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FEDERAL RESERVE'S FIRST MONETARY POLICY REPORT FOR 2003

HEARING

BEFORE THE

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

ONE HUNDRED EIGHTH CONGRESS

FIRST SESSION

ON

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

FEBRUARY 11, 2003

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FEDERAL RESERVE'S FIRST MONETARY POLICY REPORT FOR 2003

TUESDAY, FEBRUARY 11, 2003

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

The Committee met at 10:15 a.m., in room SH–216 of the Hart Senate Office Building, Senator Richard C. Shelby (Chairman of the Committee) presiding.

OPENING STATEMENT OF CHAIRMAN RICHARD C. SHELBY

Chairman SHELBY. The hearing will come to order.

I believe we have a quorum. Since we have a quorum present, I would ask that the Committee favorably report the nomination of William Donaldson, to be a Member of the Securities and Exchange Commission for the remainder of the term expiring June 5, 2007.

Can we do a voice vote?

Senator DODD. I second the nomination on that, Mr. Chairman.

Chairman SHELBY. The nomination has been seconded by Senator Dodd. All in favor, say aye.

[A chorus of ayes.]

Chairman SHELBY. All opposed, no.

[No response.]

Chairman SHELBY. The ayes have it.

The nomination is favorably reported. We will leave the record open so that any Member who is not present will have an opportunity to record their votes, if they care to.

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

Chairman Greenspan, our Nation's economy appears to be highly resilient. Last year, accounting scandals and corporate misdeeds unnerved investors and weakened trust in financial markets. The war on terrorism and our continuing efforts to enhance homeland security consumed valuable resources, but are necessary to preserve long-term security and freedom.

Despite these challenges, the economy grew at a 2.8 percent pace in 2002, with inflation remaining low at only 1.3 percent. Productivity growth was more impressive. On an annual average basis, productivity in both the business and nonfarm business sectors rose 4.7 percent in 2002—the fastest pace since 1950, and more than four times the 1.1 percent gain posted in 2001. On the unemployment front, the unemployment rate decreased to 5.7 percent in

January, falling three-tenths of a percentage point from December's 6.0 percent, and hit its lowest level since September 2002.

On the economic front, consumers continue to be a source of strength to this economy. Many homeowners have benefited from record low interest rates as they purchase new homes and refinance mortgages. Residential investment remains strong, but business investment continues to be weak. This is certainly a source of concern as we look to businesses to purchase new equipment and hire new workers.

I believe that ending the double tax on corporate income and permanently raising expensing limits for small firms would stimulate more of this needed investment. While it would be very difficult to repeat the productivity gains of this past year, we need to continue to focus on what can be done to further grow the economy, to improve productivity, and ultimately the standard of living for all our workers.

This requires that we look to our fiscal policy for improvement. I believe the President has put forward a very thoughtful, targeted, and balanced plan that would not only stimulate the economy in the short term, but make very positive long-term policy changes that would sustain strong economic growth.

But just as vital to our success in achieving these goals is the underlying credibility and integrity of our capital markets.

Earlier this morning, just a few minutes ago, this Committee voted to send forward the nomination of William Donaldson to chair the Securities and Exchange Commission. I believe he has the stature and the experience to provide the strong leadership that will be necessary to help set the tone for the high standards of corporate governance and financial reporting that our markets demand.

Mr. Chairman, we are pleased to have you with us this morning, and we look forward to you discussing with us the necessary actions we must take to ensure that our economy grows and prospers in the coming years. I look forward to hearing your remarks.

Senator Dodd.

STATEMENT OF SENATOR CHRISTOPHER J. DODD

Senator DODD. Mr. Chairman, Senator Sarbanes, I am sure, will be along shortly. Let me make a couple of opening comments, and then leave the record open for Senator Sarbanes to add his thoughts as well.

First of all, Mr. Chairman, we welcome you once again before this Committee to discuss the Federal Reserve's Monetary Policy and the state of the economy. It is always a pleasure to have you here before us.

Since you last appeared before the Committee, Mr. Chairman, the unemployment rate has lingered near 6 percent and the stock market continues to tumble. Consumer confidence levels remain low and economic growth has been reduced to a near stand-still, at 0.07 percent. All this, in addition to the looming war and rising oil prices, has led some analysts to continue to express concern that we may see a double-dip recession.

When President Bush took office, the Nation was in the midst of its fourth consecutive year of budget surpluses. Both the Congres-

sional Budget Office and the Office of Management and Budget projected surpluses of more than $5.6 trillion over fiscal years 2002 through 2011.

At that time, the President submitted his first budget 2 years ago and he promised that the Nation could afford to use projected surpluses to pay for his $1.3 trillion tax cut, and still have enough to meet our spending needs in the Nation. I believe he was wrong. His tax cuts have brought about soaring deficits and instead of trying to decrease the deficit, the President continues to add to it.

Last week, President Bush submitted his fiscal year 2004 budget proposal to Congress, which substantiates how much the economy has deteriorated during his first 2 years in office.

In the Bush Administration's first budget, it projected a 2004 surplus of $262 billion. In his second budget, a year ago, the Administration projected a $14 billion deficit for the year 2004. And now the budget for fiscal year 2004 projects a record deficit of $304 billion this year and $307 billion next year.

During President Clinton's last year in office, we were looking at record surpluses of $236 billion. This is the swiftest fiscal deterioration our Nation has seen in its history. This is even worse than the record deficit set by President Bush's father.

Even though the numbers show that the President's previous economic policies hurt the economy, this year's budget contains much of the same centerpieces as the first budget demonstrated—tax cuts for some of the wealthiest Americans. This year's proposed tax cuts will cost $1.3 trillion.

I see, by the way, my colleague from Maryland has arrived.

Just yesterday, more than 10 Nobel Laureates, together with 450 respected economists from universities and institutes from all across the Nation signed a statement expressing caution that the tax cut plan proposed by the President will not only fail to help the economy in the short run, but also will weaken it over the long term by enlarging projected deficits.

Any growth package, of course, that Congress passes should go to the people who most feel the ills of the economy. After all, since before President Truman, no President has presided over an economy registering net job loss until now.

Since President Bush took office, the economy has lost 2.3 million private-sector jobs, averaging about 75,000 jobs lost a month. In contrast to the previous Administration, we saw the creation of 239,000 jobs gained per month.

In 2001, it was projected that we would be debt-free by 2008. The Congressional Budget Office now forecasts that the Nation's publicly held debt will skyrocket to close to $4 trillion.

History has shown us that if we ignore fiscal discipline, the debt continues to increase and we will see high long-term interest rates and lower productivity growth. Businesses will be less likely to invest and spend.

Chairman Greenspan himself has said this throughout the years.

Mr. Chairman, these are trying times both home and abroad. But the decisions we make on the economy today will have long-lasting implications for all of us, and generations to come hereafter.

We need to understand that circumstances have changed profoundly. Our surpluses have turned into deficits. We are seeing a

record number of job losses. Our economy's growth rate has been the slowest in 50 years. The Dow and NASDAQ stock markets have lost roughly $5 trillion in market value.

It would be foolish for anyone to think that our policies should not change in response to these circumstances. It is unfortunate that thus far the Administration, in my view, has failed to see this.

So, Mr. Chairman, we look forward to hearing from you this morning to talk about what can be done to change the direction that we presently seem to be heading in.

Chairman SHELBY. Senator Allard.

COMMENTS OF SENATOR WAYNE ALLARD

Senator ALLARD. Thank you, Mr. Chairman, for holding this hearing. I would like to join you in welcoming Chairman Greenspan before this Committee again. It is always a delight to hear his comments as we move forward with the next Congressional session.

I happen to feel that when the President assumed office, the economy was beginning to head in the wrong direction. It was headed in a negative direction. And I believe now, that the economy is beginning to head back in a positive direction.

I want to thank Chairman Greenspan for his efforts to get us on the right track.

Yet, the American economy still has some elements of uncertainty. But I still believe it is critical that the Congress move to address the long-term solvency of Social Security and Medicare, to put the Government on a plan to pay down the national debt, and to continue to cut taxes. I believe by pursuing policies of low taxation, limited Federal regulation, free trade, and monetary policy, the United States will experience great wealth and opportunity. We will create new jobs.

I believe that we should follow these policies of limited Government. And Chairman Greenspan, having shared a few of my thoughts with you, I now look forward to your comments.

Thank you, Mr. Chairman.

Chairman SHELBY. Senator Reed.

STATEMENT OF SENATOR JACK REED

Senator REED. Thank you very much, Mr. Chairman. And thank you, Chairman Greenspan, for joining us.

I would like to associate myself with Senator Dodd's comments. I thought he was quite eloquent in his discussion of the current economic situation. Like him, I am afraid that the fiscal discipline of the 1990's is a fading memory and we are headed for a repeat of the fiscal mistakes of the 1980's.

The 1980 tax cuts were a mistake at that time, but similar policies would be an even greater mistake now. At least in the 1980's, the pressures on the budget from the retirement of the baby-boom generation were off in the relatively distant future and there was time to restore fiscal discipline.

This time, however, the biggest tax cuts will be kicking in at just about the same time that the baby boomers start retiring and start claiming the Social Security benefits that they have contributed and the Medicare they expect.

There is a fundamental question that we have to address—is this Government going to break its commitments to the beneficiaries of Social Security who have contributed to the system and to American citizens who reasonably expect that their health bills will be paid by Medicare?

Also, we have a commitment to fund an ongoing war against terrorism and perhaps other military operations, a commitment I do not think anyone around this table, and Chairman Greenspan would say, we will not fulfill totally.

With the context of Social Security, Medicare, and expenditures for war, we have to be concerned about the proposed tax cuts, which are I think both unwise and unfair.

Indeed, one of the economists today who associated himself with the hundred other economists in the United States, including several Nobel Prize Winners, indicated that the President's tax plans are a weapon of mass destruction aimed at the middle class.

I think we have to be cognizant of those types of comments and recognize and understand that the policies being advanced today by the President will not help restore our economy, nor will they help us face the responsibilities to fund Social Security, Medicare, and to conduct an international war against terrorists.

Thank you, Mr. Chairman.

Chairman SHELBY. Senator Bunning.

STATEMENT OF SENATOR JIM BUNNING

Senator BUNNING. Thank you, Mr. Chairman.

I would like to thank you for holding the hearing, and I would like to thank Chairman Greenspan for coming before the Committee today.

As we all know, and as has been said before, our Nation's economy has been sputtering. We had good growth in the first quarter of last year. We had weak growth in the second quarter. We had good growth again in the third quarter. And we had almost no growth at all in the fourth quarter.

Seasonally adjusted unemployment was down in January, after a sharp rise in December. The stock market was up and now on the uncertainty of a possible war, it is down. Energy prices are up, but interest rates are still low.

As I have pointed out many times, I believe that you waited too long to cut the Federal funds rate when the economy started tanking in 2000. I believe that delay has greatly contributed to the state of our economy right now. Unfortunately, we do not have a time machine to fix past mistakes. You did aggressively cut rates to try to help right the economy, so much so that it is pretty difficult to cut much more. Unfortunately, it was late in the game.

Hopefully, you will have some good news for us today. The American people still do not have strong confidence in this economy. They may see a light at the end of the tunnel, but they still think it might be a train.

Your words matter, Chairman Greenspan, maybe more than they should. But they still matter.

You make statements on fiscal policy, which you should not be doing. I understand that sometimes making statements, you believe you are off the record, and your comments about the Presi-

dent's economic plan may have been taken out of context. But this is Washington. Every microphone is "wired and hot."

You have been in this town for a long time. Some might say too long. You know "how to play the game" and you have played it well. If you are innocent and if the statement you made about the President's plan were off the record and out of context, you should have known better.

If it was neither off the record, nor out of context, then you are once again interjecting yourself into matters where you have no business. Like you, I believe the Federal Reserve should be fiercely independent. No President should try and set monetary policy. That is not his job.

But the Fed Chairman should not try to set fiscal policy. That is not your job. It is a two-way street. I understand you are asking questions about fiscal policy. I am sure you will be asked some fiscal policy questions at this hearing, and you should answer them truthfully. But just as the President should not undermine you on monetary policy, you should not undermine him or Congress on fiscal policy.

Once again, thank you, Mr. Chairman, for holding this hearing.

Thank you, Chairman Greenspan, for running the gauntlet today. I look forward to talking with you further during the question and answer period.

Chairman SHELBY. Senator Schumer.

COMMENTS OF SENATOR CHARLES E. SCHUMER

Senator SCHUMER. Thank you, Mr. Chairman.

I want to thank Chairman Greenspan for being with us because I believe that there is no more respected economist in the world, and we greatly value your time and perspective.

Seeing Chairman Greenspan here today makes me think of the classic Yogi Berra line, it is like déjà vu all over again.

We are all here together again. It is almost 2 years to the day when Chairman Greenspan testified before us, and again, the President has proposed tax cuts that have a profound fiscal impact. Again, we are trying to sort through it all to find the best policy.

But one thing is different today. Instead of surpluses, we have ever-widening deficits as far as the eye can see. And I believe we need strong and independent voices to speak out against this ever-increasing fiscal imprudence.

I disagree with my good friend from Kentucky. We need your voice. It is our hope that you will be one of those voices that speaks out against this fiscal imprudence because there is no stronger, no more respected, and no more needed voice than yours today.

Our hope is that we do not end up in a true fiscal morass down the road. I very much look forward to the Chairman's comments.

Chairman SHELBY. Senator Sununu.

COMMENTS OF SENATOR JOHN E. SUNUNU

Senator SUNUNU. Thank you, Mr. Chairman.

Welcome, Chairman Greenspan. I appreciate your taking the time. I know these hearings are extremely time-consuming and you are faced with Members of Congress, on the House side and on the

Senate side, that would like to explain to you exactly how we would act if we had your job. So, I appreciate your patience.

This is an important time internationally and domestically. I would be very interested in hearing your thoughts today about how the long-term prospects of establishing greater stability overseas, such as in Iraq and North Korea, can promote a better investment climate and can help accelerate whatever benefits—either from tax policy or fiscal policy—here in the United States, I look forward to your testimony.

Thank you.

Chairman SHELBY. Senator Bayh.

COMMENTS OF SENATOR EVAN BAYH

Senator BAYH. Thank you, Chairman Shelby.

Chairman Greenspan, thank you for being with us today. We are all here to hear from you and so I am going to save my comments for the question period.

Chairman SHELBY. Senator Dole.

COMMENTS OF SENATOR ELIZABETH DOLE

Senator DOLE. Thank you, Mr. Chairman.

Mr. Greenspan, I certainly appreciate very much the opportunity as a new Member of the Committee to hear your report this morning. And in the interest of time, I am going to submit my formal statement for the record.

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

Senator Miller.

COMMENTS OF SENATOR ZELL MILLER

Senator MILLER. Thank you, Chairman Shelby, for holding this hearing.

I have no opening statement, but we are glad to have you with us again, Chairman Greenspan.

Chairman SHELBY. Senator Crapo.

COMMENTS OF SENATOR MIKE CRAPO

Senator CRAPO. Thank you, Mr. Chairman. I will be brief as well.

Chairman Greenspan, I appreciate the opportunity to meet with you again and look forward to your testimony.

Obviously, from some of the comments that have already been made, it is very clear that your opinion on economic matters carries a significant amount of weight. I, along with the others that are here, are going to be looking very closely at your evaluation of what is needed in our economy, not only in terms of some of the economic policy decisions that we will be making here in Congress with regard to the President's proposal, but also with regard to some of the issues that have been around previously.

For example, the derivatives issue still may arise. And I expect that during the question and answer period, to have an opportunity to discuss that with you, to see if your opinion has changed at all on how we should approach those types of issues.

But, again, as some of my collegues have indicated, we are here to listen to you. And I look forward to the opportunity that we have to visit with you today.

Thank you.

Chairman SHELBY. Senator Carper.

STATEMENT OF SENATOR THOMAS R. CARPER

Senator CARPER. Thanks, Mr. Chairman.

Chairman Greenspan, welcome. We are delighted to have you with us today.

One of my colleagues said earlier today that the President should not try to fix monetary policy any more than the Chairman of the Federal Reserve should try to fix fiscal policy.

I was just thinking—how many Presidents have we seen in my lifetime who tried to fix monetary policy? I am not going to ask you to address that question. But I think most of us here know that there has been some precedent for that.

I share with you a conversation we had with some Democratic and Republican centrist Senators not so long ago, conversations I had with some business leaders back in my own State of Delaware, where we talked about what we needed to do to get the economy moving.

They talked a whole lot about uncertainty. They spoke of the uncertainty that we have faced with investor confidence, lack of investor confidence over the last year and hopefully, the steps that we have taken here today in moving forward the nomination of Bill Donaldson to chair the Securities and Exchange Commission will help to alleviate some of that uncertainty.

As time goes by, the implementation of the Sarbanes-Oxley legislation will hopefully help to boost investor confidence as well.

We have uncertainty because of the fear of terrorist attacks. What are we in—orange alert these days, and a whole lot of uncertainty that continues to swirl around that.

We have faced the uncertainties of the elections. We have survived the elections. We now know who is in the majority and who is not.

We still face the uncertainty of a potential war with Iraq, the effect that that war will have on energy prices, on the availability of oil, the prospect of an altercation with North Korea as we deal with them and their problems.

We have all kinds of uncertainty that flow out of class action lawsuits where little local courts in places like East St. Louis, Illinois and places in Alabama and Texas are making national class action law for our country.

We see uncertainty facing companies with little exposure to asbestos that are actually taking them under and putting them into bankruptcy.

We see uncertainty with spiraling health care costs. And we see the uncertainty of a trade deficit, where we have gotten better at exporting jobs. Not just manufacturing jobs, but jobs that are high-paying jobs—software jobs, technology jobs that are going abroad faster than we would like to think.

The last thing that I wanted to say is I had an interesting meeting with Dan Crippen, our recently departed CBO Chairman. He

put in context the Administration's tax cut proposal and talked about its effect on the economy.

He looked ahead for the next 10 years and said, GDP for the next 10 years will be about $120, $130, maybe $140 trillion. He also said the size of this tax cut proposal that we are looking at is about $650 billion. An economy of $140 trillion for the next 10 years, about a $650 billion tax cut.

And what he said then really helped me put it in context. He said it is a 65-cent change to a $140 economy.

Sometimes we delude ourselves, I think, by presuming that a tax cut or a spending policy is going to somehow move the economy, when actually what we do is relatively small compared to the size of the economy itself.

I would just say to my colleagues, and certainly to you, and to the Administration, that we need to deal with uncertainty to get the economy moving.

You have done a great job on monetary policy. You have done a terrific job and you are to be commended for that.

Thank you.

Chairman SHELBY. Senator Sarbanes.

STATEMENT OF SENATOR PAUL S. SARBANES

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

First, I want to commend our new Chairman for producing an immediate quorum this morning to report Mr. Donaldson out of the Committee, and I would like to join that favorable vote. In fact, Mr. Chairman, with your indulgence and that of my colleagues, I would like to make just a short statement about Mr. Donaldson.

In my view, he brings considerable relevant experience to this new assignment as Chairman of the SEC. He founded and managed a major investment company, Donaldson, Lufkin & Jenrette. He served as Chairman and CEO of the New York Stock Exchange. He was Chairman and President and CEO of a multibillion dollar public company. And he was the first Dean and Professor at the Yale School of Management.

He will face a daunting task as the new Chairman of the SEC. He must join with his fellow Commissioners in appointing the Chairman of the Public Company Accounting Oversight Board. He must address the challenge of restoring confidence to the capital markets. And I very much hope that he would move immediately to implement pay parity at the SEC.

I am pleased in his appearance before the Committee of recognizing the importance and immediate challenge of implementing the accounting responsibility and investor protection legislation we passed here in the Congress last year.

At his confirmation hearing, he testified that he will vigorously enforce Sarbanes-Oxley and the rules and regulations already put forth by the SEC.

He went on to say: "I will demand accountability from all responsible parties. I will aggressively enforce civil penalties and work cooperatively with the State and Federal law enforcement agencies and the President's Corporate Fraud Task Force to bring those who break the law to justice."

He went on to pledge to call on corporate America and Wall Street to restore the principles of honesty and integrity to their proper place. He indicated a strong concern for the welfare of the employees of the SEC. He pledged to address issues of morale and union relations at that Agency.

I am hopeful that Mr. Donaldson will effectively manage the SEC and effectively enforce the Federal securities laws and that he will bring about a new era of respect for the Agency and confidence in the U.S. securities markets.

And I know, Mr. Chairman, you have indicated an intention on the part of this Committee to follow closely with oversight hearings the activities at the SEC.

Chairman SHELBY. Absolutely.

Senator SARBANES. I am very pleased to join with my colleagues in welcoming Chairman Greenspan before our Committee this morning to testify on the Federal Reserve's Semi-Annual Monetary Policy Report to the Congress.

The Federal Reserve was created with an act of Congress. We have the oversight responsibility over the activities of the Federal Reserve.

We have tried to formalize those with these semi-annual reports to the Congress, which I think are extremely important. I am pleased that Chairman Greenspan is back before us carrying out this responsibility.

I want to make brief reference to the statement that was signed by the economists, including 10 Nobel Prize Winners, that was just released yesterday. They have pointed out the slowdown in the economic growth, the loss of private-sector jobs, the over-capacity, corporate scandals, and uncertainty weigh down the economy.

They view with considerable concern—one might say almost alarm—the tax cut plan proposed by the President, as a permanent change in the tax structure rather than directed toward the short-term problem of creating jobs and growth, and note that it would worsen the long-term budget outlook, adding to the Nation's projected chronic deficits.

Some of my colleagues have pointed out, when President Bush came into office in January 2001, that the Federal Government was projecting a 10-year surplus of $5.6 trillion. In fact, Chairman Greenspan came before the Senate at that time supporting a tax cut proposed by President Bush on the grounds that the Government was paying off its debt too fast. I remember that hearing as though it were yesterday. Chairman Greenspan argued that a tax cut was needed, to "smooth the glide path," so that the Government debt would not be paid off too quickly and put the Government in the position of acquiring private assets.

Well, that was then and this is now.

If the President's program were enacted into law, the program currently being proposed, the budget projections for the same 10-year period would be a $2.1 trillion deficit. In other words, we have gone from projecting a $5.6 trillion surplus to where we would now project a $2.1 billion. Trillion. Excuse me—$2.1 trillion deficit. That is obviously a shift of $7.7 trillion. That projected figure does not include the cost of a possible war with Iraq—probably one should strike the word possible. It also does not include tax changes such

as the reform of the alternative minimum tax and the extension of tax provisions currently scheduled to sunset, which almost certainly will be extended. We have done that continuously.

By any measure, we are in the process of transforming the fiscal position of the United States from one of fiscal surplus to one of large fiscal deficits. Given the scale of the deficits that would be created by the President's plan, fundamental questions are raised about the impact of deficits on interest rates, investment, growth, and jobs in our economy.

Witnesses for the Administration are downplaying the impact of budget deficits. I might note that many of these witnesses not very long ago were in here testifying in favor of the balanced budget amendment to the Constitution of the United States, to require that the Federal Government have a balanced annual budget.

In the face of the uncertain demands on public resources imposed by the war on terrorism, by homeland defense, by our difficulties with North Korea, and the march toward war with Iraq, I think the President's fiscal proposals are reckless and irresponsible.

It would deny us the public resources we need to meet current and future challenges. It would put upward pressure on long-term interest rates, which would reduce economic growth and impose greater hardship on middle and working class Americans.

Mr. Chairman, I look forward to reviewing these and other issues with Chairman Greenspan this morning.

Thank you very much.

Chairman SHELBY. Senator Johnson.

STATEMENT OF SENATOR TIM JOHNSON

Senator JOHNSON. Thank you, Chairman Shelby, and Ranking Member Sarbanes. And thank you for convening today's hearing to examine the monetary policy of the United States. We are privileged to have before us Chairman Alan Greenspan, and I welcome him here today to the Senate Banking Committee.

Today, as we gather to hear about the state of America's economy, we face a grim picture. It is sobering to note, as Ranking Member Sarbanes has just observed, that just 2 years ago, in this very room, Chairman Greenspan cautioned this Committee about the dangers of paying down the national debt too quickly. Now just a short time later, we face a $304 billion deficit this year alone, and a deficit of more than $2 trillion projected over the next 10 years. That is without counting the costs of war, the AMT fix, or homeland security, the war and homeland security both being particularly unknown and contingent in terms of the nature of the expense that that will entail, other than the obvious observation that it will be extraordinarily costly.

I speak in a somewhat unique circumstance among my colleagues in that in 2001, I voted to support President Bush's $1.3 trillion tax cut. And while I worked to moderate the cost of that tax cut in its initial proposal, and while I worked to redirect more of those resources toward middle class and working families, I agreed with Chairman Greenspan, who has often warned that Government should not accumulate taxpayer dollars. At the time that I voted for that tax relief, this country faced historically high surpluses projected at $5.6 trillion for fiscal years 2002 through 2011,

and I committed myself to assisting to return surplus funds to the taxpayer at that time. I did so, however, on the condition that President Bush himself reiterated during his most recent State of the Union address when he said: "We will not pass along our problems to other Congresses, other Presidents, and other generations."

It is difficult to believe that our circumstances have changed so dramatically since President Bush took office 2 short years ago. It is even more difficult to believe that President Bush appears determined to do exactly the opposite of what he pledged not to do. That is, pass along our actions to the next generation.

And frankly, I am appalled at the President's recklessness in proposing a massive tax cut targeted for the rich, while so many of our Nation's basic needs go unmet and while the prospect of enormously deep budget deficits loom before us. I simply cannot understand the impulse to plunge our Nation into even more staggering deficits at this time.

Now, I believe that any stimulus plan has to meet three simple conditions: One, it should give tax relief to working families who need it and who will spend it. Two, it should give tax relief now, while the economy is weak. And three, it should not saddle our children and grandchildren with additional debt.

In 2001, we were faced with record surpluses. Times have changed radically. And as I look, and as my constituents look back at what has gone on over the last several years, we have gone from a time when, frankly, the Democrats were in control in the White House and the Congress and the economy was deep in red ink. And the advice was to balance the budget, and that should come ahead of education and health care and other domestic needs. And that was done.

Then, we reached a time when Democrats again were in control in Congress, at the White House, and times were good, and we had budget surpluses. Again, the recommendation was tax cuts should come ahead of education, health care, and other domestic needs.

Now, we find ourselves with our Republican friends at the White House and in Congress, and the circumstances again deep in red ink and the advice yet again is tax cuts ahead of education, health care and other domestic needs.

My constituents are wondering whether this is economic advice we are receiving or whether it is simply political ideology, whether this has less to do with the economy than it does with bankrupting the Federal Government so that we do not find ourselves in a position where we can invest in our schools, in our families, in our kids, in the infrastructure that we need to have, in the health care needs of our people.

I have to tell you that the observations that I hear from my constituents are grim, indeed, about where this country is going and what the prospects are going to be in the future years if we continue to follow down this road of fiscal irresponsibility.

I appreciate the opportunity to listen to your words of advice, Mr. Greenspan, here today. I share with you the observations of so many of my constituents and the great fear and concern they have.

I look forward to a very constructive hearing today. Thank you, Mr. Chairman.

Chairman SHELBY. Senator Corzine.

COMMENTS OF SENATOR JON S. CORZINE

Senator CORZINE. Thank you, Mr. Chairman.

First of all, I am pleased that we are having this hearing and I welcome Chairman Greenspan. It is ironically disturbing to me that I am bouncing back and forth between the Foreign Relations Committee and here today. The two issues on the table are very much interconnected. We have a tragedy of the war on terrorism ongoing, a real element of concern to the American public. We have risks of war, and we are having a hearing on the costs of reconstruction of Iraq in a post-conflict period. And I am hearing from Under Secretary Grossman in that hearing that it will take a long and sustained commitment.

Times have changed. The world has changed, whether it is with regard to national security issues. And certainly, anyone's reading of the budget and economic conditions, which we have heard my colleagues speak of.

I look forward to hearing how the Federal Reserve and one of those people most respected in the world believes we should change, given the changing circumstances and environment we face with regard to the economy.

These are truly times of challenge for our Nation. And it is very hard for one to understand how we can, in the first time in our history at least that I know of, that we have chosen to have tax cuts in the midst of such great national challenge.

I will be anxious to hear what the Chairman has to say about these kinds of issues.

Thank you.

Chairman SHELBY. Mr. Chairman, welcome again to the Committee. Your written statement will be made a part of the record in its entirety. You may proceed as you wish.

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

Chairman GREENSPAN. My written statement, as you know, Mr. Chairman, is rather extended and I do not intend to speak more than 10 to 12 minutes, which would be a significant excerpt out of that long testimony.

Mr. Chairman and Members of the Committee, when I testified before this Committee last July, I noted that, while the growth of economic activity over the first half of the year had been spurred importantly by a swing from rapid inventory drawdown to modest inventory accumulation, that source of impetus would surely wind down in subsequent quarters, as it did. We at the Federal Reserve recognized that a strengthening of final sales was an essential element of putting the expansion on a firm and sustainable track. To support such a strengthening, monetary policy was set to continue its accommodative stance.

In the event, final sales continued to grow only modestly, and business outlays remained soft. Concerns about corporate governance, which intensified for a time, were compounded over the late summer and into the fall by growing geopolitical tensions. Equity prices weakened further, the expected volatility of equity prices rose to unusually high levels, spreads on corporate debt and credit default swaps deteriorated, and liquidity in corporate debt markets

declined. The economic data and the anecdotal information suggested that firms were tightly limiting hiring and capital spending and keeping an unusually short leash on inventories.

By early November, conditions in financial markets had firmed somewhat. But on November 6, with economic performance remaining subpar, the Federal Open Market Committee chose to ease the stance of monetary policy, reducing the Federal funds rate 50 basis points, to 1¼ percent. We viewed that action as an insurance against the possibility that the still widespread weakness would become entrenched.

In the weeks that followed, financial market conditions continued to improve, but only haltingly. Mounting concerns about geopolitical risks and energy supplies were mirrored by the worrisome surge in oil prices, continued skittishness in financial markets, and substantial uncertainty among businesses about the outlook.

Partly as a result, growth of economic activity slowed markedly late in the summer and in the fourth quarter. Much of that deceleration reflected a falloff in the production of motor vehicles from the near-record level that had been reached in the third quarter when low financing rates and other incentive programs sparked a jump in sales. The slowing in aggregate output also reflected aggressive attempts by businesses more generally to ensure that inventories remained under control. Thus far, those efforts have proven successful in that business inventories, with only a few exceptions, have stayed lean.

Apart from these quarterly fluctuations, the economy has largely extended the broad patterns of performance that were evident at the time of my July testimony. Most notably, output has continued to expand, but only modestly. As previously, overall growth has simultaneously been supported by relatively strong spending by households and weighed down by weak expenditures by businesses. Importantly, the favorable underlying trends in productivity have continued. One consequence of the combination of sluggish output growth and rapid productivity gains has been that the labor market has remained quite soft.

Another consequence of the strong performance of productivity has been its support of household incomes despite the softness of labor markets. Those gains in income, combined with the very low interest rates and reduced taxes, have permitted relatively robust advances in residential construction and household expenditures. The increases in consumer outlays have been financed partly by the large extraction of built-up equity in homes.

While household spending has been reasonably vigorous, we have yet to see convincing signs of a rebound in business outlays. The emergence of a sustained and broad-based pick-up in capital spending will almost surely require the resumption of substantial gains in corporate profits.

Of course, the path of capital investment will also depend on the resolution of the uncertainties surrounding the business outlook.

The intensification of geopolitical risks makes discerning the economic path ahead especially difficult. If these uncertainties diminish considerably in the near term, we should be able to tell far better whether we are dealing with a business sector and an economy poised to grow more rapidly—our more probable expectation—

or one that is still laboring under persisting strains and imbalances that have been misidentified as transitory.

If instead, contrary to our expectations, we find that, despite the removal of the Iraq-related uncertainties, constraints to expansion remain, various initiatives for stimulus will doubtless move higher on the policy agenda. But as part of that process, the experience of recent years may be instructive. As I have testified before this Committee in the past, the most significant lesson to be learned from recent American economic history is arguably the importance of structural flexibility and the resilience to economic shocks that it imparts.

I do not claim to be able to judge the relative importance of conventional stimulus and increased economic flexibility to our ability to weather the shocks of the past few years. But the improved flexibility of our economy, no doubt, has played a key role. That increased flexibility has been in part the result of the ongoing success in liberalizing global trade, a quarter-century of bipartisan deregulation that has significantly reduced rigidities in our markets for energy, transportation, communication, and financial services, and, of course, the dramatic gains in information technology that have markedly enhanced the ability of businesses to address festering economic imbalances before they inflict significant damage. This improved ability has been facilitated further by the increasing willingness of our workers to embrace innovation more generally.

It is reasonable to surmise that but, not only have such measures contributed significantly to the long-term growth potential of the economy this past decade, but they have also enhanced its short-term resistance to recession. That said, we have too little history to measure the extent to which increasing flexibility has boosted the economy's potential and helped damp cyclical fluctuations in activity.

Even so, the benefits appear sufficiently large that we should be placing special emphasis on searching for policies that will engender still greater economic flexibility and dismantling policies that contribute to unnecessary rigidity. The more flexible an economy, the greater its ability to self-correct in response to inevitable, often unanticipated, disturbances, thus reducing the size and the consequences of cyclical imbalances. Enhanced flexibility has the advantage of adjustments being automatic and not having to rest on the initiatives of policymakers, which often come too late or are based on highly uncertain forecasts.

Policies intended to improve the flexibility of the economy seem to fall outside the sphere of traditional monetary and fiscal policy. But decisions on the structure of the tax system and spending programs surely influence flexibility and thus can have major consequences for both the cyclical performance and long-run growth potential of our economy.

As we approach the next decade, we need to focus attention on this necessity to make difficult choices from among programs that, on a stand-alone basis, appear very attractive.

Because the baby boomers have not yet started to retire in force, and accordingly, the ratio of retirees to workers is still relatively low, we are in the midst of a demographic lull. But short of an outsized acceleration of productivity to well beyond the average pace

of the past 7 years or a major expansion of immigration, the aging of the population now in train will end this state of relative budget tranquility in about a decade's time. It would be wise to address this significant pending adjustment and the associated potential for the emergence of large and possibly unsustainable deficits sooner rather than later. As the President's just-released budget put it: "The longer the delay in enacting reforms, the greater the danger, and the more drastic the remedies will have to be."

Reestablishing budget balance will require discipline in both revenue and spending actions, but restraint on spending may prove the more difficult. Tax cuts are limited by the need for the Federal Government to fund a basic level of services—for example, national defense. No such binding limits constrain spending. If spending growth were to outpace nominal GDP, maintaining budget balance would necessitate progressively higher tax rates that would eventually inhibit the growth in the revenue base on which those rates are imposed. Deficits, possibly ever widening, would be the inevitable outcome.

Faster economic growth, doubtless, would make the deficits far easier to contain. But faster economic growth alone is not likely to be the full solution to currently projected long-term deficits. To be sure, underlying productivity has accelerated considerably in recent years. Nevertheless, to assume that productivity can continue to accelerate to rates well beyond the current underlying pace would be a stretch, even for our very dynamic economy. So short of a major increase in immigration, economic growth cannot be safely counted upon to eliminate deficits and the difficult choices that will be required to restore fiscal discipline.

By the same token, in setting budget priorities and policies, attention must be paid to the attendant consequences for the real economy. Achieving budget balance, for example, through actions that hinder economic growth is scarcely a measure of success. We need to develop policies that increase the real resources that will be available to meet our longer-term needs. The greater the resources available—that is, the greater the output of goods and services produced by our economy—the easier will be providing real benefits to retirees in coming decades without unduly restraining the consumption of workers.

These are challenging times for all policymakers. Considerable uncertainties surround the economic outlook, especially in the period immediately ahead. But the economy has shown remarkable resilience in the face of a succession of substantial blows. Critical to our Nation's performance over the past few years has been the flexibility exhibited by our market-driven economy and its ability to generate substantial increases in productivity. Going forward, these same characteristics, in concert with sound economic policies, should help to foster a return to vigorous growth of the U.S. economy to the benefit of all our citizens.

Thank you very much, Mr. Chairman. I look forward to your questions.

Chairman SHELBY. Thank you.

Chairman Greenspan, you are well known for your comments several years ago concerning the irrational exuberance of financial markets.

Over the past year, we have seen a significant decline in financial markets, due in part to not only an economic slowdown, but also because of a decline in investor confidence. In fact, the NASDAQ is below the level it was when you made your comments several years back. In your opinion, have we now moved from irrational exuberance to excessive anxiety?

Chairman GREENSPAN. Well, it is always difficult to make those judgments, Mr. Chairman, but the fact that there is some anxiety in the markets I think is very evident.

Indeed, the general context of my prepared remarks is that, pending full confirmation of the impact of what we call geopolitical risks, we do not know what the underlying strength of this economy is. My suspicion, and I emphasize it is very difficult to know for sure, is that that geopolitical risk is hanging very heavily on economic decisionmaking and hence, economic growth. And its elimination should, in my judgment, make a very considerable difference.

Chairman SHELBY. Thank you. Do you believe that sufficient actions have been taken to restore investor confidence or that we need to do more to restore market credibility?

Chairman GREENSPAN. I think that the statute which was essentially formulated by Senator Sarbanes and Congressman Oxley has gone a very significant way in eliminating a considerable amount of the incredible corporate malfeasance which we saw over the last year or so; or at least was exposed over the last year or so.

I do think that the issue of the statute is not wholly related to the short-term. It is mainly, in my judgment, related to the longer term when the next generation, having accrued irrational exuberance, is apt to go down very similar paths that we have seen the current generation go down.

I do think that, as best I can judge, a considerable amount of the malfeasance which I think is so rightly addressed by the Senator's and the Congressman's statute, is not a major problem for the immediate future. I do not deny that we are likely to find additional examples of rather atrocious accounting, atrocious behavior, and I find that more likely than not.

But I would be very surprised if it were initiated beyond mid-2002 because the decline in the market and the response of the Congress and the political system to some of the actions I think chastised the business community in a way which had the equivalent of almost eliminating a high fever which seemed to have gripped people who were otherwise very ethical, very responsive to their shareholders, and responsive to making their companies as best as they could.

Virtually all of them, listening to their commentary, have seemingly come out of this fever-ridden view toward how to harvest those huge capital gains and restored, in many respects, some of the actions which they did in a more sensible way in years past.

Chairman SHELBY. Mr. Chairman, homeowners have benefited greatly in recent years from continued low interest rates and rising home values. The outstanding value of revolving home equity loans at commercial banks rose from $155.5 billion in December 2001, to $212.3 billion in December 2002, just 1 year. Homeowners use this money to make other purchases or to pay down some debt. Should

we have any concerns about consumers being over-extended through these home equity loans? Would there be an adverse impact if home prices no longer appreciate or even decline?

Chairman GREENSPAN. Senator, we have looked at that in some considerable detail, and the result of our analysis is the following: If you take overall mortgage debt, which would include home equity debt and you compare it to the level of disposable income of homeowners only, the level of the debt is rising relative to income, but not significantly so. However, with the very marked decline in interest rates, the debt service cost as a percent of disposable income of owner-occupied households, is actually average or, if anything, somewhat less than average.

Now, I hasten to add that a goodly part of this is the rather low interest rates that exist in the mortgage market. But unless interest rates come back very sharply, which would presumably occur in the context of rapid economic recovery or an acceleration of inflation, which I do not anticipate, the balance of debt in the mortgage market generally, even though very large, is not, in our judgment, a cause of concern.

We would be concerned if the price of homes in general across the country moved down rather considerably. And there was a good deal of concern, as you know, about this housing bubble. But our evaluation of the data and the outlook suggests that, while obviously there are potential problems, they are not serious ones that need to be addressed in any material way as far as we can judge.

Chairman SHELBY. Senator Sarbanes.

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

Chairman Greenspan, *The Washington Post* this morning has a story headlined: "Greenspan Likely To Back Dividend Plan," referring to the President's proposal with respect to the taxation of corporate dividends. It points out later that the tax changes that the President is seeking would cost well over a trillion dollars in the next 10 years. Do you back the dividend plan?

Chairman GREENSPAN. Let me make two points with respect to this, Senator.

The first thing is, I have always supported the elimination of the double taxation of dividends because I think it is a major factor restraining flexibility in our economy. And as I pointed out in my prepared remarks, moving in the direction of improving flexibility I think has very large, long-term payoffs.

However, I also commented in my prepared remarks and, indeed, testified before the House Budget Committee, that PAYGO rules, which expired in September in the House, and will expire here, are very important for the budgetary process.

So, I do support the elimination of the double taxation of dividends. I would prefer that it be done at the corporate level. But I think the way it is constructed in the President's program makes a good deal of sense over the long run as well.

But in my judgement, any such initiative should be in the context of PAYGO rules, which means that the deficit must be maintained at minimal levels.

Senator SARBANES. Just last July, you testified before this Committee, and I am now going to read you a quote and follow up with a couple of questions on the double taxation of dividends. You said:

The fundamental aspect of this question really gets down to the double taxation of dividends and the issue of the integration of the corporate tax with the individual tax. And I think a lot of economists will tell you that it is an extraordinarily useful and efficient way, if you can do it, to put all of the tax burden on shareholders and not have double taxation of dividends through taxing the corporation and then taxing the dividends again.

My own impression is that we should have a very large expansion of subchapter S corporations which effectively would enable dividends to be paid out and effectively taxed only once.

I do not expect that to happen at this particular stage and there are very good reasons why problems of revenue loss are creating a concern. There are issues of equity. But if you are asking as an economist and looking strictly at the question of the optimum allocation of capital in the system, eliminating double taxation of dividends is a very valuable thing to do.

Now it seems to me that the key question is not whether you support ending double taxation of dividends as a matter of abstract tax policy. But whether you think it should be financed by deficit spending or whether it should be paid for.

That in turn raises the fundamental issue of whether deficits matter and whether deficits affect long-term interest rates, savings, investment, and growth.

You are on the record on that issue as well, but I would like you to respond to two questions. And in the course of asking them, I note that the economists who issued the statement opposing the Bush tax cuts, the 10 Nobel Prize winners and many, many others, said in the course of that statement—the permanent dividend tax cut in particular is not credible as a short-term stimulus.

As tax reform, the dividend tax cut is misdirected in that it targets individuals rather than corporations, is overly complex, and could be, but is not, part of a revenue-neutral tax reform effort.

Now given that your position has been that you want to address the double taxation, do you think it should be financed out of deficits in order to correct that problem?

Chairman GREENSPAN. Well, if I support, and I argued very strenuously at the House Budget Committee last September, and indeed, repeated part of that testimony in my prepared remarks, that the process that you go through in constructing the budget has been very effectively enhanced by PAYGO rules and discretionary caps, then the way I would answer the question is, yes, I do think that eliminating the double taxation of dividends in any of the various forms, including subchapter S or taking the tax deduction at the individual level or at the corporate level—and as I said, from a commerce point of view, it is the latter that is the best. But they are all I think quite important and useful.

The reason is that they improve the flexibility of the economy. And the one thing I have sensed as the last 2 or 3 years have gone on is how really important that apparently is.

Having said that, there is no question that as deficits go up, contrary to what some have said, it does affect long-term interest rates. It has a negative impact on the economy, unless attended.

As I have indicated in my prepared remarks and, indeed, in my oral remarks, I think that there are major problems which must be addressed, which means that we just cannot keep adding programs

of one form or another to a limited expansion capability in the economy.

I would argue that we should be doing both, namely trying to move toward increased flexibility, but being very careful not to allow deficits to get out of hand, especially when we are going to be running into a significant problem starting 2010, 2012, and beyond with a very significant acceleration in beneficiaries for both Social Security and Medicare.

Senator SARBANES. Mr. Chairman, let me just close.

Two years ago almost to the day, you said before this Committee, and I want to see whether you still adhere to this statement, and I am now quoting you: "In recognition of the uncertainties in the economic and budget outlook, it is important that any long-term tax plan or spending initiative . . ." let me just emphasize that, 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 this is when we are dealing with a surplus question. We are dealing with a deficit question. Even the Administration itself is projecting deficits of $300 billion over the next 2 fiscal years.

Then to go on with your quote: "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."

Do you still hold to that statement?

Chairman GREENSPAN. I do, Senator.

Senator SARBANES. All right. Thank you.

Thank you, Mr. Chairman.

Chairman SHELBY. Senator Allard.

Senator ALLARD. Thank you, Mr. Chairman.

Around September 2002, many of the opponents of the temporary tax cut of 2 years ago, admitted that they felt like it kept the economy from bottoming out at a potentially lower number. In other words, the tax cut did help the economy some. That was even noted in an editorial in *The Washington Post* in September.

What conditions have changed now that would show that we should not advance those tax cuts or make them permanent in order to further help the economy?

Chairman GREENSPAN. Senator, as I implied in my remarks, I am one of the few people who still are not as yet convinced that stimulus is a desirable policy at this particular point.

It depends very much on how one reads what is effectively going on under the whole structure of geopolitical and other risk. And unless and until we can make a judgment as to whether, in fact, there is underlying deterioration going on, and my own judgment is I suspect not, then stimulus is actually premature.

I support the President's proposal on eliminating the double taxation, not as a short-term stimulus measure, but as long-term, good corporate tax policy and something which would add to the long-term flexibility and potential growth of the economy. But unless it turns out that there really is a very weak underlying structure even beneath this degree of uncertainty, which I will grant you will

then change our view with respect to the desirability of stimulus beyond what has already been put in place by the Federal Reserve in its fairly significant decline in short-term interest rates, we have to be in a position to be able to state that we see that as a very significant problem and one which must be addressed in a manner which would then clearly be necessary.

I suspect it is not. But I cannot say with any degree of assurance that I feel comfortable with that conclusion.

Senator ALLARD. Mr. Chairman, we are possibly facing the need for Congress to increase the debt limit. The debt limit reflects not only public debt—it is a total debt limit. It reflects obligations, as you know, to the general fund, both from the trusts, as well as the public debt.

There is some discussion as to whether, in dealing with the debt limit, we should just concern ourselves with public debt or whether we should concern ourselves just with the total debt limit figure. In other words, instead of putting that limit on total debt, maybe modify it so that it is just on the public debt. I would like to hear your comments on that, sir.

Chairman GREENSPAN. Well, I have testified on this previously, Senator, and I will just repeat what I said then, which is, if you are going to do this, then putting it on debt to the public, which is now a number which excludes debt held by investment accounts of the Federal Government, obviously, that is the economic variable you should be adjusting it to.

But having said that, you have already, or will have already, constructed a debt limit by the various votes that you have had with respect to authorizing receipts and outlays. And either that debt limit is redundant, meaning that it is the same number that is implicit in the difference between receipts and expenditures, coupled with the debt at the beginning of the period, or it is inconsistent and you are creating contradictory law.

So, I conclude, as I did in my prepared remarks, that the debt ceiling is not a useful fiscal tool and, indeed, has never in my judgment been successful in doing what it is supposed to have been doing—namely, constrain spending. I would think it would be wise to eliminate it.

Senator ALLARD. Thank you, Mr. Chairman.

Chairman SHELBY. Senator Dodd.

Senator DODD. Thank you, Mr. Chairman. Let me pick up, if I can, a bit on what Senator Sarbanes was raising.

In your testimony here this morning, you said:

> As I testified before this Committee in the past, the most significant lesson to be learned from recent American economic history is arguably the importance of structural flexibility and the resilience to economic shocks . . .

I want to raise the question of the permanency of the tax cuts that are being sought, the ones that were adopted in the spring of 2001. Obviously, major events have occurred since then that have caused us to have to examine our fiscal policies for all the obvious reasons.

I note that you have taken the position, before the Joint Economic Committee, that the tax cuts are not stimulative. You do not believe them to have any stimulative effect.

But you also argue that because there is a presumption that these tax cuts are already permanent in the economy, that to not make them permanent would be unwise. And I want to raise that particular issue.

These are tax cuts that go out 10 years. How do you square agreeing to a permanency of a 10-year tax cut proposal with structural flexibility at a time when we have so many demands that are going to be made on us for all the obvious reasons, both including domestic pressures, as well as anywhere from, according to some economists, $100 billion to in excess of $1 trillion, the cost of the war in Iraq and the after-effects?

Chairman GREENSPAN. Well, Senator, my response to that question at an earlier time was the endeavor to try to recognize that it is just not credible to have a significant tax cut which sunsets 10 years out. Markets do not believe it. It makes no fiscal sense and you are far better off making it permanent, but putting everything under PAYGO in a manner which addresses the broad issues of the deficit.

The Congress has to make judgments because it is the only vehicle which ultimately has the authority to make choices among some very difficult programs. That is, I do not know a single program which has been authorized by the Congress over the years which was not perceived to be beneficial, either as a spending program or a tax cut.

The trouble is that when you add them all up, they come to a total larger than the fiscal capacity of the country as measured by our gross domestic product, which means choices must be among things which on a stand-alone basis are very good, desirable, and meet any cost-benefit analysis you can think of.

So what we are dealing with is the issue of how to make choices. And the most difficult problem that exists with respect to long-term budget issues is getting them right.

But as I have said in previous testimony—indeed, I said it in the current testimony—we almost surely will never get it right. Therefore, we have to consider issues of triggers and sunset legislation in order to make midcourse corrections, not if, but when policies go off the long-term, expected track.

And because there has been a very substantial change in budgetary policy over the last 20, 30, 40 years, in the sense that we have moved from 1-year budgets and essentially two-thirds discretionary spending to exactly the reverse, and indeed, we have gone from, as I said, the 1-year, to then 5-year, mandated under the 1979 Act, and by the mid-1990's, to 10-year horizons, because our programs are projecting out that far, even though we know we cannot estimate them with any great accuracy, we need new devices for long-term fiscal policy.

In my judgment, the most significant ones that we need are the ones which we are allowing to basically expire, the PAYGO and discretionary caps, and importantly, over the longer-term, triggers, and to the extent that it is important, sunset legislation. Because the existing tools that we now employ for budgetary policy are not significantly different from what they were 30, 40 years ago. And these are very different budget processes that we are involved in.

Senator DODD. Just a quick follow-up, then. I am somewhat confused here.

The permanency of these tax cuts over the next 10 years, I do not disagree. In fact, I have supported over the years pay-as-you-go proposals and so forth. I understand the value of that.

We are looking, for instance, at budget cuts that are occurring in a number of areas where people anticipated that there would be a Federal commitment in certain areas and seeing the pressures occur at the State and local level as a result of our changing direction here. Just most recently in the COPS program, for instance, in which local departments and States counted on over the years. All of a sudden, that program is going to be eliminated, just to use one example.

I am not arguing. Maybe it should be. But the point is that there is an anticipation by local governments and State governments for some time that this would be forthcoming. We are changing that.

It seems to me that we need to send some mechanism here. I am hearing you saying that with regard to these tax cuts, that the permanency of them, that you would like to see something put in place, rather than just the pure permanency of them, some trigger mechanism or some pay-as-you-go proposal that you attach to their permanency.

Chairman GREENSPAN. Yes. I do not think that we can have permanent tax cuts or permanent spending programs in the sense that they exist independently of the tax base or the revenue-raising base of the economy.

In a sense, it would be desirable to have permanent, irrevocable fiscal policy. But if it adds up to a claim on resources which exceeds what is available given our economic condition, something has to give. So the notion of permanence cannot rationally be consistent with the programs we are involved with.

Senator DODD. Thank you.

Thank you, Mr. Chairman.

Chairman SHELBY. Senator Bunning.

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

I always start out just to ask one question of you. Do you see any evidence of inflation in the economy presently?

Chairman GREENSPAN. I do not, Senator.

Senator BUNNING. Thank you. In regards to some of the testimony you have given in the past, I would like to just mention a couple things that have happened since that testimony.

We had September 11, 2001. We have a war on terrorism. We have had a surplus and now we have a deficit. We had a discussion about the cost of the war, if there is one with Iraq, by OMB Director Mitch Daniels. He thinks the cost can be under $100 billion. I heard a trillion dollars mentioned here just a minute ago.

What I am saying is for 40 years in the Congress that we had some deficit spending. So before the year 1997, when we finally got it right and we turned it around we then had some surplus years.

You testified that surpluses are not always good, but can create problems. And sure enough, they have created a problem because we got on a spending spree of about annually 10 to 12 percent in discretionary spending. We cannot sustain that, Mr. Chairman, and expect our surpluses to last very long.

Besides that, we have the cost of the war on terrorism and we have the cost of the war for homeland security.

What I am saying to you is a temporary deficit in the amount of $300 billion is bad. I do not like it any more than you do. But if we do not change the policies that we now have, we may have that forever as we go out. And we have to change our fiscal policy to deal with that.

Are you saying that we need to do that to stabilize our economy in the out-years, even though you do not think that the tax cuts are stimulus as they are now proposed?

Chairman GREENSPAN. I certainly think that it is crucial that we have a budget policy which does not destabilize the economy. What that turns out to be, Senator, amongst a number of different criteria, is at least the necessary condition that the level of debt-to-GDP not be rising.

Now, you can have in today's environment a level of debt-to-GDP which is flat, but still have modest, small deficits, indeed, somewhere in the area of 1 to 2 percent. That is not inconsistent with stability.

But if we get into a position, as I pointed out in my prepared remarks, where we are finding that the debt-to-GDP ratio begins to accelerate, we have to be very careful because there is no self-equilibrating mechanism when that is occurring because a rise in the debt increases the amount of interest payments, which in turn increases the debt still further and there is an accelerating pattern after you reach a certain point of no return.

So it is crucial that we keep in mind the long-term pattern of debt-to-GDP on a unified basis. And I even go on further to discuss in some detail the desirability of moving to an accrued budgetary system as well, which would take into consideration the value of the commitments which the Congress is making over a protracted period and make judgments far better than we can now as to whether those are long-term, sustainable fiscal policies.

Senator BUNNING. As you know, the Fed recently announced that they will be eliminating 72 jobs from the Louisville office. I know that your staff has assured my office that the Fed will try to help those workers that are displaced. But I think those workers who may be displaced would feel much better if they had assurance from the Chairman that the Fed will do what they can to assist them in finding new work. Will you give that commitment to the Federal workers in Louisville and throughout the country who are losing their jobs?

Chairman GREENSPAN. Most certainly, Senator. We have a program which endeavors either to find alternate jobs for the people who are displaced in the check-clearing operations, or if that is not feasible, to do whatever we can to find ways in which they can be reemployed as expeditiously as possible.

Senator BUNNING. I have some other questions but my time has run out. If I can, I will just submit them to you and you can give me a written response.

Chairman GREENSPAN. I would be delighted to.

Senator BUNNING. Thank you.

Chairman SHELBY. Senator Reed.

Senator REED. Thank you, Mr. Chairman.

Chairman Greenspan, let me make one comment and then ask one question.

In your testimony, you quite fervently argue for flexibility. But one aspect of flexibility in the American economic and in the political system is the flexibility of leaders who recognize changed circumstances. In fact, I think the President's proposal is quite inflexible. It is the same approach that he was advocating before September 11. It is the same approach he was advocating before we saw a surplus turn into a growing deficit. And I would hope that if you are arguing for flexibility before the Congress, you would argue for flexibility of mind with the Administration so that they could adjust their policies.

Let me ask just one specific question. Actually, two premises and a conclusion. I will ask you to comment on my premises and the conclusion.

The first premise—the American public expects to be paid fully the Social Security benefits which they have contributed.

The second premise—by exhausting the Social Security Trust Fund, which is the effect, if not the intent, of the President's proposals, accomplishing that expectation is very, very difficult, if not impossible.

The conclusion might be, then, those who support these proposals of the Administration either have no intention of paying fully the benefits of Social Security, and I could add Medicare also, or they are irresponsible in advocating such proposals.

Now the first premise. Do you believe that, not that the American people expect to have the benefits, we will in fact pay full Social Security benefits to everyone who is entitled at this moment?

Chairman GREENSPAN. I think, as best I can judge, it has always been my expectation that the payments of benefits under law had very little to do with what the assets in the Social Security Trust Fund were, because I cannot conceive of a political situation in which those benefits run out. And under law, there are curtailments in payments. I know that is what the law says. I have no expectation that the Congress would allow that law to stay in place.

Senator REED. The second premise is that, by exhausting the Social Security Trust Fund, which is the effect of the proposals that we have seen 2 years ago in the tax cuts and the current proposals, making those payments is extraordinarily difficult and will put extraordinary pressure on this Congress in terms of other programs and other priorities. Do you agree with that premise, also?

Chairman GREENSPAN. Actually, the Social Security benefits are reasonably capable of being estimated well into the future because they have many of the characteristics of a defined benefit pension plan. The really major fiscal problem is not Social Security. It is Medicare.

Senator REED. I agree with you. However I was raising an issue that is less complicated in terms of discretionary spending. But as I think you recognize, and we all do, we are talking about, particularly after 2017, huge contingent liabilities which we can define right now, as you said, we have reserved some funds for it. But we are going to exhaust those funds by proposed tax cuts. Doesn't it follow then that we are making life impossible for us?

Chairman GREENSPAN. Well, I merely fall back to my previous answer. These are the crucial issues of the determination of how one allocates resources available to the Government amongst a series of programs, both tax and spending programs, all of which have very strong supporters and very good résumés, if I may put it that way, as to why these programs are indispensable to the American people.

It is the Congress' very difficult task to make those judgments because we have no other mechanism in this democratic society to effectively try to translate the value system of the American people into how we cut these priorities—I do not mean cutting, I mean by paring—how we lay them out.

As you know, I was Chairman of the Social Security Commission back in 1983. It was a fascinating experience to be exposed to a number of what were then your predecessors in a number of the seats around this table, on how they negotiated what ultimately actually turned out to be a remarkably sensible compromise. It pleased nobody. But everyone signed on.

Senator REED. I think that is the only thing we can agree on. It won't please anybody what we do, but we have to do something.

Again, let me thank you. I see from your response, which is my intuition also, that we will not step away from Social Security spending, but we are going to make it extraordinarily difficult to fulfill that commitment by these tax cuts.

Thank you, Mr. Chairman.

Chairman SHELBY. Senator Sununu.

Senator SUNUNU. Thank you, Mr. Chairman.

Mr. Greenspan, in your testimony, you talk about the fact that business inventories have stayed pretty lean and then indicate that that is probably a good prognosticator of maybe future manufacturing activity, and note that purchasing manager information suggests the improvement on manufacturing activity has continued into the beginning of this year. Could you elaborate on that a little bit and talk about what signs you see from purchasing managers or other sources that the early trends in the first quarter now are somewhat positive?

Chairman GREENSPAN. Yes. First of all, the fact that inventories are low is a very positive sign in the sense that if there is any evidence that the economy is picking up, inventory accumulation will begin to move at a fairly pronounced pace.

The data for January, which we have, as you know, for purchasing managers, says that in their diffusion index, production went up. But more importantly, we have a lot of weekly statistics on production for motor vehicles, steel, electric power, and a set of individual products which account for something in the area of a sixth of the total industrial production index which we publish.

Senator SUNUNU. Is that a pretty good proxy?

Chairman GREENSPAN. Actually, it is better than a proxy in the sense that we actually have on a weekly basis the industrial production index for part of the total.

Senator SUNUNU. But does the other 84 percent tend to track the weekly numbers?

You can get weekly information on 50 percent. But if the other 50 percent is incredibly volatile, it may be of no use.

Chairman GREENSPAN. We have other indicators that tend to proxy for the remainder, mainly, insured unemployment data, which we find has been useful in combination with the weekly data to suggest what patterns are emerging in the manufacturing or, more exactly, in the industrial production area.

Senator SUNUNU. I consider myself somewhat an optimist. And so, the parts of your testimony that, at least over the last 2 or 3 years, that I have found most interesting or most encouraging, is your repetition of the degree to which you are impressed with the resilience of our economy, the degree to which technological improvements have lent themselves to productivity increases and the flexibility you talk about being important. Also, I have been impressed with the resilience of the consumer demand, which you note in your testimony has been quite stable through all of this uncertainty. But business investment continues to lag.

Could you talk a little bit about the elements of the President's proposal that do target business investment? There is a provision for small businesses to allow them to expense $75,000 a year instead of $25,000 a year.

To what degree is that kind of an approach effective, given that it is targeted at small businesses? Are they a big enough part of our business investment economy to make a difference?

I am not asking you to write legislation. I know that is not appropriate. But other types of approaches that might address the lagging business investment and, as a result, have a good, long-term impact on our economy?

Chairman GREENSPAN. Senator, I have not looked at some of the details enough to make an evaluation. But the most important stimulus, if you want to put it that way, in my judgment, is the removal of the uncertainties which overhang the capital investment markets, which, as I have indicated earlier, I believe are quite significant and that one does not need stimulus, if I may put it that way——

Senator SUNUNU. You are talking about the geopolitical concerns that you outlined in your testimony.

Chairman GREENSPAN. Yes.

Senator SUNUNU. Beyond that, you have no thoughts to offer about the accelerating depreciation or the reforming depreciation schedules to encourage business investment? Or do you think they just pale in comparison to the geopolitical concerns?

Chairman GREENSPAN. The answer is, yes, I do think that it is small in comparison. But I have in the past discussed the various different issues which economists have evaluated with respect to capital investment, namely, there are ways to accelerate capital investment in the short run.

But the most fundamental stimulus to capital investment is the prospect for higher earnings on real investment over the longer run. There is no substitute.

Senator SUNUNU. I have one final question about the mortgage industry.

You talked about the degree to which mortgage rates being at historic lows encourage refinancing and the refinancing activity is at a very high level right now.

In the past, you have been very candid about your concerns regarding the GSE's and your thoughts regarding changing some of the current legislation that provides benefits to GSE's.

Let me talk about one particular reform, which I think is topical because of the Sarbanes-Oxley bill, and that is greater oversight or involvement of the SEC in the mortgage market and the secondary mortgage markets in particular.

To what extent do you or would you support SEC oversight or involvement in the GSE's—but to what extent would that affect the costs of mortgages and the liquidity in the mortgage markets?

Chairman GREENSPAN. Without stipulating whether I would agree with any particular proposal because without seeing the specific proposal, basically saying that this agency should oversee this part of the economy, I do not think there is enough information.

But having said that, the major issue here is the subsidy which is implicit in the GSE debentures, even though they are not legally an obligation of the U.S. Government. They are not backed by the full faith and credit of the United States. It is the market which presumes that they will be bailed out that effectively enables them to sell mortgages at a number of basis points below what the market otherwise would be.

As a consequence of that, some of that does go through into lower mortgage interest rates. But as best we can judge, it is a very small number.

So, I am not at all convinced that many of the proposals really make all that much difference to the secondary mortgage market or to the level of mortgage interest rates to the American public.

Senator SUNUNU. I don't want to let you completely off the hook. On the first part of your response, it is the SEC, the Securities and Exchange Commission, we do task them with oversight of securities markets. We are talking about collateralized obligations. Do you think that they would be an appropriate oversight agency? Or is there something unique to the mortgage markets that would make you say that this has to be treated somewhat differently?

Chairman GREENSPAN. No, no. As you know, the SEC is already involved in the question of making judgments as to whether certain types of securities should be registered or not registered. I think these are legally private corporations and should be handled the way private corporations are handled.

Senator SUNUNU. With regard to registration and fees.

Chairman GREENSPAN. With regard to issues that revolve around the SEC. But going beyond that, I do not know because I do not know what the particular proposals would be.

Senator SUNUNU. I appreciate that. Thank you, Mr. Chairman.

Chairman SHELBY. Senator Schumer.

Senator SCHUMER. Thank you, Mr. Chairman. And I want to thank you for your answers.

I would like to refer, Mr. Chairman, to an exchange that you and I had just about 2 years ago that still rings fresh in my mind. And it rings fresh in my mind because it was cited in *The Washington Post* today, evidently.

As you may recall, you appeared before our Committee in 2001, as we were considering the President's first tax cut package and its

potential impact on dividends. And I am just going to quote a little bit of our exchange:

SCHUMER: I take it you, Chairman Greenspan, would say deficit reduction is a reasonable priority.

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

SCHUMER: Right.

Okay. That sounds like me.

[Laughter.]

SCHUMER: 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?

GREENSPAN: I repeat—when we project our way back into deficit, which I think would be a mistake.

That is pretty unequivocal.

Now according to the Congressional Budget Office, and validated by the President's own budget and advisors, we are going to have a unified deficit of $199 billion in 2003, and unified deficits through 2007. If we exclude the Social Security Trust Fund surplus, all of those figures are worse and the budget remains in deficit through 2011.

To me, this passes the test of, as you put it, projecting our way back into deficits. So given this new budget outlook, do you maintain, as you stated a while ago, that a large tax cut that further sends us into deficits, would be a mistake?

Chairman GREENSPAN. I support the program to reduce double taxation on dividends and the necessary other actions in the Federal budget to make it revenue-neutral.

Senator SCHUMER. Right.

Chairman GREENSPAN. I think that that would be a significant value to the American economic system.

Senator SCHUMER. Okay. Let me just probe your fertile mind.

I generally like cutting the tax on dividends in an abstract world. All things being equal, not thinking of the deficit, it seems to me something that would be a good idea. Although I think I agree with you that it probably would have more bang for the buck in a sense at the corporate level than at the individual level.

So be it. I am not President and making that decision.

But one way we could make it revenue-neutral, and not get into the age-old fight between the spending side because you and I know that with war coming and with everything else, we are not going to make up for that huge revenue loss that the dividend tax cut would produce on spending.

Even the President's budget goes up 4 percent. It doesn't go up as much as maybe it might have. And I know the President is trying to rein in spending, but it still goes up. It doesn't do anything to balance the dividend tax cut.

What about looking at some corporate tax loopholes. Give something to the corporate side, but take it away. Give it in a general and nonspecific way, which is generally preferred in tax theory.

The Cato Institute, not an organization I always agree with, but they said that Federal subsidies to business costs taxpayers an estimated $87 billion a year. These are the rifle shots aimed at very specific businesses or specific industries.

Congressional Research says that corporate tax expenditures are over $100 billion. And most troubling to me, offshore tax havens—

and I have a proposal which is different. I would like the shareholders to vote before the company goes offshore.

If this is supposed to benefit the company, let's see if the shareholders have that view, which I think is a little bit unpatriotic that we should go overseas to reduce our revenues.

But in any case, these offshore tax havens cost an estimated $92 billion in otherwise taxable profits. So those are enormous figures—$3 trillion in lost revenues over 10 years, which would pay, of course, for the dividend reduction, the dividend elimination, eliminating the tax on dividends several times over.

It has been a tough issue to address politically. But do you think that combining these two things might be—I am not asking you to comment on any of the specific proposals I mentioned, but general corporate reform, and then come out in a much more revenue neutral way, but still do the tax elimination on dividends and given general corporations a break, a good idea?

Chairman GREENSPAN. Senator, I have always opposed subsidies to corporations. If you are a private business, you should function as a private business and getting special preferences from the Federal Government has never been something which I have been supportive of.

Senator SCHUMER. So, you might think that combining the two, in the abstract, would be a good idea.

Chairman GREENSPAN. I do not want to comment on the specifics of your proposal.

Senator SCHUMER. All right. I tried. I do not know. Is my time up, Mr. Chairman?

Chairman SHELBY. Your time is up.

Senator SCHUMER. Okay. Well, I have more questions.

Chairman SHELBY. Senator Dole.

Senator DOLE. Chairman Greenspan, I would like you to focus on the long-term effects of very low-interest rates. With the Federal funds rate at a record low and the high rate of mortgage refinancing, do you see a long-term problem with future mortgage-backed securities which will yield historically low returns?

Chairman GREENSPAN. There is no necessary problem that mortgage-backed securities are in difficulty with low-interest rates in the sense, remember that these securities are fully backed by whole mortgages and in many respects, because they are so-called conforming mortgages, they have reasonably good credit ratings.

Indeed, it is really interesting to observe that even though the loans are on individual properties, they have something close to an "A" rating individually and in total. So, unless there is something I am missing in your question, Senator, I have not been concerned about the level of interest rates as such.

There are questions that are involved in the size of the secondary mortgage market and its efficiency and how it functions. I think the movement of interest rates, and low-interest rates, do cause some problems for some of the GSE's as a consequence of that.

Because there is a one-sided option where a homeowner can refinance, but the bank cannot, at its will, refinance, you have difficulties in knowing what the maturity of these particular mortgages are which combined into any form of these collateralized vehicles. And I suspect there are some difficulties with them.

So far, that market has worked really quite well. And indeed, I would even go further. I would say the ability to have been able to get the extent of refinancing which has reduced the debt service charges for the American homeowner, but also the very large cash-outs, which is borrowing over and above just refinancing the mortgage, has been a very important issue in financing consumers in maintaining a fairly robust consumer market, which I think has been a major factor helping us through the last 2 years of very difficult problems with the corporate investment and inventory sectors.

Senator DOLE. Thank you. Two other questions, please.

Wholesale heating oil prices jumped enormously. Yesterday, it was up 30 cents from a week earlier to $1.20 a gallon. Do you have any information on what may happen if indeed there is a conflict with Iraq, whether others in OPEC might step up and fill the shortfall?

Chairman GREENSPAN. Senator, this is a very crucial question which we in the Federal Reserve watch very closely and obviously, other members of the Government are doing the same.

There are problems in the sense that the sum of the capacity of Iraq and Venezuela is greater than the gap between overall world oil capacity and presumed consumption. And it is that which has been driving up crude oil prices which has spilled over into home heating oil. But it has been very considerably exacerbated by the obviously colder-than-expected winter that we have gone through.

We have gone through certain calculations which suggest that inventory levels which seem to be quite low at the primary distributor level, have actually moved up quite considerably in both households and in the secondary distribution level, so that there has been a bulge in heating oil inventories which we do not directly measure.

This cannot continue on, obviously, because we are gradually moving out of the heating season and into effectively a much lower level of aggregate world demand for oil, which is between the North American heating season and the motoring season, which dominates world markets.

In that regard, the outlook, other than the impact of a war, is really obviously quite favorable.

The crucial question here is whether, in a war, that the Iraqi oil fields are under stress. So without being able to forecast for both the final outcome of the problems in Venezuela, which has cut production from about 3 million barrels a day down to now a little over one million barrels a day, and the Iraqi oil production capability, so long as those issues overhang us, they will continue to press prices higher. But the fundamentals are for much lower prices, eventually.

Senator DOLE. Thank you.

Mr. Chairman, my mother is 101 years old. America is aging, as we all know. We will have a savings crunch in the next 20 years. I would like to have your thoughts on what we might do to increase savings and what you think of the President's proposals in this regard.

Chairman GREENSPAN. About half of productivity growth in the United States is attributable to the actual capital investment input

which we make year upon year, and that is a prominent force in productivity. It is not 100 percent, but it is a very big chunk.

The more savings that we have that are productively used in our economy, the greater the productivity, the greater the growth, the greater the prosperity that we have. Any proposal which augments savings has a positive effect on long-term economic growth.

I cannot comment on the specifics of the President's proposal because it is rather complex and there are pluses and there are minuses, and I probably would be better off if I just stayed with that for the moment.

But we should keep looking for policies which, one, enhance savings and enhance flexibility. I think there has been too much in the way of trying to do short-term stimuluses and they work in the short run, but then they fade out. And I think we spend more time than I think is productive in figuring out how to get the economy to move in a certain way in the very short run, rather than focus on the long-term. And if we do that, I suspect the short-term will largely take care of itself.

Senator DOLE. Thank you.

Chairman SHELBY. Senator Bayh.

Senator BAYH. Thank you to both Chairmen.

Mr. Chairman, I have four questions. So, I am going to try to march through these relatively succinctly.

The first is about the proposal and the double taxation of dividends. I understand the argument in favor of it. It is that it will promote more flexibility in the economy, increase productivity growth, and thereby, better prepare us for the advent of the retirement of the baby-boom generation.

As you know, there are many things that affect productivity growth. I remember well in my previous capacity as Governor, your giving an address to the Governors Association about the effect of job training and education on productivity growth. There are other things, such as investment in research and development. There are other parts of the tax code that could be altered that would stimulate productivity gains.

Why is this the best proposal of all the possible avenues to promote productivity growth? And is there a comparative analysis that we can rely on in making this policy decision?

Chairman GREENSPAN. Senator, I do not know the answer to that question. I do know that eliminating the double taxation of dividends is a positive force for just the reasons you gave.

I cannot say to you that I know that say using the same amount of resources, if you want to put it that way, it is the best because nobody has come up with a proposal which strikes me as better. I do not deny that one could.

Senator BAYH. Unfortunately, that is the choice that we face.

My second question is about the effect of tax cuts on revenues. A couple of years ago, the tax cut that was enacted into law was advanced as a way to reduce the burgeoning size of the surplus by reducing the amount of revenue coming into the Federal Treasury.

Today, an acceleration of those same tax cuts is being urged upon us. I understand not by you because you have questions about the need for a stimulus at this point. But as a way to stimulate

the economy, to grow revenue, and thereby deal with the budget surplus.

How do you reconcile these arguments coming from the same people? How can the same policy both increase and decrease revenues?

Chairman GREENSPAN. As you say, you are not addressing that question to me.

[Laughter.]

Senator BAYH. Well, someone needs to answer it because it is being pressed upon us, and it seems to me to be internally inconsistent. But I will go on to my third question.

You mentioned a combination of weak demand plus continuing productivity gains has led to a soft job market. All of us want the productivity gains to continue. In your opinion, what level of growth is necessary to create jobs in a climate where robust productivity gains continue?

Chairman GREENSPAN. It is a strictly arithmetical calculation because, basically, jobs or, more exactly, hours of input, plus the change in productivity, is what gives you the GDP.

What we had for a good part of last year was a largely unexploited capability of a manufacturing and distribution system and service system, which basically had not been pressed through the latter part of the 1990's to be as efficient as it could.

Remember, back in the latter part of the 1990's, the real issue was to try to expand markets, expand sales, and expand profitability as a consequence. And little relative effort was employed in making sure that the costs involved in producing those expanding outputs were as efficient as they could be.

When we came into the early 2000's, where sales became very sluggish, American business turned to that unexploited source of potential productivity and created a remarkable run-up in output per hour.

So long as that unexploited base is there, then it is possible for business to continuously increase output with very little increase in employment.

Now, I do not know where the point turns. At some point, that availability of unexploited short-term capability to increase productivity will have been exhausted, and then to keep up with demand which is coming in, presumably, you have to start reemploying lots of people. And I do not know where that is, but it will happen, and presumably, sooner rather than later.

Senator BAYH. And the more that we can do to increase demand and grow GDP, the sooner that day would arrive.

Chairman GREENSPAN. Oh, certainly. For every percentage point increase in the GDP growth rate, holding productivity growth unchanged, is the same percentage——

Senator BAYH. I promise, Chairman Shelby, this will be quick, Mr. Chairman. So let me just cut to the bottom line of my fourth question.

I have only been around this town for 4 years. But I think a healthy level of skepticism is in order when it comes to the Federal Government's ability to constrain—take the difficult steps necessary to constrain the budget deficit. Ordinarily, the thing grows

until it can be denied no longer, a crisis is imminent, then something is done.

Having said that, I want to ask you about the double taxation again. Assuming for the sake of argument, that these deficits are going to persist for a while, does the benefit of flexibility and productivity generated by ending the double taxation of dividends outweigh the exacerbation of the deficit that it may cause?

Chairman GREENSPAN. Well, I presume that it will not cause an exacerbation because I would couple my consideration of this with the restoration of the PAYGO rules. So, I look at that as a joint recommendation.

Senator BAYH. Thank you, Mr. Chairman. It is one that hopefully we can implement.

Mr. Chairman, thank you.

Chairman SHELBY. Thank you.

Senator Miller.

Senator MILLER. Mr. Chairman, thank you for your wisdom and also, as I note the clock, thank you for your patience this morning.

My first question is one that I am bringing from Young Harris, Georgia. I was sitting around a coffee table in this rural Georgia restaurant. We were discussing the President's economic program and his plan, and the fact that it suggests that the deficit is going to rise. And the way that it was put to me was, does the growth in the deficit pose a greater or lesser danger than the prospect of slower economic growth?

I told them that I did not know the answer, but that I would ask Chairman Greenspan, which impressed them and let me get out of that restaurant.

[Laughter.]

Senator SARBANES. Give the Chairman the name of the restaurant so he can go down there and visit it himself.

[Laughter.]

Senator MILLER. Mary Anne's.

Chairman SHELBY. Mary Anne's.

[Laughter.]

Chairman GREENSPAN. The basic approach to economic analysis and programming that is associated with it is, in my judgment, to try to formulate a budget policy which is stable, meaning that it does not create pressures on private finance which eliminates the underlying growth pattern in the economy.

So, I would presume that we can have a fairly rapidly growing economy with a balanced budget or even a surplus, and that the presumption that deficits somehow would increase the GDP—the more deficit, the greater the GDP—is a short-term view which I do not believe continues in the longer run.

I think we have to focus on maintaining maximum economic growth, but simultaneously recognize that a necessary condition to do that is that deficits have to be contained or, at the extreme, that the ratio of debt to the public as a percent of the GDP, remains stable.

Senator MILLER. Thank you. I will try to paraphrase that next Saturday.

[Laughter.]

This also is a question that comes from personal experience. I am sitting here between two former governors. I do not know about them, but from time to time, I get to thinking that maybe it would be better to be back in the Statehouse. Except right now, it is not too good back in the Statehouse.

My question to you is, do you think that Congress should address in any way the budget shortfalls that the States are having? And if so, what would be your approach?

Chairman GREENSPAN. This is a difficult question largely because the source of the problem in many of the States, as you know, Senator, has been that with the fairly substantial surge in revenues that the States had in many cases, and it is hard to know how many, permanent programs for expenditures were financed.

And to a large extent, because the tax rate on capital gains and options and the like are—or I should say the tax rate on capital gains in the States are pretty much equivalent to the regular income tax rate since the adjusted gross income from the Federal returns is what is used for the income tax where it is applicable for the States, we saw a very big surge in Federal revenues, but for some States, because the tax rates are relatively high, they saw an even greater surge.

So that you have to weigh the fact that some of the States overexpended and should and will and are appropriately pulling back, and others did not. And the question is, how does the Congress or the Federal Government appropriately handle that without essentially treating those who were not sufficiently conservative to contain their funds from those who are less conservative? In other words, how does one make a program which is fair to everybody?

I have no objection obviously to having Federal funds go to the States. We have been doing that for decades. But I must admit that I do have some problems—how would one in all fairness create a program which did not essentially benefit those who are the least conservative in their programs relative to those who were more conservative? If that can be done, then I think that there are obvious arguments in favor of it.

Senator MILLER. Thank you, sir.

Chairman SHELBY. Senator Carper.

Senator CARPER. Mr. Chairman, again thanks for all of your time and insights today.

I want to follow up on Governor Miller's and Governor Bayh's questions with one that also relates to the States.

We have heard from the States repeatedly over the last year or two that, particularly for those whose tax systems piggybacked on the Federal system, that when we make reductions here, then there is an effect on them as well, reducing their revenue base.

With the latest proposal from the Administration, and which I think in theory, the double taxation of dividends make sense. It is logical.

I, like you, would say, if we are going to do that thing in the context of maybe a broader tax reform, that it be deficit-neutral and that we do it on the corporate side rather than on the approach that the Administration seems to be taking.

But I am hearing from some of my old governor friends that they are concerned about the cost of issuing tax-exempt debt and how

that might be affected, if we approach the taxation of dividends as the Administration has proposed.

Any thoughts as to how we could minimize the effect of the impact on the States by taking a different course?

Chairman GREENSPAN. Senator, you are referring to the issue that municipal finance, the interest rates that are involved would be affected by essentially creating a whole new segment of demand for untaxable issues, so to speak.

Senator CARPER. Yes, sir.

Chairman GREENSPAN. This is a half-full, half-empty glass problem because the double taxation of dividends is a subsidy to the municipalities in the sense that it gives them less competition and, hence, better financing capability.

If you look at it that way, then the question is you are eliminating a subsidy. If you look at it the other way, you are taking away a subsidy which is deserved. And I do not have a clue how to answer that question.

Senator CARPER. All right. Let us try another one. I am going to quote you here in your written testimony, which says:

> The intensification of geopolitical risks makes discerning the economic path ahead especially difficult. If these uncertainties diminish considerably in the near term, we should be able to tell far better whether we are dealing with the business sector and an economy poised to grow more rapidly—our more probable expectation—or one that is still laboring under persisting strains and imbalances that have been misidentified as transitory.

And then, skipping down a couple of lines, you say:

> If instead, contrary to our expectations, we find that, despite the removal of the Iraq-related uncertainties, constraints to expansion remain, various initiatives for conventional monetary and fiscal stimulus will doubtless move higher on the policy agenda.

There is a couple of different ways a person could read this.

My own view is that the greatest impediment to economic growth in this country is the uncertainties, a lot of them outside of our country. But I alluded to some of those earlier.

Are you saying here that before we use the other arrows in our monetary arrow-holder——

Senator MILLER. Quiver.

Senator CARPER. Quiver—out of our monetary quiver, or out of our fiscal quiver, that we should first try to deal with some of these uncertainties. And once we have dealt with those, then let us see what we further need to do on the monetary side or the fiscal side. Is that what you are saying?

Chairman GREENSPAN. Yes, Senator.

Senator CARPER. On the monetary side, what could that include?

Chairman GREENSPAN. The usual monetary policy initiatives.

Senator CARPER. Well, you have done a lot. And there are some on this Committee who have been rather critical of your stewardship on monetary policy. I am certainly not among them. But what further can we do? You have taken the Federal funds rate down. You have loosened up the money supply. What further is there to do?

Chairman GREENSPAN. Well, the general position of the Federal Open Market Committee at this particular stage is that we are holding at the 1¼ percent Federal funds rate and view the outlook

as the balance of risks essentially balanced on both the upside and the downside.

One of the reasons is the large uncertainties with respect to the geopolitical risks. As I said several times this morning, our judgement, as best as we can make it, is that there seems to be a fairly significant, almost inexorable, endeavor on the part of the economy to move forward, but it is being held back by these set of forces.

And if that is the correct interpretation, and we are viewing it correctly, then we will find that, at least in my judgment, the issue of the discussion of stimulus will probably just go away. Because of the fact we are apt to know the resolution of that within a period which doesn't stretch out indefinitely into the future, I have concluded, as I have indicated previously here, that we are probably more sensible to wait to see what happens before we embark upon a number of programs which may in fact from a stimulus point of view, not be necessary.

Remember that I am in support of the President's program on the elimination of the double taxation of dividends, not for short-term stimulus purposes. I think that it is a very sensible long-term program.

Senator CARPER. Thank you.

Chairman SHELBY. Senator Corzine.

Senator CORZINE. Thank you, Mr. Chairman.

Chairman Greenspan, I want to be precise if I can. You said that you support President Bush's proposal, which I just heard you say, about the dividend exclusion. But I also heard you say, only if it were implemented in a revenue-neutral world. Does that mean, to be clear, would you oppose the Bush tax plan if it were not offset with regard to the dividend exclusion?

Chairman GREENSPAN. I would just allow my remarks to stand as I have stated them.

Senator CORZINE. You do believe it should be revenue-neutral?

Chairman GREENSPAN. I do believe it should be revenue-neutral.

Senator CORZINE. I presume that, if we cannot put that together, the conclusion is clear.

Let me say, in light of changed conditions that we have talked about, Senator Dodd asked a question about making permanent the 2001 tax cuts. And I thought I heard that in light of changed conditions, you believed in triggers, sunsets, and reviews, those policies in light of those changed circumstances. Did I hear that as it related to the 2001, making permanent the 2001 tax cuts?

Chairman GREENSPAN. Yes. I went further. I thought I said that I did not believe that there can be in this changed fiscal environment, with so much in the way of commitments to the longer term, which are entitlements, that there can be such a concept as an unchangeable program on either the revenue or the expenditure side.

Senator CORZINE. Thank you.

Following up on some of the questions that the Governors talked about, is a $70 to $90 billion cumulative budget deficit at the State levels, maybe larger if you include some of the local government levels, a drag on economic activity, regardless of what we do here, if that is what takes place, cutting in expenditures or raising taxes, 18½ percent in the city of New York or property taxes?

Chairman GREENSPAN. Senator, as you know, it relates solely to the general funds of the States and does not affect really the localities or other parts of the State budgets that are involved. So those numbers are really quite large. But they are variable. And our ability to forecast them has not been particularly good.

But, having said that, to the extent that taxes are raised in order to close those gaps, I would assume that it is restrictive of economic activity in the locality.

Senator CORZINE. Thank you.

I just wanted to make sure that I heard you say deficits impact long-term interest rates, in your view, and have an impact then on the investment function over a period of time.

Chairman GREENSPAN. You heard me correctly, sir.

Senator CORZINE. Okay. Then I would just ask, is there any time—you have a wealth of knowledge on this—in economic history that you know of a period in time when we are at war, where we have serious programmatic demands with regard to homeland security and protecting the American people and our national security needs, that you have seen a series of tax cuts in the judgment of Congress, is the right way to proceed fiscally?

Chairman GREENSPAN. Well, Senator, that is a factual question which it is either true or it is false. And I presume that we can find that out.

There is one point in this discussion, however, that I think we should at least put on the table. It is that the ratio of defense expenditures to the GDP is still quite low and indeed, as recently as a couple of years ago, it was at the lowest level since before World War II.

So, we do have a low base from which we are functioning. And one would presume that there is some give there.

Now that does not respond specifically to your question with respect to whether tax cuts are appropriate or not appropriate. But it is relevant to the general impact of what the size of potential demands, at least for the military, would be relative to the overall economy.

Senator CORZINE. I would understand that. But it does have an ultimate budget impact on the bottom line of whether we are running deficits and national savings is being impacted by the fact of the role of Government, whether it is for national security or whether it is for domestic policy.

Chairman GREENSPAN. That is certainly the case. But in the context of raising it with the issue of being in periods of war or in periods of military stress, those periods, you will find the ratio of defense expenditures-to-GDP was considerably higher than it is today.

Senator CORZINE. You talked about flexibility in the economy and then were complimentary of Sarbanes-Oxley.

I would presume that there are times when you believe that the role of Government in our society is a positive element. Some people might call that rigidity and the imposition of rigidities with respect to flexibility. So that there is some minimum level of participation that I would suspect that you are supportive of with regard to the SEC and other elements.

Chairman GREENSPAN. I think that I have a very rigid view toward the Constitution of the United States. I do not wish to imply, Senator, that I believe that flexibility goes into our laws or any of the other things which affect business decisionmaking and business activity and corporate governance.

Clearly, you cannot run a flexible, capitalist, "creative destruction" type of economy unless you have a rule of law which is clear, unequivocal, and definitive. And in that regard, that is not flexible. In other words, flexible law may very well lead to rigid economics.

Senator CORZINE. Thank you.

Chairman SHELBY. Senator Stabenow.

COMMENTS OF SENATOR DEBBIE STABENOW

Senator STABENOW. Thank you, Mr. Chairman. And Chairman Greenspan, welcome back to the Committee.

One more follow-up regarding State budget deficits because we know that across the country now, the vast majority of the States are in serious deficits or gaps in their funding.

The National Council of State Legislatures says in the coming year, over $68 billion will be there in terms of shortfalls.

From a macroeconomic view, can you speak to the effect again in terms of large fiscal shortfalls and the macroeconomic effect to the country?

Chairman GREENSPAN. Well, Senator, because, I gather, with the exception of Vermont, every State has a requirement that the budget be balanced within the State, the actions that are going to be taken by the States in order to meet their internal statutes or constitutions are going to be taken well before the Congress can decide to move significant funds for the current year.

Those adjustments are going to be taken. And one must presume, although I do not know this, that it will effectively restore balance into the States well before any funding could be made available to the States.

If that is the case, then you have to be careful in thinking about this issue because unless taxes which are raised which would have a macroeconomic negative effect, are then presumed to be lowered again as Federal funds come in, which strikes me as questionable policy, then I think you have to recognize that because the timing of when the fiscal years end in the States tends to be different than our fiscal year in the Federal Government, you have a very tricky problem, in that if the States have to take actions in order to close their budget deficits in this fiscal year before any Federal funds could conceivably be forthcoming, and in that process, they actually close the gap for all subsequent years, then the issue of making Federal funds available to help the States over this particular problem tends to be moot.

And I do not know what the answer to that is. You have to, I suspect, argue that even if they were to impose taxes or cut programs in order to maintain their constitutional required balance, that there are still problems for the current fiscal year which could be assisted by Federal funds.

In that event, as I indicated to Senator Miller, you could make the argument that one could go forward with programs, but it is next year's concerns that should be of interest to you, not the cur-

rent ones, because it is already too late to address those issues in most States, as I understand it.

Senator STABENOW. I appreciate that. I know that in Michigan, that is certainly the case, although they are projected for 2004 additional either spending that will be eliminated from the economy in the State, or some other combinations in terms of—certainly, States are looking at raising taxes, taking spending out of the economy, and so on. I would suspect that this is going to be a few years of a challenge for the States.

If you might talk one more time about the deficit.

Senator Bayh, Senator Snowe, and I and others have been, since 2001, talking about a trigger and put forward both in committee and on the floor the idea of both addressing an economic trigger that dealt with tax and spending programs so that we would not be going back into debt.

Two years ago, we were talking about tremendous surpluses and whether or not we should go back into debt. Now, we are talking about how big the deficit will be, dramatically different just in 2 years. It is astounding the shift that we have seen. But I know you have spoken in support of the idea of some kind of a trigger that relates to the deficit.

And also, before the Committee back in February 2001, when we talked about that, you had said: "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."

I would ask both if you continue to support the idea of a trigger to bring us into balance, but also, do you still believe that eliminating the debt should be our first priority?

Chairman GREENSPAN. With the revenues where they are, or more exactly the tax base, where it currently is, that is no longer feasible as a realistic priority.

I was raising it in the context of when we were getting significantly higher individual income tax receipts as a consequence of a very high flow of cash which the Congressional Budget Office was projecting would maintain us in a very high surplus level for quite a while.

If we could eliminate the debt in a practical way which was conceivable at that point, I would certainly be in favor of it. But having lost the base and, indeed, largely because of the sharp decline in the stock market, a very substantial amount of revenues have been pulled out of the system, it is not a credible policy which we can embark upon without very substantially altering revenues and spending in a way which I do not think the Congress would even remotely consider.

So it was a practical consideration back then. Regrettably, that is gone without it being achieved.

Senator STABENOW. It is extremely regrettable. And when we look at the slowing of the economy, the issues of terrorism and the war certainly have to be taken into account. But I would argue that, unfortunately, a majority was self-inflicted by decisions that were made by the Congress.

Just one other quick question if I might, Mr. Chairman, that is a totally separate track.

Chairman Greenspan, I know that the Federal Reserve is exempted from the appropriations process. I would like to talk about the SEC, just one question.

I know that you are allowed to use whatever funds are collected. There are reasons for that in terms of insulating you from political pressure, being able to make long-term decisions, being able to make decisions independently, and so on, all of which makes sense to me.

I am wondering if you believe that the SEC, which is one of the only major regulators that goes through the appropriations process, might be better served and if investors and Americans would be better served if in fact the SEC funding process was, as your funding process is, exempt from the annual appropriations process.

I wonder if you have any thoughts on that.

Chairman GREENSPAN. I have no specific thoughts on that general proposal, Senator. But I have always argued that it has been our experience that the levels of the salaries in the SEC are probably too low, especially for their lawyers, to attract the quality of people in general which they need to maintain the type of surveillance which is required.

They have some extraordinary lawyers in the SEC whom I suspect could be making double to three times what they are making in the private sector.

Senator STABENOW. Don't tell them that, would you?

Chairman GREENSPAN. No, they are smart enough to know that.

Senator STABENOW. I agree.

Chairman GREENSPAN. But they consider working at the SEC a sufficiently interesting job to consider that the foregone income is more than matched than the job appreciation that one has from doing that work.

Senator STABENOW. Thank you.

Chairman SHELBY. Chairman Greenspan, I am going to try to be quick. I have a lot of questions for the record, such as the President's budget, projected deficits, tax reform, personal savings—some of these things have been touched on. Dividend proposals have been touched on. Condition of the banking industry, the economy's resilience, and so forth.

But we will do those for the record. I will try to be real fast and try to wind this up. I know you have a place to go and you need to get there.

Would you elaborate quickly on the types of decisions regarding our tax structure that would increase economic flexibility as well as the long-run growth potential that the changes would create?

Chairman GREENSPAN. Senator, the first thing I would do would be to broaden the question to overall fiscal policy.

Chairman SHELBY. Okay.

Chairman GREENSPAN. As I indicated earlier, I think we are now involved in the type of process which is really quite different from anything we had in the past. It is essentially the fact that we are dealing with long-term entitlements or taxes which do not go through annual appropriations or annual evaluations by the Congress, and as a consequence of that, can very readily add up to a drain on the resources of the economy, which is not the intention of the Congress.

So, I think that the process really needs to be thoroughly reviewed to make it consonant with the fact of our long-term commitments. And that would be involved with accrual accounting, which I discuss at length in my prepared remarks. It has to do with the triggers and various other mechanisms to enable a phase-in of programs which will go off-track inevitably, so that they do not create instabilities in the fiscal system.

We must be sure that the Federal Government does not impinge on the private sector's capability of creating goods and services and expanding the standard of living of the American people, and that requires that it not drain the savings resources of the private sector, which it does when it is running a deficit.

Chairman SHELBY. Last, would you comment on the effect of the strengthened Euro versus the dollar on the U.S. economy? What is the future of that?

Chairman GREENSPAN. Well, unfortunately, I am not capable of answering that because, as I think I may have said to you previously in hearings, that we have an agreement with the Treasury that the exchange rate is discussed only by the Secretary of the Treasury and by no one else in the Administration.

Chairman SHELBY. We will have Secretary Snow up here as soon as Senator Sarbanes and I can.

Chairman GREENSPAN. I would suggest that you raise that question with him and you will get a sensible answer.

Chairman SHELBY. Senator Sarbanes.

Senator SARBANES. Mr. Chairman, I just have one question that I want to ask Chairman Greenspan.

Just last year, you testified before the JEC, and I quote you:

> It is difficult to predict how long global investors will continue to place their funds disproportionately in U.S. assets. The current account is a measure of the increase in net claims, primarily debt claims that foreigners have on our assets. As the stock of such claims grows, an ever larger flow of interest payments must be provided to the foreign suppliers of this capital.
>
> Countries that have gone down this path invariably have run into trouble, and so would we.

And in your monetary policy report, you point out that we are already borrowing $500 billion a year from a broad, a record 5 percent of our GDP. I have been concerned about this issue, as you know from some of our exchanges, for a very long time. This is the net international position of the U.S. as a percent of GDP.

A little over 20 years ago, we were positive, 12.9 percent of GDP. Now, we are negative, just shy of 23 percent of GDP. And if we had 5 percent this next year because of the continued borrowing, we would be down to 28 percent of GDP. Is it really realistic to expect that these big increases in our Federal deficit can be offset even more by foreign borrowing? What kind of hole are we digging ourselves into here?

Chairman GREENSPAN. Senator, I think I probably said at the JEC testimony, to which you are alluding, and in years previous when this issue came up, that that trend cannot continue. Something will make it change.

What is basically causing it is the fact that we have a propensity to import goods and services relative to our GDP which is by far higher than our trading partners'. So in the context of everybody in the world growing at the same rate, we would continually in-

crease our imports faster than anybody else and create a large and increasing trade deficit, which of course is at the root of this particular problem.

We know that at some point, the system cannot go on because, as you point out in one of the balance sheets in the way our economy functions is, of necessity, that there are relationships between the Government deficit, domestic investment, and domestic savings which are all tied together. And they cannot go off in different directions without affecting each other.

I presumed 5 years ago that it would be resolved at some point. I have been presuming the same thing every year for 5 years. Fortunately, we have not had a major problem with respect to this because the productivity in the United States has been very impressive and the rates of return on our assets have attracted a considerable amount of investment.

There are a numbers of ways in which this adjustment could occur. One, which we hope is the case, is a gradual adjustment process which is essentially incremental and we restore balance without economic disruption.

There are other scenarios in which there are disruptions. I do not know of any useful way—I know of no way that I find persuasive that enables us to look at this particular process and be able to forecast when the adjustment is going to occur. But far more importantly, how it is going to occur. And that it will occur I think is inevitable.

Chairman SHELBY. Any other questions?

[No response.]

Mr. Chairman, picking up on this, on the current account, how much of that is attributable, our deficiency in the current account, to the importation of oil?

You can furnish that for the record.

Chairman GREENSPAN. It is an issue, but it is not the critical issue.

Chairman SHELBY. It is not the only issue, is it?

Chairman GREENSPAN. No. We import much more oil per dollar of GDP than others. But in and of itself, even without the oil, that problem still exists.

Chairman SHELBY. It would exist, but it wouldn't be exacerbated. Is that true?

Chairman GREENSPAN. Obviously, we are increasing an ever-increasing proportion of our domestic consumption of oil, we are importing an increasing proportion, and that clearly has no offsets.

Chairman SHELBY. Mr. Chairman, thank you for your appearance. Thank you for your patience and your answers.

The hearing is adjourned.

[Whereupon, at 12:45 p.m., the hearing was adjourned.]

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

PREPARED STATEMENT OF SENATOR ELIZABETH DOLE

Thank you, Mr. Chairman. I want to thank you for holding this hearing, and I join you in welcoming Federal Reserve Chairman Greenspan today for his Semi-Annual Monetary Policy Report. Chairman Greenspan, over the years the economy has benefited greatly from your leadership at the Federal Reserve. In these uncertain times, experience and steadiness at the helm of the central bank are particularly important. We are grateful for your continued service.

In recent months, we have witnessed some mixed messages from our economic indicators. I was pleased to see that last month unemployment fell three-tenths of a percent from December and that home sales and residential construction remain at high levels. However, at the same time, rising energy costs place a strain on the economy and adverse weather has harmed agricultural production.

The Federal Reserves' January *Current Market Conditions Report* quoted a Charlotte, North Carolina, contact which summed up conditions in commercial real estate sector as "slow to partly cloudy."

With these issues in mind, my colleagues and I look forward to your thoughts on the current state of the economy and its potential. In addition, I hope we have the benefit of your views regarding the President's tax package and its ability to stimulate the economy. I know you agree that tax stimulus is a necessary component of economic recovery, and I look forward to hearing your thoughts on this.

While all of us agree that the American economy needs a push in the right direction there is some disagreement among my colleagues on the best way to achieve this goal. I hope in the months ahead we can work together to take the necessary steps in the right direction. Your report today will help us focus on the fundamentals as we move forward.

Chairman Greenspan, I look forward to working with you and the Federal Reserve in the years to come to achieve sustainable long-term growth.

Thank you, Mr. Chairman.

PREPARED STATEMENT OF SENATOR PAUL S. SARBANES

I am pleased to welcome Chairman Greenspan before the Committee on Banking, Housing, and Urban Affairs this morning to testify on the Federal Reserve's Semi-Annual Monetary Policy Report to Congress.

Yesterday, a statement signed by over 450 economists, including 10 Nobel Prize winners, was released. At the outset of today's hearing I think it would be worthwhile to read parts of that statement because it helps to frame the economic issues that will be under discussion this morning:

> Economic growth, although positive, has not been sufficient to generate jobs and prevent unemployment from rising. In fact, there are now more than two million fewer private sector jobs than at the start of the current recession. Overcapacity, corporate scandals, and uncertainty have and will continue to weigh down the economy.
>
> The tax cut plan proposed by President Bush is not the answer to these problems. Regardless of how one views the specifics of the Bush plan, there is wide agreement that its purpose is a permanent change in the tax structure and not the creation of jobs and growth in the near-term. The permanent dividend tax cut, in particular, is not credible as a short-term stimulus. As tax reform, the dividend tax cut is misdirected in that it targets individuals rather than corporations, is overly complex, and could be, but is not, part of a revenue-neutral tax reform effort.
>
> *Passing these tax cuts will worsen the long-term budget outlook, adding to the Nation's projected chronic deficits.*

When President Bush came into office in January 2001, the Federal Government had a projected 10-year surplus of $5.6 trillion. In fact, Chairman Greenspan, you testified before the Senate in favor of the tax cut proposed by the President at that time on the grounds that the Government was paying off its debt too fast. You argued that a tax cut was needed to "smooth the glide path," I believe that was the phrase you used, so that the Government debt would not be paid off too quickly and put the Government in the position of acquiring private assets.

That is not the problem we confront today. If the President's program were enacted into law, the budget projection for the same 10-year period would be a $2.1 trillion deficit. That is a $7.7 trillion reversal. That does not include the costs of a possible war with Iraq. It also does not include tax changes such as the reform of the alternative minimum tax and the extension of tax provisions currently sched-

uled to sunset which have traditionally been extended. That projection may well be overly optimistic.

By any measure, we are in the process of transforming the fiscal position of the United States from one of fiscal surplus to one of large fiscal deficits. Given the scale of the deficits that would be created by the President's plan, fundamental questions are raised about the impact of deficits on interest rates, investment, growth, and jobs in our economy.

The Administration is downplaying the impact of budget deficits, arguing the deficits that will result from their program are not that large relative to the economy, and that their size will be reduced by the economic activity that will result from the enactment of its proposed tax cuts. Some people who now support these tax cuts, and discount the significance of the budget deficits they would produce, previously supported an amendment to the Constitution requiring a balanced budget. Particularly in the face of the uncertain demands on public resources imposed by the war on terrorism, homeland defense, difficulties with North Korea, and a possible war with Iraq, I believe the President's proposals are reckless and irresponsible.

Giving away our economic strength with the kind of irresponsible tax cuts proposed by the President would not only deny us the public resources we will need to meet future challenges, but also it would put upward pressure on long-term interest rates that would reduce economic growth and impose greater hardship on middle and working class Americans.

I look forward to reviewing these issues with Chairman Greenspan this morning.

PREPARED STATEMENT OF SENATOR TIM JOHNSON

Chairman Shelby and Ranking Member Sarbanes, thank you for convening today's hearing to examine the monetary policy of the United States. We are privileged to have before us Chairman Alan Greenspan, and I welcome him here today to the Senate Banking Committee.

Today, as we gather to hear about the state of America's economy, we face a grim picture. It is sobering to note that, just 2 years ago, Chairman Greenspan cautioned this Committee about the dangers of paying down the national debt too quickly. Now just a short time later, we face a $304 billion deficit this year alone, and a deficit of more than $2 trillion over the next 10 years.

In 2001, I voted to support President Bush's $1.3 trillion tax cut. While I wish that package had been less skewed to the richest Americans, I agree with Chairman Greenspan, who has often warned that the Government should not accumulate taxpayer dollars. At the time I voted for tax relief, this country faced historically high surpluses of $5.6 trillion for fiscal years 2002–2011, and I committed myself to returning surplus funds to the taxpayers. I did so, however, on the condition that President Bush himself reiterated during his State of the Union address: "We will not pass along our problems to other Congresses, other Presidents, other generations."

It is difficult to believe that our circumstances have changed so dramatically since President Bush took office 2 short years ago. And it is even more difficult to believe that President Bush appears determined to do exactly the opposite of what he pledged not to: Pass along our actions to the next generation.

Frankly, I am appalled at the President's recklessness in proposing a massive tax cut targeted for the rich while so many of our Nation's basic needs go unmet. I simply cannot understand the impulse to plunge our Nation into even more staggering deficits in order to indulge the desire for massive tax relief for the rich. All this, Mr. Chairman, while denying that we leave the next generation to pay for this folly.

I believe that any stimulus plan must meet three simple conditions: (1) it should give tax relief to working American families who need it and who will spend it; (2) it should give tax relief now, while the economy is weak; and (3) it should not saddle our children and grandchildren with additional debt. President Bush's plan does not meet these conditions. Instead, President Bush uses his plan as an excuse not to provide real stimulus, like drought relief that is so desperately needed in States like South Dakota.

Chairman Greenspan has long been respected for his wise counsel on the damaging impact of deficits. It is now conventional wisdom that deficits cause high interest rates, and that, as Mr. Greenspan testified back in 2001, "a declining level of Federal debt is desirable because it holds down long-term real interest rates, thereby lowering the cost of capital and elevating private investment." We need only look at the incredible appreciation in the Nation's housing market to see the real benefits that low interest rates have had on our economy.

Back in 2001, when we were faced with record surpluses, I think that we all recognized the value of Chairman Greenspan's suggestion that the President's tax cut include so-called "triggers" to revisit the revenue side if the projected budget surpluses did not materialize. He recognized that political pressure tends to make hard decisions even harder.

Today, it is my hope that Chairman Greenspan can resist the strong pressure to allow politics to color his testimony. We have all read articles decrying the last election cycle as one of the most vicious in history, with ads attacking our colleagues' patriotism, their judgment, their motives. For the sake of our Nation and its fiscal health, we must not let that ugliness infect our current deliberations. Chairman Greenspan, your legacy deserves to reflect the brilliance of your career to this point. And so it all comes down to this: Will you be remembered for maintaining your opposition to reckless deficit spending? Or will you abandon that legacy by succumbing to enormous political pressure to justify the President's tax proposal.

I look forward to your testimony.

PREPARED STATEMENT OF ALAN GREENSPAN

CHAIRMAN, BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM

FEBRUARY 11, 2003

Mr. Chairman and Members of the Committee, I am pleased this morning to present the Federal Reserve's Semi-Annual Monetary Policy Report to the Congress. I will begin by reviewing the state of the U.S. economy and the conduct of monetary policy and then turn to some key issues related to the Federal budget.

When I testified before this committee last July, I noted that, while the growth of economic activity over the first half of the year had been spurred importantly by a swing from rapid inventory drawdown to modest inventory accumulation, that source of impetus would surely wind down in subsequent quarters, as it did. We at the Federal Reserve recognized that a strengthening of final sales was an essential element of putting the expansion on a firm and sustainable track. To support such a strengthening, monetary policy was set to continue its accommodative stance.

In the event, final sales continued to grow only modestly, and business outlays remained soft. Concerns about corporate governance, which intensified for a time, were compounded over the late summer and into the fall by growing geopolitical tensions. In particular, worries about the situation in Iraq contributed to an appreciable increase in oil prices. These uncertainties, coupled with ongoing concerns surrounding macroeconomic prospects, heightened investors' perception of risk and, perhaps, their aversion to such risk. Equity prices weakened further, the expected volatility of equity prices rose to unusually high levels, spreads on corporate debt and credit default swaps deteriorated, and liquidity in corporate debt markets declined. The economic data and the anecdotal information suggested that firms were tightly limiting hiring and capital spending and keeping an unusually short leash on inventories. With capital markets inhospitable and commercial banks firming terms and standards on business loans, corporations relied to an unusual extent on a drawdown of their liquid assets rather than on borrowing to fund their limited expenditures.

By early November, conditions in financial markets had firmed somewhat on reports of improved corporate profitability. But on November 6, with economic performance remaining subpar, the Federal Open Market Committee chose to ease the stance of monetary policy, reducing the Federal funds rate 50 basis points, to 1¼ percent. We viewed that action as insurance against the possibility that the still widespread weakness would become entrenched. With inflation expectations well contained, this additional monetary stimulus seemed to offer worthwhile insurance against the threat of persistent economic weakness and unwelcome substantial declines in inflation from already low levels.

In the weeks that followed, financial market conditions continued to improve, but only haltingly. The additional monetary stimulus and the absence of further revelations of major corporate wrongdoing seemed to provide some reassurance to investors. Equity prices rose, volatility declined, risk spreads narrowed, and market liquidity increased, albeit not to levels that might be associated with robust economic conditions. At the same time, mounting concerns about geopolitical risks and energy supplies, amplified by the turmoil in Venezuela, were mirrored by the worrisome surge in oil prices, continued skittishness in financial markets, and substantial uncertainty among businesses about the outlook.

Partly as a result, growth of economic activity slowed markedly late in the summer and in the fourth quarter, continuing the choppy pattern that prevailed over

the past year. According to the advance estimate, real GDP expanded at an annual rate of only ¾ percent last quarter after surging 4 percent in the third quarter. Much of that deceleration reflected a falloff in the production of motor vehicles from the near-record level that had been reached in the third quarter when low financing rates and other incentive programs sparked a jump in sales. The slowing in aggregate output also reflected aggressive attempts by businesses more generally to ensure that inventories remained under control. Thus far, those efforts have proven successful in that business inventories, with only a few exceptions, have stayed lean—a circumstance that should help support production this year. Indeed, after dropping back a bit in the fall, manufacturing activity turned up in December, and reports from purchasing managers suggest that improvement has continued into this year. Excluding both the swings in auto and truck production and the fluctuations in nonmotor-vehicle inventories, economic activity has been moving up in a considerably smoother fashion than has overall real GDP: Final sales excluding motor vehicles are estimated to have risen at a 2¼ percent annual rate in the fourth quarter after a similar 1¾ percent advance in the previous quarter and an average of 2 percent in the first half.

Thus, apart from these quarterly fluctuations, the economy has largely extended the broad patterns of performance that were evident at the time of my July testimony. Most notably, output has continued to expand, but only modestly. As previously, overall growth has simultaneously been supported by relatively strong spending by households and weighed down by weak expenditures by businesses. Importantly, the favorable underlying trends in productivity have continued; despite little change last quarter, output per hour in the nonfarm business sector rose 3¾ percent over the four quarters of 2002, an impressive gain for a period of generally lackluster economic performance. One consequence of the combination of sluggish output growth and rapid productivity gains has been that the labor market has remained quite soft. Employment turned down in the final months of last year, and the unemployment rate moved up, but the report for January was somewhat more encouraging.

Another consequence of the strong performance of productivity has been its support of household incomes despite the softness of labor markets. Those gains in income, combined with very low interest rates and reduced taxes, have permitted relatively robust advances in residential construction and household expenditures. Indeed, residential construction activity has moved up steadily over the year. And despite the large swings in sales, the underlying demand for motor vehicles appears to have been well maintained. Other consumer outlays, financed partly by the large extraction of built-up equity in homes, have continued to trend up. Most equity extraction—reflecting the realized capital gains on home sales—usually occurs as a consequence of house turnover. But during the past year, an almost equal amount reflected the debt-financed cash-outs associated with an unprecedented surge in mortgage refinancings. Such refinancing activity is bound to contract at some point, as average interest rates on outstanding home mortgages converge to interest rates on new mortgages. However, fixed mortgage rates remain extraordinarily low, and applications for refinancing are not far off their peaks. Simply processing the backlog of earlier applications will take some time, and this factor alone suggests that refinancing originations and cash-outs will be significant at least through the early part of this year.

To be sure, the mortgage debt of homeowners relative to their income is high by historical norms. But as a consequence of low interest rates, the servicing requirement for the mortgage debt of homeowners relative to the corresponding disposable income of that group is well below the high levels of the early 1990's. Moreover, owing to continued large gains in residential real estate values, equity in homes has continued to rise despite sizable debt-financed extractions. Adding in the fixed costs associated with other financial obligations, such as rental payments of tenants, consumer installment credit, and auto leases, the total servicing costs faced by households relative to their incomes are below previous peaks and do not appear to be a significant cause for concern at this time.

While household spending has been reasonably vigorous, we have yet to see convincing signs of a rebound in business outlays. After having fallen sharply over the preceding 2 years, new orders for capital equipment stabilized and, for some categories, turned up in nominal terms in 2002. Investment in equipment and software is estimated to have risen at a 5 percent rate in real terms in the fourth quarter and a subpar 3 percent over the four quarters of the year.

However, the emergence of a sustained and broad-based pickup in capital spending will almost surely require the resumption of substantial gains in corporate profits. Profit margins apparently did improve a bit last year, aided importantly by the strong growth in labor productivity.

Of course, the path of capital investment will depend not only on market conditions and the prospects for profits and cashflow but also on the resolution of the uncertainties surrounding the business outlook. Indeed, the heightening of geopolitical tensions has only added to the marked uncertainties that have piled up over the past 3 years, creating formidable barriers to new investment and thus to a resumption of vigorous expansion of overall economic activity.

The intensification of geopolitical risks makes discerning the economic path ahead especially difficult. If these uncertainties diminish considerably in the near term, we should be able to tell far better whether we are dealing with a business sector and an economy poised to grow more rapidly—our more probable expectation—or one that is still laboring under persisting strains and imbalances that have been misidentified as transitory. Certainly, financial conditions would not seem to impose a significant hurdle to a turnaround in business spending. Yields on risk-free Treasury securities have fallen, risk spreads are narrower on corporate bonds, premiums on credit default swaps have retraced most of their summer spike, and liquidity conditions have improved in capital markets. These factors, if maintained, should eventually facilitate more-vigorous corporate outlays.

If instead, contrary to our expectations, we find that, despite the removal of the Iraq-related uncertainties, constraints to expansion remain, various initiatives for conventional monetary and fiscal stimulus will doubtless move higher on the policy agenda. But as part of that process, the experience of recent years may be instructive. As I have testified before this Committee in the past, the most significant lesson to be learned from recent American economic history is arguably the importance of structural flexibility and the resilience to economic shocks that it imparts.

I do not claim to be able to judge the relative importance of conventional stimulus and increased economic flexibility to our ability to weather the shocks of the past few years. But the improved flexibility of our economy, no doubt, has played a key role. That increased flexibility has been in part the result of the ongoing success in liberalizing global trade, a quarter-century of bipartisan deregulation that has significantly reduced rigidities in our markets for energy, transportation, communication, and financial services, and, of course, the dramatic gains in information technology that have markedly enhanced the ability of businesses to address festering economic imbalances before they inflict significant damage. This improved ability has been facilitated further by the increasing willingness of our workers to embrace innovation more generally.

It is reasonable to surmise that, not only have such measures contributed significantly to the long-term growth potential of the economy this past decade, they also have enhanced its short-term resistance to recession. That said, we have too little history to measure the extent to which increasing flexibility has boosted the economy's potential and helped damp cyclical fluctuations in activity.

Even so, the benefits appear sufficiently large that we should be placing special emphasis on searching for policies that will engender still greater economic flexibility and dismantling policies that contribute to unnecessary rigidity. The more flexible an economy, the greater its ability to self-correct in response to inevitable, often unanticipated, disturbances, thus reducing the size and consequences of cyclical imbalances. Enhanced flexibility has the advantage of adjustments being automatic and not having to rest on the initiatives of policymakers, which often come too late or are based on highly uncertain forecasts.

Policies intended to improve the flexibility of the economy seem to fall outside the sphere of traditional monetary and fiscal policy. But decisions on the structure of the tax system and spending programs surely influence flexibility and thus can have major consequences for both the cyclical performance and long-run growth potential of our economy. Accordingly, in view of the major budget issues now confronting the Congress and their potential implications for the economy, I thought it appropriate to devote some of my remarks today to fiscal policy. In that regard, I will not be emphasizing specific spending or revenue programs. Rather, my focus will be on the goals and process determining the budget and on the importance, despite our increasing national security requirements, of regaining discipline in that process. These views are my own and are not necessarily shared by my colleagues at the Federal Reserve.

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One notable feature of the budget landscape over the past half century has been the limited movement in the ratio of unified budget outlays-to-nominal GDP. Over the past 5 years, that ratio has averaged a bit less than 19 percent, about where it was in the 1960's before it moved up during the 1970's and 1980's. But that pattern of relative stability over the longer term has masked a pronounced rise in the

share of spending committed to retirement, medical, and other entitlement programs. Conversely, the share of spending that is subject to the annual appropriations process, and thus that comes under regular review by the Congress, has been shrinking. Such so-called discretionary spending has fallen from two-thirds of total outlays in the 1960's to one-third last year, with defense outlays accounting for almost all of the decline.

The increase in the share of expenditures that is more or less on automatic pilot has complicated the task of making fiscal policy by effectively necessitating an extension of the budget horizon. The Presidents' budgets through the 1960's and into the 1970's mainly provided information for the upcoming fiscal year. The legislation in 1974 that established a new budget process and that created the Congressional Budget Office required that organization to provide 5-year budget projections. And by the mid-1990's, CBO's projection horizon had been pushed out to 10 years. These longer time periods and the associated budget projections, even granted their imprecision, are useful steps toward allowing the Congress to balance budget priorities sensibly in the context of a cash-based accounting system.[1] But more can be done to clarify those priorities and thereby enhance the discipline on the fiscal process.

A general difficulty concerns the very nature of the unified budget. As a cash accounting system, it was adopted in 1968 to provide a comprehensive measure of the funds that move in and out of Federal coffers. With a few modifications, it correctly measures the direct effect of Federal transactions on national saving. But a cash accounting system is not designed to track new commitments and their translation into future spending and borrowing. For budgets that are largely discretionary, changes in forward commitments do not enter significantly into budget deliberations, and hence the surplus or deficit in the unified budget is a reasonably accurate indicator of the stance of fiscal policy and its effect on saving. But as longer-term commitments have come to dominate tax and spending decisions, such cash accounting has been rendered progressively less meaningful as the principal indicator of the state of our fiscal affairs.

An accrual-based accounting system geared to the longer horizon could be constructed with a reasonable amount of additional effort. In fact, many of the inputs on the outlay side are already available. However, estimates of revenue accruals are not well developed. These include deferred taxes on retirement accounts that are taxable on withdrawal, accrued taxes on unrealized capital gains, and corporate tax accruals. An accrual system would allow us to keep better track of the Government's overall accrued obligations and deferred assets. Future benefit obligations and taxes would be recognized as they are incurred rather than when they are paid out by the Government.[2]

Currently, accrued outlays very likely are much greater than those calculated under the cash-based approach. Under full accrual accounting, the Social Security program would be showing a substantial deficit this year, rather than the surplus measured under our current cash accounting regimen.[3] Indeed, under most reasonable sets of actuarial assumptions, for Social Security benefits alone past accruals cumulate to a liability that amounts to many trillions of dollars. For the Government as a whole, such liabilities are still growing.

Estimating the liabilities implicit in Social Security is relatively straightforward because that program has many of the characteristics of a private defined-benefit retirement program. Projections of Medicare outlays, however, are far more uncertain even though the rise in the beneficiary populations is expected to be similar. The likelihood of continued dramatic innovations in medical technology and procedures combined with largely inelastic demand and a subsidized third-party payment system engenders virtually open-ended potential Federal outlays unless constrained by law.[4] Liabilities for Medicare are probably about the same order of magnitude as those for Social Security, and as is the case for Social Security, the date is rapidly approaching when those liabilities will be converted into cash outlays.

Accrual-based accounts would lay out more clearly the true costs and benefits of changes to various taxes and outlay programs and facilitate the development of a

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[1] Unfortunately, they are incomplete steps because even a 10-year horizon ends just as the baby-boom generation is beginning to retire and the huge pressures on Social Security and especially Medicare are about to show through.

[2] In particular, a full set of accrual accounts would give the Congress, for the first time in usable form, an aggregate tabulation of Federal commitments under current law, with various schedules of the translation of those commitments into receipts and cash payouts.

[3] However, accrued outlays should exhibit far less deterioration than the unified budget outlays when the baby boomers retire because the appreciable rise in benefits that is projected to cause spending to balloon after 2010 will have been accrued in earlier years.

[4] Constraining these outlays by any mechanism other than prices will involve some form of rationing—an approach that in the past has not been popular in the United States.

broad budget strategy. In doing so, these accounts should help shift the national dialogue and consensus toward a more realistic view of the limits of our national resources as we approach the next decade and focus attention on the necessity to make difficult choices from among programs that, on a stand-alone basis, appear very attractive.

Because the baby boomers have not yet started to retire in force and accordingly the ratio of retirees to workers is still relatively low, we are in the midst of a demographic lull. But short of an outsized acceleration of productivity to well beyond the average pace of the past 7 years or a major expansion of immigration, the aging of the population now in train will end this state of relative budget tranquility in about a decade's time. It would be wise to address this significant pending adjustment sooner rather than later. As the President's just-released budget put it, "The longer the delay in enacting reforms, the greater the danger, and the more drastic the remedies will have to be."[5]

Accrual-based revenue and outlay projections, tied to a credible set of economic assumptions, tax rates, and programmatic spend-out rates, can provide important evidence on the long-term sustainability of the overall budget and economic regimes under alternative scenarios.[6] Of course, those projections, useful as they might prove to be, would still be subject to enormous uncertainty. The ability of economists to assess the effects of tax and spending programs is hindered by an incomplete understanding of the forces influencing the economy.

It is not surprising, therefore, that much controversy over basic questions surrounds the current debate over budget policy. Do budget deficits and debt significantly affect interest rates and, hence, economic activity? With political constraints on the size of acceptable deficits, do tax cuts ultimately restrain spending increases, and do spending increases limit tax cuts? To what extent do tax increases inhibit investment and economic growth or, by raising national saving, have the opposite effect? And to what extent does Government spending raise the growth of GDP, or is its effect offset by a crowding out of private spending?

Substantial efforts are being made to develop analytical tools that, one hopes, will enable us to answer such questions with greater precision than we can now. Much progress has been made in ascertaining the effects of certain policies, but many of the more critical questions remain in dispute.

However, there should be little disagreement about the need to reestablish budget discipline. The events of September 11 have placed demands on our budgetary resources that were unanticipated a few years ago. In addition, with defense outlays having fallen in recent years to their smallest share of GDP since before World War II, the restraint on overall spending from the downtrend in military outlays has surely run its course—and likely would have done so even without the tragedy of September 11.

The CBO and the Office of Management and Budget recently released updated budget projections that are sobering. These projections, in conjunction with the looming demographic pressures, underscore the urgency of extending the budget enforcement rules. To be sure, in the end, it is policy, not process, that counts. But the statutory limits on discretionary spending and the so-called PAYGO rules, which were promulgated in the Budget Enforcement Act of 1990 and were backed by a sixty-vote point of order in the Senate, served as useful tools for controlling deficits through much of the 1990's. These rules expired in the House last September and have been partly extended in the Senate only through mid-April.

The Budget Enforcement Act was intended to address the problem of huge unified deficits and was enacted in the context of a major effort to bring the budget under control. In 1990, the possibility that surpluses might emerge within the decade seemed remote indeed. When they unexpectedly arrived, the problem that the budget control measures were designed to address seemed to have been solved. Fiscal discipline became a less pressing priority and was increasingly abandoned.

To make the budget process more effective, some have suggested amending the budget rules to increase their robustness against the designation of certain spending items as "emergency" and hence not subject to the caps. Others have proposed mechanisms, such as statutory triggers and sunsets on legislation, that would allow the Congress to make mid-course corrections more easily if budget projections go off-

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[5] Office of Management and Budget, *Budget of the United States Government,* fiscal year 2004, Washington, DC: U.S. Government Printing Office, p.32.

[6] In general, fiscal systems are presumed stable if the ratio of debt in the hands of the public-to-nominal GDP (a proxy for the revenue base) is itself stable. A rapidly rising ratio of debt-to-GDP, for example, implies an ever-increasing and possibly accelerating ratio of interest payments to the revenue base. Conversely, once debt has fallen to zero, budget surpluses generally require the accumulation of private assets, an undesirable policy in the judgment of many.

track—as they invariably will. These ideas are helpful and they could strengthen the basic structure established a decade ago. But, more important, a budget framework along the lines of the one that provided significant and effective discipline in the past needs, in my judgment, to be reinstated without delay.

I am concerned that, should the enforcement mechanisms governing the budget process not be restored, the resulting lack of clear direction and constructive goals would allow the inbuilt political bias in favor of growing budget deficits to again become entrenched. We are all too aware that Government spending programs and tax preferences can be easy to initiate or to expand but extraordinarily difficult to trim or to shut down once constituencies develop that have a stake in maintaining the status quo.

In Congress's review of the mechanisms governing the budget process, you may want to reconsider whether the statutory limit on the public debt is a useful device. As a matter of arithmetic, the debt ceiling is either redundant or inconsistent with the paths of revenues and outlays you specify when you legislate a budget.

In addition, a technical correction in the procedure used to tie indexed benefits and individual income tax brackets to changes in "the cost of living" as required by law is long overdue. As you may be aware, the Bureau of Labor Statistics has recently introduced a new price index—the so-called chained CPI. The new index is based on the same underlying data as is the official CPI, but it combines the individual prices in a way that better measures changes in the cost of living. In particular, the chained CPI captures more fully than does the official CPI the way that consumers alter the mix of their expenditures in response to changes in relative prices. Because it appears to offer a more accurate measure of the true cost of living—the statutory intent—the chained CPI would be a more suitable series for the indexation of Federal programs. Had such indexing been in place during the past decade, the fiscal 2002 deficit would have been $40 billion smaller, all else being equal.

At the present time, there seems to be a large and growing constituency for holding down the deficit, but I sense less appetite to do what is required to achieve that outcome. Reestablishing budget balance will require discipline on both revenue and spending actions, but restraint on spending may prove the more difficult. Tax cuts are limited by the need for the Federal Government to fund a basic level of services—for example, national defense. No such binding limits constrain spending. If spending growth were to outpace nominal GDP, maintaining budget balance would necessitate progressively higher tax rates that would eventually inhibit the growth in the revenue base on which those rates are imposed. Deficits, possibly ever widening, would be the inevitable outcome.

Faster economic growth, doubtless, would make deficits far easier to contain. But faster economic growth alone is not likely to be the full solution to currently projected long-term deficits. To be sure, underlying productivity has accelerated considerably in recent years. Nevertheless, to assume that productivity can continue to accelerate to rates well above the current underlying pace would be a stretch, even for our very dynamic economy.[7] So, short of a major increase in immigration, economic growth cannot be safely counted upon to eliminate deficits and the difficult choices that will be required to restore fiscal discipline.

By the same token, in setting budget priorities and policies, attention must be paid to the attendant consequences for the real economy. Achieving budget balance, for example, through actions that hinder economic growth is scarcely a measure of success. We need to develop policies that increase the real resources that will be available to meet our longer-run needs. The greater the resources available—that is, the greater the output of goods and services produced by our economy—the easier will be providing real benefits to retirees in coming decades without unduly restraining the consumption of workers.

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These are challenging times for all policymakers. Considerable uncertainties surround the economic outlook, especially in the period immediately ahead. But the economy has shown remarkable resilience in the face of a succession of substantial blows. Critical to our Nation's performance over the past few years has been the flexibility exhibited by our market-driven economy and its ability to generate substantial increases in productivity. Going forward, these same characteristics, in concert with sound economic policies, should help to foster a return to vigorous growth of the U.S. economy to the benefit of all our citizens.

[7] In fact, we will need some further acceleration of productivity just to offset the inevitable decline in net labor force, and associated overall economic, growth as the baby boomers retire.

RESPONSE TO WRITTEN QUESTIONS OF SENATOR SHELBY FROM ALAN GREENSPAN

Q.1. I would like to start off with a very broad question involving our tax structure. I am a strong proponent of a simplified tax structure which would eliminate the inefficiencies of our current system and end the waste of the vast resources currently dedicated to taking advantage of all of the complexities.

What three words would you use to describe our current system? What would be the benefits of moving to a more straightforward structure? What aspects of our current tax structure would be in the "most in need of reform" winners?

A.1. I believe that our current tax system is overly complex, burdensome, and inefficient. It creates larger disincentives for work, saving, and investment than need be to raise the revenue required to finance Government operations. Moreover, the complexity leads to a substantial commitment of resources on the part of the private sector for the sole purpose of complying with the tax code. The Nation would be well served by moving to a more straightforward structure that would engender greater economic flexibility and efficiency and lower the compliance burden. A successful round of tax reform, particularly with regard to the taxation of capital income, could significantly improve the working of our economy. As I stated in my recent appearance before the Committee, I believe any such tax reform should be implemented in a budget-neutral manner.

Q.2.a. The President's budget proposes an end to the double taxation of corporate dividends by granting tax relief to individual shareholders. I support this proposal and the President's proposal to increase expensing for small businesses. What would you anticipate would be the effect of these proposals on investment and job growth?

A.2.a. A full analysis of the macroeconomic impact of the proposals is exceptionally complicated because the relevant conceptual issues touch on unsettled questions at the heart of public finance and corporate finance. That said, as I pointed out during my testimony, I support elimination of the double taxation of dividends because it is good long-term policy that reduces distortions and adds to the flexibility of the economy in responding to shocks that otherwise might result in recession. While I do not support elimination of double taxation because of short-term stimulus, it likely would provide some near-term boost to the economy. This is primarily because the plan would likely boost the level of stock prices that, in turn, would generate a positive wealth effect; there also could be some small income effects owing to short-run multiplier effects on aggregate demand.

Q.2.b. Won't this proposal give corporations better incentives as they decide whether to issue debt or equity to run their operations?

A.2.b. If enacted as proposed, the President's plan would eliminate the double tax on corporate dividends and those capital gains derived from undistributed after-tax profits ("deemed" dividends). This would eliminate shareholder taxes on corporate equity income and thus mitigate the current tax-induced distortion that favors debt financing relative to equity financing. Lower taxes on cor-

porate dividends and capital gains would boost the incentive to issue equity, both to finance new investment and to pay down existing debt, resulting in a decline in corporate debt-equity ratios. As a positive byproduct, the diminution of the reliance on debt would tend to reduce the fragility of the financial system in the face of adverse shocks.

Q.2.c. Some have argued that it would be preferable to allow corporations to expense dividends akin to the treatment of interest. Does it matter how we do it? And if it does, what incentives/disincentives and costs/benefits are created based on the two approaches?

A.2.c. I would prefer that the elimination of the double taxation of dividends be done at the corporate level, although in the long run, it probably would not matter greatly which approach is taken. I would note a couple of differences, however, between the two approaches you outline. First, if the plan were implemented on the corporate side, the revenue loss likely would be larger, because about half of dividends are received by tax-exempt equity holders at the personal level. Second, the increase in share prices may be larger: When implemented on the corporate side, the stream of dividend payments plausibly would rise essentially immediately and, thus, make stocks more attractive even to tax-exempt holders.

Q.3.a. The President's budget projects deficits through 2008. Some have expressed concern about the magnitude of these deficits. However, on a percentage basis, the deficits are a smaller percentage of GDP than those we experienced in the 1980's. (For example, the projected $308 billion deficit for 2003 represents 2.8 percent of GDP while the 1992 deficit was 4.7 percent of GDP.) Given current economic conditions and uncertainty concerning world affairs, how important is it to maintain fiscal discipline and where is it most important to seek this discipline?

A.3.a. Current economic and fiscal circumstances make the maintenance of fiscal discipline highly important. The recently updated budget projections from CBO and the Office of Management and Budget show that projections of the budget balance have deteriorated sharply over the past 2 years reflecting, in part, the demands that our response to the events of September 11 has placed on our budgetary resources, as well as the effects on tax revenues of the cyclical downturn and stock market decline. This return to budget deficits has occurred at a time when lower deficits and declining Federal debt levels would help the country prepare for the fiscal pressures that will accompany the rapidly approaching retirement of the baby-boom generation.

My preferred approach to attaining fiscal discipline would be to reinstate budget rules—perhaps a version of the recently expired PAYGO rules and discretionary spending caps. Such an approach would leave the Congress and the Administration free to act on high-priority initiatives and respond to unanticipated demands as long as their effect on the deficit were offset elsewhere in the budget. In addition, I have frequently stated that improvement in the budget balance realized through spending restraint would generally be preferable to improvements based on tax increases.

Q.3.b. At what point do you believe we should be concerned about Government deficits "crowding out" private borrowing?

A.3.b. The tendency for increases in the deficit to crowd out private borrowing does not begin at a particular point. In general, increases in the deficit result in higher long-term interest rates which, in turn, discourage private borrowing. However, if we let deficits become too large there is the additional concern that the fiscal system will become unsustainable; that is, higher-debt service outlays engendered by growing debt may result in a cycle of ever-higher debt-service outlays and deficits relative to GDP. Such instability would not occur as long as deficits do not result in a rising debt-to-GDP ratio. The path of the debt-to-GDP ratio currently being projected by CBO and the Office of Management and Budget for the next several years is about flat; that is, the deficits do not yet pose a significant instability concern. But as we go beyond the turn of the decade, a very significant acceleration in payments to beneficiaries of both Social Security and Medicare will hit the budget and, in the absence of other budget adjustments, produce deficit-to-GDP ratios that would not be consistent with long-run fiscal sustainability.

Q.4. The threat of war against Iraq leaves consumers and businesses feeling very uncertain about the economic outlook. I want to ask you about an article from last week's *Wall Street Journal*. According to this article, since WWII, wartime spending has become a smaller part of the economy and produces fewer economic gains. In short, the article makes the case that the United States cannot expect an economic boost from war-related spending since the economy has grown so large relative to the spending. Given that is the case, should we be arguing that the threat of war represents a significant factor in the cooldown or lag in the economy? What other factors might be at work that are not receiving attention?

A.4. It is certainly the case that defense spending represents a smaller share of our GDP than it did in the 1950's and 1960's; that is also true for the share of defense output in manufacturing production. However, I would still expect the incremental increases in defense spending over previously budgeted levels to boost the level of real activity, at least in the short to intermediate term. Part of that effect is likely to occur right away. However, the boost to production from the replacement of spent munitions and equipment would likely extend over several years. That was the pattern we saw after the 1991 Gulf War.

In more recent months, geopolitical concerns have been among a number of factors inhibiting business hiring and capital spending. There is considerable anecdotal evidence that business remain in a wait-and-see mode when it comes to dealing with geopolitical risks. These same concerns likely have weighed on consumer confidence in recent months. As I noted in my testimony, if these uncertainties diminish considerably in the near term, we should be able to determine whether we are dealing with an economy poised to grow more rapidly or one that is still laboring to rectify lingering imbalances.

Q.5. Economists have long lamented the low savings rate of Americans. The President's budget includes sweeping proposals aimed at

raising the amount of money Americans save. I believe that increasing savings is critical yet I am concerned that we may not be able to go as far as the President suggests. If the Congress chose to address this issue, how would you recommend that we provide greater incentives for individual saving?

A.5. I agree that raising our Nation's saving rate should be an important long-term priority. Saving frees up resources from current use and thereby makes those resources available for investment in new plants and equipment. Indeed, about half of the growth in labor productivity in the United States over long periods can be attributed to capital investment. The more saving our economy generates, the greater our productivity and prosperity.

Raising personal saving—the saving done by households—can be an important element of raising national saving—the saving done by the country as a whole. However, it is only one element. National saving is the sum of personal saving, saving by businesses (that is, retained earnings), and the saving of governments (that is, budget surpluses less budget deficits). Of the various savings concepts, it is national saving that is most important for determining our future national standard of living. Thus, it is critical that any effort to raise personal saving be judged in terms of its efficacy in raising national saving.

Q.6. The Fed's most recent Senior Loan Officer Survey of Bank Lending Practices (January 2003) reported that banks continued to tighten lending standards and terms for commercial and industrial (C&I) loans over the past 3 months in fractions similar to those reported in the October survey. In particular, the percentage of domestic banks that reported worsening industry-specific problems were a reason for tightening rose substantially from 39 percent in October to 66 percent in January. What is the nature of industry-specific problems? Do you see any particular types of businesses having difficulty getting credit? On the other hand, few banks reported that they had tightened any terms on credit card loans or other consumer loans. Should we have any concerns about too much credit in this area?

A.6. The survey did not ask respondents to comment on particular industries that were experiencing problems. The few banks that volunteered such information most commonly cited the energy industry, with the telecommunications and airlines industries also being mentioned.

The growth of consumer credit slowed sharply last year, to 3.3 percent, down from 6.9 percent in 2001. Part of this slowdown owes to a substantial volume of debt consolidation facilitated by a wave of "cash out" refinancing of mortgage debt in an environment of unusually low mortgage rates. Indeed, the growth of mortgage debt was sufficiently strong to raise the growth of overall household debt, the sum of consumer credit and residential mortgages, in 2002. Even so, as I mentioned in my testimony, adding in the fixed costs associated with other financial obligations, such as rental payments of tenants, consumer installment credit, and auto leases, the total servicing costs faced by households relative to their incomes are below previous peaks and do not appear to be a significant cause for concern at this time. Recent declines in delinquency

rates on total household debt suggest that this sector remains healthy overall.

Q.7. Last week, we saw American Insurance Group (AIG) increase its reserves by $3.5 billion—a result of unexpected costs from corporate claims over injury lawsuits, corporate mismanagement, improper financial transactions, and medical malpractice. AIG has a significant amount of capital and isn't in financial danger. Can we expect to see similar increases in reserves for other companies and what does this mean for the insurance industry's condition as a whole? How much of what we are seeing is due to price competition among insurers versus potential flaws in our tort liability system?

A.7. As you know, the Federal Reserve does not have direct supervisory or regulatory responsibility for the insurance industry. In its role as umbrella supervisor of financial holding companies, and for internal purposes, the Federal Reserve tracks broader insurance industry developments, particularly in view of the industry's role in providing credit to the economy. The Federal Reserve monitors insurance industry developments using publicly available information. Our response is limited to comments on the property and casualty sector of the insurance industry in view of your reference to adverse reserve developments in that sector.

Based on the publicly available sources, it appears that further adverse reserve developments for a number of property and casualty insurance companies may occur. It is our understanding that a large proportion of the recent additional claims reserving for the industry as a whole is associated with business booked in the late 1990's when pricing was particularly competitive and that additional reserving may be anticipated. The increased reserving appears to be largely related to losses in commercial coverage, including coverage for product liability, workers' compensation, general liability, financial guarantees, and directors and officers insurance. We also understand that additional reserving by a number of companies is associated with commercial coverages under general liability dating back to the 1970's and before, particularly for asbestos-related claims. (AIG reports that its exposure to asbestos claims is minimal and attributed none of its increased reserves noted above to asbestos exposure.)

In addition to continued underwriting losses, other factors may continue to affect the condition of the property and casualty insurance industry, including declining interest earned on investment portfolios and write-downs for bond impairments. For many years prior to 2000, property and casualty insurance companies relied on their investment portfolio results to offset underwriting losses. Declines in corporate credit quality and equity prices in recent years have reversed that trend, which has put significant pressure on insurance companies to price their products to cover expected losses and recover prior losses. The industry now appears to be benefiting from significantly stronger demand for insurance products and increased insurance premium rates across virtually all business lines, and may benefit in the future from the heightened focus on underwriting standards.

On balance, the industry continues to face significant challenges. Despite the adverse effect of recent developments on earnings and capital, capital levels appear strong by historical standards.

The Federal Reserve does not have the data to determine the extent to which the reserve developments may have been attributable to adverse judgments by juries. Press reports suggest that the adverse reserve developments may be attributed, in large part, to unsustainable, aggressive pricing during the late 1990's, but we do not have the data to indicate the extent to which the reserving is attributable to competitive pricing.

Q.8. Although the banking industry continues to earn record profits, credit-quality problems continue to be a concern in commercial and industrial (C&I) loan portfolios at large banks. The industry's noncurrent rate on C&I loans increased from 2.87 to 3.01 percent during the quarter, the first time since the first quarter of 1993 that it has been above 3 percent. Will we see banks continue to add to loan loss reserves when the fourth quarter data is released? Will credit quality problems continue into 2003 or can we expect to see an improvement?

A.8. Bank data for the fourth quarter of 2002 show that both net charge-offs and nonperforming assets declined moderately from the previous quarter, providing some indication that credit quality overall has begun to improve. Broadly speaking, the key contributing factors to the credit quality problems experienced in the past 2 years—a period of recession and weak economic growth, structural problems experienced by certain specific industrial sectors (e.g. telecommunications) and the revelation of improper corporate governance practices at certain firms—appear to have receded in significance. These preliminary indications of improvement should be interpreted with caution. Many bankers have expressed considerable uncertainty about the prospects for significant improvement in credit quality before the middle of 2003.

Consistent with this general outlook, banks bolstered their reserves in the fourth quarter by about $1.5 billion, so that reserve coverage of nonaccrual loans improved to 1.63 times, an increase in the multiple of 0.06 from September 2002. For the full year, a net increase in reserves of $3.2 billion was not sufficient to offset more rapid growth in nonaccrual loans, so that reserve coverage of these loans declined by 0.11 times from year-end 2001.

The noncurrent ratio for C&I loans cited in the question provides one useful indicator of the severity of credit problems at banks. In the current period, this indicator has been strongly influenced by lower C&I loans outstanding that were attributable to cyclically weak business loan demand, as well as by increases in noncurrent loans. A broader measure of credit quality, the noncurrent rate for all loans, reached only 1.45 percent of loans at year-end 2002, well below the comparable figure of 3.06 percent in 1992. This result is consistent with the broader view that the current credit cycle has been much more manageable for banks than that of a decade ago. The most significant area of difference is in commercial real estate lending. In 1992, the noncurrent rate for all real estate loans was 3.88 percent while the same rate for construction loans reached a remarkable 14.01 percent; these ratios were far lower in 2002, at

0.89 percent and 0.98 percent, respectively. A number of factors contributed to the unusually large magnitude of the 1992 figures, including the poor lending practices and the significant weakness of commercial real estate as an economic sector at that time.

Q.9. When you appeared before the Committee last July, I asked a question about productivity. I would like to revisit that issue again today. Last year, productivity in both the business and nonfarm business sectors rose 4.7 percent—the fastest pace since 1950 and more than four times the 1.1 percent gain posted in 2001. What are your views regarding this significant gain? What could be done to attempt to duplicate gains of this magnitude or greater? Do you think that this significant increase provides any indication as to the future direction of the economy?

A.9. The impressive performance of productivity recently appears to support the view that the step-up in the pace of structural productivity growth that occurred in the latter part of the 1990's has not, as yet, faltered. Indeed, the high growth of productivity during the past year merely extends recent experience. Since the mid-1990's, output per hour has been growing at an annual rate of 2½ percent, on average, compared with a rate of roughly 1½ percent during the preceding two decades.

Arguably, the pickup in productivity growth since 1995 reflects largely the ongoing incorporation of innovations in computing and communications technologies into the capital stock and business practices. In addition to the rapid pace of technical progress, deregulation and other policies to promote the flexibility of the economy have almost surely contributed to the spread and adoption of innovations that have, in turn, boosted the growth of productivity. Furthermore, the more flexible is an economy, the greater is its ability at any given point in time to be producing close to its productive potential.

Looking forward, the transition to the higher permanent level of productivity associated with previous innovations is likely not yet completed. The chances of prolonging the period of rapid innovation, doubtless, will be enhanced by maintaining and extending conditions that contribute to flexibility and by dismantling policies that contribute to unnecessary rigidity.

However, history does raise some warning flags concerning the length of time that productivity growth remains elevated. Gains in productivity remained quite rapid for years after the innovations that followed the surge in inventions a century ago. But in other episodes, the period of elevated growth of productivity was shorter. Regrettably, examples are too few to generalize. Hence, policymakers have no substitute for continued close surveillance of the evolution of productivity during this current period of significant innovation.

Q.10. I would like to quote from remarks given by Chairman Alan Greenspan at Lancaster House, in London, September 25, 2002:

> The development of our paradigms of containing risk has emphasized, and will, of necessity, continue to emphasize dispersion of risk to those willing, and presumably able, to bear it. If risk is properly dispersed, shocks to the overall economic system will be better absorbed and less likely to create cascading failures that could threaten financial stability.

The broad success of that paradigm seemed to be most evident in the United States over the past 2½ years. Despite the draining impact of a loss of $8 trillion of stock market wealth, a sharp contraction in capital investment and, of course, the tragic events of September 11, 2001, our economy held firm. Importantly, despite significant losses, no major U.S. financial institution was driven to default. Similar observations pertain to much of the rest of the world but to a somewhat lesser extent than to the United States.

In light of these circumstances and observations, plus a significant tax-cutting proposal by our President of an overall estimated $674 billion dollars, and the likelihood of impending war against Iraq, what are your thoughts about the U.S. economy's resilience for the upcoming year?

A.10. The ability of our economy to weather the many shocks inflicted on it since the spring of 2000 attests to our market system's remarkable resilience. As I have noted previously, that characteristic is far more evident today than two or three decades ago. There may be numerous causes of this increased resilience. Among them, ongoing efforts to liberalize global trade have added flexibility to many aspects of our economy over time. Furthermore, a quarter-century of bipartisan deregulation has significantly reduced inflexibilities in our markets for energy, transportation, communication, and financial services. And, of course, the dramatic gains in information technology have markedly improved the ability of businesses to address festering economic imbalances before they inflict significant damage. This improved ability has been further facilitated by the increasing willingness of our workers to embrace innovation more generally. Looking forward, the enhanced flexibility should continue to allow the economy to withstand the potentially destabilizing effects of additional negative shocks.

Q.11. I share the Chairman's view regarding the need to keep in place mechanisms that control spending in the budget process. I am particularly intrigued by the ideas relating to limits on the ability to have emergency or supplemental spending. It seems that these types of measures are a significant loophole in the system. Would you recommend that there be some type of automatic offset for these types of bills? Would you suggest that a super-majority (60 votes or more) be required to waive such a rule?

A.11. I recommend that Congress reinstate discretionary spending caps and PAYGO rules because those procedures have provided clear direction and constructive goals capable of offsetting in-built political biases in favor of budget deficits. To remain effective over time, a budgetary control mechanism must be stringent enough to exert real budgetary restraint and yet be sufficiently flexible to remain relevant in the face of "shocks" such as wars, recession, or unforeseen surpluses. Given the recent breakdown of budget controls in the face of emerging surpluses, I agree that closing spending loopholes in a way that better balances flexibility and overall restraint would be desirable. That said, how to best accomplish such adjustments must be left with Congress, which has the expertise needed to evaluate how possibly subtle changes in the budget process might affect budget decisions.

Q.12. Your testimony makes clear that our current cash-based budget may present a misleading picture of actual Federal Government commitments. I agree with you a better system is needed so

that we can get a handle on Federal spending. How would we transition to such a system and over what time period? Should we also be looking at a capital budget system for certain types of programs which reflect infrastructure building?

A.12. As I stated in my testimony, an accrual-based accounting system could be constructed with a reasonable amount of effort. Moreover, at least a set of rough estimates of an accrual-based budget probably could be developed relatively quickly. Although there appear to be no major conceptual hurdles blocking preparation of more refined estimates, it would not be hard to imagine—given the vast scope and complexity of the Government's operations—that significant operational questions might arise. All of those questions should be resolvable within a relatively short time-frame. Based on present information, I would recommend that accrual-based budgetary information be developed as a supplement to—not substitute for—the current, largely cash-based, unified budget. If that same view is adopted by the Congress, the transition to production of accrual-based estimates presumably could proceed on a reasonably expedited basis.

The capital-budgeting concept has some merit for the Government because it can provide useful information about the way the Government's activities are affecting overall saving and investment. However, such information is already provided in the Analytical Perspectives volume of the budget. Moreover, implementing a separate capital expenditures category within the budget that, presumably, would be subject to different rules than the operating budget would likely be problematic. In particular, I am concerned that the classification of spending as between current expenditures versus capital expenditures could be susceptible to manipulation.

I would also note that there is a fundamental difference between the application of capital budgeting in the private and Government sectors. In the private sector, separate accounts for capital expenditures can be justified because capital investments are expected to yield financial returns that are applied to interest charges and to liquidate the liability side of the capital accounts as the assets depreciate. Government investments generally are not expected to yield comparable financial returns.

RESPONSE TO WRITTEN QUESTIONS OF SENATOR REED FROM ALAN GREENSPAN

Q.1. Over the past couple of years we have seen an increasing number of credit unions drop their Federal insurance and opt for private insurance. From a safety and soundness perspective, is this something that we should be concerned with at this time?

A.1. The banking and thrift industries have had unfortunate experience with alternative deposit insurance systems, most recently during the 1980's in Ohio and Maryland. Participation in such systems can appear attractive to financial institutions, particularly if that participation is viewed as reducing the scope and cost of Federal regulatory oversight. In the final analysis, these alternative systems did not provide adequate oversight of the participating institutions and proved to be insufficiently funded or diversified to withstand significant failures. The result was mass depositor with-

drawals from, and ultimately the failure of, other similarly-insured institutions.

Credit unions have no immunity to these risks, as demonstrated in the collapse of the Rhode Island Share and Deposit Indemnity Corporation in 1991. The NCUA has been vocal in expressing its concern, on a number of occasions, about the potential problems associated with credit unions opting for private deposit insurance, including undue relaxation of their field-of-membership rules and insufficient oversight of the financial condition of these institutions. The history of alternative deposit-insurance systems suggests that such concern is well-founded.

Q.2. What impact do you anticipate from regulatory relief legislation that allows interest on business checking accounts to have on monetary policy and on the economy as a whole? How would it specifically impact small businesses?

A.2. Permitting interest to be paid on business checking accounts would help to improve the efficiency of our banking industry and provide important benefits for the business customers of banks. A more efficient banking industry would strengthen the overall economy by reducing the level of resources needed to provide a given level of banking services. In addition, interest on business checking could be beneficial for the implementation of monetary policy in the future if it were combined with the authorization of interest on balances held at Federal Reserve Banks.

Currently, the prohibitions against interest on demand deposits and on required reserve balances give banks incentives to establish programs to sweep the demand deposits of larger business firms into instruments that can earn interest and that are not subject to reserve requirements. Banks also set up complicated compensating balance programs that pay implicit interest through credits for the use of their services by larger firms. If interest could be paid on demand deposits and on the reserves that must be held against them, there would be no need for such programs, and the resources devoted to them could be redirected to activities that are genuinely productive for the economy as a whole.

Sweep programs have the potential to undermine the implementation of monetary policy under current operating procedures. The Federal Open Market Committee determines a target for the Federal funds rate, which the Open Market Desk at the Federal Reserve Bank of New York tries to achieve by adjusting the aggregate supply of reserves through open market operations. To realize the desired Federal funds rate, the Desk needs to have a predictable demand for reserves so it knows the level of reserves to supply. A predictable demand is provided by balances held at Reserve Banks to meet reserve requirements and contractual clearing requirements. If these balances were to drop too low, the demand for reserves would be less predictable and the Desk would find it more difficult to achieve the targeted level of the Federal funds rate. Interest payments on balances at Reserve Banks, along with interest payments on business checking accounts, would remove incentives for reserve-avoidance activities, thereby helping to ensure that the balances held at Reserve Banks remain at a satisfactory level for the continued effective implementation of monetary policy.

While households have been able to earn interest on their checking accounts since the early 1980's, and larger businesses, at some cost, have earned implicit interest through sweep programs and compensating balance arrangements, small businesses continue to be disadvantaged by the unnecessary prohibition against interest on demand deposits. The checking accounts of small firms are often not sizable enough to justify the complicated compensating balance arrangements or the type of sweep programs mentioned above. Therefore, many small firms earn no interest on the funds they keep in demand deposit accounts.

Q.3. What is your position on whether Industrial Loan Companies should be able to offer interest bearing corporate checking accounts? Do you believe they should be subject to the same regulatory treatment with regards to interest on their accounts?

A.3. Currently, Federal law prohibits commercial firms from owning and operating insured banks and establishes a prudential framework of supervision that protects the safety and soundness of banks controlled by corporate owners and thereby protects the taxpayer. When Congress closed the nonbank bank loophole in 1987, it granted corporate owners of industrial loan companies (ILC's) chartered in a limited number of States an exception from the rules that apply to all other corporate owners of banks. The exception was subject to the condition that the ILC either refrain from offering demand deposits withdrawable by check or remain below $100 million in assets. At that time, ILC's were for the most part small local institutions that did not offer checking accounts and consequently were distinguishable from full service insured banks. In recent years, the insured deposits in a number of ILC's have grown into the multiple billions of dollars and ILC's have been acquired by a number of large corporations.

The Board opposes allowing ILC's that currently cannot offer demand deposits to offer their functional equivalent: Business checking accounts. If this were allowed, ILC's would become the functional equivalent of full service insured banks. This would turn the limited exception for ILC's into a significant competitive advantage for corporate owners of ILC's, such as large retail and commercial firms, by allowing them to avoid the rules that apply to all other corporate owners of full service insured banks. Unlike bank holding companies, corporate owners of ILC's would be able to have commercial affiliations and avoid the prudential framework the Congress has deemed essential for the enhancement of financial stability and the protection of the taxpayer. Indeed, in the Gramm-Leach-Bliley Act (GLB Act), the Congress rejected efforts to allow commercial entities to acquire insured depository institutions and closed the unitary thrift loophole.

This is not a technical matter, nor a simple matter of fairness that affects only a small number of grandfathered companies. There is no restriction that prevents grandfathered States from chartering new ILC's for corporations seeking banks, as they have continued to do since 1987. Moreover, competitive pressures could encourage existing bank holding companies seeking commercial affiliations or to avoid prudential supervision to relocate their insured banks to grandfathered States that charter ILC's to take ad-

vantage of the ILC loophole. Consequently, taking this step would alter the structure of banking in the United States and be contrary to two important national policies that Congress reaffirmed recently in the GLB Act: One prohibiting the mixing of banking and commerce, and the other establishing a Federal prudential framework to assure that companies that own insured banks operate in a safe and sound manner.

RESPONSE TO WRITTEN QUESTIONS OF SENATOR BUNNING FROM ALAN GREENSPAN

Q.1. Should the tensions in the Middle East and/or Venezuela continue, are you worried about the effect of long-term high energy prices on our economy?

A.1. Because the United States is a major net importer of crude oil, higher crude oil prices exert a restraining influence on the growth of aggregate demand by a reduction in the purchasing power of consumers. In addition, higher crude oil prices raise business costs, and with many companies unable to pass on these cost increases to their customers, the growth of corporate profits slows; this, in turn, restrains business investment. Obviously, the higher crude oil prices go and the longer these high prices persist, the larger the negative economic consequences.

Q.2. We all know what the housing boom has done for this economy, especially over the last year. Do you see the housing market being able to sustain this growth?

A.2. Last year was truly extraordinary in terms of the construction and sale of residential properties. Near-record-low mortgage rates helped to push up home sales to a record 6.4 million unit pace. However, unless mortgage interest rates fall by the same extent as last year, housing construction is likely to contribute less to economic growth in the period ahead.

Q.3. On Thursday, the Joint Tax Committee will release a report on the Enron mess that I understand may "name names" of those institutions that aided Enron in trying to evade taxes. Will you be taking a look at this report to see if it affects institutions under the Federal Reserve's regulatory jurisdiction?

A.3. Federal Reserve staff are continuing to evaluate financial organizations' participation in the types of structured finance activities that have recently raised significant legal and accounting questions. These efforts include analysis of individual transactions, as well as evaluation of the policies and the processes employed by financial organizations to ensure that they are in compliance with all laws and regulations. In addition to the information developed by our own examination efforts, our staff intend to fully consider information developed by other regulatory agencies, law enforcement offices, Congressional committees, bankruptcy proceedings, and others. Staff have recently received copies of the Joint Committee's report and are in the process of reviewing it.

Q.4. Last year, I asked you about your views on OTC energy and metals trading, and you responded very favorably to the values that commodity trading brings to the energy industry. Has any-

thing occurred in the last year to change your support for the OTC markets?

A.4. I continue to believe that OTC derivatives, including energy derivatives, are important tools for managing price risks. During the last year, there have been a string of revelations and accusations regarding the trading practices of Enron and some other firms during the California energy crisis. However, it is difficult to determine on the basis of publicly available information whether the practices in question constituted fraud or market manipulation or what the scale of any such illegal activity was. What does seem clear is that most of the practices that are being questioned were made possible by a flawed implementation of deregulation of energy markets. Fraud and manipulation undermine the integrity of markets and must be effectively deterred. But, thus far, I have seen no compelling evidence that it cannot be deterred effectively through a combination of market discipline and effective exercise of existing regulatory authority.

RESPONSE TO WRITTEN QUESTIONS OF SENATOR MILLER FROM ALAN GREENSPAN

Q.1. Morgan Stanley Dean Witter Chief Economist Richard Berner said on January 10 in *The Washington Post,* "Federal budget deficits do tend to raise long-term interest rates, making it more expensive for businesses to borrow and invest. But he added as long as economic growth is slow, the private sector's demand for investment money will stay low. Only when the economy significantly heats up would the competition between the Federal Government and private companies for lenders significantly boost interest rates." What do you see the overall economy doing over the next 6 months and do you agree with Mr. Berner's statement?

A.1. As discussed in the Monetary Policy Report, the members of the Federal Open Market Committee at the time of my testimony believed the most likely outcome for the economy this year was that the economic fundamentals would support a strengthening of economic growth. Of course, considerable uncertainty attends this view owing to geopolitical concerns. There is no question that long-term interest rates are affected by rising deficits, and that this tends to have a negative effect on capital formation. In particular, econometric evidence suggests that when investors see the projected long-run budget outlook worsening, bond rates rise today in anticipation of tighter credit market conditions down the road.

Q.2. Mr. Chairman, the housing sector has been one of the strongest performers in our economy. What impact do you see on the housing sector if deficits increase and interest rates start to rise? Are we threatening one of our strongest performers?

A.2. Should mortgage interest rates rise, it is entirely possible that new and existing home sales would decline. It is worth bearing in mind, however, that any sustained increase in rates presumably would occur only in the context of a more vigorous upturn in the pace of business activity, suggesting that the net effect on housing activity might be relatively limited.

Q.3. Do you see deflation as a threat in the near term?

A.3. Central bankers have long believed that price stability is conducive to achieving maximum sustainable growth. Historically, debilitating risk premiums have tended to rise with both expected inflation and deflation, and they have been minimized during conditions of approximate price stability. At present, the United States is nowhere close to sliding into a pernicious deflation. Indeed, both market and survey measures of inflation expectations have remained relatively stable over the past year, suggesting that there are no widespread concerns about deflation developing in the period ahead. But a major objective of the recent heightened scrutiny of the issue is to ensure that any latent deflationary pressures are addressed well before they become a problem.

Q.4. Mr. Chairman, last year you and I had the opportunity to discuss OTC energy derivatives. A bill has again been introduced this Congress that would reverse the legal certainty provisions for OTC energy derivatives achieved in the Commodity Futures Modernization Act in 2000. My concern is that significant regulatory uncertainty would be created for these products if the bill passes. Have you seen anything recently that would change your views on the California energy crisis and whether energy derivatives trading contributed either to the California energy crisis or to Enron's bankruptcy?

A.4. I have not seen anything that demonstrates clearly that energy derivatives trading contributed significantly to the California energy crisis. The root cause of the crisis was a flawed implementation of the deregulation of energy markets. To be sure, some traders may have used energy derivatives to profit from the flaws in the regulatory structure. But it remains unclear to what extent these trading strategies added to the strains and the imbalances inherent in the regulatory system. Likewise, although Enron was a leading dealer in energy derivatives, derivatives were not the root cause of its failure. Rather, it failed because its board of directors and its auditors allowed it to publish financial statements that distorted its true financial condition and allowed it to become excessively leveraged. More intensive regulation of derivatives would not have prevented the California energy crisis or the failure of Enron. Furthermore, as you recognize, some of the proposals for more intensive regulation would have the unintended consequence of reintroducing legal uncertainty regarding contract enforceability.

RESPONSE TO WRITTEN QUESTIONS OF SENATOR CRAPO FROM ALAN GREENSPAN

Q.1. During a recent hearing of this Committee, it was suggested that some financial institutions may be illegally tying the availability or price of credit to investment banking services. What are your views concerning the adequacy of existing laws and regulation in this area and are you aware of any convincing evidence that illegal tying occurs? What steps is the Federal Reserve taking to ensure that commercial banking companies do not engage in illegal antitying activities?

A.1. Banks are subject to a variety of laws that prohibit them from tying products and services in a manner that harms customers or lessens competition. Section 106 of the Bank Holding Company Act

Amendments of 1970, prohibits a bank from extending credit or varying the terms of credit on the condition that a customer purchase another product or service from the bank or its affiliates, with certain exceptions. Banks are also subject to the antitying provisions of the Federal antitrust laws, which prohibit a company with market power in one product from using that market power to require a customer to purchase a second product.

In addition, to the extent that this conduct involves a bank reducing the price of credit to benefit an affiliate's investment banking business, it may violate Section 23B of the Federal Reserve Act, which requires that transactions involving a bank and its affiliate be on market terms. Finally, in certain circumstances, this practice may, by reducing the bank's income for the benefit of an affiliate, be an unsafe and unsound banking practice.

The Board's examination procedures and practices include supervisory efforts to ensure compliance with Section 106, other banking statutes and safe and sound banking practices. For example, the Board's Supervision Manuals governing Bank Holding Company and State Member Bank Examinations provide for compliance reviews of a bank holding company and State member bank that include evaluation by examiners of the institution's program for compliance with Section 106. The Board and the other Federal banking agencies have also issued guidance directing banks and bank holding companies to implement and maintain appropriate systems and controls to promote compliance with the antitying provisions. That guidance addressed the need for specific policies and procedures addressing tying prohibitions, training materials and programs that provide examples of prohibited practices and sensitize employees to the concerns raised by tying, compliance systems, and management involvement in reviewing training, audit, and compliance programs related to tying. *See, e.g.,* FRB Bank Holding Company Supervision Manual § 3500.0; OCC Insurance Activities Handbook, Federal Prohibitions on Tying (June 2002); OCC Bulletin 95–20 (April 14, 1995).

In addition to examining for compliance with this agency guidance, the Board investigates allegations of illegal tying and initiates appropriate actions to remedy any violations of the antitying provisions that are found. Currently, the Board, in conjunction with the Office of the Comptroller of the Currency, is conducting a special targeted review of compliance with the antitying provisions in light of reports described in the press. This review includes a review of the antitying training and compliance programs, marketing programs, training materials and adequacy of internal audits for compliance with the bank's internal policies and procedures at several of the country's largest banks. These efforts are ongoing, and we have not yet completed our evaluation of the information we have gathered thus far. If the Board finds banks offering credit on an impermissible basis, we will take appropriate supervisory action to assure compliance with the law and to terminate unsafe and unsound banking practices.

To date, the agencies have not found that commercial banks are manipulating the pricing of credit to build investment banking market share. Clearly, banking organizations that have credit relationships with customers hope to sell them the bank's full range of

products and services. As you know, banking organizations are permitted to package certain services because some tying arrangements are permissible under statutory and regulatory exceptions and some customers may request that the bank package services. In both cases, interested customers have the choice of whether to enter into these arrangements.

Q.2. Derivatives are complex instruments used by institutional investors. As I understand it, derivatives are actually utilized in our markets to allocate risk better to those areas or those entities that can handle it, and it is a stabilizing force in the markets. Do you agree with that?

A.2. Derivatives allow price risks to be transferred to those most willing to assume and manage those risks. Provided that those assuming the risks manage them effectively, such risk transfers stabilize markets and contribute to economic growth. Notwithstanding certain high-profile instances of mismanagement, derivatives have been an important factor supporting growth of the U.S. economy in recent years.

Q.3. As you know, last year we had proposals in the Senate that would amend the CFMA (Commodity Futures Modernization Act). Do you see any need to revisit the CFMA at this time?

A.3. No. Some may argue that the CFTC needs additional authority to deter fraud and manipulation in the trading of OTC energy derivatives. While some apparently were tempted to engage in such market abuses by flaws in the way energy markets were deregulated by the States, the scale and significance of such practices remains unclear. Furthermore, it is not clear that such practices cannot be effectively deterred by a combination of market discipline and exercise of existing regulatory authority. We need to be mindful of the danger of unintended consequences of new legislation, including the reintroduction of legal uncertainty regarding the enforceability of contracts.

Q.4. What existing reporting and disclosure is made for derivatives transactions?

A.4. Firms that file financial statements with the SEC are required to make certain public disclosures related to derivatives transactions. Under generally accepted accounting principles (GAAP) in the United States, all derivatives must be measured at fair value and recognized on the balance sheet as either assets or liabilities. Also, a firm must disclose its objectives for entering into derivatives transactions, the context needed to understand the objectives, and its strategies for achieving the objectives. In addition, the SEC requires firms to describe their accounting policies for derivatives and to provide the quantitative and qualitative information about market risk exposures, including exposures due to derivatives transactions.

Banks are subject to additional public reporting requirements for derivatives transactions. Regulatory reports for banks and bank holding companies require a breakdown of derivatives transactions by risk factor (interest rate, foreign exchange, equity, commodity, credit) by type (futures, forwards, options), and by purpose (trading or nontrading). Moreover, the Federal Reserve has encouraged

large banks to disclose additional information on market risk exposures in the trading account (exposures arising from derivatives and other trading instruments), such as value-at-risk on an aggregate basis and value-at-risk by risk factor.

RESPONSE TO WRITTEN QUESTIONS OF SENATOR SARBANES FROM ALAN GREENSPAN

Q.1. Chairman Greenspan, at the hearing you stated that, "There was a good deal of concern, as you know, about this housing bubble. But our evaluation of the data and the outlook suggests that, while obviously, there are potential problems, they are not serious ones that need to be addressed in any material way as far as we can judge." Can you please elaborate on these potential problems and the process that led you to your conclusion that they are not serious enough to be addressed in any material way?

A.1. The house price increases over the past 2 years have been described by some analysts as possibly symptomatic of an emerging housing bubble, not unlike the stock market bubble whose bursting has produced considerable distress in recent years. Existing home prices (as measured by the repeat-sales index) rose by 7 percent during 2002, and by a third during the past 4 years. Such a pace cannot reasonably be expected to be maintained. And recently, price increases have slowed.

It is, of course, possible for home prices to fall as they did in a couple of quarters in 1990. But any analogy to stock market pricing behavior and bubbles is a rather large stretch. First, to sell a home, one almost invariably must move out and in the process confront substantial transaction costs in the form of brokerage fees and taxes. These transaction costs greatly discourage the type of buying and selling frenzy that often characterizes bubbles in financial markets.

Second, there is no national housing market in the United States. Local conditions dominate, even though mortgage interest rates are similar throughout the country. Home prices in Portland, Maine, do not arbitrage those in Portland, Oregon. Thus, any bubbles that might emerge would tend to be local, not national, in scope.

Third, there is little indication of a supply overhang in newly constructed homes. The level of overall new home construction, including manufactured homes, appears to be well supported by steady household formation and not dependent on high and variable replacement needs or second-home demand. Census Bureau data suggest that one-third to one-half of new household formations in recent years result directly from immigration.

After their very substantial run-up in recent years, home prices could recede. A sharp decline, the consequences of a bursting bubble, however, seems most unlikely. Nonetheless, even modestly declining home prices would reduce the level of unrealized capital gains and presumably dampen the pace of home equity extraction. Home mortgage cash-outs and home equity loan expansion would likely decline in the face of declining home prices. However, the 5-year-old home building and mortgage finance boom is less likely to be defused by declining home prices than by rising mortgage interest rates.

Should rates rise, it is entirely possible that new and existing home sales would decline. However, it is worth bearing in mind that any sustained increase in rates presumably would occur only in the context of a more vigorous upturn in the pace of business activity, suggesting that the net effect on housing activity might be relatively limited.

Q.2. In the Administration's proposed budget they have decreased their projections for the cost of bank failures in fiscal year 2004 by 70 percent (from $6.4 billion to $1.9 billion). Do you agree with the Administration's changed projection? Comparing the economic environment for banking institutions, going forward from this year compared to last year, would you expect the likelihood for aggregate bank failures to have increased, decreased, or remained the same?

A.2. Bank failures have been relatively few in recent years, and only 10 banks and one thrift failed in 2002. Based upon current conditions, there are no indications that failures should be expected to rise significantly in the near future. Despite recent increases in problem loans and charge-offs, the number and size of problem banks remains small relative to the banking industry. The FDIC reported that at year-end 2002 there were 136 problem institutions (for example, those receiving a CAMEL composite rating of "4" or "5," made up of 116 banks and 20 thrifts), with combined assets of approximately $39 billion. These figures are significantly higher than just a few years ago, but nonetheless represent a relatively minor share of the industry. Moreover, the industry once again reported robust earnings for the year 2002 and remains strongly capitalized. The prospect of improved economic conditions, together with preliminary indications that problem loans have begun to decline, suggest that credit quality pressures on the banking industry may be expected to subside in the coming years. Barring unforeseen developments, it would be reasonable to expect that the number of bank failures in the next 2 years would remain low, perhaps even lower than were experienced in 2002.

Neither figure cited in the question as projected costs of bank failures could readily be located in the Administration's budget documents, so that it is not possible to comment on them specifically. As a general observation, both figures seem very high. The total costs to the deposit insurance funds from bank failures have been below $1 billion every year since 1992, even if losses to both the Bank Insurance Fund and Savings Association Insurance Fund are included. Estimated losses for 2002 came to roughly $630 million. Given the current number and size of problem banks and the general state of the banking industry, and barring significant unforeseen events, it would seem reasonable to expect annual losses to be well below even the $1.9 billion figure in the next 2 years.

For use at 10:00 a.m., EST
Tuesday
February 11, 2003

Board of Governors of the Federal Reserve System

Monetary Policy Report to the Congress

Submitted pursuant to section 2B of the Federal Reserve Act

February 11, 2003

Letter of Transmittal

BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM
Washington, D.C.
February 11, 2003

The President of the Senate
The Speaker of the House of Representatives

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

Sincerely,

Alan Greenspan, Chairman

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Monetary Policy Report to the Congress

Report submitted to the Congress on February 11, 2003, pursuant to section 2B of the Federal Reserve Act

Monetary Policy and the Economic Outlook

The economy of the United States has suffered a series of blows in the past few years, including the fall in equity market values that began in 2000, cutbacks in capital spending in 2001, the horrific terrorist attacks of September 11, the emergence of disturbing evidence of corporate malfeasance, and an escalation of geopolitical risks. Despite these adversities, the nation's economy emerged from its downturn in 2001 to post moderate economic growth last year. The recovery was supported by accommodative monetary and fiscal policies and undergirded by unusually rapid productivity growth that boosted household incomes and held down business costs. The productivity performance was also associated with a rapid expansion of the economy's potential, and economic slack increased over the year despite the growth in aggregate demand.

After turning up in late 2001, activity began to strengthen more noticeably early last year. Sharp inventory cutbacks in 2001 had brought stocks into better alignment with gradually rising final sales, and firms began to increase production in the first quarter of 2002 to curtail further inventory runoffs. Moreover, businesses slowed their contraction of investment spending and began to increase outlays for some types of capital equipment. Household spending on both personal consumption items and housing remained solid and was supported by another installment of tax reductions, widespread price discounting, and low mortgage interest rates. By midyear, the cutbacks in employment came to an end, and private payrolls started to edge higher.

Although economic performance appeared to be gradually improving, the tentative nature of this improvement warranted the continuation of a highly accommodative stance of monetary policy. Accordingly, the Federal Open Market Committee (FOMC) held the federal funds rate at 1¾ percent through the first part of the year. In March, however, the FOMC shifted from an assessment that the risks over the foreseeable future to its goals of maximum sustainable growth and price stability were tilted toward economic weakness to an assessment that the risks were balanced.

Around midyear, the economy began to struggle again. Concerns about corporate governance came to weigh heavily on investors' confidence, and geopolitical tensions, especially the situation in Iraq, elevated uncertainties about the future economic climate. Equity prices fell during the summer, liquidity eroded in corporate debt markets, and risk spreads widened. Businesses once again became hesitant to spend and to hire, and both manufacturing output and private payrolls began to decline. State and local governments struggled to cope with deteriorating fiscal positions, and the economies of some of our major trading partners remained weak. Although the already accommodative stance of monetary policy and strong upward trend of productivity were providing important support to spending, the Committee perceived a risk that the near-term weakening could become entrenched. In August, the FOMC adjusted its weighting of risks toward economic weakness, and in November, it reduced the targeted federal funds rate 50 basis points, to 1¼ percent. The policy easing allowed the Committee to return to an assessment that the risks to its goals were balanced. With inflation expectations well contained, this additional monetary stimulus seemed to offer worthwhile insurance against the threat of persistent economic weakness and substantial declines in inflation from already low levels.

On net, the economy remained sluggish at the end of 2002 and early this year. The household sector continued to be a solid source of demand. Motor vehicle sales surged at year-end on the tide of another round of aggressive discounting by the manufacturers, other consumer outlays trended higher, and activity in housing markets remained exceptionally strong. Concerns about corporate governance appeared to recede somewhat late last year, in part because no new revelations of major wrongdoing had emerged. However, the ongoing situation in Iraq, civil strife in Venezuela that has curtailed oil production, and tensions on the Korean peninsula have sustained investors' uncertainty about economic prospects and have pushed prices higher on world oil markets. Faced with this uncertainty, businesses have been cautious in spending and changed payrolls little, on net, over December and January.

Mindful of the especially high degree of uncertainty attending the economic outlook in the current geopolitical environment, the members of the FOMC believe the most likely outcome to be that fundamentals will support

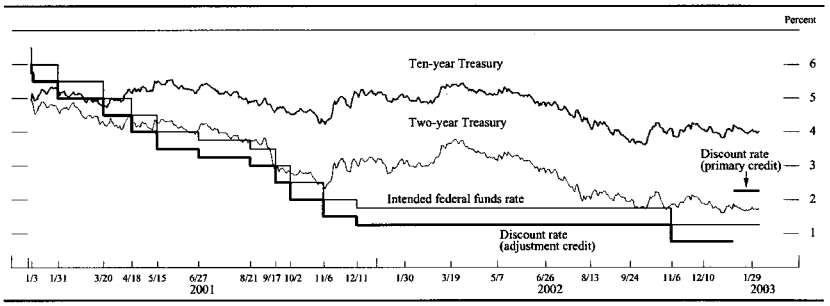
a strengthening of economic growth. Business caution is anticipated to give way over the course of the year to clearer signs of improving sales. Inventories are lean relative to sales at present, and restocking is likely to provide an additional impetus to production in the period ahead. The rapid expansion of productivity, the waning effects of earlier declines in household wealth, and the highly accommodative stance of monetary policy should also continue to boost activity. Although state and local governments face budgetary problems, their restraint is likely to offset only a part of the stimulus from past and prospective fiscal policy actions at the federal level. In addition, the strengthening economies of our major trading partners along with the improving competitiveness of U.S. products ought to support demand for our exports. Taken together, these factors are expected to lead to a faster pace of economic expansion, while inflation pressures are anticipated to remain well contained.

Monetary Policy, Financial Markets, and the Economy over 2002 and Early 2003

As economic growth picked up during the early months of 2002, the FOMC maintained its target for the federal funds rate at 1¾ percent. A sharply reduced pace of inventory liquidation accounted for a significant portion of the step-up in real GDP growth, but other indicators also suggested that the economy was gaining momentum. Reductions in business outlays on equipment and software had moderated significantly after dropping precipitously in 2001, and consumer spending was well maintained by sizable gains in real disposable personal income. Residential construction activity was spurred by low home mortgage interest rates. The improvement in economic conditions sparked a rally in equity markets late in the first quarter and pushed up yields on longer-term Treasury instruments and investment-grade corporate bonds; yields on speculative-grade bonds declined in reaction to brighter economic prospects and the perceived reduction in credit risk. Meanwhile, surging energy prices exerted upward pressure on overall inflation, but still-appreciable slack in resource utilization and a strong upward trend in private-sector productivity were holding down core price inflation.

At both its March and May meetings, the FOMC noted that the apparent vigor of the economy was importantly attributable to a slowdown in the pace of inventory liquidation and that considerable uncertainty surrounded the outlook for final sales over the next several quarters. The Committee was especially concerned about prospects for a rebound in business fixed investment, which it viewed as key to ensuring sustainable economic expansion. Although the decline in investment spending during the first quarter of 2002 was the smallest in a year, gloomy business sentiment and large margins of excess capacity in numerous industries were likely to hamper capital expenditures. According to anecdotal reports, many firms were unwilling to expand capacity until they saw more conclusive evidence of growing sales and profits. At the same time, however, the FOMC noted that, with the federal funds rate unusually low on an inflation-adjusted basis and considerable fiscal stimulus in train, macroeconomic policies would provide strong support to further economic expansion. Against this backdrop, the Committee at the March 19 meeting judged the accommodative stance of monetary policy to be appropriate and announced that it considered the risks to achieving its long-run objectives as being balanced over the foreseeable future, judgments it retained at its meeting in early May.

Selected interest rates



NOTE. The data are daily and extend through February 5, 2003. The dates on the horizontal axis are those of scheduled FOMC meetings and of any intermeeting policy actions. On January 9, 2003, the Federal Reserve changed the main credit program offered at the discount window by terminating the adjustment credit program and beginning the primary credit program.

The information reviewed at the June 25–26 FOMC meeting confirmed that the economy was expanding but at a slower pace than earlier in the year. As expected, the degree of impetus to economic activity from decelerating inventory liquidation had moderated. Residential investment and consumer spending also had slowed appreciably after surging earlier in the year. The most recent data on orders and shipments suggested a small upturn in business spending on equipment and software, but the improvement in capital spending appeared to be limited, unevenly distributed across industries, and not yet firmly indicative of sustained advance. Industrial production continued to increase, and the unemployment rate declined somewhat.

In financial markets, investors and lenders had apparently become more risk averse in reaction to the mixed tone of economic data releases, growing geopolitical tensions, further warnings about terrorist attacks, and additional revelations of dubious corporate accounting practices. In concert, these developments pushed down yields on longer-term Treasury securities, while interest rates on lower-quality corporate bonds rose notably, and equity prices dropped sharply. Although the economy continued to expand and the prospects for accelerating aggregate demand remained favorable, downbeat business sentiment and skittish financial markets rendered the timing and extent of the expected strengthening of the expansion subject to considerable uncertainty. In these circumstances, the FOMC left the federal funds rate unchanged to keep monetary policy very accommodative and once again assessed the risks to the outlook as being balanced.

By the time of the August 13 FOMC meeting, it had become apparent that economic activity had lost some of its earlier momentum. Turbulence in financial markets appeared to be holding back the pace of the economic expansion. Market participants focused their attention on the lack of convincing evidence that the recovery was gaining traction and the possibility that more news of corporate misdeeds would surface in the run-up to the Securities and Exchange Commission's August 14 deadline for the certification of financial statements by corporate executives. Although the cumulative losses in financial wealth since 2000 were restraining expenditures by households, very low mortgage interest rates were helping to sustain robust demand for housing. Moreover, the financial resources made available by a rapid pace of mortgage refinancing activity, in combination with attractive incentives offered by auto manufacturers, supported other consumer spending. The Committee continued to judge the prevailing degree of monetary accommodation as appropriate to foster a solid expansion that would bring the economy to fuller resource utilization. At the same time, the Committee recognized the considerable risks to that outlook and the potential adverse consequences for economic prospects from possible additional deterioration of financial conditions. The members noted, however, that a further easing of monetary policy, if it came to be viewed as appropriate, could be accomplished in a timely manner. In light of these considerations, the FOMC opted to retain a target rate of 1¾ percent for the federal funds rate, but it viewed the risks to the economy as having shifted from balanced to being tilted toward economic weakness.

When the FOMC met on September 24, data indicated that economic growth had picked up in the third quarter, on average, buoyed in part by a surge in motor vehicle production. The uneventful passing of the mid-August deadline for recertification of corporate financial statements briefly alleviated investors' skittishness in debt and equity markets. However, the most timely information suggested that some softening in economic activity had occurred late in the summer. Those economic reports, along with a darker outlook for corporate profits and escalating fears of a possible war against Iraq, led market participants to revise down their expectations for the economy. Equity prices and yields on both longer-term Treasury and private securities moved sharply lower in early autumn. In the Committee's view, heightened geopolitical tensions constituted a significant additional source of uncertainty clouding the economic outlook. Still, fundamentals suggested reasonable prospects for continued expansion. Accordingly, the FOMC left the federal funds rate unchanged at the close of the September meeting but also reiterated its view that the risks to the outlook were weighted toward economic weakness.

The information reviewed at the November 6 meeting indicated a more persistent spell of below-par economic performance than the FOMC had anticipated earlier. With home mortgage rates at very low levels, residential construction activity remained high. But consumer spending had decelerated noticeably since midsummer under the combined weight of stagnant employment and declining household wealth resulting from further decreases in equity prices. Worries about the potential for war against Iraq, as well as persistent concerns about the course of economic activity and corporate earnings, were apparently engendering a high degree of risk aversion among business executives that was constraining capital spending and hiring. Despite a weakening in the exchange value of the dollar, sluggish economic growth among major trading partners spelled difficulties for U.S. exports, and a rebound in foreign output seemed more likely to follow than to lead a rebound at home. Moreover, economic slack that was larger and more persistent than previously anticipated ran the risk of reducing core inflation appreciably further from already low levels. Given these considerations, the Committee lowered its target for the fed-

eral funds rate 1/2 percentage point, to 1 1/4 percent. The relatively aggressive adjustment in the stance of monetary policy was deemed to offset the potential for greater economic weakness, and the Committee accordingly announced that it judged risks to the outlook as balanced with respect to its long-run goals of price stability and sustainable economic growth.

When the FOMC met on December 10, overall conditions in financial markets had calmed considerably. Indicators of production and spending, however, remained mixed. The manufacturing sector registered large job losses in the autumn, and industrial production continued its slide, which had begun around midyear. A more vigorous rebound in business fixed investment was not evident, and indeed the recent data on orders and shipments and anecdotal reports from business contacts generally signaled continued softness in capital spending. Very low home mortgage interest rates were supporting residential construction activity, but consumption expenditures were sluggish. On balance, the Committee's view was that in the absence of major shocks to consumer and business confidence, a gradual strengthening of the economic expansion was likely over the coming quarters, especially given the very accommodative stance of monetary policy and probable further fiscal stimulus. The FOMC left the federal funds rate unchanged and indicated that it continued to view the risks to the outlook as balanced over the foreseeable future.

By the time of the FOMC meeting on January 28–29, 2003, it had become apparent that the economy had grown only slowly in the fourth quarter of last year, but little evidence of cumulating weakness appeared in the most recent data, and final demand had held up reasonably well. The escalation of global tensions weighed heavily on business and investor sentiment. Firms apparently were remaining very cautious in their hiring and capital spending, and equity prices had declined on balance since the December meeting. But yield spreads on corporate debt—especially for riskier credits—narrowed further, and longer-term Treasury yields declined slightly. Although the fundamentals still pointed to favorable prospects for economic growth beyond the near term, geopolitical developments were making it especially difficult to gauge the underlying strength of the economy, and uncertainties about the economic outlook remained substantial. Against this background, the Committee decided to leave the federal funds rate unchanged and stated that it continued to judge the risks to the outlook as balanced.

Economic Projections for 2003

An unusual degree of uncertainty attends the economic outlook at present, in large measure, but not exclusively, because of potential geopolitical developments. But Federal Reserve policymakers believe the most probable outcome for this year to be a pickup in the pace of economic expansion. The central tendency of the real GDP forecasts made by the members of the Board of Governors and the Federal Reserve Bank presidents is 3 1/4 percent to 3 1/2 percent, measured as the change between the final quarter of 2002 and the final quarter of this year. The full range of these forecasts is 3 percent to 3 3/4 percent. Of course, neither the central tendency nor the range is intended to convey the uncertainties surrounding the individual forecasts of the members. The civilian unemployment rate is expected to end the year in the 5 3/4 percent to 6 percent range.

Apart from the geopolitical and other uncertainties, the forces affecting demand this year appear, on balance, conducive to a strengthening of the economic expansion. Monetary policy remains highly accommodative, and federal fiscal policy is and likely will be stimulative. However, spending by many state and local governments will continue to be restrained by considerable budget difficulties. Activity abroad is expected to improve this year, even if at a less robust pace than in the United States; such growth together with the improving competitiveness of U.S. products should generate stronger demand for our exports. Furthermore, robust gains in productivity, though unlikely to be as large as in 2002, ought to continue to promote both household and business spending. Household purchasing power should be supported as well by a retreat in the price of imported energy products that is suggested by the oil futures market. And the adverse effects on household spending from past declines in equity wealth probably will begin to wane.

A reduction of businesses' hesitancy to expand investment and hiring is critical to the durability of the expansion, and such a reduction should occur gradually if geopolitical risks ease and profitability improves. Inventories are relatively lean, and some restocking ought to help boost production this year, albeit to a much smaller extent than did last year's cessation of sharp inventory

Economic projections for 2003

Percent

Indicator	Memo 2002 actual	Federal Reserve Governors and Reserve Bank presidents	
		Range	Central tendency
Change, fourth quarter to fourth quarter[1]			
Nominal GDP	4.1	4 1/2–5 1/2	4 3/4–5
Real GDP	2.8	3–3 3/4	3 1/4–3 1/2
PCE chain-type price index	1.9	1 1/4–1 3/4	1 1/4–1 1/2
Average level, fourth quarter			
Civilian unemployment rate	5.9	5 3/4–6	5 3/4–6

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

liquidations. In addition, the continued growth of final sales, the tax law provision for partial expensing of equipment purchases, replacement demand, and a more hospitable financial environment should induce many firms to increase their capital spending. The growth of investment likely will be tempered, however, by the persistence of excess capital in some areas, notably the telecommunications sector, and reductions in business spending on many types of new structures may continue this year.

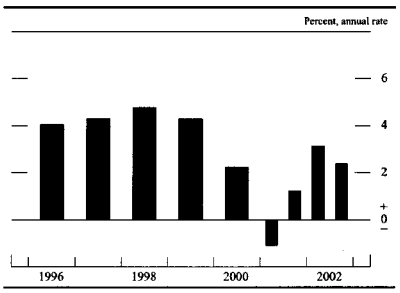
Federal Reserve policymakers believe that consumer prices will increase less this year than in 2002, especially if energy prices partly reverse last year's sharp rise. In addition, resource utilization likely will remain sufficiently slack to exert further downward pressure on underlying inflation. The central tendency of FOMC members' projections for increases in the chain-type price index for personal consumption expenditures (PCE) is 1 1/4 percent to 1 1/2 percent this year, lower than the actual increase of about 2 percent in 2002.

Economic and Financial Developments in 2002 and Early 2003

In 2002, the United States economy extended the upturn in activity that began in late 2001. Real GDP increased 2 3/4 percent over the four quarters of last year, according to the advance estimate from the Commerce Department. However, the pace of activity was uneven over the course of the year, as concerns about emerging economic and political developments at times weighed heavily on an economy already adjusting to a succession of shocks from previous years.

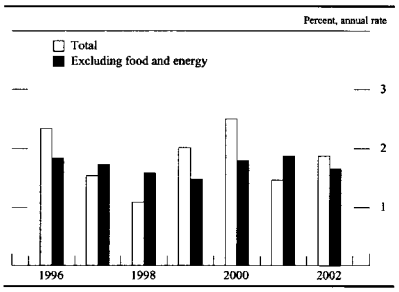
Economic conditions improved through the first part of the year. Household spending on both personal consumption items and housing remained solid, businesses curtailed their inventory liquidation and began to increase their outlays for some types of capital equipment, and private employment started to edge higher. But the forward momentum diminished noticeably later in the year when concerns about corporate governance put a damper on financial markets and geopolitical developments boosted oil prices and added to the uncertainty already faced by businesses about the economic outlook. In the summer, equity prices fell, risk spreads widened, and liquidity eroded in corporate debt markets. Businesses' caution was reflected in their reluctance to substantially boost investment, restock inventories, or add to payrolls. Responding to these developments, as well as some weakening in demand from abroad, manufacturers trimmed production during the fall. Employment at private businesses declined again, and the unemployment rate rose to 6 percent in December. However, despite the modest pace of last year's overall recovery, output per hour in the nonfarm business sector grew 3 3/4 percent over the year—an extraordinary increase even by the standards of the past half decade or so.

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

Signals on the trajectory of the economy as we enter 2003 remain mixed. Some of the factors that had noticeably restrained the growth of real GDP in the fourth quarter of last year—most especially a sharp decline in motor vehicle production—are not on track to be repeated. Moreover, employment leveled off on average in December and Janaury, and readings on industrial production have had a somewhat firmer tone of late. Nevertheless, the few data in hand suggest that the economy has not yet broken out of the pattern of subpar performance experienced over the past year.

Consumer price inflation moved up a bit last year, reflecting sharply higher energy prices. Excluding the prices of food and energy items, the price index for per-

sonal consumption expenditures increased 1¾ percent, about ¼ percentage point less than in 2001; this deceleration most likely resulted from continued slack in labor and product markets, robust gains in productivity, and somewhat lower expectations of future inflation.

The Household Sector

Consumer Spending

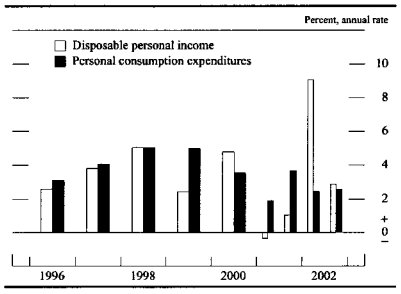
Consumer spending grew at a moderate pace last year and, on the whole, continued to be an important source of support for overall demand. Personal consumption expenditures rose 2½ percent in real terms, near the 2¾ percent increase in 2001 and down from the more than 4 percent average growth over the preceding several years. Sales of new motor vehicles fell only a little from the extremely high levels of late 2001; outlays were especially strong during the summer and late in the year, when manufacturers were offering aggressive price and financing incentives. Growth of spending on other durable goods was well maintained last year as well, although the gains were smaller than is often seen early in an economic recovery; in contrast to the situation in many previous cycles, spending on durable goods did not decline sharply during the recession and so had less cause to rebound as the recovery got under way. Apart from outlays on durable goods, spending for most categories of consumer goods and services increased at a moderate rate last year.

That moderate rate of aggregate consumption growth was the product of various crosscurrents. On the positive side, real disposable personal income rose nearly 6 percent last year, the fastest increase in many years. Strong productivity growth partially offset the effects of stagnant employment in restricting the growth of household income, and the phase-in of additional tax reductions from the Economic Growth and Tax Relief Reconciliation Act of 2001 boosted household purchasing power appreciably. In addition, high levels of mortgage refinancing allowed homeowners to reduce their monthly payments, pay down more costly consumer credit, and, in many cases, extract equity that could be used to support other spending. On the negative side, household wealth again moved lower last year, as continued reductions in equity values outweighed further appreciation of house prices. By the end of the third quarter, according to the Federal Reserve's flow-of-funds accounts, the ratio of household net worth to disposable income had reversed nearly all of its run-up since the mid-1990s.

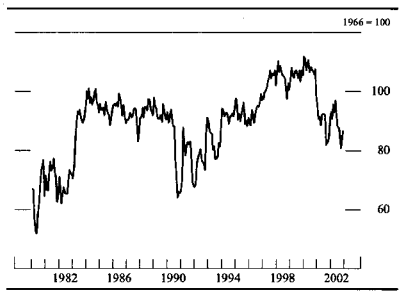
Consumer confidence, which had declined during most of 2001 and especially after the September 11 attacks, picked up in the first half of last year, according to both the Michigan Survey Research Center (SRC) and Conference Board surveys. However, confidence retreated over the summer along with the drop in equity prices, and by early this year, consumer confidence again stood close to the levels of late 2001. These levels of consumer confidence, though at the bottom of readings of the past several years, are nevertheless above levels normally associated with recession.

The personal saving rate, which has trended notably lower since the early 1980s, moved above 4 percent by late last year after having averaged 2¼ percent in 2001. The saving rate has been buffeted during the past two years by surges in income induced by tax cuts and by spikes in spending associated with variations in motor vehicle incentives. But, on balance, the extent of the increase in the saving rate has been roughly consistent with a gradual response of consumption to the reduction in the ratio of household wealth to disposable income.

Change in real income and consumption

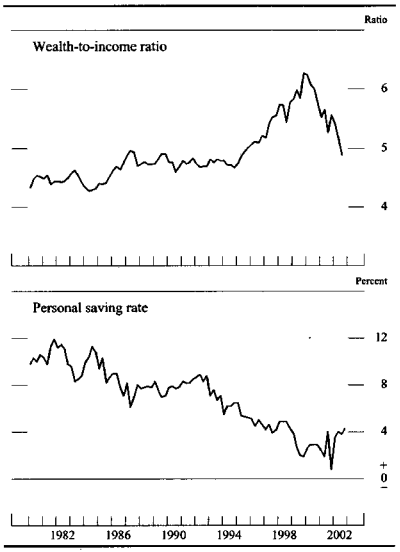


Consumer sentiment



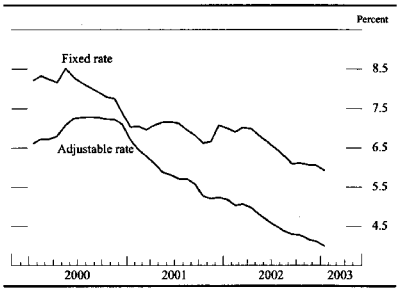
SOURCE. University of Michigan Survey Research Center.

Wealth and saving



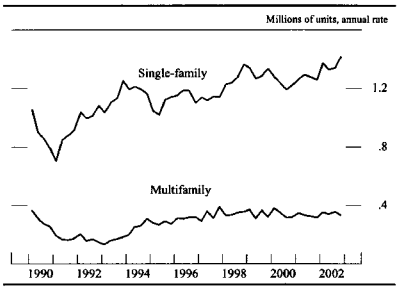
NOTE. The data are quarterly. The wealth-to-income ratio is the ratio of household net worth to disposable personal income and extends through 2002:Q3; the personal saving rate extends through 2002:Q4.

Mortgage rates



NOTE. The data, which are monthly and extend through January 2003, are contract rates on thirty-year mortgages.
SOURCE. Federal Home Loan Mortgage Corporation.

Private housing starts



NOTE. The data are quarterly.

Residential Investment

Real expenditures on residential investment increased 6 percent in 2002—the largest gain in several years. Demand for housing was influenced by the same factors affecting household spending more generally, but it was especially supported by low interest rates on mortgages. Rates on thirty-year fixed-rate mortgages, which stood at around 7 percent in the first months of the year, fell to around 6 percent by the autumn and dipped below that level early this year—the lowest in thirty-five years. Not surprisingly, attitudes toward homebuying, as measured by the Michigan SRC, remained quite favorable.

Starts of new single-family homes were at 1.36 million units last year, 7 percent above the already solid pace for 2001. Sales of both new and existing homes were brisk as well. Home prices continued to rise but at a slower rate than in 2001, at least according to some measures. The repeat-sales price index for existing homes rose $5^1/_2$ percent over the four quarters ended in 2002:Q3, a slowing from the $8^3/_4$ percent increase over the comparable year-earlier period. The constant-quality price index for new homes rose $4^1/_2$ percent last year, but this increase was close to the average pace over the past few years. At the same time, measures of house prices that do not control for the mix of homes sold rose considerably more last year than in 2001, a difference indicating that a larger share of transactions were in relatively expensive homes.

In the multifamily sector, starts averaged a solid 345,000 units last year, an amount in line with that of the preceding several years. However, the pace of building slowed a little in the fall. Apartment vacancy rates moved notably higher last year and rent and property values declined; these changes suggest that the strong demand for single-family homes may be eroding demand for apartment space.

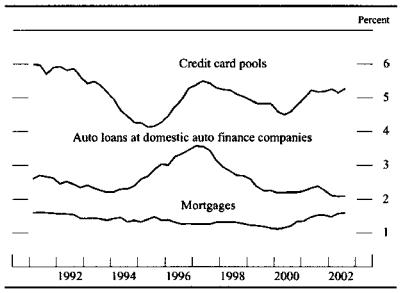
Household Finance

Households continued to borrow at a rapid pace last year; the $9^1/_4$ percent increase in their debt outstanding was the

largest since 1989. Low mortgage interest rates helped spur both very strong home purchases and refinancing of existing loans, which together increased home mortgage debt 11½ percent. Refinancing activity was especially elevated in the fourth quarter, when fixed mortgage interest rates dipped to around 6 percent. Torrid refinancing activity helps explain last year's slowdown of consumer credit, which is household borrowing not secured by real estate: A significant number of households reportedly extracted some of the equity from their homes at the time of refinancing and used the proceeds to repay other debt as well as to finance home improvements and other expenditures. According to banks that participated in the Federal Reserve's Senior Loan Officer Opinion Survey on Bank Lending Practices in October, the frequency and size of cash-out refinancings were substantially greater than had been reported in the January 2002 survey. Although automakers' financing incentives and attractive cash rebates stimulated a substantial amount of consumer borrowing, the growth rate of consumer credit in 2002, at 4¼ percent, was more than 2½ percentage points below the pace in 2001.

Even though households took on a large amount of mortgage debt last year, extraordinarily low mortgage rates kept the servicing requirement for that debt (measured as a share of homeowners' disposable income) well below its previous peak levels. Moreover, reflecting large gains in residential real estate values, equity in homes has continued to increase despite sizable debt-financed extractions. The combined influence of low interest rates and the sizable gain in disposable personal income also kept the total servicing costs faced by households—which in addition to home mortgage payments include costs of other financial obligations such as rental payments of tenants, consumer installment credit, and auto leases—relative to their incomes below previous peaks. Against this backdrop, broad measures of household credit quality deteriorated very little last year, and signs of financial stress were confined mainly to the subprime segment of the market. Delinquency rates on home mortgages inched up, while those on auto loans at finance companies were flat. Delinquency rates on credit cards bundled into securitized asset pools remained close to those of recent experience.

Delinquency rates on selected types of household loans



NOTE. The data are quarterly and extend through 2002:Q3.
SOURCE. For mortgages, the Mortgage Bankers Association; for auto loans, the Big Three automakers; for credit cards, Moody's Investors Service.

The Business Sector

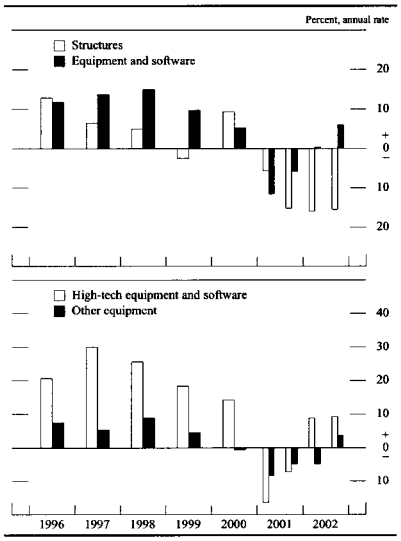
Overall business fixed investment moved lower last year, although the decline was not nearly so precipitous as in 2001. Outlays for equipment and software edged up, but spending on structures fell sharply. Financing conditions worsened over the summer, with equity prices declining, initial public offerings (IPOs) drying up, credit market spreads widening, and banks tightening up somewhat on credit standards in the wake of increased reports of corporate malfeasance. In addition, geopolitical concerns increased firms' already heightened uncertainty about the economic outlook. These factors contributed to an apparent deterioration in business confidence, and businesses still have not felt any great urgency to boost investment appreciably. For similar reasons, although firms slowed their rate of inventory liquidation last year, they have yet to undertake a sustained restocking.

Fixed Investment

After dropping sharply in 2001, real spending on equipment and software rose 3 percent last year. Spending on high-technology equipment, one of the hardest-hit sectors in 2001, showed signs of uneven improvement. The clearest rebound was in computing equipment, for which spending rose 25 percent in real terms; this gain fell short of the increases posted in the late 1990s but far more than reversed the previous year's decline. Software investment also turned positive, rising 6 percent after declining about 3 percent in 2001. By contrast, real outlays for communications equipment were reported to be up only slightly in 2002 after plummeting 30 percent in 2001.

Business spending on aircraft fell sharply last year. Airlines were hit especially hard by the economic downturn and by the reduction in air travel after the September 11 attacks; although expenditures for new aircraft held up through the end of 2001 because of the very long lags involved in producing planes, shipments of planes slowed greatly thereafter. Meanwhile, business outlays on motor vehicles edged up last year. Demand for autos and light trucks by rental companies weakened sharply along with the drop in air traffic that occurred after September 11 but recovered gradually over the course of last year. Purchases of medium and heavy trucks fell off overall,

Change in real business fixed investment



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

despite the fact that demand for heavy (class 8) trucks was boosted by spending in advance of the implementation of more-stringent environmental regulations.

Investment in equipment other than high-tech and transportation goods moved modestly higher through most of last year, as real outlays for industrial machinery and a wide range of other equipment gradually strengthened through the summer. Although spending edged lower again in the fourth quarter, investment in non-high-tech, nontransportation equipment increased 3½ percent for the year as a whole.

Spending on equipment and software was supported last year by low interest rates, which helped hold down the cost of capital, as did the tax provision enacted in March 2002 that allows partial expensing of new equipment and software purchased before September 11, 2004. Moreover, modest increases in final sales together with replacement demand no doubt spurred many firms to make new capital outlays. Nevertheless, some sectors, most notably telecommunications, probably still had excess holdings of some forms of capital. Concerns about corporate malfeasance, which had become more intense over the spring and summer, weighed heavily on financial markets and raised the cost of capital through reduced share prices and higher yields on the bonds of lower-rated firms. In addition, uncertainty about the geopolitical situation, including the possible consequences for oil prices of an outbreak of war with Iraq, likely made many firms reluctant to commit themselves to new expenditures. In all, businesses have been, and appear to remain, quite cautious about undertaking new capital spending projects.

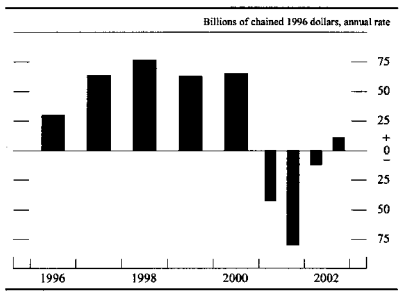
Real business spending for nonresidential structures declined sharply for a second year in 2002. Outlays for the construction of office buildings and industrial buildings were especially weak. Vacancy rates for such buildings increased throughout the year, and property values and rents moved lower. Construction of new hotels and motels also fell considerably, reflecting the weakness in the travel industry. By contrast, spending on other commercial buildings, such as those for retail, wholesale, and warehouse space, moved only a little lower last year.

A number of factors likely account for investment in structures having been much weaker than investment in equipment. Structures depreciate very slowly, so businesses can defer new outlays without incurring much additional deterioration of their capital stock. And unlike investment in equipment, spending on structures is not eligible for partial expensing. According to some analysts, concerns about additional acts of terrorism (and, until late in the year, the lack of insurance to cover such events) may also have had a damping effect on some types of construction, particularly large "trophy" projects.

Inventory Investment

The sharp inventory runoffs that characterized the economic downturn, together with gradually rising final sales, implied that, by early last year, stocks were in much better alignment with sales than had been the case during 2001. Accordingly, businesses lessened the pace of inventory liquidation early in the year and by summer

Change in real business inventories



had turned to some modest restocking. However, firms appeared to have exerted tight control over production and inventories; with prospects for the strength of the recovery having diminished in the second half of the year, businesses quickly cut production, and inventories only edged up in the fourth quarter, according to incomplete and preliminary data. In all, total inventories were about unchanged last year compared with a liquidation of more than $60 billion in 2001, and this turnaround contributed 1 percentage point to the growth of real GDP over the year. At year-end, inventory-to-sales ratios in most sectors stood near the low end of their recent ranges.

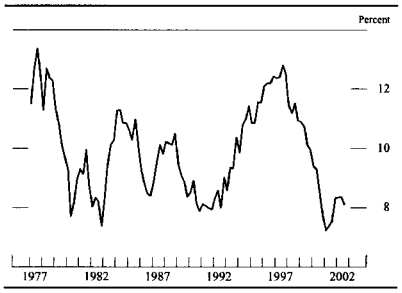
In the motor vehicle industry, last year's very strong sales were matched by high levels of production, and the stock of inventories, especially for light trucks, appeared at times to be higher than the industry's desired levels. Nevertheless, the surge in sales late in the year helped to pare stocks, and dealers ended the year with inventories of light vehicles at a comfortable level.

Corporate Profits and Business Finance

The profitability of the U.S. nonfinancial corporate sector improved from its lows of 2001 but relative to sector output remained at the low end of the range experienced over the past thirty years. Economic profits of nonfinancial corporations—that is, book profits adjusted for inventory valuations and capital consumption allowances—rebounded in late 2001 and were little changed through the third quarter of last year. The sluggish expansion of aggregate demand and the lack of pricing power associated with intense competitive pressures were the main factors that held down profits in 2002. Also playing a role, especially in the manufacturing sector, were costs arising from underfunded defined-benefit pension plans. Reflecting the pause in economic growth, earnings reports for the fourth quarter indicate that profits may have dropped some late in the year.

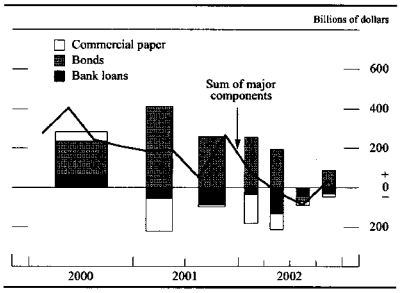
A dearth of expenditures on fixed capital and moribund merger and acquisition activity were the chief culprits behind the sluggish pace of nonfinancial corporate borrowing last year. Also important was the propensity of some firms to draw on liquid assets—which began the year at high levels—rather than to seek external financing. Consequently, debt of the nonfinancial corporate sector expanded only 1½ percent, a rate slower than the already subdued pace in 2001. The composition of business borrowing was dominated last year, as it was in 2001, by longer-term sources of funds. Robust demand for higher-quality corporate debt on the part of investors, combined with the desire of firms to lock in low interest rates, prompted investment-grade corporations to issue a large volume of bonds during the first half of 2002. With funding needs limited, investment-grade issuers continued to use the proceeds to strengthen their balance sheets by refinancing higher-coupon bonds and by paying down short-term obligations such as bank loans and commercial paper. Buoyed by declining yields, gross issuance of below-investment-grade bonds for the most part also held up well during the first half, although this segment of the market was hit hard after revelations of corporate malfeasance, as investors shunned some of the riskiest issues; issuance was especially weak in the beleaguered telecom and energy sectors, which continue to be saddled with overcapacity and excessive leverage. Despite falling share prices, seasoned equity offerings were also well maintained over the first half of the year, in part because of the decision of some firms—especially in the telecom and energy sectors—to reduce leverage. IPOs, by con-

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



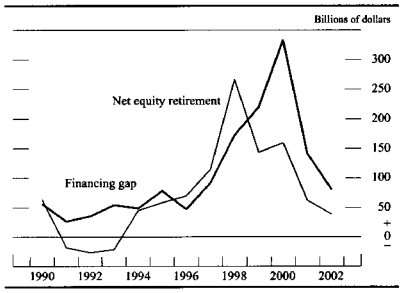
NOTE. The data are quarterly and extend through 2002:Q3. Profits are from domestic operations of nonfinancial corporations, with inventory valuation and capital consumption adjustments.

Major components of net business financing



NOTE. Seasonally adjusted annual rate for nonfarm nonfinancial corporate business. The data for the sum of major components are quarterly. The data for 2002:Q4 are estimated.

Financing gap and net equity retirement at nonfarm nonfinancial corporations

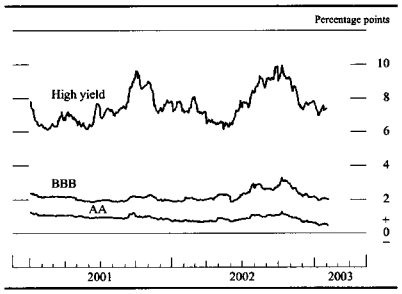


NOTE. The data are annual; 2002 is based on partially estimated data. The financing gap is the difference between capital expenditures and internally generated funds. Net equity retirement is the difference between equity retired through share repurchases, domestic cash-financed mergers, or foreign takeovers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

trast, were sparse. The evaporation of cash-financed mergers and acquisitions and desire by firms to conserve cash kept equity retirements at their slowest pace since 1994.

Over the summer, investors grew more reluctant to buy corporate bonds because of concerns about the reliability of financial statements, deteriorating credit quality, and historically low recovery rates on defaulted speculative-grade debt. Macroeconomic data suggesting that the economic recovery was losing momentum and widespread company warnings about near-term profits pushed yields on speculative-grade debt sharply higher. Risk spreads on investment-grade bonds also widened appreciably in the third quarter, as yields in that segment

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



NOTE. The data are daily and extend through February 5, 2003. The spreads compare the yields on the Merrill Lynch AA, BBB, and 175 indexes with the yield on the ten-year off-the-run Treasury note.

of the corporate bond market declined less than those on Treasury securities of comparable maturity. Investors' aversion to risk was also heightened by mounting tensions with Iraq; by early autumn, risk spreads on junk-rated bonds reached their highest levels in more than a decade. Gross bond issuance both by investment-grade and below-investment-grade firms fell off markedly, and the amount of redemptions was large. By the third quarter, net issuance of bonds by nonfinancial corporations had turned negative for the first time since the early 1950s. Trading conditions in the corporate bond market deteriorated during this period, as bid–asked spreads reportedly widened in all sectors. With share prices dropping and stock market volatility increasing, issuance of seasoned equity nearly stalled in the summer and early autumn. IPOs were virtually nonexistent amid widely publicized investigations into the IPO allocation process at large investment banks.

A smattering of more upbeat news about the economy in mid-autumn and the absence of major revelations of corporate wrongdoing sparked a rally in equity prices and rekindled investors' appetite for corporate debt. Over the remainder of the year and during early 2003, risk spreads narrowed considerably on investment-grade corporate bonds—especially for the lowest rated of these issues—and even more on speculative-grade bonds, although they remained high by historical standards. In the meantime, liquidity in the corporate bond market generally improved. A brightening of investor sentiment caused a rebound in gross bond issuance, with firms continuing to use bond proceeds to refinance long-term debt and to pay down short-term debt. Rising stock prices and reduced volatility also allowed seasoned equity issuance to regain some ground in the fourth quarter. The improved tone in corporate debt markets carried over into early 2003. Gross corporate bond issuance continued at a moderate pace, and despite the drop in stock prices in the latter half of January, seasoned equity issuance has been reasonably well maintained. IPO activity and venture capital financing, however, remained depressed.

The heavy pace of bond issuance, sagging capital expenditures, and diminished merger and acquisition activity allowed firms to pay down large amounts of both business loans at banks and commercial paper last year. The runoff in business loans that started in early 2001 intensified in the first half of 2002. At the same time, commercial paper issuers that were perceived as having questionable accounting practices encountered significant investor resistance, and most of these issuers discontinued their programs. Bond rating agencies stepped up the pressure on firms to substitute longer-term debt for shorter-term debt and thereby reduce rollover risk. In addition, banks raised the total cost of issuing commercial paper by tightening underwriting standards and boost-

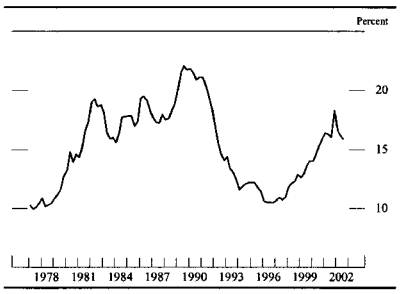
ing fees and spreads on the associated backup lines of credit—especially for lower-rated issuers. In doing so, respondents to the April Senior Loan Officer Opinion Survey on Bank Lending Practices cited heightened concerns about the deterioration of issuers' credit quality and a higher probability of lines being drawn. Many commercial paper issuers either turned to longer-term financing or dropped out of the credit markets altogether, and the volume of nonfinancial commercial paper outstanding shrank about one-fourth during the first six months of the year after having dropped one-third in 2001.

The volatility that gripped equity and bond markets around midyear, however, did not spill over to the commercial paper market. Quality spreads in the commercial paper market were largely unaffected, in part because many of the riskiest issuers had already exited the market, while others had strengthened their cash positions and significantly reduced rollover risk earlier in the year. Indeed, because of difficulties in the corporate bond market, some nonfinancial firms turned temporarily to the commercial paper market to obtain financing, and the volume of outstanding paper rose in July after a lengthy period of declines. Over the remainder of the year, business loans at banks and commercial paper outstanding contracted rapidly, as inventory investment remained negligible, and firms continued to take advantage of relatively low longer-term interest rates by issuing bonds.

A decline in market interest rates and improved profitability helped reduce the ratio of net interest payments to cash flow in the nonfinancial corporate sector last year. Even so, many firms struggled to service their debt, and corporate credit quality deteriorated markedly. The trailing average default rate on corporate bonds, looking back over the preceding twelve months, was already elevated and climbing when WorldCom's $26 billion default in July propelled the average rate to a record level. The amount of nonfinancial corporate debt downgraded by Moody's Investors Service last year was more than fourteen times the amount upgraded. At less than 25 percent, the average recovery rate in 2002 on all defaulted bonds—as measured by the price of bonds at default—was at the low end of recovery rates over the past decade. Delinquency rates on business loans at commercial banks rose noticeably before stabilizing in the second half of the year, and charge-off rates remained quite high throughout 2002.

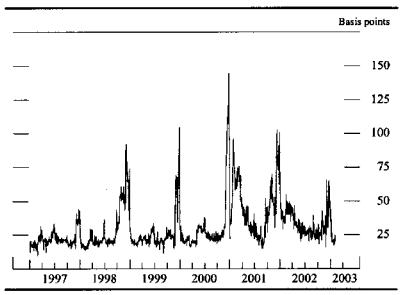
After expanding rapidly in 2001, commercial mortgage debt grew much more slowly during the first quarter of last year, as business spending on nonresidential structures fell. Despite the continued contraction in outlays on nonresidential structures, commercial mortgage debt accelerated over the remainder of the year, apparently because of refinancing to extract a significant por-

Net interest payments of nonfinancial corporations relative to cash flow



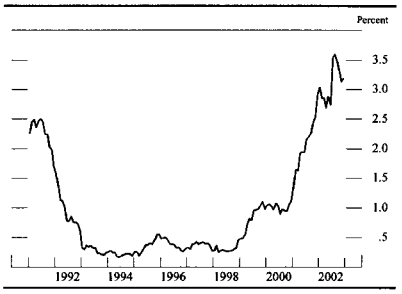
NOTE. The data are quarterly and extend through 2002:Q3.

Spread of low-tier CP rates over high-tier CP rates



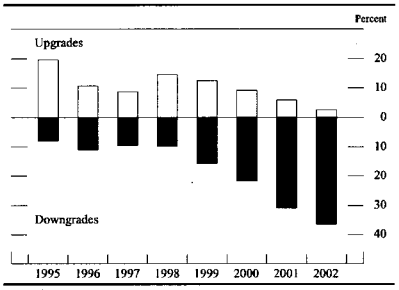
NOTE. The data are daily and extend through February 5, 2003. The series shown is the difference between the rate on A2/P2 nonfinancial commercial paper and the AA rate.

Default rate on outstanding bonds



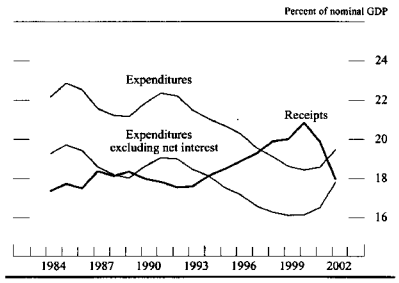
NOTE. The default rate is monthly and extends through December 2002. The rate for a given month is the face value of bonds that defaulted in the twelve months ending in that month divided by the face value of all bonds outstanding at the end of the calendar quarter immediately preceding the twelve-month period.

Ratings changes of nonfinancial corporations



NOTE. Data are at an annual rate. Debt upgrades (downgrades) are expressed as a percentage of par value of all bonds outstanding.
SOURCE. Moody's Investors Service.

Federal receipts and expenditures



NOTE. The budget data are from the unified budget and are for fiscal years (October through September); GDP is for Q3 to Q3.

tion of equity from existing properties. The issuance of commercial-mortgage-backed securities (CMBS), a key source of commercial real estate financing in recent years, was well maintained in 2002. Even as office vacancy rates rose, the quality of commercial real estate credit remained stable last year. Commercial banks firmed standards on commercial real estate loans in 2002, on net, and delinquency rates on commercial real estate loans at banks stayed at historically low levels. Delinquency rates on CMBS leveled off after increasing appreciably in late 2001, and forward-looking indicators also do not suggest elevated concerns about prospective defaults: Yield spreads on CMBS over swap rates remained in the fairly narrow range that has prevailed over the past several years.

The Government Sector

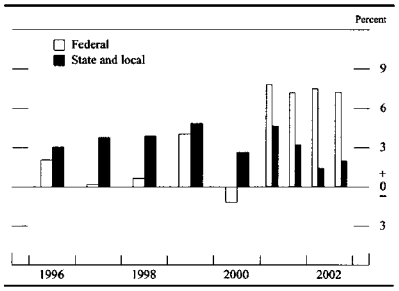
Federal Government

Despite modest economic growth, the federal budget position deteriorated sharply in 2002. After running a unified budget surplus of $127 billion in fiscal 2001, the federal government posted a deficit of $158 billion in fiscal 2002—and that deficit would have been $23 billion larger if not for the shifting of some corporate tax payments from fiscal 2001 to fiscal 2002. After adjustment for that tax shifting, receipts declined 9 percent in fiscal 2002: A $50 billion drop in corporate payments stemmed largely from tax provisions enacted in the 2002 stimulus bill (especially the partial-expensing provision on investment), and a decline in individual tax payments of $136 billion was largely attributable to a drop in capital gains realizations and to lower tax rates that were enacted in the 2001 tax bill.

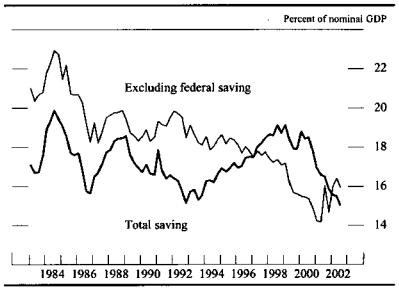
Meanwhile, federal outlays increased nearly 8 percent in fiscal 2002 and 11 percent excluding a decline in net interest expenses. Spending increased notably in many categories, including defense, homeland security, Medicaid, and income security (which includes the temporary extended unemployment compensation program). Federal government consumption and investment—the part of spending that is counted in GDP—rose more than 7 percent in real terms in 2002. (Government spending on items such as interest payments and transfers are not counted in GDP because they do not constitute a direct purchase of final production.)

The turn to deficit in the unified budget means that the federal government, which had been contributing to national saving since 1997, began to reduce national saving last year. The reversal more than offset an increase in saving by households and businesses, and gross national saving declined to 15 percent of GDP by the third quarter of last year—the lowest national saving rate since the 1940s.

Change in real government expenditures on consumption and investment



National saving



NOTE. The data are quarterly and extend through 2002:Q3.

After it reentered the credit markets as a significant borrower of net new funds in the second half of 2001, the Treasury continued to tap markets in volume last year. Federal net borrowing was especially brisk over the first half of the year. With federal debt rapidly approaching its statutory borrowing limit, the Secretary of the Treasury declared a debt ceiling emergency on May 16 and identified about $80 billion worth of accounting measures that could be used to create financing room within the existing $5.95 trillion limit. The Secretary's announcement and subsequent employment of one of these devices—in which Treasury securities held in government trust funds were temporarily replaced by Treasury IOUs not subject to the debt ceiling—had little effect on Treasury yields, as market participants were apparently confident that the ceiling would be raised in time to avoid default. And indeed, the Congress approved legislation raising the statutory borrowing limit to $6.4 trillion on June 27. With its credit needs remaining substantial, the Treasury continued to borrow heavily over the second half of 2002. The increase in the Treasury's net borrowing last year caused the ratio of publicly held debt to nominal GDP to rise for the first time since 1993.

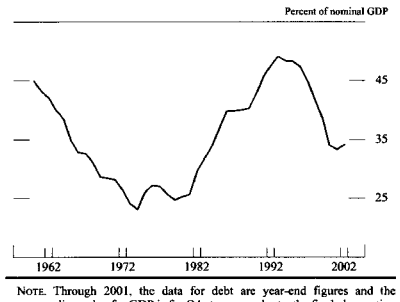
State and Local Governments

State and local governments have continued to struggle in response to sluggish growth of receipts. In the current fiscal year (which ends June 30 for most states), most state governments are reported to be facing significant shortfalls. Although a variety of strategies may be available for the purpose of technically complying with balanced-budget requirements, including tapping nearly $20 billion in combined rainy-day and general fund balances and turning to the capital markets, many states will be forced to boost revenues and hold the line on spending.

Real expenditures for consumption and gross investment by state and local governments rose less than 2 percent in 2002—the smallest increase in ten years. The slowdown in spending growth was widespread across expenditure categories and included notably smaller increases in outlays for construction. Employment in the state and local sector continued to rise in 2002, but at a slower rate than in recent years.

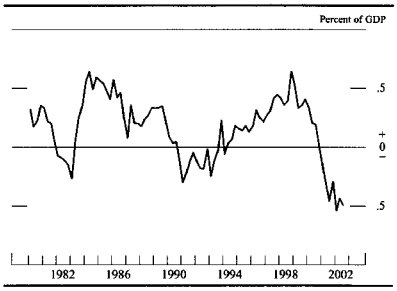
Debt of the state and local government sector expanded last year at the fastest pace since 1987. Governments used the proceeds to finance capital spending and to refund existing debt in advance. Net issuance of short-term municipal bonds was also well maintained, as California

Federal government debt held by the public



NOTE. Through 2001, the data for debt are year-end figures and the corresponding value for GDP is for Q4 at an annual rate; the final observation is for 2002:Q3. Excludes securities held as investments of federal government accounts.

State and local government current surplus or deficit



NOTE. The data, which are quarterly, are on a national income and product account basis and extend through 2002:Q3. The current surplus or deficit excludes social insurance funds.

and some other states facing fiscal difficulties turned to shorter-term borrowing while fashioning more permanent solutions to their budget problems. Worsening budget situations contributed to some deterioration in municipal credit quality last year. Credit-rating downgrades outpaced upgrades by a significant margin, and the yield spread of BBB-rated over insured AAA-rated municipal bonds rose significantly over the second half of 2002.

The External Sector

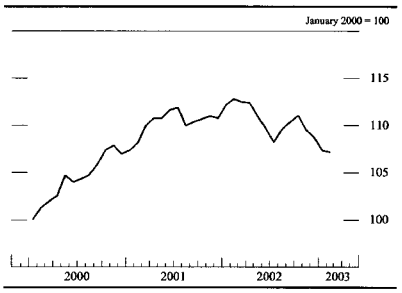
The U.S. current account deficit widened again in 2002 after a brief respite during the cyclical slowdown in 2001. Two-thirds of the expansion of the deficit last year was attributable to a decline in the balance on goods and services, although net investment income also fell sharply as receipts from abroad declined more than payments to foreign investors in the United States. The broad exchange value of the dollar peaked around February 2002 after appreciating about 13 percent in real terms from January 2000; in early February 2003 it was down about 5 percent from the February 2002 level.

Trade and the Current Account

Both exports and imports rebounded in 2002 as the cyclical downturn of the previous year was reversed and spending on travel recovered from the post–September 11 slump. As is often the case, the amplitude of the recent cycle in trade has been greater than that of real GDP. In 2001, stagnant real GDP in the United States and abroad was coupled with declines of 11½ percent in real exports and 8 percent in real imports. Last year, moderate growth of both foreign and domestic real GDP was exceeded by gains of 5 percent and 9 percent, respectively, in our real exports and imports. The faster growth of imports relative to exports over the past two years was consistent with the historical pattern in which the responsiveness of imports to income is greater in the United States than in the rest of the world. Although the dollar depreciated on balance last year, the lagged effects of its prior appreciation over the two previous years contributed to the faster growth in imports relative to exports in 2002.

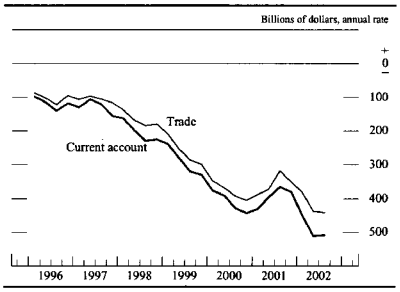
Real exports of goods posted a strong gain in the second quarter of 2002 after six consecutive quarters of decline. However, as output growth slowed abroad, exports decelerated in the third quarter and then fell in the fourth quarter. On balance, exports of goods rose about 2 percent over the course of the year, reversing only a small portion of the previous year's decline. Not surprisingly, the increase in goods exports in 2002 was concen-

U.S. dollar real exchange rate, broad index



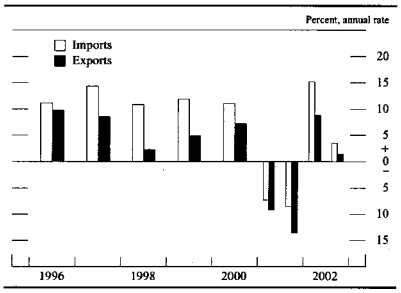
NOTE. The data are monthly. The last observation is the average of trading days through February 5, 2003. Exchange rates are adjusted for inflation with the consumer price index and are in foreign currency units per dollar. The broad index is a weighted average of the foreign exchange values of the U.S. dollar against the currencies of a large group of major U.S. trading partners. The index weights, which change over time, are derived from U.S. export shares and from U.S. and foreign import shares.

U.S. trade and current account balances



NOTE. The data are quarterly and extend through 2002:Q3.

Change in real imports and exports of goods and services

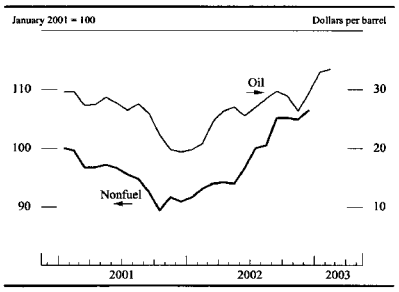


trated in the destinations where GDP growth was strongest—Canada, Mexico, and several developing Asian economies. A gain of 12 percent in real exports of services in 2002 more than reversed the previous year's decline and reflected both a pickup in tourism and an increase in other private services. Export prices turned up in the second quarter after a year of decline and continued to rise at a moderate pace in the second half.

The very rapid growth of real imports of goods in the first half of last year was a reaction to the revival of U.S. activity, and they gained about 9 percent over the year. The particularly large gains in imports of consumer goods and automotive products reflected the buoyancy of U.S. consumption expenditures. Imports of most major categories of capital goods also increased on balance over the year. However, as with exports, import growth was considerably stronger in the first half of the year than in the second. This pattern likely reflected the deceleration in U.S. GDP, along with the effects of some depreciation of the dollar. In addition, there may have been some shifting of import demand from later in the year to the earlier months as it began to appear more likely that labor contract negotiations at West Coast ports would not go smoothly.[1] Imports of services more than reversed their 2001 decline over the course of the year, and gains were recorded for both travel and other private services. Prices of non-oil imports turned up in the second quarter after declining over the preceding four quarters, as a result of the weaker exchange rate and a turnaround in prices of internationally traded commodities.

The spot price of West Texas intermediate crude oil climbed above $35 per barrel in early 2003, its highest level since the beginning of 2000. Oil prices had fallen to around $20 per barrel during 2001 amid general economic weakness, but they began rising in February and March of last year in response to both improving global economic activity as well as a production-limiting agreement between OPEC and several major non-OPEC producers. Even though production in a number of OPEC and non-OPEC countries in fact exceeded the agreed limits last year, heightened tensions in the Middle East along with severe political turmoil in Venezuela continued to put upward pressure on prices. The pressure intensified late in the year as a strike in Venezuela that began on December 2 virtually shut down that country's oil industry, and Venezuelan oil production was still well below pre-strike levels in early 2003. Concern over a possible war with Iraq, along with a very low level of crude oil inventories in the United States, has helped to keep spot prices high. Also in response to the heightened tensions, the price of gold shot up about 30 percent over the past year.

Prices of oil and of nonfuel commodities



NOTE. The data are monthly; the last observation for oil is the average of trading days through February 5, 2003; the last observation for nonfuel commodities is December 2002. The oil price is the spot price of West Texas intermediate crude oil. The price of nonfuel commodities is a weighted average of thirty-nine primary-commodity prices from the International Monetary Fund.

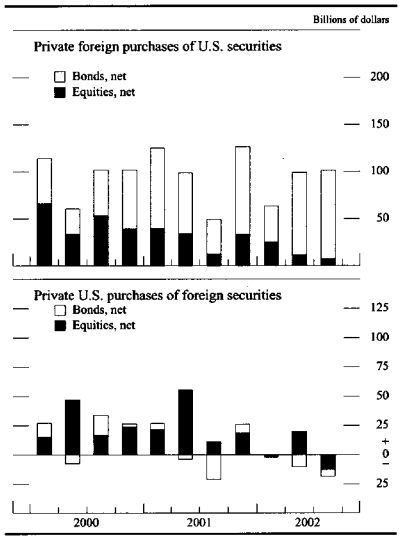
The Financial Account

The increase in the current account deficit in 2002 was about equal on balance to the stepped-up foreign official purchases of U.S. assets, as changes in the components of private capital flows were offsetting. Private foreign purchases of U.S. securities were about $360 billion at an annual rate through November, a volume similar to last year's total. However, there was some shift in the composition of flows away from equities and toward Treasury securities. This shift may have reflected the damping of equity demand caused by slower economic growth and continued concern about corporate governance and accounting. Over the same period, purchases by private U.S. investors of foreign securities declined nearly $100 billion. Accordingly, the net balance of private securities trading recorded a sharp increase in net inflows.

In contrast, net foreign direct investment inflows fell about $70 billion between 2001 and 2002. Foreign investment in the United States and investment abroad by U.S. residents both declined, but the decline in flows into the United States was considerably larger, as merger activity slowed and corporate profits showed little vigor. U.S. direct investment abroad held up fairly well in 2002, a result largely reflecting retained earnings.

1. The dispute between the Pacific Maritime Association and the International Longshore and Warehouse Union eventually led to an eleven-day port closure in late September and early October that ended when President Bush invoked the Taft-Hartley Act. Although the monthly pattern of trade was influenced by the closure, the overall level of imports for the year does not appear to have been much affected.

U.S. international securities transactions



SOURCE. Department of Commerce and the Federal Reserve Board.

The Labor Market

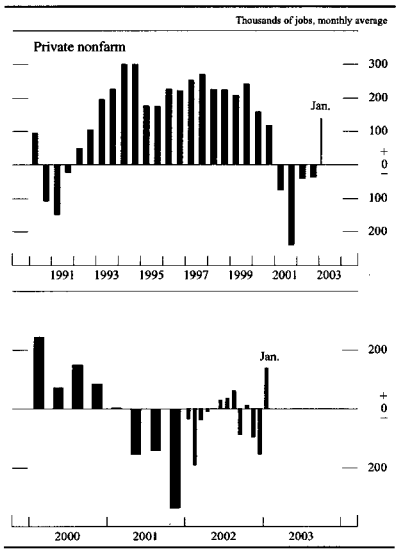
Employment and Unemployment

Labor markets appeared to stabilize last spring after the sharp deterioration of 2001 and early 2002. Employment on private payrolls, which had declined an average of 160,000 per month in 2001, leveled off in the spring and moved slightly higher over the summer. But labor demand weakened again as the economy softened later in the summer, and private employment declined about 80,000 per month on average in the last four months of the year. Private payrolls rebounded nearly 150,000 in January, though the magnitude of both the especially sharp decline in December and the rebound in January likely was exaggerated by difficulties in adjusting for the normal seasonal movements in employment during these months.

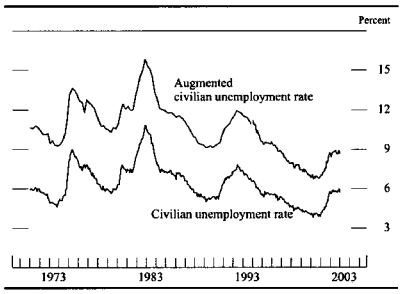
The manufacturing sector continued to be the weakest segment of the labor market; even during the spring and early summer, when the overall labor market seemed to be improving, factory payrolls contracted on average. Declines in factory employment were more pronounced—at about 50,000 per month—toward the end of the year. Employment at help-supply firms and in wholesale trade—two sectors in which activity closely tracks that of manufacturing proper—rose over the summer but also turned down again later in the year. And employment in retail trade, though quite erratic, leveled off over the summer before declining further in the fall. However, employment in services other than help supply grew reasonably steadily throughout the year and rose nearly 50,000 per month after March; health services and education services contributed more than half of those job gains. The finance and real estate sectors also added jobs last year, probably because of the surge in mortgage refinancings and high levels of activity in housing markets. Last year's job losses in the private sector were partially offset by an increase in government employment that averaged about 20,000 per month; the increase resulted mostly from hiring by states and municipalities, but it also reflected hiring in the fall by the Transportation Security Administration.

Overall employment moved lower, on net, and the unemployment rate increased a little less than 1/2 percentage point over the year, to 6 percent, before dropping back to 5.7 percent in January 2003. The unemployment rate probably has been boosted slightly by the federal temporary extended unemployment compensation program. By extending benefits for an additional three months, the pro-

Net change in payroll employment



Measures of labor utilization



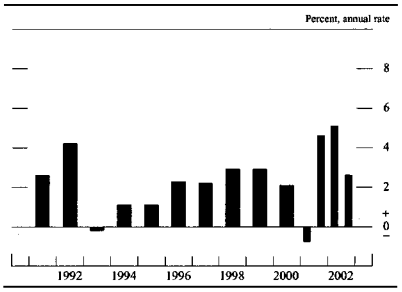
NOTE. The data extend through January 2003. The civilian rate is the number of civilian unemployed divided by the civilian labor force. The augmented rate adds to the numerator and the denominator of the civilian rate the number of those who are not in the labor force but want a job. The small break in the augmented rate in January 1994 arises from the introduction of a redesigned survey. For the civilian rate, the data are monthly; for the augmented rate, the data are quarterly through December 1993 and monthly thereafter.

gram allows unemployed individuals whose regular benefits have expired to be more selective in accepting job offers and provides them with an incentive not to withdraw from the labor force. In addition, as would be expected in a still-weak labor market, the labor force participation rate moved lower last year.

Productivity and Labor Costs

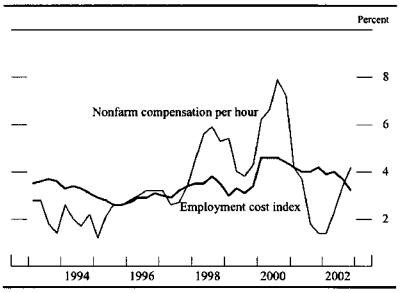
Labor productivity rose impressively in 2002. Output per hour in the nonfarm business sector increased an estimated 3¾ percent from the fourth quarter of 2001 to the fourth quarter of 2002. Labor productivity typically suffers in an economic downturn as businesses reduce hours worked by proportionally less than the decline in output; conversely, productivity typically rebounds early in an expansion as labor is brought back toward fuller utilization. During the most recent downturn, however, productivity held up comparatively well, a performance that makes last year's surge all the more impressive. Indeed, productivity rose at an average annual rate of nearly 3 percent over the past two years, faster than the average pace of increase during the late 1990s.

Change in output per hour



NOTE. Nonfarm business sector.

Measures of change in hourly compensation



NOTE. The data extend through 2002:Q4. For nonfarm compensation, change is over four quarters; for the employment cost index (ECI), change is over the twelve months ending in the last month of each quarter. Nonfarm compensation is for the nonfarm business sector; the ECI is for private industry excluding farm and household workers.

Very likely, the rapid pace of last year's productivity growth was due in part to the special circumstances that developed after the September 11 attacks. Businesses cut labor substantially in late 2001 and early 2002 amid widespread fear of a sharp decline in demand; when demand held up better than expected, businesses proved able to operate satisfactorily with their existing workforces. Moreover, the fact that this step-up in productivity was not reversed later in the year suggests that at least a portion of it is sustainable. The recent rapid growth in productivity may derive in part from ongoing improvements in the use of the vast amount of capital installed in earlier years, and it may also stem from organizational innovations induced by the weak profit environment.

Indicators of hourly compensation sent mixed signals last year. The rise in the employment cost index (ECI) for hourly compensation in private nonfarm businesses, 3¼ percent, was 1 percentage point lower than the increase in 2001. Compensation increases likely were damped last year by the soft labor market and expectations of lower consumer price inflation. The wages and salaries component and the benefits component of the ECI both posted smaller increases last year. The deceleration was less pronounced for the benefits component,

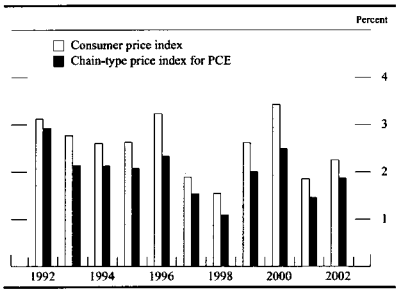
however, which was boosted by further large increases in employers' health insurance costs. According to the ECI, health insurance costs, which constitute about 6 percent of overall compensation, rose 10 percent last year after having risen about 9 percent in each of the preceding two years.

An alternative measure of compensation costs is compensation per hour in the nonfarm business sector, which is derived from information in the national income and product accounts. According to this measure, hourly compensation rose 4 1/4 percent last year—a little more than the increase in the ECI and up from a much smaller increase in 2001. One important difference between these two measures of compensation is that the ECI omits stock options, while nonfarm compensation per hour captures the value of these options upon exercise. The very small increase in the latter measure in 2001 likely reflects, in part, a drop in option exercises in that year, and the larger increase in 2002 may point to a firming, or at least to a smaller rate of decline, of these exercises.

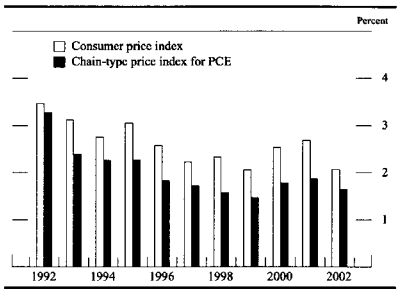
Prices

The chain-type price index for personal consumption expenditures (PCE) rose about 2 percent last year, compared with an increase of 1 1/2 percent in 2001. This step-up in consumer price inflation resulted from a jump in energy prices. Outside of the energy sector, consumer price inflation was pushed lower last year by continued slack in labor and product markets as well as by expectations of future inflation that appeared to be lower in 2002 than in most of 2001. The increase in PCE prices excluding food and energy, which was just 1 3/4 percent, was about 1/4 percentage point less than in 2001. The price index for GDP was less affected by last year's rise in energy prices than was the PCE measure; much of the energy price increase was attributable to higher prices of imported oil, which

Change in consumer prices



Change in consumer prices excluding food and energy



are not included in GDP because they are not part of domestic production. On net, GDP prices rose only 1 1/4 percent last year, a deceleration of 3/4 percentage point that reflected not just the deceleration in core consumer prices but also considerably smaller increases for prices of construction.

The upturn in consumer energy prices in 2002 was driven by a jump in crude oil prices. Gasoline prices increased some 25 percent from December 2001 to December 2002; prices of fuel oil increased considerably as well. By contrast, consumer prices of natural gas posted only a modest rise after declining sharply in 2001, and electricity prices moved lower. More recently, the rise in crude oil prices since mid-December, together with cold weather, has increased the demand for natural gas and has led to higher spot gas prices; the higher spot prices for both oil and gas are likely to be boosting consumer energy prices early this year.

The PCE price index for food and beverages increased only 1 1/2 percent last year; the increase followed a 3 percent rise in 2001 that reflected supply-related price increases for many livestock products including beef, poultry, and dairy products. But livestock supplies had

Alternative measures of price change

Percent

Price measure	2001	2002
Chain-type		
Gross domestic product	2.0	1.3
Gross domestic purchases	1.3	1.6
Personal consumption expenditures	1.5	1.9
Excluding food and energy	1.9	1.7
Chained CPI	1.2	1.9
Excluding food and energy	1.8	1.6
Fixed-weight		
Consumer price index	1.9	2.3
Excluding food and energy	2.7	2.1

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.

recovered by early last year, and a drought-induced selloff of cattle herds last summer pushed prices still lower.

The prices of goods other than food and energy items decelerated sharply last year. Prices for apparel, new and used motor vehicles, and a wide range of other durable goods all declined noticeably and, on average, at a faster pace than in 2001. Price increases for services were much larger than for goods and slowed less from the previous year. Both tenants' rent and the imputed rent of owner-occupied housing—categories that account for a sizable share of services—rose significantly less last year than they did in 2001. But many other services prices posted increases in 2002 that were about the same as in 2001. Information on medical prices was mixed. According to the CPI, the price of medical services continued to accelerate, rising 5 1/2 percent last year. But the increase in the PCE measure of medical services prices was less than 3 percent, a smaller increase than in 2001. One reason for this difference is that the prices of services paid for by Medicare and Medicaid are included in the PCE index but not in the CPI (because services provided by Medicare and Medicaid do not represent out-of-pocket costs to consumers and so are outside of the CPI's scope), and Medicare reimbursement rates for physicians were reduced last year.

Despite the acceleration in medical prices in the CPI but not in the PCE price index, the CPI excluding food and energy decelerated notably more than did the core PCE price index between 2001 and 2002. The two price measures differ in a number of respects, but much of last year's greater deceleration in the CPI can be traced to the fact that the CPI suffers from a form of "substitution bias" that is not present in the PCE index. The CPI, being a fixed-weight price index, overstates increases in the cost of living because it does not adequately take into account the fact that consumers tend to substitute away from goods that are rising in relative price; by contrast, the PCE price index does a better job of taking this substitution into account. Last year, the Bureau of Labor Statistics began to publish a new index called the chained CPI; like the PCE price index, the chained CPI does a more complete job of taking consumer substitution into account, but it is otherwise identical to the official CPI. In 2001, an unusually large gap between increases in the official CPI and the chained CPI arose, pointing to very large substitution bias in the official CPI in that year. This gap narrowed in 2002, indicating that substitution bias declined between the two years. (Final estimates of the chained CPI are not yet available; the currently available data for both 2001 and 2002 are preliminary and subject to revision.)

Survey measures of expected inflation generally ran a little lower in 2002 than in 2001. According to the Michigan SRC, median one-year inflation expectations plummeted after the September 11 attacks, but by early 2002, expectations returned to the 2 3/4 percent range that had prevailed during the previous summer. These expectations gradually moved lower over the course of last year and now stand around 2 1/2 percent. Meanwhile, the Michigan SRC's measure of five- to ten-year inflation expectations remained steady at about 2 3/4 percent during 2002, a rate a little lower than the 3 percent inflation expectations that had prevailed through most of 2001.

U.S. Financial Markets

Developments in financial markets last year were shaped importantly by sharp declines, on net, in equity prices and most long-term interest rates and by periods of heightened market volatility. In contrast to 2001, when the Federal Reserve eased the stance of monetary policy eleven times, last year saw one reduction in the intended federal funds rate—in early November—and interest rates on short-term Treasury securities had moved little until then. Longer-term interest rates, by contrast, were more volatile. Investors' optimism about future economic prospects pressured longer-term Treasury bond yields higher early in 2002. But as the year progressed, that optimism faded when the economy failed to gather much momentum, and longer-term Treasury yields ended the year appreciably lower. Softer-than-expected readings of the economic expansion, a marked deterioration in corporate credit quality, concerns about corporate governance, and heightened geopolitical tensions made investors especially wary about risk. Lower-rated firms found credit substantially more expensive, as risk spreads on speculative-grade debt soared for most of the year before narrowing somewhat over the last few months. Even for higher-quality firms, risk spreads widened temporarily during the tumultuous conditions that prevailed in financial markets over the summer. In addition, commercial banks tightened standards and terms for business borrowers, on net, in 2002, and risk spreads on business loans remained in an elevated range throughout the year. Increased caution on the part of investors was particularly acute in the commercial paper market, where the riskiest issuers discontinued their programs.

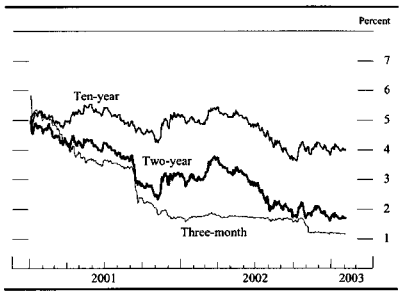
Federal borrowing surged last year, while private borrowing was held down by the significantly reduced credit needs of business borrowers. Declines in longer-term interest rates during the first half of the year created incentives for both businesses and households to lock in lower debt-service obligations by heavily tapping corporate bond and home mortgage markets, respectively. While mortgage borrowing remained strong, businesses sharply curtailed their issuance of longer-term debt during the second half of 2002 amid the nervousness then prevailing in the financial markets.

Interest Rates

Reflecting an unchanged stance of monetary policy over most of last year, short-term market interest rates moved little until early November, when the FOMC lowered the target federal funds rate 1/2 percentage point, and other short-term interest rates followed suit. Yields on intermediate- and long-term Treasury securities, by contrast, declined as much as 1 1/2 percentage points, on net, in 2002. Longer-term interest rates began last year under upward pressure, as signs that the economy had bottomed out started to nudge rates higher in the final weeks of 2001. Positive economic news pushed interest rates up appreciably further during the first quarter of 2002. The increase in longer-term interest rates was consistent with the sharp upward tilt of money market futures rates, which suggested that market participants expected that the FOMC would almost double the intended level of the funds rate by year's end. However, as readings on the strength of the economic expansion came in on the soft side, investors substantially trimmed their expectations for policy tightening, and yields on longer-term Treasury securities turned down in the spring.

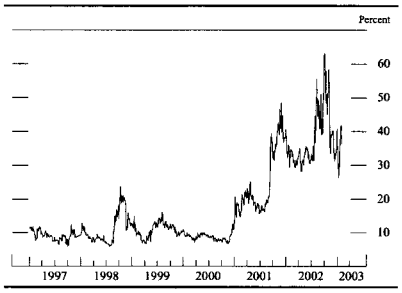
The slide in longer-term Treasury yields intensified over the summer amid weaker-than-expected economic data, heightened geopolitical tensions, fresh revelations of corporate malfeasance, and disappointing news about near-term corporate profits. In concert, these developments prompted investors to mark down their expectations for economic growth and, consequently, their anticipated path for monetary policy. A widespread retrenchment in risk-taking sent yields on speculative-grade corporate bonds sharply higher and kept those on the lower rungs of investment grade from declining, even as longer-term nominal Treasury yields fell to very low levels by the end of July.

Interest rates on selected Treasury securities



NOTE. The data are daily and extend through February 5, 2003.

Implied volatility of short-term interest rates

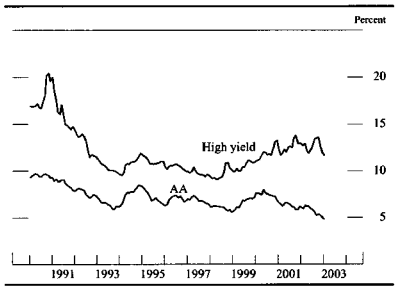


NOTE. The data are daily and extend through February 5, 2003. The series shown is the implied volatility of the three-month eurodollar rate over the coming four months, as calculated from option prices.

The uneventful passing of the Securities and Exchange Commission's August 14 deadline for officers of large companies to certify corporate financial statements somewhat assuaged investors' anxieties about corporate governance problems. But subsequent news suggesting that the economy was losing momentum and a flare-up in tensions with Iraq further boosted demand for Treasury securities. The FOMC's decision at the August meeting—to leave the intended federal funds rate unchanged but to judge the balance of risks to the outlook as weighted toward economic weakness—pulled the expected path of the funds rate lower, and longer-term Treasury yields sank to forty-year lows in early autumn. A high degree of investor uncertainty about the future path of monetary policy was evidenced by implied volatilities of short-term interest rates derived from option prices, which soared to record levels in early autumn. The size of the FOMC's November cut in the target federal funds rate and the shift to balance in its assessment of risks surprised market participants, but the policy easing appeared to lead investors to raise the odds that the economy would pick up from its sluggish pace. Generally positive economic news and rising equity prices over the remainder of the year also bolstered confidence and prompted market participants to mark up the expected path for monetary policy and push up longer-term Treasury yields.

Yields on higher-quality investment-grade corporate bonds generally tracked those on Treasuries of comparable maturity last year, although risk spreads on these instruments widened moderately over the summer and early autumn before narrowing over the remainder of the year. Interest rates on below-investment-grade corporate debt, by contrast, increased for much of last year, as spreads over Treasuries ballooned in response to mounting concerns about corporate credit quality, historically

Corporate bond yields



NOTE. The data are monthly averages and extend through January 2003. The AA rate is calculated from bonds in the Merrill Lynch AA index with seven to ten years remaining maturity. The high-yield rate is the yield on the Merrill Lynch 175 high-yield index.

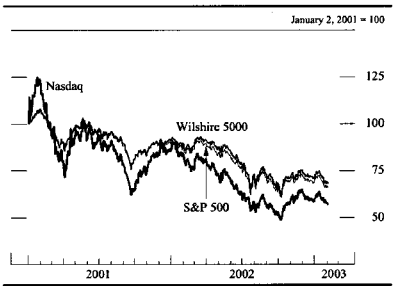
low recovery rates on defaulted bonds, and revelations of improper corporate governance; credit risk spreads widened in all speculative sectors but especially in telecom and energy. By the summer, investors' retreat from risk-taking had widened bid–asked spreads in the corporate bond market enough to impair trading. Risk spreads on speculative-grade bonds narrowed considerably over the year's final quarter and in early 2003, though they remain elevated by historical standards; risk spreads for the weaker speculative-grade credits remain exceptionally wide, as investors evidently anticipate a continued high level of defaults and low recovery rates.

Equity Markets

Equity prices were buffeted last year by considerable fluctuations in investors' assessments of the outlook for the economy and corporate earnings and by doubts about the quality and transparency of corporate balance sheets. Net declines in stock prices in 2002 exceeded those posted during either of the preceding two years. Worries about the pervasiveness of questionable corporate governance and a deterioration in the earnings outlook—especially in the technology sector—depressed equity prices in early 2002. The positive tenor of economic data, however, managed to outweigh those concerns, and stock prices staged a rally halfway through the first quarter, with the gains tilted toward "old economy" firms. But the rebound was short lived. Share prices started to tumble in early spring across all sectors as weaker-than-expected economic data eroded investors' confidence in the strength of the economic expansion. These developments were reinforced by first-quarter corporate earnings reports that, though mostly matching or exceeding investors' expectations, painted a bleak picture of prospective sales and profits.

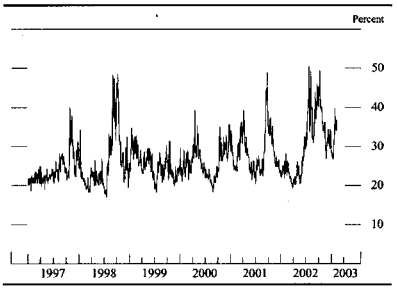
Over the spring and summer, accounting scandals, widespread warnings about near-term corporate profitability, and heightened geopolitical tensions intensified the slide in stock prices. Particularly large declines in share prices were posted for technology firms, whose prospects for sales and earnings were especially gloomy. Equity prices were boosted briefly by the uneventful passing of the August 14 deadline to certify financial statements, but they quickly reversed course on continued concerns about the pace of economic growth and corporate earnings and the escalating possibility of military action against Iraq. By early October, equity indexes sank to their lowest levels since the spring of 1997, and implied stock price volatility on the S&P 100 surged to its highest reading since the stock market crash of 1987.

Major stock price indexes



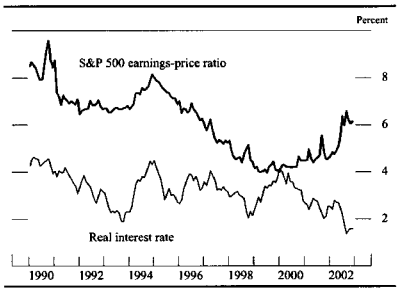
NOTE. The data are daily and extend through February 5, 2003.

Implied S&P 100 volatility



NOTE. The data are daily and extend through February 5, 2003. The series shown is the implied volatility of the S&P 100 stock price index as calculated from the prices of options that expire over the next several months.
SOURCE. Chicago Board Options Exchange.

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



NOTE. The data are monthly and extend through December 2002. The earnings-price ratio is based on I/B/E/S consensus estimates of earnings over the coming year. The real rate is estimated as the difference between the ten-year Treasury rate and the five-year to ten-year expected inflation rate from the FRB Philadelphia survey.

The drop in stock prices widened the gap between the expected year-ahead earnings–price ratio for the S&P 500 and the real ten-year Treasury yield—one simple measure of the equity premium—to levels not seen since the mid-1990s.

Share prices turned around in late October, as the third-quarter corporate earnings reports were not as weak as investors had originally feared. Equity prices were also given a boost in early November by the larger-than-expected monetary policy easing, and the rally was sustained over the remainder of the year by the generally encouraging tone of economic data. Greater confidence among investors in the economic outlook also helped bring down the implied volatility on the S&P 100 significantly by year-end, although it remains at an elevated level by historical standards. Despite the fourth-quarter rebound, broad equity indexes were down, on net, about 20 percent in 2002, while the tech-heavy Nasdaq lost more than 30 percent.

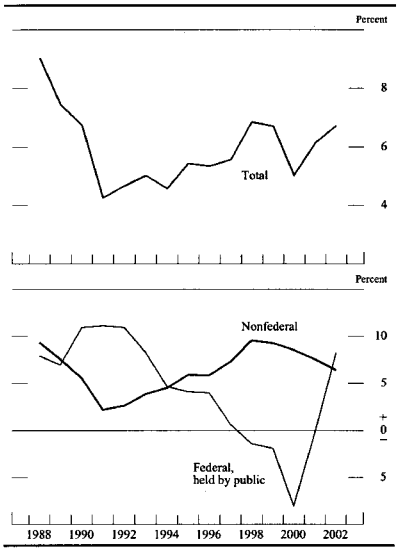
The decline in equity prices during the first three quarters of 2002 is estimated to have erased more than $3½ trillion in household wealth, a loss of nearly 9 percent of total household net worth, although the fourth-quarter rise in stock prices restored about $600 billion. Still, the level of household net worth at the end of last year was more than 40 percent higher than it was at the start of the bull market in 1995. Equity prices maintained their upward momentum during the first half of January 2003 but then fell sharply amid the looming prospects of military action against Iraq and a still-gloomy outlook for corporate earnings. Broad stock price indexes have lost almost 5 percent this year; however, solid fourth-quarter earnings from many prominent technology companies helped brighten investors' sentiment regarding that sector, and the Nasdaq is down about 3 percent this year.

Debt and Financial Intermediation

A deceleration of business borrowing slowed growth of the debt of nonfederal sectors about 1 percentage point in 2002, to 6½ percent. By contrast, the decline in interest rates last year kept borrowing by households and state and local governments brisk. At the federal level, weak tax receipts and an acceleration in spending pushed debt growth to 7½ percent last year after a slight contraction in 2001.

For the year as a whole, corporate borrowing was quite weak, mainly because of sagging capital expenditures, a drying up of merger and acquisition activity, and a reliance on liquid assets. Although businesses tapped bond markets in volume over the first half of the year, subsequent concerns about the reliability of financial statements

Change in domestic nonfinancial debt

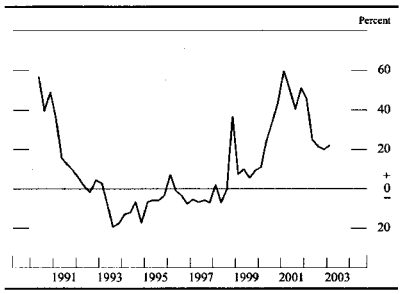


NOTE. For 2002, change is from 2001:Q4 to 2002:Q3 at an annual rate. For earlier years, the data are annual and are computed by dividing the annual flow for a given year by the level at the end of the preceding year. The total consists of nonfederal debt and federal debt held by the public. Nonfederal debt consists of the outstanding credit market debt of state and local governments, households, nonprofit organizations, nonfinancial businesses, and farms. Federal debt held by the public excludes securities held as investments of federal government accounts.

and the quality of corporate governance and deteriorating creditworthiness ruined investors' appetite for corporate debt in the summer and early autumn. Households, by contrast, flocked to the mortgage markets to take advantage of low mortgage rates throughout the year, and strong motor vehicle sales supported the expansion of consumer credit. For depository institutions, the net effect of these developments was an acceleration of credit to 6½ percent last year, 2 percentage points above the pace of 2001. The growth of credit at thrift institutions moderated, though the slowdown can be attributed for the most part to a large thrift institution's conversion to a bank charter. The growth of credit at commercial banks accelerated to 6¾ percent—a significant increase from the anemic pace in 2001; the pickup was driven by large acquisitions of securities, especially mortgage-backed securities, as well as a surge in home equity and residential real estate lending.

By contrast, business lending at commercial banks dropped 7 percent last year after falling almost 4 percent in 2001; last year's decline kept overall loan growth for 2002 to about 5 percent. In the October Senior Loan Officer Opinion Survey on Bank Lending Practices, respondents noted that the decline in commercial and industrial (C&I) lending since the beginning of the year reflected not only the limited funding needs of creditworthy borrowers that found bond financing or a runoff of liquid assets more attractive, but also a reduction in the pool of creditworthy borrowers. Over the course of last year, banks reported some additional net tightening of standards and terms on C&I loans, mainly in response

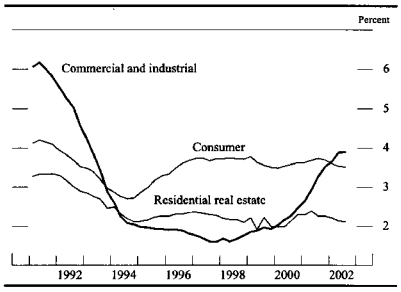
Net percentage of domestic banks tightening standards on commercial and industrial loans to large and medium-sized firms



NOTE. The data are based on a survey generally conducted four times per year; the last reading is from the January 2003 survey. Large and medium-sized firms are those with annual sales of $50 million or more. Net percentage is the percentage reporting a tightening less the percentage reporting an easing.

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

Delinquency rates on selected types of loans at banks

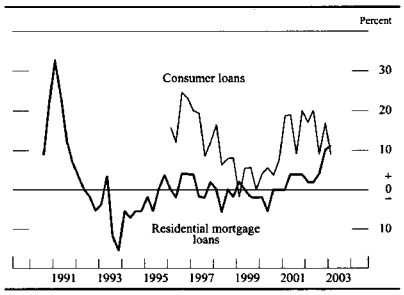


NOTE. The data, from bank Call Reports, are quarterly, seasonally adjusted, and extend through 2002:Q3.

to greater uncertainty about the economic outlook and rising corporate bond defaults, although the proportions of banks that reported doing so declined noticeably. Direct measures of loan pricing conditions from the Federal Reserve's quarterly Survey of Terms of Business Lending also indicated that banks were cautious lenders last year, as the average spread of C&I loan rates over market interest rates on instruments of comparable maturity remained wide, and spreads on new higher-risk loans declined only slightly from the lofty levels that prevailed over the first half of the year. Although bank lenders were wary about business borrowers, especially toward lower-rated credits, they did not significantly constrict the supply of loans: Most small firms surveyed by the National Federation of Independent Businesses in 2002 reported that they experienced little or no difficulty satisfying their borrowing needs.

Loan quality at commercial banks improved overall last year. Loan delinquency rates edged down through the third quarter of 2002—the latest period for which Call Report data are available—in response to better performance of residential real estate and consumer loans and a stable delinquency rate on C&I loans. Despite the improvement in consumer loan quality, domestic banks imposed somewhat more stringent credit conditions when lending to households, according to the survey on bank lending practices. Moderate net proportions of surveyed institutions tightened credit standards and terms for credit card and other consumer loans throughout last year. The net fraction of banks that tightened standards on residential mortgage loans rose late in the year to the highest share in the past decade, but nonetheless remained quite low. Commercial banks generally registered strong profit gains last year, although steep losses on loans to energy and telecommunications firms significantly depressed profits at several large bank holding companies. Despite

Net percentage of domestic banks tightening standards on consumer loans and residential mortgage loans

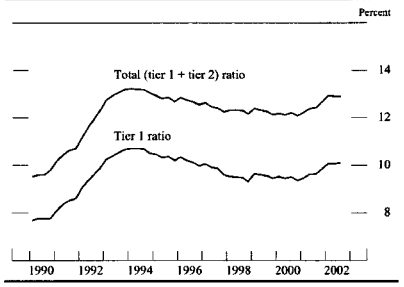


NOTE. The data are based on a survey generally conducted four times per year; the last reading is from the January 2003 survey. Net percentage is the percentage reporting a tightening less the percentage reporting an easing.
SOURCE. Federal Reserve, Senior Loan Officer Opinion Survey on Bank Lending Practices.

the increased rate of provisioning for loan losses, the banking sector's profitability stayed in the elevated range recorded for the past several years, as a result of the robust fee income from mortgage and credit card lending, effective cost controls, and the relatively inexpensive funding offered by inflows of core deposits. As of the third quarter of last year, virtually all assets in the banking sector were at well-capitalized institutions, and the substitution of securities for loans on banks' balance sheets helped edge up risk-based capital ratios.

The financial condition of insurance companies, by contrast, worsened notably last year. Both property and casualty insurers and life and health insurers sustained significant investment losses from the decline in equity prices and the deterioration in corporate credit quality. However, these negative pressures were offset somewhat by the continued strong growth of insurance premiums, and both sectors of the insurance industry stayed fairly well capitalized in 2002.

Regulatory capital ratios of commercial banks



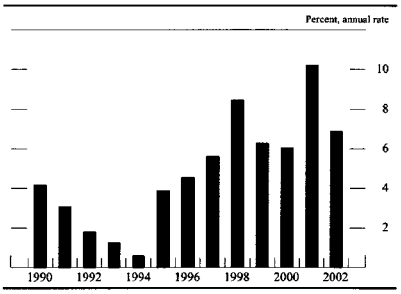
NOTE. The data, which are quarterly and extend through 2002:Q3, are ratios of capital to risk-weighted assets. Tier 1 capital consists primarily of common equity and certain perpetual preferred stock. Tier 2 capital consists primarily of subordinated debt, preferred stock not included in tier 1 capital, and a limited amount of loan-loss reserves.

Monetary Aggregates

The broad monetary aggregates decelerated noticeably last year after surging in 2001. Short-term market interest rates, which had declined swiftly during 2001, were stable over the first half of the year; deposit rates, in a typical pattern of lagged adjustment, continued to fall. Consequently, the opportunity cost of holding M2 assets increased, especially for its liquid deposit (checking and savings accounts) and retail money fund components, thereby restraining the demand for such assets. After decelerating in the first half of the year, M2 rebounded significantly in the second half, because of a surge in liquid deposits and retail money market mutual funds. The strength in both components partly reflected elevated volatility in equity markets against the backdrop of a still-low opportunity cost of holding such deposits. In addition, another wave of mortgage refinancing boosted M2 growth during this period. (Refinancings cause prepayments to accumulate temporarily in deposit accounts before being distributed to investors in mortgage-backed securities.) All told, over the four quarters of the year, M2 increased 7 percent, a pace that exceeded the expansion of nominal income. As a result, M2 velocity—the ratio of nominal GDP to M2—declined for the fifth year in a row, roughly in line with the drop in the opportunity cost of M2 over this period.

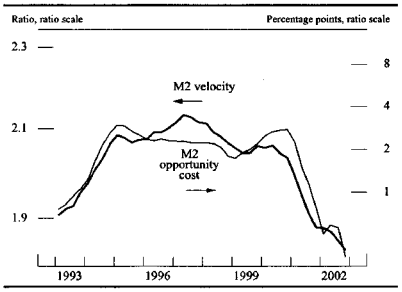
Reflecting in part the slowing of its M2 component, M3—the broadest money aggregate—expanded

M2 growth rate



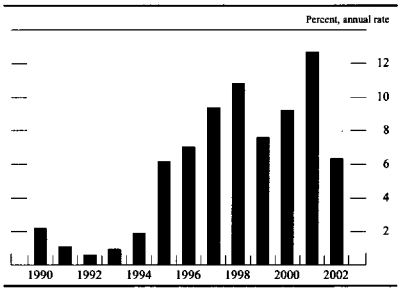
NOTE. M2 consists of currency, travelers checks, demand deposits, other checkable deposits, savings deposits (including money market deposit accounts), small-denomination time deposits, and balances in retail money market funds.

M2 velocity and opportunity cost



NOTE. The data are quarterly and extend through 2002:Q4. 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.

M3 growth rate



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

6½ percent in 2002, a pace well below the 12¾ percent advance posted in 2001. Growth in M3 was also held down by a sharp deceleration of institutional money funds, as their yields dropped to close alignment with short-term market interest rates. This effect was only partly offset by the pickup in needs to fund bank credit, which resulted in an acceleration in the issuance of managed liabilities, including large time deposits. M3 velocity continued to decline in 2002.

New Discount Window Programs

On October 31, 2002, following a three-month public comment period, the Board of Governors approved changes to its Regulation A that established two new types of loans to depository institutions—primary and secondary credit—and discontinued the adjustment and extended credit programs. The new programs were implemented on January 9, 2003. The seasonal credit program was not altered.

The primary reason for adopting the new programs was to eliminate the subsidy to borrowing institutions that was implicit in the basic discount rate, which since the late 1960s had usually been set below market interest rates. The subsidy required Federal Reserve Banks to administer credit extensions heavily in order to ensure that borrowing institutions used credit only in appropriate circumstances—specifically, when they had exhausted other reasonably available funding sources. That administration was necessarily somewhat subjective and consequently difficult to apply consistently across Reserve Banks. In addition, the heavy administration was one factor that caused depository institutions to become reluctant to use the window even in appropriate conditions. Also, depository institutions were concerned at times about being marked with a "stigma" if market analysts and counterparties inferred that the institution was borrowing from the window and suspected that the borrowing signaled that the institution was having financial difficulties. The resulting reluctance to use the window reduced its usefulness in buffering shocks to the reserve market and in serving as a backup source of liquidity to depository institutions, and thus undermined its performance as a monetary policy tool.

To address these issues, the Board of Governors specified that primary credit may be made available at an above-market interest rate to depository institutions in generally sound financial condition. The above-market interest rate eliminates the implicit subsidy. Also, restricting eligibility for the program to generally sound institutions should reduce institutions' concerns that their borrowing could signal financial weakness.

The Federal Reserve set the initial primary credit rate at 2.25 percent, 100 basis points above the FOMC's target federal funds rate as of January 9, 2003. The target federal funds rate remained unchanged, and thus the adoption of the new programs did not represent a change in the stance of monetary policy. In the future, the primary credit rate will be adjusted from time to time as appropriate, using the same discretionary procedure that was used in the past to set the adjustment credit rate. The Federal Reserve also established procedures to reduce the primary credit rate to the target federal funds rate in a national emergency, even if key policymakers are unavailable.

Institutions that do not qualify for primary credit may obtain secondary credit when the borrowing is consistent with a prompt return to market sources of funds or is

necessary to resolve severe financial difficulties. The interest rate on secondary credit is set by formula 50 basis points above the primary credit rate. The rate was set initially at 2.75 percent. Because secondary credit borrowers are not in sound financial condition, extensions of secondary credit usually involve some administration.

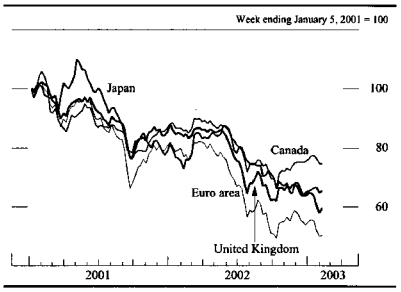
International Developments

The international economy rebounded in 2002 after a stagnant performance in 2001, but recovery was uneven in both timing and geographical distribution. Growth abroad picked up sharply in the first half of last year, as a strong rally in the high-tech exporting economies in developing Asia was joined by robust growth in Canada and, to a lesser extent, Mexico. Japan also posted respectable growth in the first half, largely as a result of a surge of exports. However, performance in the euro area remained sluggish, and several South American economies experienced difficulties, with full-fledged crises in Argentina and Venezuela and mounting concerns about prospects for Brazil. As the U.S. economy decelerated in the second half, the rapid pace of recovery slowed in developing Asia and in Canada, while performance remained lackluster in much of the rest of the world.

Monetary policy actions abroad also diverged across countries in 2002 as authorities reacted to differing economic conditions. In Canada, official interest rates were raised in three steps by July amid concerns that buoyant domestic demand and sharply rising employment would ignite inflationary pressures. Monetary authorities in Australia and Sweden also increased policy rates in the first half of the year. However, as economic conditions weakened around the world in the second half, official interest rates were held constant in Canada and Australia and were lowered in Sweden. Monetary policy was held steady throughout 2002 in the United Kingdom, where growth was moderate and inflation subdued, but official interest rates were lowered 25 basis points, to 3.75 percent, in early February 2003 in response to concerns about the prospects for global and domestic demand. The European Central Bank (ECB) held rates constant through most of the year, as inflation remained above the ECB's 2 percent target ceiling, but rates were lowered 50 basis points in December as the euro area's already weak recovery appeared to be stalling. Japanese short-term interest rates remained near zero, while authorities took some limited further steps to stimulate demand through nontraditional channels. Monetary policy was tightened in both Mexico and Brazil in response to concerns about the inflationary effects of past currency depreciation.

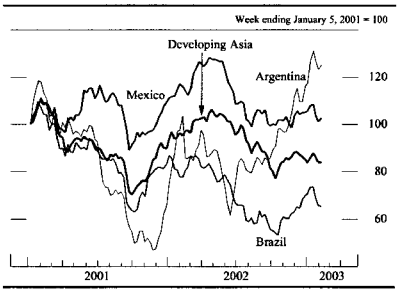
Yield curves in the major foreign industrial countries steepened and shifted up in the first quarter of 2002 in response to generally favorable economic news, but later they flattened out and moved back down as the outlook deteriorated. Similarly, equity prices in the major foreign industrial economies held up well early in the year but then declined along with the U.S. stock market and ended the year down sharply from the previous year. The performance of the stock markets in the emerging-market economies was mixed. Share prices in Brazil and Mexico fell sharply in the second and third quarters but then showed some improvement toward the end of the year. In the Asian emerging-market economies, equity prices rose in the first half of 2002 on a general wave of optimism, especially in the high-technology producing economies; equity prices began to decline around midyear as global demand softened but posted modest rebounds late in the year.

Equity indexes in selected foreign industrial countries



NOTE. The data are weekly. The last observations are the average of trading days through February 5, 2003.

Equity indexes in selected emerging markets



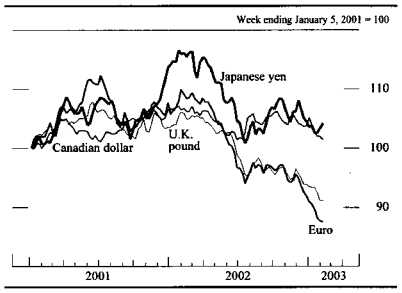
NOTE. The data are weekly. The last observations are the average of trading days through February 5, 2003.

The foreign exchange value of the dollar continued its mild upward trend into the early part of 2002, as it appeared that the United States was poised to lead a global economic recovery. However, the dollar weakened sharply in the late spring and early summer amid deepening concerns about U.S. corporate governance and profitability. Around that time market analysts also appeared to become more worried about the growing U.S. current account deficit and its potential negative influence on the future value of the dollar. The dollar rebounded somewhat around midyear as growth prospects for other major economies, particularly in the euro area, appeared to dim; the dollar dropped back again late in the year as geopolitical tensions intensified, and continued to depreciate in early 2003. In nominal terms the dollar has declined about 5 percent on balance over the past year, with depreciations against the currencies of the major industrial countries and several of the developing Asian economies partly offset by appreciation against the currencies of several Latin American countries.

Industrial Economies

The Canadian economy recorded the strongest performance among the major foreign industrial countries last year despite some slowing in the second half. The strength, which was largely homegrown, reflected robust growth of consumption and residential construction as well as an end to inventory runoffs early in the year. The expansion was accompanied by very rapid increases in employment and utilization of capacity, and the core inflation rate breached the upper end of the government's 1 percent to 3 percent target range near the end of the year. The Canadian dollar appreciated against the U.S. dollar in the first half of the year, but it dropped back somewhat in the second half as the economy slowed; by the end of the year it was up only slightly on balance. The Canadian dollar has moved up somewhat more so far this year.

U.S. dollar exchange rate against selected major currencies



NOTE. The data are weekly. Exchange rates are in foreign currency units per dollar. Last observations are the average of trading days through February 5, 2003.

The Japanese economy recorded positive growth during 2002, although it was not enough to fully reverse the decline in output that occurred in 2001. Despite about 10 percent appreciation of the yen against the dollar in 2002, Japanese growth was driven largely by exports, with smaller contributions from both increased consumption and a slower pace of inventory reduction. In contrast, private investment continued to decline, although not as sharply as in 2001. Labor market conditions remained quite depressed, and consumer prices continued to fall. Little progress was made on the serious structural problems that have plagued the Japanese economy, including the massive and growing amount of bad loans on the books of Japanese banks. A new set of official measures that aims at halving the value of bad loans within two and a half years was announced in the fall, but the details of this plan are still not fully specified. In September, the Bank of Japan announced a plan to buy shares from banks with excessive holdings of equity, which would help to reduce bank exposure to stock market fluctuations. Because the transactions are to occur at market prices, there would be no net financial transfer to the banks. Near the end of last year the Bank of Japan (BOJ) raised its target range for bank reserves at the BOJ from ¥10–15 trillion to ¥15–20 trillion, increased the monthly amount of its outright purchases of long-term government bonds, and broadened the range of collateral that can be used for market operations. In December the monetary base was up about 20 percent from a year earlier, a rise partially reflecting the increased level of bank reserves at the BOJ. However, the twelve-month rate of base money growth was considerably below the 36 percent pace registered in April. Broad money growth remains subdued.

Economic performance in the euro area was quite sluggish last year. Although exports were up sharply, growth in consumption was modest, and private investment declined. The area's lackluster economic performance pushed the unemployment rate up by several tenths of a percentage point by the end of the year. Economic weakness was particularly pronounced in some of the larger countries—Germany, Italy, the Netherlands, and, to a lesser extent, France. In contrast, growth in Spain and some of the smaller euro-area countries—Ireland, Portugal, Finland, and Greece—was much more robust. Headline inflation jumped to a bit above 2½ percent early in the year, owing to higher food and energy prices and in small part to the introduction of euro notes and coins. Increased slack in the economy, however, together with the 15 percent appreciation of the euro by the end of the

year, helped to mitigate inflation concerns, and the ECB lowered its policy interest rate in December. The euro continued to appreciate in early 2003.

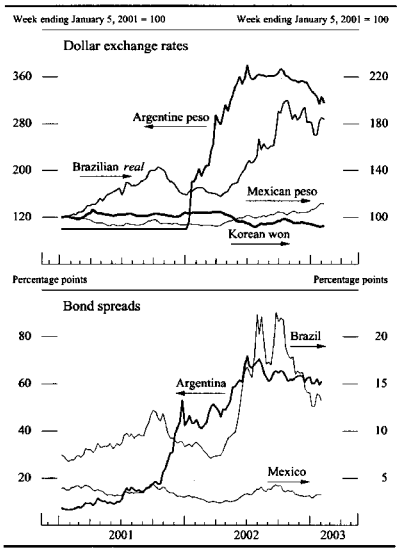
Economic growth in the United Kingdom held up better than in the other major European countries last year, and sterling strengthened about 10 percent versus the dollar. However, the expansion remained uneven, with the services sector continuing to grow more rapidly than the smaller manufacturing sector. Despite tight labor markets, inflation remained a bit below the Bank of England's target of 2½ percent for most of the past year. A sharp rise in housing prices has, however, raised some concern about the possibility of a real estate price bubble. The British government announced its intention to complete a rigorous assessment of its criteria for joining the European Monetary Union (EMU) by the middle of this year and, if they are met, to hold a referendum on entry.

Emerging-Market Economies

The Brazilian economy posted a surprisingly strong rebound in 2002 despite a major political transition and accompanying turbulence in financial markets. The Brazilian *real* depreciated sharply between May and October, and sovereign bond spreads climbed to 2,400 basis points as it became increasingly likely that Luiz Inácio Lula da Silva (Lula), the Workers' Party candidate, would win the presidential election. Given some of the past stances of the party, this possibility fueled concerns among foreign investors about a potential erosion of fiscal and monetary discipline. In response to the sharp deterioration in financial conditions facing Brazil, a $30 billion IMF program was approved in September 2002, $6 billion of which was disbursed by the end of the year. However, financial conditions improved markedly after Lula won the election in late October and appointed a cabinet perceived to be supportive of orthodox fiscal and monetary policies, including greater central bank independence. By January 2003 the *real* had reversed about one-fourth of its previous decline against the dollar, and bond spreads had fallen sharply. However, the new administration still faces some major challenges. In particular, serious concerns remain over the very large quantity and relatively short maturity of the outstanding government debt. In addition, last year's currency depreciation fueled a rise in inflation that has prompted several increases in the monetary policy interest rate. In January the government raised the upper bound of its inflation target range for this year to 8.5 percent from 6.5 percent, although the target for next year was lowered at the same time to 5.5 percent from 6.25 percent.

Argentine GDP contracted further in 2002 after declining 10 percent in 2001. The currency board arrangement that had pegged the peso at a one-to-one rate with the dollar collapsed early last year; the peso lost nearly three-fourths of its value by late June, and sovereign bond spreads spiked to more than 7,000 basis points. By early 2002, the banking system had become effectively insolvent as a result of the plunging peso, the weak economy, and the government's default on debt that the banks held mostly involuntarily. Confronted with this situation, the government forced the conversion of the banks' dollar-denominated assets and liabilities to pesos and also mandated the rescheduling of a large share of deposits. As a result of these and other measures, confidence in the banking system, already shaken, was further impaired. Financial and economic conditions eventually stabilized in the second half of the year, but there are no signs yet of a sustained recovery. The government also defaulted on obligations to multilateral creditors in late 2002 and early 2003. In January, Argentina and the International Monetary Fund reached agreement on a $6.6 billion short-term program that will go to meeting Argentina's payments to the IMF at least through the elections expected

Exchange rates and bond spreads for selected emerging markets



NOTE. The data are weekly. Exchange rates (top panel) are in foreign currency units per dollar. Bond spreads (bottom panel) are the J.P. Morgan Emerging Market Bond Index (EMBI+) spreads over U.S. Treasuries. Last observations are the average of trading days through February 5, 2003.

in the spring and also to clearing its overdue obligations to the multilateral development banks.

Venezuela experienced extreme economic and political turmoil over the past year. In February 2002 the central bank abandoned the bolivar's crawling peg to the dollar, and the bolivar depreciated sharply. Opponents of President Hugo Chavez mounted a short-lived coup in April and declared a national strike in early December. The strike brought the already-weak economy to a standstill, and output in the key oil industry plummeted. The strike abated in early February in all sectors but oil. In response to the strike, Chavez increased his control of the state-owned oil company and oil production began rising in early 2003, but it was still well below pre-strike levels. With the exchange rate plunging in late January, the government suspended currency trading for two weeks before establishing a fixed exchange rate regime and some restrictions on foreign currency transactions.

One of the few bright spots in Latin America last year was the Mexican economy. Boosted by the U.S. recovery, growth was moderate for the year as a whole despite some late slowing. However, financial conditions deteriorated somewhat after midyear as market participants reevaluated the strength of the North American recovery. Mexican stock prices slid about 25 percent between April and September, and sovereign bond spreads widened nearly 200 basis points to around 430 basis points over the same period. Nevertheless, the Mexican economy did not appear to be much affected by spillovers from the problems elsewhere in Latin America; bond spreads dropped sharply between October and the end of the year to around 300 basis points, a level considerably lower than elsewhere in the region. The peso depreciated about 12 percent against the dollar over the course of last year. The decline fueled an increase in twelve-month inflation to more than 5 1/2 percent by year-end. The acceleration put inflation above the government target rate of 4 1/2 percent and well above the ambitious 3 percent target set for 2003. In response to increasing inflation, the Bank of Mexico has tightened monetary policy four times since September 2002. The peso has continued to depreciate in early 2003, and bond spreads have moved back up a bit.

The Asian emerging-market economies generally performed well in 2002, although there were significant differences within the region. Outside of China, the strongest growth was recorded in South Korea, which benefited in the first half of the year from both an upturn in global demand for high-tech products and a surge in domestic demand, particularly consumption. However, consumer confidence deteriorated at the end of the year as tensions over North Korea intensified; the uneasy situation, as well as the substantial existing consumer debt burden, pose significant risks to growth in consumption this year. The Korean won appreciated sharply against the dollar between April and midyear in response to improving economic conditions; it then dropped back in late summer and early fall as perceptions about the strength of the global recovery were adjusted downward. However, the won turned back up against the dollar late last year.

The performance of the ASEAN-5 economies—Indonesia, Malaysia, the Philippines, Singapore, and Thailand—also was generally robust in 2002, although the overall softening in global demand in the second half of the year was evident there as well. The second-half slowing in production was particularly pronounced in Singapore, which is heavily dependent on exports of high-technology products. Taiwan, another high-technology producer, also showed a significant deceleration in output between the first and second halves of the year. Both of these economies experienced some mild deflation in 2002, although prices turned up toward the end of the year.

Although the Hong Kong economy did not show as much improvement as most other emerging Asian economies in the first half of last year, it recorded very strong growth in the third quarter. Nevertheless, prices continued to fall for the fourth consecutive year. The mainland Chinese economy, which again outperformed the rest of the region in 2002, enjoyed surging investment by the government and by foreign investors as well as robust export growth. The Chinese economy continued to experience mild deflation last year.