for real-time surveillance.

As I pointed out earlier, demand has been depressed by the rise in energy prices as well as by the needed slowing in the pace of accumulation of business capital and consumer durable assets. The sharp rise in energy costs pressed down on profit margins still further in the fourth quarter. About a quarter of the rise in total unit costs of nonfinancial, nonenergy corporations reflected a rise in energy costs. The 12 percent rise in natural gas prices last quarter contributed directly, and indirectly through its effects on the cost of electrical power generation, about one fourth of the rise in overall energy costs for nonfinancial, non-energy corporations; increases in oil prices accounted for the remainder.

In addition, a significant part of the margin squeeze not directly attributable to higher energy costs probably has reflected the effects of the moderation in consumer outlays that, in turn, has been due in part to higher costs of energy, especially for natural gas. It is likely that energy cost increases contributed significantly more to the deteriorating profitability of nonfinancial, non-energy corporations in the fourth quarter than is suggested by the energy-related rise in total unit costs alone.

To be sure, the higher energy expenses of households and most businesses represent a transfer of income to producers of energy. But the capital investment of domestic energy producers, and, very likely, consumption by their owners, have provided only a small offset to the constraining effects of higher energy costs on spending by most Americans. Moreover, a significant part of the extra expense is sent overseas to foreign energy producers, whose demand for exports from the United States is unlikely to rise enough to compensate for the reduction in domestic spending, especially in the short-run. Thus, given the evident inability of energy users, constrained by intense competition for their own products, to pass on much of their cost increases, the effects of the rise in energy costs does not appear to have had broad inflationary effects, in contrast to some previous episodes when inflation expectations were not as well anchored. Rather, the most prominent effects have been to depress aggregate demand. The recent decline in energy prices and further declines anticipated by futures markets, should they occur, would tend to boost purchasing power and be an important factor supporting a recovery in demand growth over coming quarters.

Economic Projections

The members of the Board of Governors and the Reserve Bank presidents foresee an implicit strengthening of activity after the current rebalancing is over, although the central tendency of their individual forecasts for real GDP still shows a substantial slowdown, on balance, for the year as a whole. The central tendency for real GDP growth over the four quarters of this year is 2 to 2½ percent. Because this average pace is below the rise in the economy's potential, they see the unemployment rate increasing to about 4½ percent by the fourth quarter of this year. The central tendency of their forecasts for inflation, as measured by the prices for personal consumption expenditures, suggests an abatement to 1¾ to 2¼ percent over this year from 2½ percent over 2000.

Government Debt Repayment and the Implementation of Monetary Policy

Federal budget surpluses have bolstered national saving, providing additional resources for investment and, hence, contributing to the rise in the capital stock and our standards of living. However, the prospective decline in Treasury debt outstanding implied by projected Federal budget surpluses does pose a challenge to the implementation of monetary policy. The Federal Reserve has relied almost exclusively on increments to its outright holdings of Treasury securities as the "permanent" asset counterpart to the uptrend in currency in circulation, our primary liability. Because the market for Treasury securities is going to become much less deep and liquid if outstanding supplies shrink as projected, we will have to turn to acceptable substitutes. Last year the Federal Reserve System initiated a study of alternative approaches to managing our portfolio.

At its late January meeting, the FOMC discussed this issue at length, and it is taking several steps to help better position the Federal Reserve to address the alternatives. First, as announced on January 31, the Committee extended the temporary authority, in effect since late August 1999, for the Trading Desk at the Federal Reserve Bank of New York to conduct repurchase agreements in mortgage-backed securities guaranteed by the agencies as well as in Treasuries and direct agency debt. Thus, for the time being, the Desk will continue to rely on the same types of temporary open market operations in use for the past year and a half to offset transitory factors affecting reserve availability.

Second, the FOMC is examining the possibility of beginning to acquire under repurchase agreements some additional assets that the Federal Reserve Act already authorizes the Federal Reserve to purchase. In particular, the FOMC asked the staff to explore the possible mechanisms for backing our usual repurchase operations with the collateral of certain debt obligations of U.S. States and foreign governments. We will also be consulting with the Congress on these possible steps before the FOMC further considers such transactions. Taking such assets in repurchase operations would significantly expand and diversify the assets our counterparties could post in temporary open market operations, reducing the potential for any impact on the pricing of private sector instruments.

Finally, the FOMC decided to study further the even longer-term issue of whether it will ultimately be necessary to expand the use of the discount window or to request the Congress for a broadening of its statutory authority for acquiring assets via open market operations. How quickly the FOMC will need to address these longer-run portfolio choices will depend on how quickly the supply of Treasury securities declines as well as the usefulness of the alternative assets already authorized by law.

In summary, although a reduced availability of Treasury securities will require adjustments in the particular form of our open market operations, there is no reason to believe that we will be unable to implement policy as required.

RESPONSE TO WRITTEN QUESTIONS OF SENATOR BUNNING FROM ALAN GREENSPAN

Q.1. I believe the Fed's lack of action in November and December helped ensure that we would have a recession. Now that we have a recession, how rapidly must rates be cut in order to turn around the economy? Could tax cuts alone help quickly enough to help prevent a further economic slowdown?

Q.2. Why did the Fed not cut rates in November and December when economic indicators were already turning downward?

Q.3. If the Fed was able to cut rates by a half-point at the emergency meeting in early January, couldn't rates have been cut even further for needed stimulus in late January?

Q.4. Do the Fed's economic models need to be updated? If they did not accurately forecast the recession, then they need to be changed. If they did accurately forecast, then why didn't the Fed act?

Taken together, your questions raise issues about the timing and magnitude of the Federal Reserve's response to emerging economic weakness. In the second half of 1999 and first half of 2000, overall investment demand outstripped the available savings. The imbalance that developed threatened to destabilize the economy. It drove real long-term interest rates up substantially through this period, and in order to contain the imbalances the FOMC increased its policy interest rate. After mid-2000, the rate of economic growth slowed significantly, suggesting that the adjustment toward more sustainable economic expansion was under way; long-term interest rates began to come down and financial markets took out the further Federal Reserve tightening previously thought to be necessary. Had the Federal Reserve firmed policy by less last spring or eased rates much sooner last fall, it was our judgment that we would have risked short-circuiting this needed adjustment. The likely result would have been broader and deeper imbalances that eventually would trigger a far more difficult economic correction than we are currently experiencing.

In the event, the slowing in the economy late last year was greater than we or most other economic analysts anticipated. As I explained at greater length in my testimony, it appears that the rapidity and unexpected nature of the weakening owe importantly to recent advances in information technology that have enabled businesses to respond much more quickly than we anticipated to impending overhangs of inventory and plant capacity.

As soon as it became evident that the economy was softening by more than was necessary to contain imbalances and foster sustainable economic expansion, we began to reduce the Federal funds rate. Because business conditions were weakening unusually rapidly, our policy shift also needed to be unusually prompt and forceful. The adjustment of the stocks of inventories and capital equipment after the unsustainable buildups of late 1999 and early 2000 is still under way, the Federal Reserve continues to watch the situation carefully to gauge the appropriate policy response.

The structure of the economy is always evolving, and consequently the Federal Reserve is continuously updating its understanding of how the economy works and how policy should most appropriately respond to emerging economic and financial develop-

ments. While we use economic models fit to historical data in that process, policymaking involves looking at all available information and exercising a substantial element of judgment based on our analysis of the implications of recent trends.

You also asked about the possibility that tax cuts alone could prevent further economic slowdown. As I noted in my discussion with the Senate Budget Committee, history suggests that because of unavoidable delays in passage and implementation, tax cuts rarely become effective at the time they are most needed to spur activity. That said, if tax reductions are in train in order to tailor a sensible path toward zero debt without subsequent private asset accumulation by the Federal Government, making them effective sooner rather than later could prove helpful should the current economic weakness persist. In any event, clearly, the Federal Reserve is not relying on fiscal initiatives to restore sustainable economic expansion, but is actively adjusting its policy stance to promote that objective.

For use at 10:00 a.m., EST
Tuesday
February 13, 2001

Board of Governors of the Federal Reserve System

Monetary Policy Report to the Congress

Pursuant to section 2B of the Federal Reserve Act

February 13, 2001

Letter of Transmittal

BOARD OF GOVERNORS OF THE
FEDERAL RESERVE SYSTEM
Washington, D.C., February 13, 2001

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,

Alan Greenspan, Chairman

Table of Contents

	Page
Monetary Policy and the Economic Outlook	1
Economic and Financial Developments in 2000 and Early 2001	5

Monetary Policy Report to the Congress

Report submitted to the Congress on February 13, 2001, pursuant to section 2B of the Federal Reserve Act

MONETARY POLICY AND THE ECONOMIC OUTLOOK

When the Federal Reserve submitted its previous Monetary Policy Report to the Congress, in July of 2000, tentative signs of a moderation in the growth of economic activity were emerging following several quarters of extraordinarily rapid expansion. After having increased the interest rate on federal funds through the spring to bring the growth of aggregate demand and potential supply into better alignment and thus contain inflationary pressures, the Federal Reserve had stopped tightening as evidence of an easing of economic growth began to appear.

Indications that the expansion had moderated from its earlier rapid pace gradually accumulated during the summer and into the autumn. For a time, this downshifting of growth seemed likely to leave the economy expanding at a pace roughly in line with that of its potential. Over the last few months of the year, however, elements of economic restraint emerged from several directions to slow growth even more. Energy prices, rather than turning down as had been anticipated, kept climbing, raising costs throughout the economy, squeezing business profits, and eroding the income available for discretionary expenditures. Equity prices, after coming off their highs earlier in the year, slumped sharply starting in September, slicing away a portion of household net worth and discouraging the initial offering of new shares by firms. Many businesses encountered tightening credit conditions, including a widening of risk spreads on corporate debt issuance and bank loans. Foreign economic activity decelerated noticeably in the latter part of the year, contributing to a weakening of the demand for U.S. exports, which also was being restrained by an earlier appreciation in the exchange value of the U.S. dollar.

The dimensions of the economic slowdown were obscured for a time by the usual lags in the receipt of economic data, but the situation began to come into sharper focus late in the year as the deceleration steepened. Spending on business capital, which had been rising rapidly for several years, elevating stocks of these assets, flattened abruptly in the fourth quarter. Consumers clamped down on their outlays for motor vehicles and other durables, the stocks of which also had climbed to high levels. As the demand for goods softened, manufacturers adjusted production quickly to counter a buildup in inventories. Rising concern about slower growth and worker layoffs contributed to a sharp deterioration of consumer confidence. In response to the accumulating weakness, the Federal Open Market Committee (FOMC) lowered the intended interest rate on federal funds ½ percentage point on January 3 of this year. Another rate reduction of that same size was implemented at the close of the most recent meeting of the FOMC at the end of last month.

As weak economic data induced investors to revise down their expectations of future short-term interest rates in recent months and as the Federal Reserve eased policy, financial market conditions became more accommodative. Since the November FOMC meeting, yields on many long-term corporate bonds have dropped on the order of a full percentage point, with the largest declines taking place on riskier bonds as the yield spreads on those securities narrowed considerably from their elevated levels. In response, borrowing in long-term credit markets has strengthened appreciably so far in 2001. The less restrictive conditions in financial markets should help lay the groundwork for a rebound in economic growth.

That rebound should also be encouraged by underlying strengths of the economy that still appear to be present despite the sluggishness encountered of late. The most notable of these strengths is the remarkable step-up in structural productivity growth since the mid-1990s, which seems to be closely related to the spread of new technologies. Even as the economy slowed in 2000, evidence of ongoing efficiency gains were apparent in the form of another year of rapid advance in output per worker hour in the nonfarm business sector. With households and businesses still in the process of putting recent innovations in place and with technological breakthroughs still occurring, an end to profitable investment opportunities in the technology area does not yet seem to be in sight. Should investors continue to seek out emerging

opportunities, the ongoing transformation and expansion of the capital stock will be maintained, thereby laying the groundwork for further gains in productivity and ongoing advances in real income and spending. The impressive performance of productivity and the accompanying environment of low and stable underlying inflation suggest that the longer-run outlook for the economy is still quite favorable, even though downside risks may remain prominent in the period immediately ahead.

Monetary Policy, Financial Markets, and the Economy over the Second Half of 2000 and Early 2001

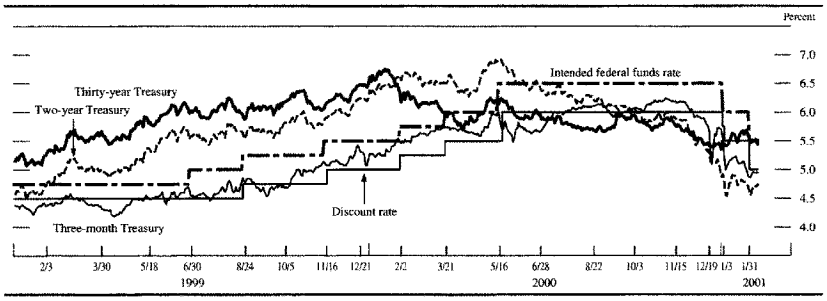
As described in the preceding Monetary Policy Report to the Congress, the very rapid pace of economic growth over the first half of 2000 was threatening to place additional strains on the economy's resources, which already appeared to be stretched thin. Private long-term interest rates had risen considerably in response to the strong economy, and, in an effort to slow the growth of aggregate demand and thereby prevent a buildup of inflationary pressures, the Federal Reserve had tightened its policy settings substantially through its meeting in May 2000. Over subsequent weeks, preliminary signs began to emerge suggesting that growth in aggregate demand might be slowing, and at its June meeting the FOMC left the federal funds rate unchanged.

Further evidence accumulated over the summer to indicate that demand growth was moderating. The rise in mortgage interest rates over the previous year seemed to be damping activity in the housing sector. Moreover, the growth of consumer spending had slowed from the exceptional pace of earlier in the year; the impetus to spending from outsized equity price gains in 1999 and early 2000 appeared to be partly wearing off, and rising energy prices were continuing to erode the purchasing power of households. By contrast, business fixed investment still was increasing very rapidly, and strong growth of foreign economies was fostering greater demand for U.S. exports. Weighing this evidence and recognizing that the effects of previous tightenings had not yet been fully felt, the FOMC decided at its meeting in August to hold the federal funds rate unchanged. The Committee remained concerned that demand could continue to grow faster than potential supply at a time when the labor market was already taut, and it saw the balance of risks still tilted toward heightened inflation pressures.

The FOMC faced fairly similar circumstances at its October meeting. By then, it had become more apparent that the growth in demand had fallen to a pace around that of potential supply. Although consumer spending had picked up again for a time, it did not regain the vigor it had displayed earlier in the year, and capital spending, while still growing briskly, had decelerated from its first-half pace. With increases in demand moderating, private employment gains slowed from the rates seen earlier in the year. However, labor markets remained exceptionally tight, and the hourly compensation of workers had accelerated to a point at which unit labor costs were edging up despite strong gains in productivity. In addition, sizable increases in energy prices were pushing broad inflation measures above the levels of recent years. Although core inflation measures were at most only creeping up, the Committee felt that there was some risk that the increase in energy prices, which was lasting longer than had seemed likely earlier in the year, would start to leave an imprint on business costs and longer-run inflation expectations, posing the risk that core inflation rates could rise more substantially. Weighing these considerations, the FOMC decided to hold the federal funds rate unchanged at its October meeting. While recognizing that the risks in the outlook were shifting, the FOMC believed that the tautness of labor markets and the rise in energy prices meant that the balance of those risks still was weighted towards heightened inflation pressures, and this assessment was noted in the balance-of-risks statement.

By the time of the November FOMC meeting, conditions in the financial markets were becoming less accommodative in some ways, even as the Federal Reserve held the federal funds rate steady. Equity prices had declined considerably over the previous several months, resulting in an erosion of household wealth that seemed likely to restrain consumer spending going forward. Those price declines, along with the elevated volatility of equity prices, also hampered the ability of firms to raise funds in equity markets and were likely discouraging business investment. Some firms faced more restrictive conditions in credit markets as well, as risk spreads in the corporate bond market widened significantly for firms with lower credit ratings and as banks tightened the standards and terms on their business loans. Meanwhile, incoming data indicated that the pace of economic activity had softened a bit further. Still, the growth of aggregate demand apparently had moved only modestly below that of potential supply. Moreover, while crude oil prices appeared to be topping out, additional inflationary pressures were arising in the energy sector in the form of surging prices for natural gas, and there had been no easing of the

Selected interest rates



NOTE. The data are daily and extend through February 8, 2001. The dates on the horizontal axis are those of scheduled FOMC meetings and of any intermeeting policy actions.

tightness in the labor market. In assessing the evidence, the members of the Committee felt that the risks to the outlook were coming into closer balance but had not yet shifted decisively. At the close of the meeting, the FOMC left the funds rate unchanged once again, and it stated that the balance of risks continued to point toward increased inflation. However, in the statement released after the meeting, the FOMC noted the possibility of subpar growth in the economy in the period ahead.

Toward the end of the year, the moderation of economic growth gave way, fairly abruptly, to more sluggish conditions. By the time of the December FOMC meeting, manufacturing activity had softened considerably, especially in motor vehicles and related industries, and a number of industries had accumulated excessive stocks of inventories. Across a broader set of firms, forecasts for corporate sales and profits in the fourth quarter and in 2001 were being slashed, contributing to a continued decline in equity prices and a further widening of risk spreads on lower-rated corporate bonds. In this environment, growth in business fixed investment appeared to be slowing appreciably. Consumer spending showed signs of decelerating further, as falling stock prices eroded household wealth and consumer confidence weakened. Moreover, growth in foreign economies seemed to be slowing, on balance, and U.S. export performance began to deteriorate. Market interest rates had declined sharply in response to these developments. Against this backdrop, the FOMC at its December meeting decided that the risks to the outlook had swung considerably and now were weighted toward economic weakness, although it decided to wait for additional evidence on the extent and persistence of the slowdown before moving to an easier policy stance. Recognizing that the current position of the economy was difficult to discern because of lags in the data and that prospects for the near term were particularly uncertain, the Committee agreed at the meeting that it would be especially attentive over coming weeks to signs that an intermeeting policy action was called for.

Additional evidence that economic activity was slowing significantly emerged not long after the December meeting. New data indicated a marked weakening in business investment, and retail sales over the holiday season were appreciably lower than businesses had expected. To contain the resulting buildup in inventories, activity in the manufacturing sector continued to drop. In addition, forecasts of near-term corporate profits were being marked down further, resulting in additional declines in equity prices and in business confidence. Market interest rates continued to fall, as investors became more pessimistic about the economic outlook. Based on these developments, the Committee held a telephone conference call on January 3, 2001, and decided to cut the intended federal funds rate ½ percentage point. Equity prices surged on the announcement, and the Treasury yield curve steepened considerably, apparently because market participants became more confident that a prolonged downturn in economic growth would likely be forestalled. Following the policy easing, the Board of Governors approved a decrease in the discount rate of a total of ½ percentage point.

The Committee's action improved financial conditions to a degree. Over the next few weeks, equity prices rose, on net. Investors seemed to become less wary of credit risk, and yield spreads narrowed across most corporate bonds even as the issuance of these

securities picked up sharply. But in some other respects, investors remained cautious, as evidenced by widening spreads in commercial paper markets. Incoming data pointed to further weakness in the manufacturing sector and a sharp decline in consumer confidence. Moreover, slower U.S. growth appeared to be spilling over to several important trading partners. In late January, the FOMC cut the intended federal funds rate ½ percentage point while the Board of Governors approved a decrease in the discount rate of an equal amount. Because of the significant erosion of consumer and business confidence and the need for additional adjustments to production to work off elevated inventory levels, the FOMC indicated that the risks to the outlook continued to be weighted toward economic weakness.

Economic Projections for 2001

Although the economy appears likely to be sluggish over the near term, the members of the Board of Governors and the Reserve Bank presidents expect stronger conditions to emerge as the year progresses. For 2001 overall, the central tendency of their forecasts of real GDP growth is 2 percent to 2½ percent, measured as the change from the fourth quarter of 2000 to the fourth quarter of 2001. With growth falling short of its potential rate, especially in the first half of this year, unemployment is expected to move up a little further. Most of the governors and Reserve Bank presidents are forecasting that the average unemployment rate in the fourth quarter of this year will be about 4½ percent, still quite low by historical standards.

The rate of economic expansion over the near term will depend importantly on the speed at which inventory overhangs that developed over the latter part of 2000 are worked off. Gains in information technology have no doubt enabled businesses to respond more quickly to a softening of sales, which has steepened the recent production cuts but should also damp the buildup in inventories and facilitate a turnaround. The motor vehicle industry made some progress toward reducing excess stocks in January owing to a combination of stronger sales and a further sharp cutback in assemblies. In other parts of manufacturing, the sizable reductions in production late last year suggest that producers in general were moving quickly to get output into better alignment with sales. Nevertheless, stocks at year-end were above desired levels in a number of industries.

Once inventory imbalances are worked off, production should become more closely linked to the prospects for sales. Household and business expenditures have decelerated markedly in recent months, and uncertainties about how events might unfold are considerable. But, responding in part to the easing of monetary policy, financial markets are shifting away from restraint, and this shift should create a more favorable underpinning to the expected pickup in the economy as the year progresses. The sharp drop in mortgage interest rates since May of last year appears to have stemmed the decline in housing activity; it also has enabled many households to refinance existing mortgages at lower rates, an action that should free up cash for added spending. Conditions of business finance also have eased to some degree. Interest rates on investment-grade corporate bonds have recently fallen to their lowest levels in about 1½ years. Moreover, the premiums required of bond issuers that are perceived to be at greater risk have dropped back in recent weeks from the elevated levels of late 2000. As credit conditions have eased, firms have issued large amounts of corporate bonds so far in 2001. However, considerable caution is evident in the commercial paper market and among banks, whose loan officers have reported a further tightening of lending conditions since last fall. In equity markets, prices have recently dropped in response to negative reports on corporate earnings, reversing the gains that took place in January.

The restraint on domestic demand from high energy prices is expected to ease in coming quarters. Natural gas prices have dropped back somewhat in recent weeks as the weather has turned milder, and crude oil prices also are down from their peaks. Although these prices could run up again in conjunction with either a renewed surge in demand or disruptions in supply, participants in futures markets are anticipating that prices will be trending gradually lower over time. A fall in energy prices would relieve

Economic projections for 2001

Percent

Indicator	Memo: 2000 actual	Federal Reserve governors and Reserve Bank presidents	
		Range	Central tendency
Change, fourth quarter to fourth quarter[1]			
Nominal GDP	5.9	3¾–5¼	4–5
Real GDP[2]	3.5	2–2¾	2–2½
PCE chain-type price index	2.4	1¾–2½	1¾–2¼
Average level, fourth quarter			
Civilian unemployment rate	4.0	4½–5	About 4½

1. Change from average for fourth quarter of 2000 to average for fourth quarter of 2001.
2. Chain-weighted.

cost pressures on businesses to some degree and would leave more discretionary income in the hands of households.

How quickly investment spending starts to pick up again will depend not only on the cost of finance but also on the prospective rates of return to capital. This past year, expectations regarding the prospects of some high-tech companies clearly declined, and capital spending seems unlikely to soon regain the exceptional strength that was evident in the latter part of the 1990s and for a portion of last year. From all indications, however, technological advance still is going forward at a rapid pace, and investment will likely pick up again if, as expected, the expansion of the economy gets back on more solid footing. Private analysts are still anticipating high rates of growth in corporate earnings over the long-run, suggesting that the current sluggishness of the economy has not undermined perceptions of favorable long-run fundamentals.

The degree to which increases in exports might help to support the U.S. economy through a stretch of sluggishness has become subject to greater uncertainty recently because foreign economies also seem to have decelerated toward the end of last year. However, the expansion of imports has slowed sharply, responding in part to the softening of domestic demand growth. In effect, some of the slowdown in demand in this country is being shifted to foreign suppliers, implying that the adjustments required of domestic producers are not as great as they otherwise would have been.

In adjusting labor input to the slowing of the economy, businesses are facing conflicting pressures. Speedy adjustment of production and ongoing gains in efficiency argue for cutbacks in labor input, but companies are also reluctant to lay off workers that have been difficult to attract and retain in the tight labor market conditions of the past few years. In the aggregate, the balance that has been struck in recent months has led, on net, to slower growth of employment, cutbacks in the length of the average workweek, and, in January of this year, a small increase in the unemployment rate.

Inflation is not expected to be a pressing concern over the coming year. Most of the governors and Reserve Bank presidents are forecasting that the rise in the chain-type price index for personal consumption expenditures will be smaller than the price rise in 2000. The central tendency of the range of forecasts is 1¾ percent to 2¼ percent. Inflation should be restrained this coming year by an expected downturn in energy prices. In addition, the reduced pressure on resources that is associated with the slowing of the economy should help damp increases in labor costs and prices.

Economic and Financial Developments in 2000 and Early 2001

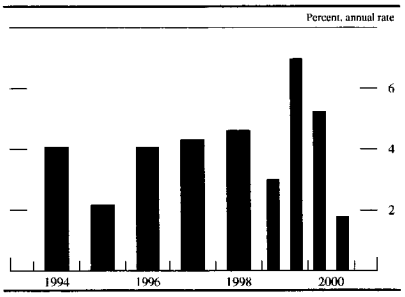
The combination of exceptionally strong growth in the first half of 2000 and subdued growth in the second half resulted in a rise in real GDP of about 3½ percent for the year overall. Domestic demand started out the year with incredible vigor but decelerated thereafter and was sluggish by year-end. Exports surged for three quarters and then faltered. In the labor market, growth of employment slowed over the year but was sufficient to keep the unemployment rate around the lowest sustained level in more than thirty years.

Core inflation remained low in 2000 in the face of sharp increases in energy prices. Although the chain-type price index for personal consumption expenditures (PCE) moved up faster than in 1999, it showed only a slight step-up in the rate of increase after excluding the prices of food and energy. Unit labor costs picked up moderately, adding to the cost pressures from energy, but the ability of businesses to raise prices was restrained by the slowing of the economy and the persistence of competitive pricing conditions.

The Household Sector

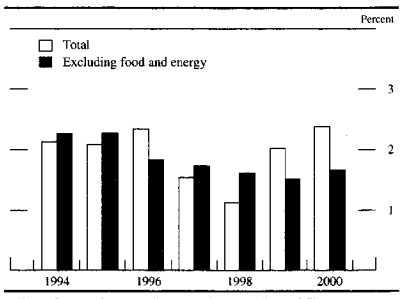
Personal consumption expenditures increased 4½ percent in real terms in 2000 after having advanced

Change in real GDP



NOTE. Here and in subsequent charts, except as noted, annual changes are measured from Q4 to Q4, and change for a half-year is measured between its final quarter and the final quarter of the preceding period.

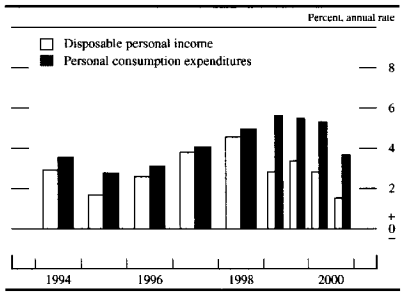
Change in PCE chain-type price index



NOTE. Data are for personal consumption expenditures (PCE).

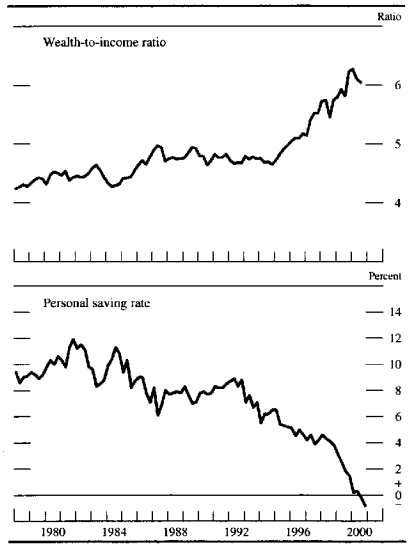
5 percent in 1998 and 5½ percent in 1999. A large portion of last year's gain came in the first quarter, when consumption moved ahead at an unusually rapid pace. The increase in consumer spending over the remainder of the year was moderate, averaging about 3½ percent at an annual rate. Consumer outlays for motor vehicles and parts surged to a record high early in 2000 but reversed that gain over the remainder of the year; sales of vehicles tailed off especially sharply as the year drew to a close. Real consumer purchases of gasoline fell during the year in response to the steep run-up in gasoline prices. Most other broad categories of goods and services posted sizable gains over the year as a whole, but results late in the year were mixed: Real outlays for goods other than motor vehicles eked out only a small gain in the fourth quarter, while real outlays for consumer services rose very rapidly, not only because of higher outlays for home heating fuels during a spell of colder-than-usual weather but also because of continued strength in real outlays for other types of services.

Change in real income and consumption



Changes in income and wealth provided less support to consumption in 2000 than in other recent years. Real disposable personal income rose about 2¼ percent last year after a gain of slightly more than 3 percent in 1999. Disposable income did not rise quite as much in nominal terms as it had in 1999, and rising prices eroded a larger portion of the nominal gain. Meanwhile, the net worth of households turned down in 2000 after having climbed rapidly for several years, as the effect of a decline in the stock market was only partially offset by a sizable increase in the value of residential real estate. With the peak in stock prices not coming until the year was well under way, and with valuations having previously been on a sharp upward course for an extended period, stock market wealth may well have continued to exert a strong positive effect on consumer spending for several months after share values had topped out. As time passed, however, the impetus to consumption from this source most likely diminished. The personal saving rate, which had dropped sharply during

Wealth and saving



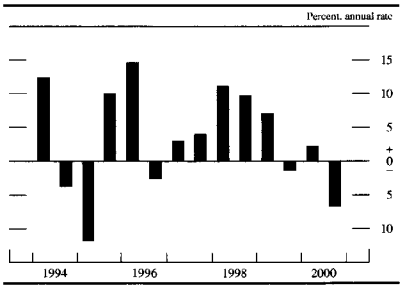
NOTE. The wealth-to-income ratio is the ratio of household net worth to disposable personal income and extends through 2000:Q3; the personal saving rate extends through 2000:Q4.

the stock market surge of previous years, fell further in 2000, but the rate of decline slowed, on average, after the first quarter.

Even with real income growth slowing and the stock market turning down, consumers maintained a high degree of optimism through most of 2000 regarding the state of the economy and the economic outlook. Indexes of sentiment from both the University of Michigan Survey Research Center and the Conference Board rose to new peaks in the first quarter of the year, and the indexes remained close to those levels for several more months. Survey readings on personal finances, general business conditions, and the state of the labor market remained generally favorable through most of the year. As of late autumn, only mild softness could be detected. Toward year-end, however, confidence in the economy dropped sharply. Both of the indexes of confidence showed huge declines over the two months ended in January. The marked shift in attitudes toward year-end probably was brought on by a combination of developments, including the weakness in the stock market over the latter part of the year and more frequent reports of layoffs.

Real outlays for residential investment declined about 2¼ percent, on net, over the course of 2000, as construction of new housing dropped back from the elevated level of the previous year. Investment in housing was influenced by a sizable swing in mortgage interest rates as well as by slower growth of employment and income and the downturn in the stock market. After having moved up appreciably in 1999, mortgage rates continued to advance through the first few months of 2000. By mid-May, the average commitment rate on conventional fixed-rate mortgages was above 8½ percent, up roughly 1½ percentage points from the level of a year earlier.

Change in real residential investment



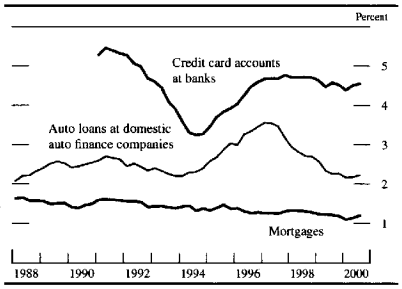
New construction held up even as rates were rising in 1999 and early 2000, but it softened in the spring of last year. Starts and permits for single-family houses declined from the first quarter to the third quarter.

But even as homebuilding activity was turning down, conditions in mortgage markets were moving back in a direction more favorable to housing. From the peak in May, mortgage interest rates fell substantially over the remainder of the year and into the early part of 2001, reversing the earlier increases. Sales of new homes firmed as rates turned down, and prices of new houses continued to trend up faster than the general rate of inflation. Inventories of unsold new homes held fairly steady over the year and were up only moderately from the lows of 1997 and 1998. With demand well-maintained and inventories under control, activity stabilized. Starts and permits for single-family houses in the fourth quarter of 2000 were up from the average for the third quarter.

Households continued to borrow at a brisk pace last year, with household debt expanding an estimated 8¾ percent, well above the growth rate of disposable personal income. Consumer credit increased rapidly early in the year, boosted by strong outlays on durable goods; but as consumer spending cooled later in the year, the expansion of consumer credit slowed. For the year as a whole, consumer credit is estimated to have advanced more than 8½ percent, up from the 7 percent pace of 1999. Households also took on large amounts of mortgage debt, which grew an estimated 9 percent last year, reflecting the solid pace of home sales.

With the rapid expansion of household debt in recent years, the household debt service burden has

Delinquency rates on household loans



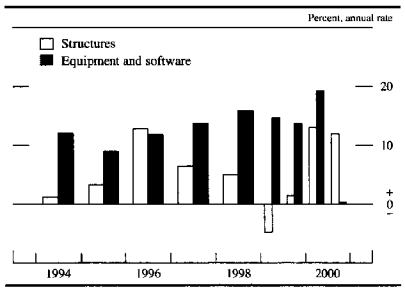
NOTE. The data are quarterly and extend through 2000:Q3. Data on credit-card delinquencies are from bank Call Reports; data on auto loan delinquencies are from the Big Three automakers; data on mortgage delinquencies are from the Mortgage Bankers Association.

increased to levels not seen since the late 1980s. Even so, with unemployment low and household net worth high, the credit quality of the household sector appears to have deteriorated little last year. Personal bankruptcy filings held relatively steady and remain well below their peak from several years ago. Delinquency rates on home mortgages, credit cards, and auto loans have edged up in recent quarters but are at most only slightly above their levels of the fourth quarter of 1999. Lenders did not appear to be significantly concerned about the credit quality of the household sector for most of last year, although some lenders have become more cautious of late. According to surveys of banks conducted by the Federal Reserve, few commercial banks tightened lending conditions on consumer installment loans and mortgage loans to households over the first three quarters of 2000. However, the most recent survey indicates that a number of banks tightened standards and terms on consumer loans, particularly non-credit-card loans, over the past several months, perhaps because of some uneasiness about how the financial position of households will hold up as the pace of economic activity slows.

The Business Sector

Real business fixed investment rose 10 percent in 2000 according to the advance estimate from the Commerce Department. Investment spending shot ahead at an annual rate of 21 percent in the first quarter of the year; its strength in that period came, in part, from high-tech purchases that had been delayed from 1999 by companies that did not want their operating systems to be in a state of change at the onset of the new millennium. Expansion of investment was slower but still relatively brisk in the second and third quarters, at annual rates of about 15 percent and 8 percent respectively. In the fourth quarter, however, capital spending downshifted abruptly in response to the slowing economy, tightening financial conditions, and rising concern about the prospects for profits; the current estimate shows real investment outlays having fallen at an annual rate of 1½ percent in that period.

Change in real business fixed investment

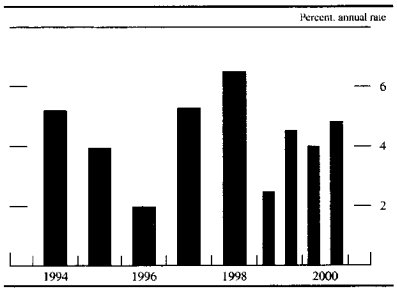


Fixed investment in equipment and software was up 9½ percent in 2000, with the bulk of the gain coming in the first half of the year. Spending slowed to a rate of growth of about 5½ percent in the third quarter and then declined in the fourth quarter. Business investment in motor vehicles fell roughly 15 percent, on net, during 2000, with the largest portion of the drop coming in the fourth quarter; the declines in real outlays on larger types of trucks were particularly sizable. Investment in industrial equipment, tracking the changing conditions in manufacturing, also fell in the fourth quarter but was up appreciably for the year overall. Investment in high-tech equipment decelerated over the year but was still expanding in the fourth quarter: Real outlays for telecommunications equipment posted exceptionally large gains in the first half of the year, flattened out temporarily in the third quarter, and expanded again in the fourth. Spending on computers and peripherals increased, in real terms, at an average rate of about 45 percent over the first three quarters of the year but slowed abruptly to a 6 percent rate of expansion in the year's final quarter, the smallest quarterly advance in several years.

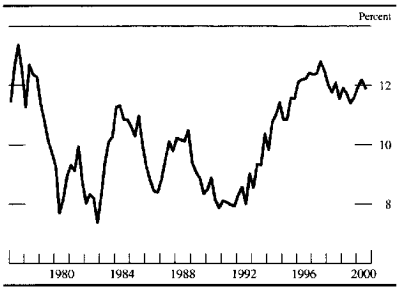
Investment in nonresidential structures rose substantially in 2000, about 12½ percent in all, after having declined 1¾ percent in 1999. Investment in factory buildings, which had fallen more than 20 percent in 1999 in an apparent reaction to the economic disruptions abroad and the associated softness in demand for U.S. exports, more than recouped that decline over the course of 2000. Real outlays for office construction, which had edged down in 1999 after several years of strong advance, got back on track in 2000, posting a gain of about 13½ percent. Real investment in commercial buildings other than offices was little changed after moderate gains in the two previous years. Spending on structures used in drilling for energy strengthened in response to the surge in energy prices.

Business inventory investment was subdued early in the year when final sales were surging; aggregate inventory–sales ratios, which have trended lower in recent years as companies became more efficient at managing stocks, edged down further. As sales moderated in subsequent months, production growth did

Change in real nonfarm business inventories



Before-tax profits as a share of GDP



NOTE. Profits from domestic operations of nonfinancial corporations, with inventory valuation and capital consumption adjustments, divided by gross domestic product of nonfinancial corporate sector. The data extend through 2000:Q3.

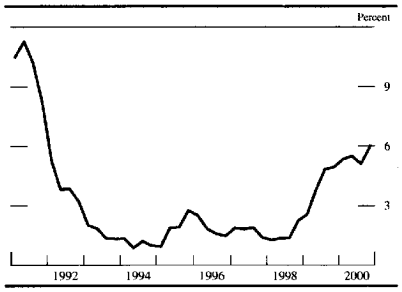
not decelerate quite as quickly, and inventories began to rise more rapidly. Incoming information through the summer suggested that some firms might be encountering a bit of backup in stocks but that the problems were not severe overall. In the latter part of the year, however, inventory–sales ratios turned up, indicating that more serious overhangs were developing. Responding to the slowing of demand and the increases in stocks, manufacturers reduced output in each of the last three months of the year by successively larger amounts. Businesses also began to clamp down on the flow of imports. Despite those adjustments, stocks in a number of domestic industries were likely well above desired levels as the year drew to a close.

The Commerce Department's compilation of business profits currently extends only through the third quarter of 2000, but these data show an evolving pattern much like that of other economic data. After having risen at an annual rate of more than 16 percent in the first half of the year, U.S. corporations' economic profits—that is, book profits with inventory and capital consumption adjustments—slowed to less than a 3 percent rate of growth in the third quarter. Profits from operations outside the United States continued to increase rapidly in the third quarter. However, economic profits from domestic operations edged down in that period, as solid gains for financial corporations were more than offset by a 4 percent rate of decline in the profits of nonfinancial corporations. Profits of nonfinancial corporations as a share of their gross nominal output rose about ½ percentage point in the first half of 2000 but reversed part of that gain in the third quarter. Earnings reports for the fourth quarter indicate that corporate profits fell sharply in that period.

Business debt expanded strongly over the first half of 2000, propelled by robust capital spending as well as by share repurchases and cash-financed merger activity. The high level of capital expenditures outstripped internally generated funds by a considerable margin despite continued impressive profits. To meet their borrowing needs, firms tapped commercial paper, bank loans, and corporate bonds in volume in the first quarter. The rapid pace of borrowing continued in the second quarter, although borrowers relied more heavily on bank loans and commercial paper to meet their financing needs in response to a rise in longer-term interest rates.

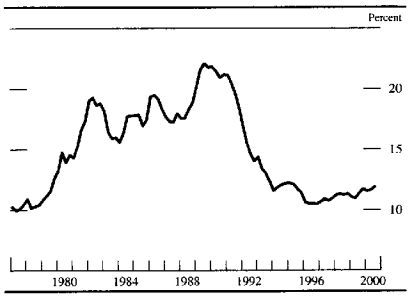
Business borrowing slowed appreciably in the second half of the year. As economic growth moderated and profits weakened, capital spending decelerated

Default rate on outstanding junk bonds



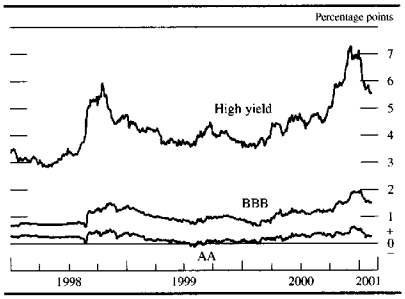
NOTE. The data are quarterly; the series shown is a four-quarter moving average.

Net interest payments of nonfinancial corporations relative to cash flow



NOTE. The data are quarterly and extend through 2000:Q3.

Spreads of corporate bond yields over the ten-year swap rate



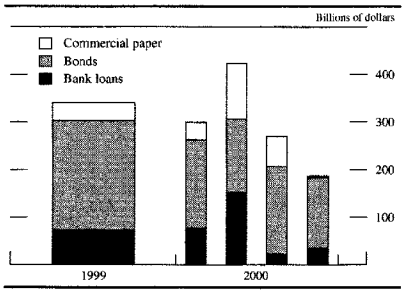
NOTE. The data are daily and extend through February 8, 2001. The spreads compare the yields on the Merrill Lynch AA, BBB, and 175 indexes with the ten-year swap rate.

sharply. In addition, firms held down their borrowing needs by curbing their buildup of liquid assets, which had been accumulating quite rapidly in previous quarters. Borrowing may have been deterred by a tightening of financial conditions for firms with lower credit ratings, as investors and lenders apparently became more concerned about credit risk. Those concerns likely were exacerbated by indications that credit quality had deteriorated at some businesses. The default rate on high-yield bonds continued to climb last year, reaching its highest level since 1991. Some broader measures of credit quality also slipped. The amount of nonfinancial debt downgraded by Moody's Investor Services in 2000 was more than twice as large as the amount upgraded, and the delinquency rate on business loans at commercial banks continued to rise over the year. But while some firms were clearly having financial difficulties, many other firms remained soundly positioned to service their debt. Indeed, the ratio of net interest payments to cash flow for all nonfinancial firms moved only modestly above the relatively low levels of recent years.

As concerns about risk mounted, lenders became more cautious about extending credit to some borrowers. An increasingly large proportion of banks reported firming terms and standards on business loans over the course of the year. In the corporate bond market, yield spreads on high-yield and lower-rated investment-grade bonds, measured relative to the ten-year swap rate, began climbing sharply in September and by year-end were at levels well above those seen in the fall of 1998. Lower-rated commercial paper issuers also had to pay unusually large premiums late in the year, particularly on paper spanning the year-end. As financial conditions became more stingent, issuance of high-yield debt was cut back sharply in the fourth quarter, although investment-grade bond issuance remained strong. Bank lending to businesses was also light at that time, and net issuance of commercial paper came to a standstill. In total, the debt of nonfinancial businesses expanded at an estimated 5½ percent rate in the fourth quarter, less than half the pace of the first half of the year. The slowdown in borrowing in the latter part of the year damped the growth of nonfinancial business debt over 2000, although it still expanded an estimated 8¾ percent.

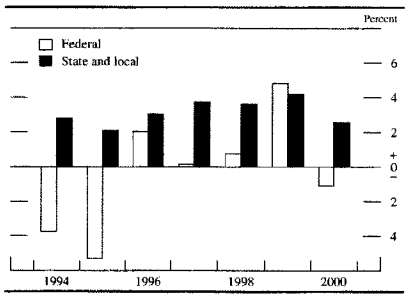
In early 2001, borrowing appears to have picked up from its sluggish fourth-quarter pace. Following the easing of monetary policy in early January, yield spreads on corporate bonds reversed a considerable portion of their rise over the latter part of 2000, with spreads on high-yield bonds narrowing more than a percentage point. As yields declined, corporate bond issuance picked up, and even some below-investment grade issues were brought to the market. In contrast, investors in the commercial paper market apparently became more concerned about credit risk, partly in response to the defaults of two California utilities on some bonds and commercial paper in mid-January related to the difficulties in the electricity market in that state. After those defaults, spreads between top-tier and second-tier commercial paper widened further, and investors became more discriminating even within the top rating tier. Some businesses facing resistance in the commercial paper market reportedly met their financing needs by tapping backup credit lines at banks.

Major components of net business financing



NOTE. Seasonally adjusted annual rate for nonfarm nonfinancial corporate businesses. Components for 2000:Q4 are estimated.

Change in real government expenditures on consumption and investment



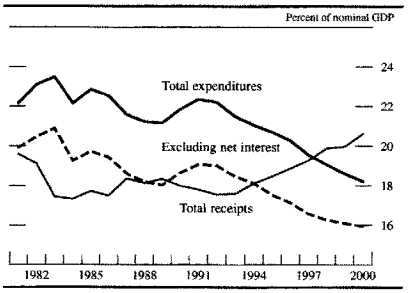
Growth in commercial mortgage debt slowed last year to an estimated rate of 9¼ percent, and issuance of commercial-mortgage-backed securities in 2000 fell back from its 1999 pace. Spreads on lower-rated commercial-mortgage-backed securities over swap rates widened by a small amount late in the year, and banks on net reported tightening their standards on commercial real estate credit over the year. Nevertheless, fundamentals in the commercial real estate market remain solid, and delinquency rates on commercial mortgages stayed around their historic lows.

The Government Sector

Real consumption and investment expenditures of federal, state, and local governments, the part of government spending that is included in GDP, rose only 1¼ percent in the aggregate during 2000. The increase was small partly because the consumption and investment expenditures of the federal government had closed out 1999 with a large increase in advance of the century date change. Federal purchases in the fourth quarter of 2000 were about 1 percent below the elevated level at year-end 1999. Abstracting from the bumps in the spending data, the underlying trend in real federal consumption and investment outlays appears to have been mildly positive over the past couple of years. The consumption and investment expenditures of state and local governments rose about 2½ percent in 2000 after an unusually large increase of 4¼ percent in 1999. The slowdown in spending was mainly a reflection of a downshift in government investment in structures, which can be volatile from year to year and had posted a large gain in 1999.

Total federal spending, as reported in the unified budget, rose 5 percent in fiscal year 2000, the largest increase in several years. A portion of the rise stemmed from shifts in the timing of some outlays in a way that tended to boost the tally for fiscal 2000. But even allowing for those shifts, the rise in spending would have exceeded the increases of other recent years. Outlays accelerated for most major functions, including defense, health, social security, and income security. Of these, spending on health—about three-fourths of which consists of outlays for Medicaid—recorded the biggest increase. Medicaid grants to the states were affected last fiscal year by increased funding for the child health insurance initiative that was passed in 1997 and by a rise in the portion of Medicaid expenses picked up by the federal government. Spending on agriculture rose very sharply for a third year but not as rapidly as in fiscal 1999. The ongoing paydown of debt by the federal government led to a

Federal receipts and expenditures



NOTE. The data are from the unified budget and are for fiscal years.

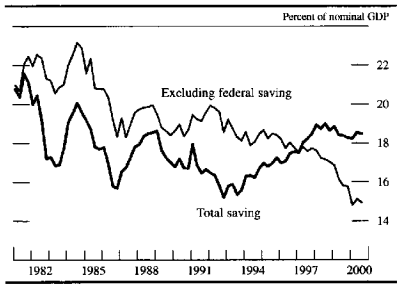
decline of nearly 3 percent in net interest payments in fiscal 2000 after a somewhat larger drop in these payments in fiscal 1999.

Federal receipts increased 10¾ percent in fiscal year 2000, the largest advance in more than a decade. The increase in receipts from taxes on the income of individuals amounted to more than 14 percent. In most recent years, these receipts have grown much faster than nominal personal income as measured in the national income and product accounts. One important factor in the difference is that rising levels of income and a changing distribution have shifted more taxpayers into higher tax brackets; another is an increase in revenues from taxes on capital gains and other items that are not included in personal income. Receipts from the taxation of corporate profits also moved up sharply in fiscal 2000, rebounding from a small decline the previous fiscal year. With federal receipts rising much faster than spending, the surplus in the unified budget rose to $236 billion in fiscal 2000, nearly double that of fiscal 1999. The on-budget surplus, which excludes surpluses accumulating in the social security trust fund, rose from essentially zero in fiscal 1999 to $86 billion in fiscal 2000. Excluding net interest payments, a charge resulting from past deficits, the surplus in fiscal 2000 was about $460 billion.

Federal saving, which is basically the federal budget surplus adjusted to conform to the accounting practices followed in the national income and product accounts, amounted to about 3½ percent of nominal GDP over the first three quarters of 2000. This figure has been rising roughly 1 percentage point a year over the past several years. Mainly because of that rise in federal saving, the national saving rate has been running at a higher level in recent years than was observed through most of the 1980s and first half of the 1990s, even as the personal saving rate has plunged. The rise in federal saving has kept interest rates lower than they otherwise would have been and has contributed, in turn, to the rapid growth of capital investment and the faster growth of the economy's productive potential.

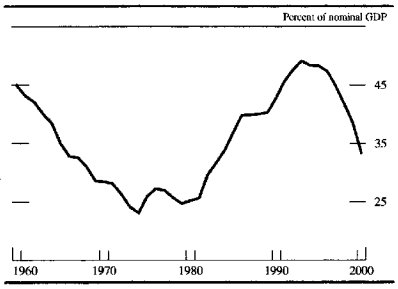
The burgeoning federal budget surplus allowed the Treasury to pay down its debt last year at an even faster pace than in recent years. As of the end of fiscal 2000, the stock of marketable Treasury debt outstanding had fallen about $500 billion from its peak in 1997. The existing fiscal situation and the anticipation that budget surpluses would continue led the Treasury to implement a number of debt management changes during 2000, many designed to preserve the liquidity of its securities. In particular, the Treasury sought to maintain large and regular offerings of new securities at some key maturities, because such attributes are thought to importantly contribute to market liquidity. In part to make room for continued sizable auctions of new securities, the Treasury initiated a debt buyback program through which it can purchase debt that it previously issued. In total, the Treasury conducted twenty buyback operations in 2000, repurchasing a total of $30 billion par value of securities with maturities ranging from twelve to twenty-seven years. Those operations were generally well received and caused little disruption to the market. Going forward, the Treasury intends to conduct two buyback operations per month and expects to repurchase about $9 billion par value of

National saving



NOTE. National saving comprises the gross saving of households, businesses, and governments. The data extend through 2000:Q3.

Federal government debt held by the public



NOTE. The data are as of the end of the fiscal year. Excludes debt held in federal government accounts and by the Federal Reserve System.

outstanding securities in each of the first two quarters of 2001.

Despite conducting buybacks on that scale, the Treasury had to cut back considerably its issuance of new securities. To still achieve large sizes of individual issues at some maturities, the Treasury implemented a schedule of regular reopenings—in which it auctions additional amounts of a previously issued security instead of issuing a new one—for its five-, ten-, and thirty-year instruments. Under that schedule, every other auction of each of those securities is a smaller reopening of the previously auctioned security. At other maturities, the Treasury reduced the sizes of its two-year notes and inflation-indexed securities and eliminated the April auction of the thirty-year inflation-indexed bond. In addition, the Treasury recently announced that it would stop issuing one-year bills following the February auction, after having cut back the frequency of new offerings of that security last year.

These reductions in the issuance of Treasury securities have caused the Federal Reserve to modify some of its procedures for obtaining securities at Treasury auctions, as described in detail below. In addition, the Treasury made changes in the rules for auction participation by foreign and international monetary authority (FIMA) accounts, which primarily include foreign central banks and governmental monetary entities. The new rules, which went into effect on February 1, 2001, impose limits on the size of non-competitive bids from individual FIMA accounts and on the total amount of such bids that will be awarded at each auction. These limits will leave a larger pool of securities available for competitive bidding at the auctions, helping to maintain the liquidity and efficiency of the market. Moreover, FIMA purchases will be subtracted from the total amount of securities offered, rather than being added on as they were in some previous instances, making the amount of funds raised at the auction more predictable.

State and local government debt increased little in 2000. Gross issuance of long-term municipal bonds was well below the robust pace of the past two years. Refunding offerings were held down by higher interest rates through much of the year, and the need to raise new capital was diminished by strong tax revenues. Net issuance was also damped by an increase in the retirement of bonds from previous refunding activity. Credit quality in the municipal market improved considerably last year, with credit upgrades outnumbering downgrades by a substantial margin. The only notable exception was in the not-for-profit health care sector, where downgrades predominated.

The External Sector

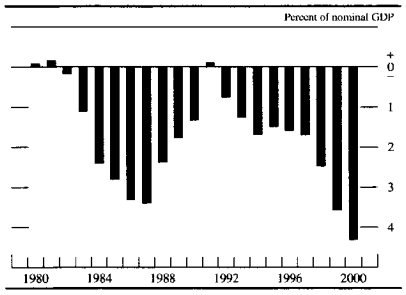
Trade and Current Account

The current account deficit reached $452 billion (annual rate) in the third quarter of 2000, or 4.5 percent of GDP, compared with $331 billion and 3.6 percent for 1999. Most of the expansion in the current account deficit occurred in the balance of trade in goods and services. The deficit on trade in goods and services widened to $383 billion (annual rate) in the third quarter from $347 billion in the first half of the year. Data for trade in October and November suggest that the deficit may have increased further in the fourth quarter. Net payments on investments were a bit less during the first three quarters of 2000 than in the second half of 1999 owing to a sizable increase in income receipts from direct investment abroad.

U.S. exports of goods and services rose an estimated 7 percent in real terms during 2000. Exports surged during the first three quarters, supported by a pickup in economic activity abroad that began in 1999. By market destination, U.S. exports were strongest to Mexico and countries in Asia. About 45 percent of U.S. goods exports were capital equipment, 20 percent were industrial supplies, and roughly 10 percent each were agricultural, automotive, consumer, and other goods. Based on data for October and November, real exports are estimated to have declined in the fourth quarter, reflecting in part a slowing of economic growth abroad. This decrease was particularly evident in exports of capital goods, automotive products, consumer goods, and agricultural products.

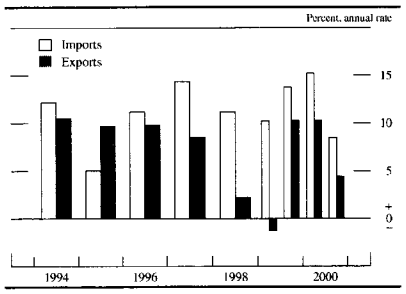
The quantity of imported goods and services expanded rapidly during the first three quarters of

U.S. current account



NOTE. The observation for 2000 is the average of the first three quarters.

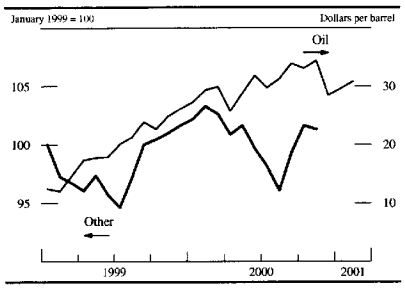
Change in real imports and exports of goods and services



2000, reflecting the continuing strength of U.S. domestic demand and the effects of past dollar appreciation on price competitiveness. Increases were widespread among trade categories. Based on data for October and November, real imports of goods and services are estimated to have risen only slightly in the fourth quarter. Moderate increases in imported consumer and capital goods were partly offset by declines in other categories of imports, particularly industrial supplies and automotive products, for which domestic demand had softened. The price of non-oil imports is estimated to have increased by less than 1 percent during 2000.

The price of imported oil rose nearly $7 per barrel over the four quarters of 2000. During the year, oil prices generally remained high and volatile, with the spot price of West Texas intermediate (WTI) crude fluctuating between a low of $24 per barrel in April

Prices for oil and other commodities



NOTE. The data are monthly: the last observation for oil is the average of trading days through February 8, 2001; the last observation for other commodities is November 2000. The oil price is the spot price of West Texas intermediate crude oil. The price for other commodities is a weighted average of thirty-nine nonfuel primary-commodity prices from the International Monetary Fund.

and a high above $37 per barrel in September. Strong demand—driven by robust world economic growth—kept upward pressure on oil prices even as world supply increased considerably. Over the course of 2000, OPEC raised its official production targets by 3.7 million barrels per day, reversing the production cuts made in the previous two years. Oil production from non-OPEC sources rebounded as well. During the last several weeks of 2000, oil prices fell sharply as market participants became convinced that the U.S. economy was slowing. In early 2001, however, oil prices moved back up when OPEC announced a planned production cut of 1.5 million barrels per day.

Financial Account

The counterpart to the increased U.S. current account deficit in 2000 was an increase in net capital inflows. As in 1999, U.S. capital flows in 2000 reflected the relatively strong cyclical position of the U.S. economy for most of the year and the global wave of corporate mergers. Foreign private purchases of U.S. securities were exceptionally robust—well in excess of the record set in 1999. The composition of U.S. securities purchased by foreigners continued the shift away from Treasuries as the U.S. budget surplus, and the attendant decline in the supply of Treasuries, lowered their yield relative to other debt. Last year private foreigners sold, on net, about $50 billion in Treasury securities, compared with net sales of $20 billion in 1999. Although sizable, these sales were slightly less than what would have occurred had foreigners reduced their holdings in proportion to the reduction in Treasuries outstanding. The increased sale of Treasuries was fully offset by larger foreign purchases of U.S. securities issued by government-sponsored agencies. Net purchases of agency securities topped $110 billion, compared with the previous record of $72 billion set in 1999. In contrast to the shrinking supply of Treasury securities, U.S. government-sponsored agencies accelerated the pace of their debt issuance. Private foreign purchases of U.S. corporate debt grew to $180 billion, while net purchases of U.S. equities ballooned to $170 billion compared with $108 billion in 1999.

The pace of foreign direct investment inflows in the first three quarters of 2000 also accelerated from the record pace of 1999. As in the previous two years, direct investment inflows were driven by foreign acquisition of U.S. firms, reflecting the global strength in merger and acquisition activity. Of the roughly $200 billion in direct investment inflows in the first three quarters, about $100 billion was

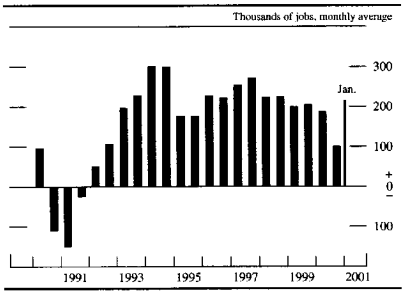
directly attributable to merger activity. Many of these mergers were financed, at least in part, by an exchange of equity, in which shares in the U.S. firm were swapped for equity in the acquiring firm. Although U.S. residents generally appear to have sold a portion of the equity acquired through these swaps, the swaps likely contributed significantly to the $97 billion capital outflow attributed to U.S. acquisition of foreign securities. U.S. direct investment abroad was also boosted by merger activity and totaled $117 billion in the first three quarters of 2000, a slightly faster pace than that of 1999.

Capital inflows from foreign official sources totaled $38 billion in 2000—a slight increase from 1999. Nearly all of the official inflows were attributable to reinvested interest earnings. Modest official sales of dollar assets associated with foreign exchange intervention were offset by larger inflows from some non-OPEC oil exporting countries, which benefited from the elevated price of oil.

The Labor Market

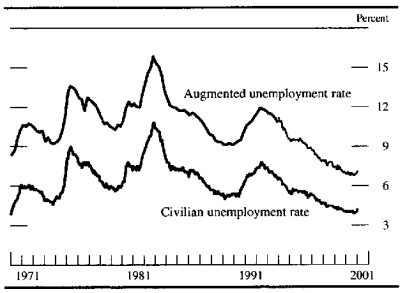
Nonfarm payroll employment increased about 1½ percent in 2000, measured on a December-to-December basis. The job count had risen slightly more than 2 percent in 1999 and roughly 2½ percent a year over the 1996–98 period. Over the first few months of 2000, the expansion of jobs proceeded at a faster pace than in 1999, boosted both by the federal government's hiring for the decennial Census and by a somewhat faster rate of job creation in the private sector. Indications of a moderation in private hiring started to emerge toward mid-year, but because of volatility of the incoming data a slowdown could not be identified with some confidence until late summer.

Net change in payroll employment



NOTE. Private nonfarm.

Measures of labor utilization



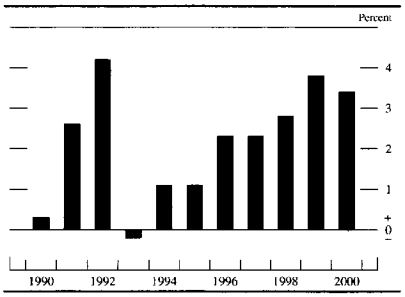
NOTE. The augmented unemployment rate is the number of unemployed plus those who are not in the labor force and want a job, divided by the civilian labor force plus those who are not in the labor force and want a job. The break in data at January 1994 marks the introduction of a redesigned survey; data after that point are not directly comparable with those of earlier periods. The data extend through January 2001.

Over the remainder of the year monthly increases in private employment stepped down further. Job growth came almost to a stop in December, when severe weather added to the restraint from a slowing economy. In January of this year, employment picked up, but the return of milder weather apparently accounted for a sizable portion of the gain.

Employment rose moderately in the private service-producing sector of the economy in 2000, about 2 percent overall after an increase of about 3 percent in 1999. In the fourth quarter, however, hiring in the services-producing sector was relatively slow, in large part because of a sizable decline in the number of jobs in personnel supply—a category that includes temporary help agencies. Employment in construction increased about 2½ percent in 2000 after several years of gains that were considerably larger. The number of jobs in manufacturing was down for a third year, owing to reductions in factory employment in the second half of the year, when manufacturers were adjusting to the slowing of demand. Those adjustments in manufacturing may also have involved some cutbacks in the employment of temporary hires, which would help to account for the sharp job losses in personnel supply. The average length of the workweek in manufacturing was scaled back as well over the second half of the year.

The slowing of the economy did not lead to any meaningful easing in the tightness of the labor market in 2000. The household survey's measure of the number of persons employed rose 1 percent, about in line with the expansion of labor supply. On net, the unemployment rate changed little; its fourth-quarter

Change in output per hour

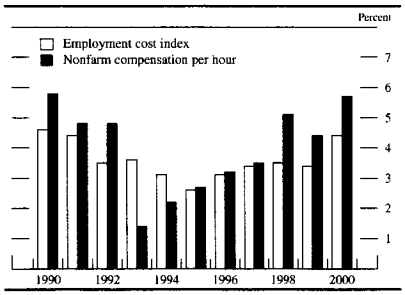


NOTE. Nonfarm business sector.

average of 4.0 percent was down just a tenth of a percentage point from the average unemployment rate in the fourth quarter of 1999. The flatness of the rate through the latter half of 2000, when the economy was slowing, may have partly reflected a desire of companies to hold on to labor resources that had been difficult to attract and retain in the tight labor market of recent years. January of this year brought a small increase in the rate, to 4.2 percent.

Productivity continued to rise rapidly in 2000. Output per hour in the nonfarm business sector was up about 3½ percent over the year as a whole. Sizable gains in efficiency continued to be evident even as the economy was slowing in the second half of the year. Except for 1999, when output per hour rose about 3¾ percent, the past year's increase was the largest since 1992, a year in which the economy was in cyclical recovery from the 1990–91 recession. Cutting through the year-to-year variations in measured productivity, the underlying trend still appears to have traced out a pattern of strong acceleration since the middle part of the 1990s. Support for a step-up in the trend has come from increases in the amount of capital per worker—especially high-tech capital—and from organizational efficiencies that have resulted in output rising faster than the combined inputs of labor and capital.

Measures of the change in hourly compensation

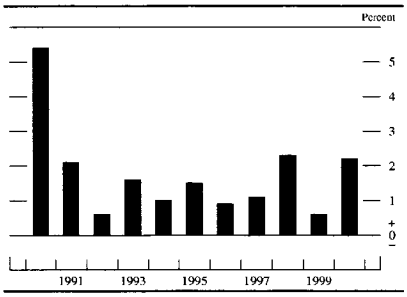


NOTE. For the ECI, change is from December to December; for nonfarm compensation, Q4 to Q4. The ECI is for private industry excluding farm and household workers. Nonfarm compensation per hour is for the nonfarm business sector.

Alternative measures of the hourly compensation of workers, while differing in their coverage and methods of construction, were consistent in showing some acceleration this past year. The employment cost index for private industry (ECI), which attempts to measure changes in the labor costs of nonfarm businesses in a way that is free from the effects of employment shifts among occupations and industries, rose nearly 4½ percent during 2000 after having increased about 3½ percent in 1999. Compensation per hour in the nonfarm business sector, a measure that picks up some forms of employee compensation that the ECI omits but that also is more subject to eventual revision than the ECI, showed hourly compensation advancing 5¾ percent this past year, up from a 1999 increase of about 4½ percent. Tightness of the labor market was likely one factor underlying the acceleration of hourly compensation in 2000, with employers relying both on larger wage increases and more attractive benefit packages to attract and retain workers. Compensation gains may also have been influenced to some degree by the pickup of consumer price inflation since 1998. Rapid increases in the cost of health insurance contributed importantly to a sharp step-up in benefit costs.

Unit labor costs, the ratio of hourly compensation to output per hour, increased about 2¼ percent in the

Change in unit labor costs



NOTE. Nonfarm business sector.

nonfarm business sector in 2000 after having risen slightly more than ½ percent in 1999. Roughly three-fourths of the acceleration was attributable to the faster rate of increase in compensation per hour noted above. The remainder stemmed from the small deceleration of measured productivity. The labor cost rise for the latest year was toward the high end of the range of the small to moderate increases that have prevailed over the past decade.

Prices

Led by the surge in energy prices, the aggregate price indexes showed some acceleration in 2000. The chain-type price index for real GDP, the broadest measure of goods and services *produced* domestically, rose 2¼ percent in 2000, roughly ¾ percentage point more than in 1999. The price index for gross domestic purchases, the broadest measure of prices for goods and services *purchased* by domestic buyers, posted a rise of almost 2½ percent in 2000 after having increased slightly less than 2 percent the previous year. Prices paid by consumers, as measured by the chain-type price index for personal consumption expenditures, picked up as well, about as much as the gross purchases index. The consumer price index (CPI) continued to move up at a faster pace than the PCE index this past year, and it exhibited slightly more acceleration—an increase of nearly 3½ percent in 2000 was ¾ percentage point larger than the 1999 rise. Price indexes for fixed investment and government purchases also accelerated this past year.

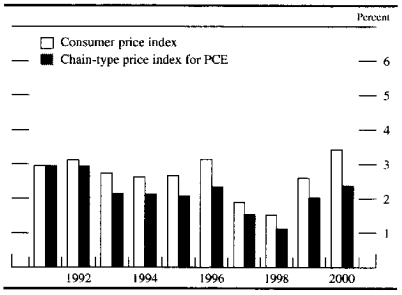
The prices of energy products purchased directly by consumers increased about 15 percent in 2000, a few percentage points more than in 1999. In response to the rise in world oil prices, consumer prices of motor fuels rose nearly 20 percent in 2000, bringing the cumulative price hike for those products over the past two years to roughly 45 percent. Prices also rose rapidly for home heating oil. Natural gas prices

Alternative measures of price change
Percent

Price measure	1999	2000
Chain-type		
Gross domestic product	1.6	2.3
Gross domestic purchases	1.9	2.4
Personal consumption expenditures	2.0	2.4
Excluding food and energy	1.5	1.7
Fixed-weight		
Consumer price index	2.6	3.4
Excluding food and energy	2.1	2.6

NOTE. Changes are based on quarterly averages and are measured to the fourth quarter of the year indicated from the fourth quarter of the preceding year.

Change in consumer prices

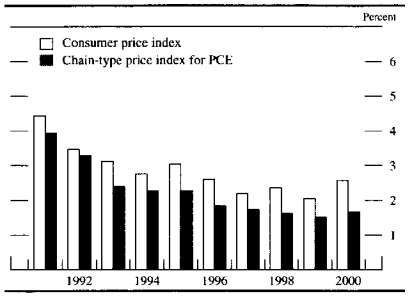


increased 30 percent, as demand for that fuel outpaced the growth of supply, pulling stocks down to low levels. Prices of natural gas this winter have been exceptionally high because of the added demand for heating that resulted from unusually cold weather in November and December. Electricity costs jumped for some users, and prices nationally rose faster than in other recent years, about 2¼ percent at the consumer level.

Businesses had to cope with rising costs of energy in production, transportation, and temperature control. In some industries that depend particularly heavily on energy inputs, the rise in costs had a large effect on product prices. Producer prices of goods such as industrial chemicals posted increases that were well above the average rates of inflation last year, and rising prices for natural gas sparked especially steep price advances for nitrogen fertilizers used in farming. Prices of some services also exhibited apparent energy impacts: Producers paid sharply higher prices for transportation services via air and water, and consumer airfares moved up rapidly for a second year, although not nearly as much as in 1999. Late in 2000 and early this year, high prices for energy inputs prompted shutdowns in production at some companies, including those producing fertilizers and aluminum.

Despite the spillover of energy effects into other markets, inflation outside the energy sector remained moderate overall. The ongoing rise in labor productivity helped to contain the step-up in labor costs, and the slow rate of rise in the prices of non-oil imports meant that domestic businesses had to remain cautious about raising their prices because of the potential loss of market share. Rapid expansion of capacity in manufacturing prevented bottlenecks from developing in the goods-producing sector of the economy

Change in consumer prices excluding food and energy



when domestic demand was surging early in the year; later on, an easing of capacity utilization was accompanied by a softening of prices in a number of industries. Inflation expectations, which at times in the past have added to the momentum of rising inflation, remained fairly quiescent in 2000.

Against this backdrop, core inflation remained low in 2000. Producer prices of intermediate materials excluding food and energy, after having accelerated through the first few months of 2000, slowed thereafter, and their four-quarter rise of 1¾ percent was only a bit larger than the increase during 1999. Prices of crude materials excluding food and energy fell moderately this past year after having risen about 10 percent a year earlier. At the consumer level, the CPI excluding food and energy moved up 2½ percent in 2000, an acceleration of slightly less than ½ percentage point from 1999 when put on a basis that maintains consistency of measurement. The rise in the chain-type price index for personal consumption expenditures excluding food and energy was 1¾ percent, just a bit above the increases recorded in each of the two previous years.

Consumer food prices rose 2½ percent in 2000 after an increase of about 2 percent in 1999. In large part, the moderate step-up in these prices probably reflected cost and price considerations similar to those at work elsewhere in the economy. Also, farm commodity prices moved up, on net, during 2000, after three years of sharp declines, and this turnabout likely showed through to the retail level to some extent. Meat prices, which are linked more closely to farm prices than is the case with many other foods, recorded increases that were appreciably larger than the increases for food prices overall.

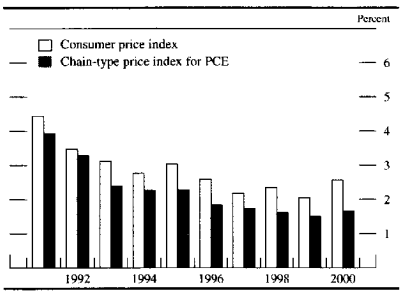
The chain-type price index for private fixed investment rose about 1¾ percent in 2000, but that small increase amounted to a fairly sharp acceleration from the pace of the preceding few years, several of which had brought small declines in investment prices. Although the price index for investment in residential structures slowed a little, to about a 3½ percent rise, the index for nonresidential structures sped up from a 2¾ percent increase in 1999 to one of 4½ percent in 2000. Moreover, the price index for equipment and software ticked up slightly, after having declined 2 percent or more in each of the four preceding years. To a large extent, that turnabout was a reflection of a smaller rate of price decline for computers; they had dropped at an average rate of more than 20 percent through the second half of the 1990s but fell at roughly half that rate in 2000. Excluding computers, equipment prices increased slightly in 2000 after having declined a touch in 1999.

U.S. Financial Markets

Financial markets in 2000 were influenced by the changing outlook for the U.S. economy and monetary policy and by shifts in investors' perceptions of and attitudes toward risk. Private longer-term interest rates generally firmed in the early part of the year as growth remained unsustainably strong and as market participants anticipated a further tightening of monetary policy by the Federal Reserve. Later in the year, as it became apparent that the pace of economic growth was slowing, market participants began to incorporate expectations of significant policy easing into asset prices, and most longer-term interest rates fell sharply over the last several months of 2000 and into 2001. Over the course of the year, investors became more concerned about credit risk and demanded larger yield spreads to hold lower-rated corporate bonds, especially once the growth of the economy slowed in the second half. Banks, apparently having similar concerns, reported widening credit spreads on business loans and tightening standards for lending to businesses. Weakening economic growth and tighter financial conditions in some sectors led to a slowing in the pace of debt growth over the course of the year.

Stock markets had another volatile year in 2000. After touching record highs in March, stock prices turned lower, declining considerably over the last four months of the year. Valuations in some sectors fell precipitously from high levels, and near-term earnings forecasts were revised down sharply late in the year. On balance, the broadest stock indexes fell more than 10 percent last year, and the tech-heavy Nasdaq was down nearly 40 percent.

Change in consumer prices excluding food and energy



when domestic demand was surging early in the year; later on, an easing of capacity utilization was accompanied by a softening of prices in a number of industries. Inflation expectations, which at times in the past have added to the momentum of rising inflation, remained fairly quiescent in 2000.

Against this backdrop, core inflation remained low in 2000. Producer prices of intermediate materials excluding food and energy, after having accelerated through the first few months of 2000, slowed thereafter, and their four-quarter rise of 1¾ percent was only a bit larger than the increase during 1999. Prices of crude materials excluding food and energy fell moderately this past year after having risen about 10 percent a year earlier. At the consumer level, the CPI excluding food and energy moved up 2½ percent in 2000, an acceleration of slightly less than ½ percentage point from 1999 when put on a basis that maintains consistency of measurement. The rise in the chain-type price index for personal consumption expenditures excluding food and energy was 1¾ percent, just a bit above the increases recorded in each of the two previous years.

Consumer food prices rose 2½ percent in 2000 after an increase of about 2 percent in 1999. In large part, the moderate step-up in these prices probably reflected cost and price considerations similar to those at work elsewhere in the economy. Also, farm commodity prices moved up, on net, during 2000, after three years of sharp declines, and this turnabout likely showed through to the retail level to some extent. Meat prices, which are linked more closely to farm prices than is the case with many other foods, recorded increases that were appreciably larger than the increases for food prices overall.

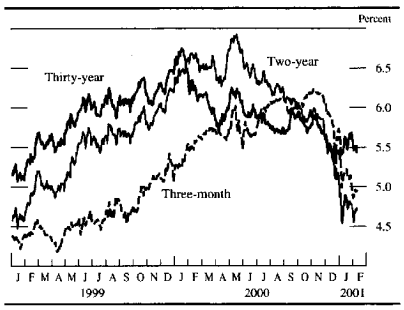
The chain-type price index for private fixed investment rose about 1¾ percent in 2000, but that small increase amounted to a fairly sharp acceleration from the pace of the preceding few years, several of which had brought small declines in investment prices. Although the price index for investment in residential structures slowed a little, to about a 3½ percent rise, the index for nonresidential structures sped up from a 2¾ percent increase in 1999 to one of 4½ percent in 2000. Moreover, the price index for equipment and software ticked up slightly, after having declined 2 percent or more in each of the four preceding years. To a large extent, that turnabout was a reflection of a smaller rate of price decline for computers; they had dropped at an average rate of more than 20 percent through the second half of the 1990s but fell at roughly half that rate in 2000. Excluding computers, equipment prices increased slightly in 2000 after having declined a touch in 1999.

U.S. Financial Markets

Financial markets in 2000 were influenced by the changing outlook for the U.S. economy and monetary policy and by shifts in investors' perceptions of and attitudes toward risk. Private longer-term interest rates generally firmed in the early part of the year as growth remained unsustainably strong and as market participants anticipated a further tightening of monetary policy by the Federal Reserve. Later in the year, as it became apparent that the pace of economic growth was slowing, market participants began to incorporate expectations of significant policy easing into asset prices, and most longer-term interest rates fell sharply over the last several months of 2000 and into 2001. Over the course of the year, investors became more concerned about credit risk and demanded larger yield spreads to hold lower-rated corporate bonds, especially once the growth of the economy slowed in the second half. Banks, apparently having similar concerns, reported widening credit spreads on business loans and tightening standards for lending to businesses. Weakening economic growth and tighter financial conditions in some sectors led to a slowing in the pace of debt growth over the course of the year.

Stock markets had another volatile year in 2000. After touching record highs in March, stock prices turned lower, declining considerably over the last four months of the year. Valuations in some sectors fell precipitously from high levels, and near-term earnings forecasts were revised down sharply late in the year. On balance, the broadest stock indexes fell more than 10 percent last year, and the tech-heavy Nasdaq was down nearly 40 percent.

Rates on selected Treasury securities



NOTE. The data are daily and extend through February 8, 2001.

Interest Rates

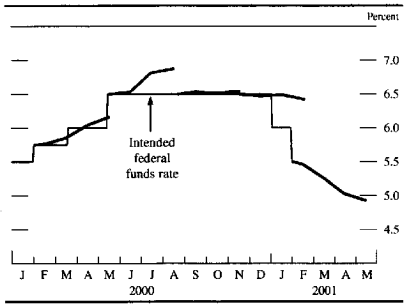
The economy continued to expand at an exceptionally strong and unsustainable pace in the early part of 2000, prompting the Federal Reserve to tighten its policy stance in several steps ending at its May meeting. Private interest rates and shorter-term Treasury yields rose considerably over that period, reaching a peak just after the May FOMC meeting. Investors apparently became more concerned about credit risk as well; spreads between rates on lower-rated corporate bonds and swaps widened in the spring, adding to the upward pressure on private interest rates. Long-term Treasury yields, in contrast, remained below their levels from earlier in the year, as market participants became increasingly convinced that the supply of those securities would shrink considerably in coming years and incorporated a "scarcity premium" into their prices. By mid-May, with the rapid expansion of economic activity showing few signs of letting up, rates on federal funds and eurodollar futures, which can be used as a rough gauge of policy expectations, were indicating that market participants expected additional policy tightening going forward.

Signs of a slowdown in the growth of aggregate demand began to appear in the incoming data soon after the May FOMC meeting and continued to gradually accumulate over subsequent months. In response, market participants became increasingly convinced that the FOMC would not have to tighten its policy stance further, which was reflected in a flattening of the term structure of rates on federal funds and eurodollar futures. Interest rates on most corporate bonds declined gradually on the shifting outlook for the economy, and by the end of August had fallen more than ½ percentage point from their peaks in May.

Most market interest rates continued to edge lower into the fall, as the growth of the economy seemed to moderate further. Over the last couple months of 2000 and into early 2001, as it became apparent that economic growth was slowing more abruptly, market participants sharply revised down their expectations for future short-term interest rates. Treasury yields plummeted over that period, particularly at shorter maturities: The two-year Treasury yield dropped more than a full percentage point from mid-November to early January, moving below the thirty-year yield for the first time since early 2000. Yields on inflation-indexed securities also fell considerably, but by less than their nominal counterparts, suggesting that the weakening of economic growth lowered expectations of both real interest rates and inflation.

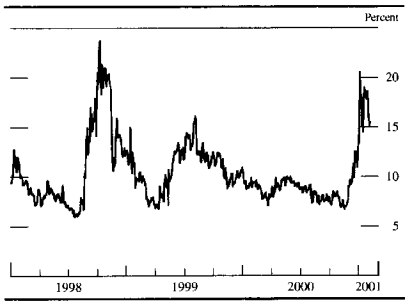
Although market participants had come to expect considerable policy easing over the first part of this year, the timing and magnitude of the intermeeting cut in the federal funds rate in early January was a surprise. In response, investors built into asset prices anticipations of a more rapid policy easing over the near-term. Indeed, the further substantial reduction in the federal funds rate implemented at the FOMC meeting later that month was largely expected and elicited little response in financial markets. Even with a full percentage point reduction in the federal funds rate in place, futures rates have recently pointed to expectations of additional policy easing over coming months. Investors appear to be uncertain about this outlook, however, judging from the recent rise in the

Federal funds futures rates and the intended federal funds rate



NOTE. The thick line segments show the rates on federal funds futures contracts on the day after the scheduled FOMC meetings in February, May, August, and November 2000 and in January 2001.

Implied volatility of short-term interest rates

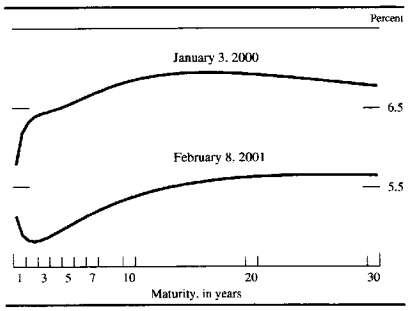


NOTE. The data are daily and extend through February 8, 2001. The series shown is the implied volatility of the three-month eurodollar rate over the coming four months, as calculated from option prices.

implied volatilities of interest rates derived from option prices. On balance since the beginning of 2000, the progressive easing in the economic outlook, in combination with the effects of actual and prospective reductions in the supply of Treasury securities, has resulted in a sizable downward shift in the Treasury yield curve.

The prospect of a weakening in economic growth, along with sizable declines in equity prices and downward revisions to profit forecasts, apparently caused investors to reassess credit risks in the latter part of last year. Spreads between rates on high-yield corporate bonds and swaps soared beginning in September, pushing the yields on those bonds substantially higher. Concerns about credit risk also spilled over into the investment-grade sector, where yield spreads widened considerably for lower-rated securities. For most investment-grade issuers, though, the effects of the revised policy outlook more than offset any widening in risk spreads, resulting in a decline in private interest rates in the fourth quarter. Since the first policy easing in early January, yield spreads on corporate bonds have narrowed considerably, including a particularly large drop in the spread on high-yield bonds. Overall, yields on most investment-grade corporate bonds have reached their lowest levels since the first half of 1999, while rates on most high-yield bonds have fallen about 2 percentage points from their peaks and have reached levels similar to those of mid-2000.

Treasury yield curve



NOTE. Yield curves are estimated from off-the-run Treasury coupon securities. Yields shown are those on notional par Treasury securities with semiannual coupons.

Although investors at times in recent months appeared more concerned about credit risk than they were in the fall of 1998, the recent financial environment, by most accounts, did not resemble the market turbulence and disruption of that time. The Treasury and investment-grade corporate bond markets remained relatively liquid, and the investment-grade market easily absorbed the high volume of bond issuance over 2000. Investors continued to show a heightened preference for larger, more liquid corporate issues, but they did not exhibit the extreme desire for liquidity that was apparent in the fall of 1998. For example, the liquidity premium for the on-the-run ten-year Treasury note this year remained well below the level of that fall.

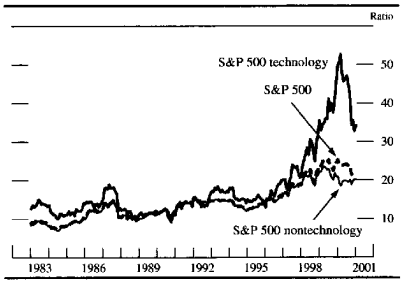
Nonetheless, the Treasury market has become somewhat less liquid than it was several years ago. Moreover, in 2000, particular segments of the Treasury market occasionally experienced bouts of unusually low liquidity that appeared related to actual or potential reductions in the supply of individual securities. Given the possibility that liquidity could deteriorate further as the Treasury continues to pay down its debt, market participants reportedly increased their reliance on alternative instruments—including interest rate swaps and debt securities issued by government-sponsored housing agencies and other corporations—for some of the hedging and pricing functions historically provided by Treasury securities. Fannie Mae and Freddie Mac continued to issue large amounts of debt under their Benchmark and Reference debt programs, which are designed to mimic characteristics of Treasury securities—such as large issue sizes and a regular calendar of issuance—that are believed to contribute to their liquidity. By the end of 2000, the two firms together had more than $300 billion of notes and bonds and more than $200 billion of bills outstanding under those programs. Trading volume and dealer positions in agency securities have risen considerably since 1998,

analysts significantly reduced their forecasts for year-ahead earnings for the S&P 500. However, analysts apparently view the slowdown in earnings as short-lived, as long-run earnings forecasts did not fall much and remain at very high levels, particularly for the technology sector.

On balance, the Wilshire 5000 index fell 12 percent over 2000—its first annual decline since 1994. The Nasdaq composite plunged 39 percent, leaving it at year-end more than 50 percent below its record high and erasing nearly all of its gains since the beginning of 1999. The broad decline in equity prices last year is estimated to have lopped more than $1¾ trillion from household wealth, or more than 4 percent of the total net worth of households. Nevertheless, the level of household net worth is still quite high—about 50 percent above its level at the end of 1995. Investors continued to accumulate considerable amounts of equity mutual funds over 2000, although they may have become increasingly discouraged by losses on their equity holdings toward the end of the year, when flows into equity funds slumped. At that time, money market mutual funds expanded sharply, as investors apparently sought a refuge for financial assets amid the heightened volatility and significant drops in equity prices. So far in 2001, major equity indexes are little changed, on balance, as the boost from lower interest rates has been countered by continued disappointments over corporate earnings.

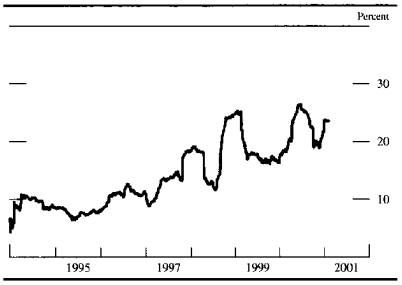
Some of the most dramatic plunges in share prices in 2000 took place among technology, telecommunications, and Internet shares. While these declines partly stemmed from downward revisions to near-term earnings estimates, which were particularly severe in some cases, they were also driven by a reassessment of the elevated valuations of many companies in these sectors. The price–earnings ratio (calculated using operating earnings expected over the next year) for the technology component of the S&P 500 index fell substantially from its peak in early 2000, although it remains well above the ratio for the S&P 500 index as a whole. For the entire S&P 500 index, share prices fell a bit more in percentage terms than the downward revisions to year-ahead earnings forecasts, leaving the price–earnings ratio modestly below its historical high.

Price–earnings ratios for the S&P 500 and selected components



NOTE. The data are monthly and extend through January 2001. The ratios are based on I/B/E/S consensus estimates of earnings over the coming twelve months.

Wilshire 5000 volatility



NOTE. The data, which are daily and extend through February 8, 2001, are the standard deviations of daily percent changes in the Wilshire 5000 index over the previous six months, with the standard deviations expressed on an annual basis.

The volatility of equity price movements during 2000 was at the high end of the elevated levels observed in recent years. In the technology sector, the magnitudes of daily share price changes were at times remarkable. There were twenty-seven days during 2000 in which the Nasdaq composite index moved up or down by at least 5 percent; by comparison, such outsized movements were observed on a total of only seven days from 1990 to 1999.

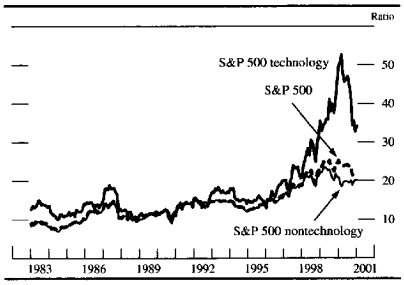
Despite the volatility of share price movements and the large declines on balance over 2000, equity market conditions were fairly orderly, with few reports of difficulties meeting margin requirements or of large losses creating problems that might pose broader systemic concerns. The fall in share prices reined in some of the margin debt of equity investors. After having run up sharply through March, the amount of outstanding margin debt fell by about 30 percent over the remainder of the year. At year-end, the ratio of margin debt to total equity market capitalization was slightly below its level a year earlier.

analysts significantly reduced their forecasts for year-ahead earnings for the S&P 500. However, analysts apparently view the slowdown in earnings as short-lived, as long-run earnings forecasts did not fall much and remain at very high levels, particularly for the technology sector.

On balance, the Wilshire 5000 index fell 12 percent over 2000—its first annual decline since 1994. The Nasdaq composite plunged 39 percent, leaving it at year-end more than 50 percent below its record high and erasing nearly all of its gains since the beginning of 1999. The broad decline in equity prices last year is estimated to have lopped more than $1¾ trillion from household wealth, or more than 4 percent of the total net worth of households. Nevertheless, the level of household net worth is still quite high—about 50 percent above its level at the end of 1995. Investors continued to accumulate considerable amounts of equity mutual funds over 2000, although they may have become increasingly discouraged by losses on their equity holdings toward the end of the year, when flows into equity funds slumped. At that time, money market mutual funds expanded sharply, as investors apparently sought a refuge for financial assets amid the heightened volatility and significant drops in equity prices. So far in 2001, major equity indexes are little changed, on balance, as the boost from lower interest rates has been countered by continued disappointments over corporate earnings.

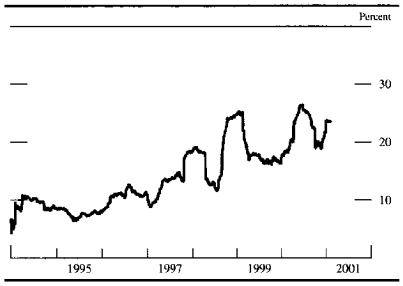
Some of the most dramatic plunges in share prices in 2000 took place among technology, telecommunications, and Internet shares. While these declines partly stemmed from downward revisions to near-term earnings estimates, which were particularly severe in some cases, they were also driven by a reassessment of the elevated valuations of many companies in these sectors. The price–earnings ratio (calculated using operating earnings expected over the next year) for the technology component of the S&P 500 index fell substantially from its peak in early 2000, although it remains well above the ratio for the S&P 500 index as a whole. For the entire S&P 500 index, share prices fell a bit more in percentage terms than the downward revisions to year-ahead earnings forecasts, leaving the price–earnings ratio modestly below its historical high.

Price–earnings ratios for the S&P 500 and selected components



NOTE. The data are monthly and extend through January 2001. The ratios are based on I/B/E/S consensus estimates of earnings over the coming twelve months.

Wilshire 5000 volatility

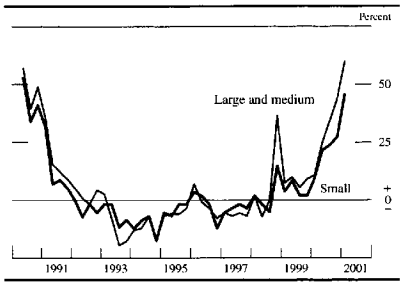


NOTE. The data, which are daily and extend through February 8, 2001, are the standard deviations of daily percent changes in the Wilshire 5000 index over the previous six months, with the standard deviations expressed on an annual basis.

The volatility of equity price movements during 2000 was at the high end of the elevated levels observed in recent years. In the technology sector, the magnitudes of daily share price changes were at times remarkable. There were twenty-seven days during 2000 in which the Nasdaq composite index moved up or down by at least 5 percent; by comparison, such outsized movements were observed on a total of only seven days from 1990 to 1999.

Despite the volatility of share price movements and the large declines on balance over 2000, equity market conditions were fairly orderly, with few reports of difficulties meeting margin requirements or of large losses creating problems that might pose broader systemic concerns. The fall in share prices reined in some of the margin debt of equity investors. After having run up sharply through March, the amount of outstanding margin debt fell by about 30 percent over the remainder of the year. At year-end, the ratio of margin debt to total equity market capitalization was slightly below its level a year earlier.

Net percentage of domestic banks tightening standards for commercial and industrial loans, by size of firm



NOTE. The data are based on the Federal Reserve's Senior Loan Officer Opinion Survey on Bank Lending Practices, which is generally conducted four times per year. The data extend through January 2001. Small firms are those with annual sales of less than $50 million.

In response to greater uncertainty about the economic outlook and a reduced tolerance for risk, increasing proportions of banks reported tightening standards and terms on business loans during 2000 and into 2001, with the share recently reaching the highest level since 1990. The tightening became widespread for loans to large and middle-market firms. A considerable portion of banks reported firming standards and terms on loans to small businesses as well, consistent with surveys of small businesses indicating that a larger share of those firms had difficulty obtaining credit in 2000 than in previous years. With delinquency rates for consumer and real estate loans having changed little, on net, last year, banks did not tighten credit conditions significantly for loans to households over the first three quarters of 2000. More recently, however, an increasing portion of banks increased standards and terms for consumer loans other than credit cards, and some of the banks surveyed anticipated a further tightening of conditions on consumer loans during 2001.

The Monetary Aggregates

The monetary aggregates grew rather briskly last year. The expansion of the broadest monetary aggregate, M3, was particularly strong over the first three quarters of 2000, as the robust growth in depository credit was partly funded through issuance of the managed liabilities included in this aggregate, such as large time deposits. M3 growth eased somewhat in the fourth quarter because the slowing of bank credit led depository institutions to reduce their reliance on managed liabilities. Institutional money funds increased rapidly throughout 2000, despite the tightening of policy early in the year, in part owing to continued growth in their provision of cash management services for businesses. For the year as a whole, M3 expanded 9¼ percent, well above the 7¾ percent pace in 1999. This advance again outpaced that of nominal income, and M3 velocity—the ratio of nominal income to M3—declined for the sixth year in a row.

Growth of money and debt

Percent

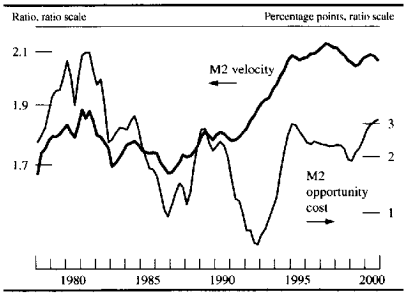
Period	M1	M2	M3	Domestic nonfinancial debt
Annual[1]				
1990	4.2	4.2	1.9	6.7
1991	7.9	3.1	1.2	4.5
1992	14.4	1.8	.6	4.5
1993	10.6	1.3	1.0	4.9
1994	2.5	.6	1.7	4.8
1995	−1.5	3.8	6.1	5.4
1996	−4.5	4.5	6.8	5.3
1997	−1.2	5.6	8.9	5.4
1998	2.2	8.4	10.9	6.9
1999	1.8	6.2	7.7	6.8
2000	−1.5	6.3	9.2	5.3
Quarterly (annual rate)[2]				
2000:1	2.0	5.8	10.6	5.6
2	−1.8	6.4	9.0	6.2
3	−3.7	5.8	8.9	4.7
4	−2.7	6.6	7.1	4.1

NOTE. M1 consists of currency, travelers checks, demand deposits, and other checkable deposits. M2 consists of M1 plus savings deposits (including money market deposit accounts), small-denomination time deposits, and balances in retail money market funds. M3 consists of M2 plus large-denomination time deposits, balances in institutional money market funds, RP liabilities (overnight and term), and eurodollars (overnight and term). Debt consists of the outstanding credit market debt of the U.S. government, state and local governments, households and nonprofit organizations, nonfinancial businesses, and farms.

1. From average for fourth quarter of preceding year to average for fourth quarter of year indicated.

2. From average for preceding quarter to average for quarter indicated.

M2 velocity and opportunity cost



NOTE. The data are quarterly. 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.

M2 increased 6¼ percent in 2000, about unchanged from its pace in 1999. Some slowing in M2 growth would have been expected based on the rise in short-term interest rates over the early part of the year, which pushed up the "opportunity cost" of holding M2, given that the interest rates on many components of M2 do not increase by the same amount or as quickly as market rates. However, with the level of long-term rates close to that of short-term rates, investors had much less incentive to shift funds out of M2 assets and into assets with longer maturities, which helped support M2 growth. M2 was also boosted at times by households' increased preference for safe and liquid assets during periods of heightened volatility in equity markets. On balance over the year, the growth of M2 slightly exceeded that of nominal income, and M2 velocity edged down.

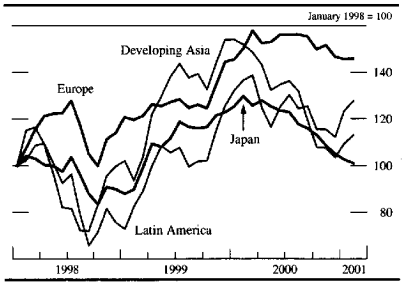
The behavior of the components of M2 was influenced importantly by interest rate spreads. The depressing effect of higher short-term market interest rates was most apparent in the liquid deposit components, including checkable deposits and savings accounts, whose rates respond very sluggishly to movements in market rates. Small time deposits and retail money market mutual funds, whose rates do not lag market rates as much, expanded considerably faster than liquid deposits. Currency growth was held down early in the year by a runoff of the stockpile accumulated in advance of the century date change. In addition, it was surprisingly sluggish over the balance of the year given the rapid pace of income growth, with weakness apparently in both domestic and foreign demands.

International Developments

In 2000, overall economic activity in foreign economies continued its strong performance of the previous year. However, in both industrial and developing countries, growth was strongest early, and clear signs of a general slowing emerged later in the year. Among industrial countries, growth in Japan last year moved up to an estimated 2 percent, and growth in the euro area slowed slightly to 3 percent. Emerging market economies in both Asia and Latin America grew about 6 percent on average in 2000. For Asian developing economies, this represented a slowing from the torrid pace of the previous year, while growth in Latin America, especially Mexico, picked up from 1999. Average foreign inflation edged up slightly to 3 percent, mainly reflecting higher oil prices. Over the first part of the year, monetary authorities moved to tighten conditions in many industrial countries, in reaction to continued strong growth in economic activity that was starting to impinge on capacity constraints, as well as some upward pressures on prices. Interest rates on long-term government securities declined on balance in most industrial countries, especially toward year-end when evidence of a slowdown in global economic growth started to emerge.

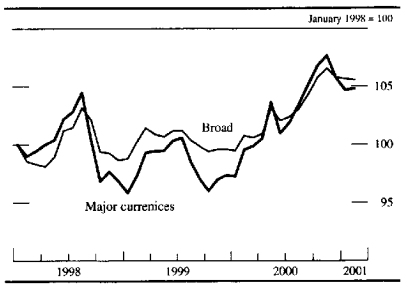
Conditions in foreign financial markets were somewhat more unsettled than in the previous year. Overall stock indexes in the foreign industrial countries generally declined, most notably in Japan. As in the United States, technology-oriented stock indexes were extremely volatile during the year. After reaching peaks in the first quarter, they started down while experiencing great swings toward mid-year, then fell sharply in the final quarter, resulting in net declines

Foreign equity indexes



NOTE. The data are monthly. The last observations are the average of trading days through February 8, 2001.

Nominal U.S. dollar exchange rate indexes



NOTE. The data are monthly. Indexes are trade-weighted averages of the exchange value of the dollar against major currencies and against the currencies of a broader group of important U.S. trading partners. Last observations are the average of trading days through February 8, 2001.

for the year of one-third or more. Stock prices in emerging market economies were generally quite weak, especially in developing Asia, where growth in recent years has depended heavily on exports of high-tech goods. Although there was no major default or devaluation among emerging market economies, average risk spreads on developing country debt still moved higher on balance over the course of the year, as the threat of potential crises in several countries, most notably Argentina and Turkey, heightened investor concerns.

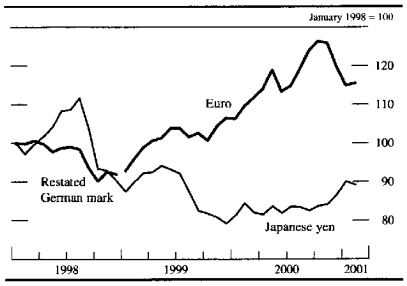
The dollar's average foreign exchange value increased over most of the year, supported by continued robust growth of U.S. activity, rising interest rates on dollar assets, and market perceptions that longer-term prospects for U.S. growth and rates of return were more favorable than in other industrial countries. Part of the rise in the dollar's average value was reversed late in the year when evidence emerged that the pace of U.S. activity was slowing much more sharply than had been expected. Despite this decline, the dollar's average foreign exchange value against the currencies of other major foreign industrial countries recorded a net increase of over 7 percent for the year as a whole. The dollar also strengthened nearly as much on balance against the currencies of the most important developing country trading partners of the United States. So far this year, the dollar's average value has remained fairly stable.

Industrial Economies

The dollar showed particular strength last year against the euro, the common currency of much of Europe. During the first three quarters of the year, the euro continued to weaken, and by late October had fallen to a low of just above 82 cents, nearly one-third below its value when it was introduced in January 1999. The euro's decline against the dollar through most of last year appeared to be due mainly to the vigorous growth of real GDP and productivity in the United States contrasted with steady but less impressive improvements in Europe. In addition, investors may have perceived that Europe was slower to adopt "new economy" technologies, making it a relatively less attractive investment climate. In September, a concerted intervention operation by the monetary authorities of G-7 countries, including the United States, was undertaken at the request of European authorities to provide support for the euro. The European Central Bank also made intervention purchases of euros on several occasions acting on its own. Late in the year, the euro abruptly changed course and started to move up strongly, reversing over half of its decline of earlier in the year. This recovery of the euro against the dollar appeared to reflect mainly a market perception that, while growth was slowing in both Europe and the United States, the slowdown was much sharper for the United States. For the year as a whole, the dollar appreciated, on net, about 7 percent against the euro.

The European Central Bank raised its policy interest rate target six times by a total of 175 basis points over the first ten months of the year. These increases reflected concerns that the euro's depreciation, tightening capacity constraints and higher oil prices would put upward pressure on inflation. While core inflation—inflation excluding food and energy—

U.S. dollar exchange rate against the euro and the Japanese yen



NOTE. Foreign currency units per dollar. Restated German mark is the mark–dollar exchange rate rescaled by the official conversion factor between the mark and the euro. Last observations are the average of trading days through February 8, 2001.

remained well below the 2 percent inflation target ceiling, higher oil prices pushed the headline rate above the ceiling for most of the year. Real GDP in the euro area is estimated to have increased about 3 percent for 2000 as a whole, only slightly below the rate of the previous year, although activity slowed toward the end of the year. Growth was supported by continued strong increases in investment spending. Net exports made only a modest contribution to growth, as rapid increases in exports were nearly matched by robust imports. Overall activity was sufficiently strong to lead to a further decline in the average euro-area unemployment rate to below 9 percent, a nearly 1 percentage point reduction for the year.

The dollar rose about 12 percent against the Japanese yen over the course of 2000, roughly reversing the decline of the previous year. Early in the year, the yen experienced periods of upward pressure on evidence of a revival of activity in Japan. On several of these occasions, the Bank of Japan made substantial intervention sales of yen. By August, signs of recovery were strong enough to convince the Bank of Japan to end the zero interest rate policy that it had maintained for nearly a year and a half, and its target for the overnight rate was raised to 25 basis points. Later in the year, evidence emerged suggesting that the nascent recovery in economic activity was losing steam, and in response the yen started to depreciate sharply against the dollar.

For the year as a whole, Japanese real GDP is estimated to have increased about 2 percent, a substantial improvement from the very small increase of the previous year and the decline recorded in 1998. Growth, which was concentrated in the first part of the year, was led by private nonresidential investment. In contrast, residential investment slackened as the effect of tax incentives waned. Consumption rebounded early in the year from a sharp decline at the end of 1999 but then stagnated, depressed in part by record-high unemployment and concerns that ongoing corporate restructuring could lead to further job losses. Public investment, which gave a major boost to the economy in 1999, remained strong through the first half of last year but then fell off sharply, and for the year as a whole the fiscal stance is estimated to have been somewhat contractionary. Inflation was negative for the second consecutive year, with the prices of both consumer goods and real estate continuing to move lower.

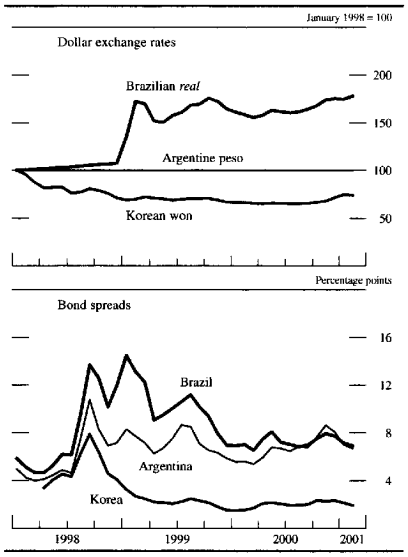
The dollar appreciated 4 percent relative to the Canadian dollar last year. Among the factors that apparently contributed to the Canadian currency's weakness were declines in the prices of commodities that Canada exports, such as metals and lumber, and a perception by market participants of unfavorable differentials in rates of return and economic growth prospects in Canada relative to the United States. For the year as a whole, real GDP growth in Canada is estimated to have been only slightly below the strong 5 percent rate of 1999, although, as in most industrial countries, there were signs that the pace of growth was tailing off toward the end of the year. Domestic demand continued to be robust, led by surging business investment and solid personal consumption increases. In the first part of the year, the sustained rapid growth of the economy led Canadian monetary authorities to become increasingly concerned with a buildup of inflationary pressures, and the Bank of Canada matched all of the Federal Reserve's interest rate increases in 2000, raising its policy rate by a total of 100 basis points. By the end of the year, the core inflation rate had risen to near the middle of the Bank of Canada's 1 percent to 3 percent target range, while higher oil prices pushed the overall rate above the top of the range. So far this year, the Bank of Canada has only partially followed the Federal Reserve in lowering interest rates, and the Canadian dollar has remained little changed.

Emerging Market Economies

In emerging market economies, the average growth rate of economic activity in 2000 remained near the very strong 6 percent rate of the previous year. However, there was a notable and widespread slowing near the end of the year, and results in a few individual countries were much less favorable. Growth in developing Asian economies slowed on average from the torrid pace of the previous year, while average growth in Latin America picked up somewhat. No major developing country experienced default or devaluation in 2000, but nonetheless, financial markets did undergo several periods of heightened unrest during the year. In the spring, exchange rates and equity prices weakened and risk spreads widened in many emerging market economies at a time of a general heightening of financial market volatility and rising interest rates in industrial countries, as well as increased political uncertainty in several developing countries. After narrowing at mid-year, risk spreads on emerging market economy debt again widened later in the year, reflecting a general movement on financial markets away from riskier assets, as well as concerns that Argentina and Turkey might be facing financial crises that could spread to other emerging market economies. Risk spreads generally narrowed in the early part of 2001.

Among Latin American countries, Mexico's performance was noteworthy. Real GDP rose an estimated 7 percent, an acceleration from the already strong result of the previous year. Growth was boosted by booming exports, especially to the United States, favorable world oil prices, and a rebound in domestic demand. In order to keep inflation on a downward path in the face of surging domestic demand, the Bank of Mexico tightened monetary conditions six times last year, pushing up short-term interest rates, and by the end of the year the rate of consumer price inflation had moved below the 10 percent inflation target. The run-up to the July presidential election generated some sporadic financial market pressures, but these subsided in reaction to the smooth transition to the new administration. Over the course of the year, the risk spread on Mexican debt declined on balance, probably reflecting a favorable assessment by market participants of macroeconomic developments and government policies, reinforced by rating upgrades of Mexican debt. During 2000, the peso depreciated slightly against the dollar, but by less than the excess of Mexican over U.S. inflation.

Selected emerging markets



NOTE. The data are monthly. Bond spreads are the J.P. Morgan Emerging Market Bond Index (stripped Brady-bond) spreads over U.S. Treasuries. Last observations are the average of trading days through February 8, 2001.

Argentina encountered considerable financial distress last year. Low tax revenues due to continued weak activity along with elevated political uncertainty greatly heightened market concerns about the ability of the country to fund its debt. Starting in October, domestic interest rates and debt risk spreads soared amid market speculation that the government might lose access to credit markets and be forced to abandon the exchange rate peg to the dollar. Financial markets began to recover after an announcement in mid-November that an IMF-led international financial support package was to be put in place. Further improvement came in the wake of an official announcement in December of a $40 billion support package. The fall in U.S. short-term interest rates in January eased pressure on Argentina's dollar-linked economy as well.

Late in the year, Brazilian financial markets received some negative spillover from the financial unrest in Argentina, but conditions did not approach those prevailing during Brazil's financial crisis of early 1999. For 2000 as a whole, the Brazilian economy showed several favorable economic trends. Real GDP growth increased to an estimated 4 percent after being less than 1 percent the previous two years, inflation continued to move lower, and short-term interest rates declined.

Growth in Asian developing countries in 2000 slowed from the previous year, when they had still been experiencing an exceptionally rapid bounceback from the 1997–1998 financial crises experienced by several countries in the region. In Korea, real GDP growth last year is estimated to have been less than half of the blistering 14 percent rate of 1999. Korean exports, especially of high-tech products, started to fade toward the end of 2000. Rapid export growth had been a prominent feature of the recovery of Korea and other Asian developing economies following their financial crises. In addition, a sharp fall in Korean equity prices over the course of the year, as well as continued difficulties with the process of financial and corporate sector restructuring, tended to depress consumer and business confidence. These developments contributed to the downward pressure on the won seen near the end of the year. Elsewhere in Asia, market concerns over heightened political instability were a major factor behind financial pressures last year in Indonesia, Thailand, and the Philippines. In China, output continued to expand rapidly in 2000, driven by a combination of surging exports early in the year, sustained fiscal stimulus, and some recovery in private consumption. In contrast, growth in both Hong Kong and Taiwan slowed, especially in the latter part of the year. In Taiwan, the exchange

rate and stock prices both came under downward pressure as a result of the slowdown in global electronics demand and apparent market concerns over revelations of possible weaknesses in the banking and corporate sectors.

Turkey's financial markets came under severe strain in late November as international investors withdrew capital amid market worries about the health of Turkey's banks, the viability of the government's reform program and its crawling peg exchange rate regime, and the widening current account deficit. The resulting liquidity shortage caused short-term interest rates to spike up and led to a substantial decline in foreign exchange reserves held by the central bank. Markets stabilized somewhat after it was announced in December that Turkey had been able to reach loan agreements with the IMF, major international banks, and the World Bank in an effort to provide liquidity and restore confidence in the banking system.

Copyright 2001 The New York Times Company
The New York Times

February 11, 2001, Sunday, Late Edition - Final

SECTION: Section 4; Page 17; Column 2; Editorial Desk

LENGTH: 1287 words

HEADLINE: A Prosperity Easy to Destroy

BYLINE: By Robert E. Rubin; Robert E. Rubin was secretary of the treasury from 1995 to 1999.

BODY:
I had not intended to get involved in the public debate on fiscal policy at this point, but I feel so strongly that a tax cut of the magnitude proposed is a serious error in economic policy that I felt a need to speak.

The proposed tax cut of roughly $2 trillion -- $1.6 trillion of tax cuts plus $400 billion of interest on debt that would otherwise have been retired -- would substantially diminish the fiscal position of the federal government, and would create a serious threat of deficits on the non-entitlement side of the federal budget. That, in turn, could increase interest rates and recreate the loss of consumer and business confidence associated with the deficits of the late 80's and early 90's. Over the last 20 years, our nation has seen the benefits of fiscal discipline, and also the adverse consequences of a lack of fiscal discipline. From these experiences, there are lessons that should guide policymakers. First, we gain greatly when our nation is clearly committed to budgetary discipline and lose greatly when it is not. Second, it is wise to be prudent -- we should avoid committing ourselves to dramatic courses of action that are hard to reverse in the face of the inherent uncertainties of any projections. Third, we have a duty not to pass on burdens to the next generation when we can act today. The size of the proposed tax cut fails all these tests.

Instead, the fiscal discipline that was so central to the remarkable economic conditions of the past eight years is the best path for both our short-term and long-term economic well-being. A brief look back can provide very useful

guidance for going forward.

In 1992, the unemployment rate was over 7 percent, the fiscal deficit was $290 billion and projected by the Congressional Budget Office to grow to over $500 billion in 2001 from there, the federal debt had quadrupled over the preceding 12 years and was projected to double again by 2001, and the prevailing view was that economic conditions would remain mediocre well into the future.

The economic transformation that followed included massive job creation, rising incomes, low inflation, unemployment now at 4.2 percent, and today's large current and projected surpluses. Many factors contributed to this transformation, including globalization, new technologies, vast corporate restructuring, and our flexible labor and capital markets. But I think there is no doubt that key and indispensable to this was the restoration of fiscal discipline, beginning with the deficit reduction program of 1993.

Just how dramatic a change in economic policy this was is evidenced by the vituperativeness of the opposition, with strident predictions of vast increases in unemployment and recession.

Instead, fiscal discipline contributed greatly to lower interest rates and, very, very importantly, restoration of confidence by consumers and business after deficits had come to symbolize a much broader set of concerns about our ability to manage our affairs. The result was increased demand; increased investment, especially in the new technologies; increased productivity; and sustained growth in gross domestic product, jobs and incomes.

We are now in the process of unwinding the excesses that, in my view, inevitably develop after an extended period of good times. To minimize the difficulty and duration of that unwinding and to best realize our very favorable longer-term prospects, we should continue with our hard-won fiscal discipline and not adopt a greatly outsized tax cut that seriously threatens the federal government's fiscal soundness.

There is broad agreement amongst virtually all mainstream economists that a tax cut this year is unlikely to provide meaningful economic stimulus to deal with whatever adverse circumstances may occur this year. Moreover, if a tax cut is desired for short-term stimulative purposes, the vast preponderance of the one proposed -- which affects later years -- is largely irrelevant. Instead, a front-end-loaded, moderate tax cut, or even a special rebate aimed at working people with the highest propensity to spend, would maximize current economic impact. The point would be to achieve increased short-term demand without causing a level of fiscal deterioration that would, on balance, damage confidence.

The serious threat of the proposed tax cut to fiscal soundness becomes apparent when you look at the numbers a little more closely. The surplus of $5.6 trillion as projected by the C.B.O. is roughly $2.1 trillion after deducting Social Security and Medicare surpluses -- as many members of Congress in both parties have advocated -- and making realistic adjustments to better represent future spending

on current discretionary programs and tax revenues. Since the proposed tax cut would cost $2 trillion, or $2.2 trillion if an alternative minimum tax adjustment is included, it would entirely use up the remaining surplus, with no additional debt reduction. And that leaves nothing for special programs that already have broad support, like a prescription drug benefit or a greater increase in defense spending for a missile defense system, or other purposes or additional tax cuts, all of which are almost sure to happen this year or over the next few years. These spending increases and the additional tax cuts could well cost between $500 billion and $1 trillion, leading to a deficit under this analysis of the C.B.O. projections.

Moreover, five-year budget forecasts, to say nothing of 10-year forecasts, are highly unreliable -- just look at the forecasts that were made five or 10 years ago. Thus, even if you favored a very large tax cut as the preferred use for available surplus -- which I emphatically do not -- even a moderate degree of prudence would suggest waiting a few years to see whether or not the projected surpluses are actually occurring, meanwhile paying down debt. That would also be in plenty of time to deal with any concerns about the uses that might be made of the surplus after the debt is retired. The suggestion that tax cuts could be rescinded if projected surpluses don't materialize seems unlikely politically.

The political impetus in Washington is toward tax cuts and spending. Real progress has been made over the past decade toward a political mindset of discipline, but that is always highly vulnerable, and a very large tax cut is a significant step back to the political mindset that produced the deficits and quadrupling of the debt from 1980 to 1992.

The imperative for maintaining our fiscal discipline and not taking a risk of losing the current opportunity to retire the publicly held debt of the federal government is increased by the importance of putting the federal government in the best possible position to meet the Social Security and Medicare requirements of future generations, when the federal budget is projected to be in deficit again.

All of this is independent of the question of how best to use the surplus available on a fiscally sound basis. My own preference would be to divide this between debt reduction, a more moderate tax cut predominantly favoring middle-income and lower-income people, and special initiatives in important areas like education and health care. Others have different views. But we should all agree that it would be profoundly unwise to seriously risk the hard-won fiscal discipline that has brought so many benefits to our nation.

We have had a remarkable eight years after a far more difficult period, including a recession in 1990. We should learn from experience and stay with a landmark change in strategy that worked, not take the path that experience suggests poses a real threat to our economic well-being.
http://www.nytimes.com