CONDUCT OF MONETARY POLICY

Report of the Federal Reserve Board pursuant to Section 2B of the Federal Reserve Act and the State of the Economy

HEARING

BEFORE THE

COMMITTEE ON FINANCIAL SERVICES

U.S. HOUSE OF REPRESENTATIVES

ONE HUNDRED SEVENTH CONGRESS

FIRST SESSION

FEBRUARY 28, 2001

Printed for the use of the Committee on Financial Services

Serial No. 107–1

U.S. GOVERNMENT PRINTING OFFICE

70–750 DTP WASHINGTON : 2001

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

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CONDUCT OF MONETARY POLICY

WEDNESDAY, FEBRUARY 28, 2001

U.S. HOUSE OF REPRESENTATIVES,
COMMITTEE ON FINANCIAL SERVICES,
Washington, DC.

The committee met, pursuant to call, at 9:32 a.m., in room 2128, Rayburn House Office Building, Hon. Michael G. Oxley, [chairman of the committee], presiding.

Present: Chairman Oxley; Representatives Roukema, Bereuter, Baker, Bachus, Castle, King, Royce, Lucas, Barr, Kelly, Paul, Gillmor, Cox, Weldon, Ryun, Riley, Ose, Biggert, Green, Toomey, Shays, Shadegg, Fossella, Miller, Cantor, Grucci, Capito, Ferguson, Rogers, Tiberi, LaFalce, Frank, Kanjorski, Waters, Sanders, C. Maloney of New York, Watt, Bentsen, J. Maloney of Connecticut, Hooley, Carson, Sherman, Sandlin, Meeks, Lee, Mascara, Inslee, Schakowsky, Moore, Gonzalez, Jones, Capuano, Ford, Hinojosa, Lucas, Shows, Crowley, Israel, and Ross.

Chairman OXLEY. The hearing will come to order.

The committee is meeting today to hear testimony from the Chairman of the Federal Reserve Board of Governors, Chairman Greenspan. Before we get started, the Chair needs to make a few announcements.

As you know, Chairman Greenspan has a very busy schedule, and in order to permit the maximum number of Members the opportunity to ask questions, we must work efficiently. Therefore, pursuant to the rules of the committee and the Chair's prior announcement, the Chair will recognize himself and the Ranking Minority Member of the full committee for 5 minutes for opening statements, and the Chair and Ranking Member of the subcommittee of jurisdiction for 3 minutes each.

After Chairman Greenspan completes his prepared remarks, the Chair will recognize Members for questioning under the 5-minute rule. Those Members present at the start of the hearing will be recognized in order of their seniority, and those Members arriving later will be recognized in order of their appearance. In order to ensure that as many Members as possible have an opportunity to question Chairman Greenspan, the Chair will watch the clock very carefully. The Chair will not entertain unanimous consent requests to extend the period available to Members to question the Chairman. The Chair urges Members to use their time wisely.

Finally, in order to ensure that Members have an opportunity to ask questions which require a more detailed response, without objection the hearing record will remain open for 30 days to permit

Members to submit written questions and place their responses in the record; and it is so ordered.

I thank the Members for their assistance and cooperation. The Chair now recognizes himself for 5 minutes.

Good morning, Chairman Greenspan and Members and guests. Welcome to the first working hearing of the new Committee on Financial Services. I can't think of a better witness for our first hearing. Today we will receive testimony from the "maestro" himself, Chairman of the Federal Reserve Board of Governors, Alan Greenspan.

Welcome, Chairman Greenspan.

This committee reflects the new financial and monetary architecture created by Gramm-Leach-Bliley. Our jurisdiction stretches across domestic and international monetary policy, banking, housing, securities and insurance, among other issues. Frankly, the jurisdiction is the economy.

Chairman Greenspan's semi-annual report to Congress on the state of the economy and on monetary policy, especially in view of the sluggishness that infected the economy in the latter half of last year, is an important and fitting place to start. Chairman Greenspan already fulfilled his legislative obligation when he appeared before the Senate 2 weeks ago. He is here today of his own free will and is graciously allowing us to pepper him with questions.

Thank you for your time, Chairman Greenspan. We are anxious to see if you are going to commit news today.

We now have two quarters of very slow growth and industrial production has declined for each of the past 4 months. The U.S. economy entered a period of slowdown in the middle of last summer.

Chairman Greenspan, you noted the early signs in your last report to Congress in July. In the fourth quarter, markets slid, inventories grew and consumer confidence wavered. High energy prices were aggravated by low winter temperatures. Also we are mindful of economic woes in Japan, strife in Indonesia, and recent economic chaos in our important strategic partner, Turkey.

Mr. Chairman, perhaps you can shed some light on the "alphabet" debate: whether we can look for a slowdown and recovery that is V-shaped, U-shaped or W-shaped. Some of us are partial to the letter W, but we would much prefer a V-shaped recovery. The bears are out in force, and yet we have so many reasons for optimism.

Chairman Greenspan, in addition to your superb stewardship of economic and monetary policy, we have a new President with a simple but profound vision to return part of the surplus to the people who earned it. This committee will do its part by working to eliminate the hidden taxes that American investors overpay in SEC fees. This represents billions of dollars that ought to stay in pension funds, rather than going into Government coffers.

Supported by your strong testimony before the Senate, the overall debate now centers over how much of a tax cut to grant, not whether one is necessary. Also you gave Congress a good talking-to about the wise use of our hard-won surplus.

President Bush has heeded your counsel, telling Congress just last night that he wants to pay down all of the debt possible as it comes due. We are fortunate to have a system where both monetary and fiscal policy tools can be used to encourage recovery. I know that the committee is looking forward to your assessment of the inflation risk that can constrain the Fed. We would appreciate your insights about the relationship between monetary policy and consumer and business confidence, and how quickly a monetary policy action could result in economic stimulation.

Some contend that the Fed can handle the downturn by easing the Federal funds rate with the two recent moves and further cuts as necessary. Others, including the President and myself, argue that interventions are important, but that short- and long-term tax relief will strengthen the economy and continue growth.

As the President told us last night, we can return some of the recent budget surplus to taxpayers while still budgeting for responsible spending that takes care of our Nation's needs. We must take the long view and see the silver lining in the cloud. Part of the reason for the speed of the slowdown was the underlying strength of our economy. Often the more sudden the storm, the more quickly it passes.

Mr. Chairman, I look forward to your testimony. I now yield to the gentleman from New York, the Ranking Member, Mr. LaFalce, for an opening statement.

[The prepared statement of Hon. Michael G. Oxley can be found on page 44 in the appendix.]

Mr. LAFALCE. Thank you very much, Chairman Oxley and Maestro Greenspan, I have got that great book by my bedside, whenever I am having difficulty.

Last night President Bush came before us in his first address to a joint session of Congress, Chairman Greenspan, and he said that we have a fork in the road, and when there is a fork in the road, take it.

Well, the question is, which road do we take, of course. As I look back over the past several decades, we can take a path similar to the path we took in the decade of the 1990s, or we can take a path similar to the path we took in the decade of the 1980s. The year 2001 could be like the beginning of the decade of the 1980s, or the beginning of the decade of the 1990s, and I make a bit of a contrast. I remember 1981 so vividly when we were told by the President at that time, "be courageous, vote for tax cuts." I could be courageous for tax cuts. That is terrific if that is what courage is.

Well, a majority did. We could debate cause and effect, but we were in, like Secretary O'Neill said, a deficit ditch for a long, long time. I worked with many to struggle out of that ditch. It was really not until 1990, with President Bush and a Democratic Congress, that we began in a really meaningful way to dig ourselves out of the ditch, adopted a policy in 1990 that you supported and you applauded, a policy agreed upon between President Bush and the Congress; and we deepened that course, we got further out of the ditch in 1993—a Democratic President this time rather than a Republican President, still a Democratic Congress—and you applauded that.

Then we took action in later years too, especially 1997, with a Republican Congress and Democratic President.

I think the decade of the 1990s has been a very successful one. Most Americans are doing much better. You played a major role in that as Chairman of the Federal Reserve Board, as Chairman of the Federal Open Market Committee. Technology played a very major role, and fiscal discipline and cooperation between Republican and Democratic Presidents, between Republican and Democratic Members of Congress.

What I am concerned about is that we might embark in the year 2001 on a course much more similar to 1981, the decade of the 1980s, rather than the decade of the 1990s, and I am afraid that your values might aid and abet that.

And what do I mean by that?

My values tell me that we must do something about the 45 million Americans who have no health insurance; that we must do something about our deteriorating public infrastructure, the fact that our bridges are crumbling, the schools in my city of Buffalo, New York, and Niagara Falls and Rochester are deteriorating; that there is an unbelievable gap between affluent suburbs and people who live there and inner-city America; that there are so many senior citizens who need prescription drugs, because prescription drugs can now deal with diabetes and macular degeneration and high blood pressure and high cholesterol, you name it, virtually everything, but these prescription drugs are unaffordable to our senior citizens, and we must provide and pay for them.

So, fiscal policy is not your domain; monetary policy is. That is your highest value construct. You want to pay down the debt, but I also think you are concerned about paying it down too much and not having any debt. Maybe that is a legitimate concern, but nowhere near the value that I attach to the concerns of those countless millions of Americans who are still suffering.

So, Mr. Chairman, I look forward to what you have to say, because it can have great influence on the opinion of Americans and the opinions of the Members of Congress, and it might have a great impact on so many Americans who are still suffering.

Thank you.

Chairman OXLEY. I thank the gentleman.

The Chair now recognizes the Chairman of the Subcommittee on Domestic Monetary Policy, the gentleman from New York, Mr. King.

Mr. KING. Thank you, Mr. Chairman. I appreciate this opportunity.

Chairman Greenspan, it is a pleasure to welcome you here this morning. I myself want to thank you for the meeting we had in my office recently. I think it is important to note that the greatest intensity in that meeting came when you discussed the *Wall Street Journal* exposé detailing how the Giants had stolen the 1951 pennant from the Dodgers. Today I guess we are here for much more mundane matters, the economic future of our country and perhaps the world.

As Chairman Oxley and Ranking Member LaFalce have said, for the past decade we have gone through a period of almost unprecedented growth and expansion in our economy. Many of us believe that the foundation for that expansion began in the 1980s. That can be debated. Also, I guess what can be debated is exactly what went on during the last decade, whether or not old economic rules and indicators were changed and put aside. But we all agree that right now we are entering a period of economic sluggishness. In this slowdown, the question is, how do we reach the softest possible landing, how do we recover from this slowdown as quickly as possible and, hopefully, enter into a new period of solid and sustained growth.

In your testimony today, and certainly in the weeks and months ahead, we will be looking for guidance from you in, for instance, the impact the President's tax plan would have on the economy, both short and long term, how that would be coordinated with monetary policy. Also whether or not those tax cuts should be made retroactive. Also—and Ranking Member LaFalce touched on this—this whole issue that you have raised, which I think is a very valid issue, as to what happens if the debt is eliminated, what impact would that have on the economy? Will that give too much of a role to the Government in the private economy of this country if in fact we did eliminate the deficit entirely?

Also with the changing of the economic rules in the past several years, we have also had the passage of Gramm-Leach-Bliley, which has totally changed the economic system here in this country. We have questions, for instance, of banks getting involved in real estate, and the impact issues such as that would have on the future of this economy.

So I look forward to your testimony today. I know that all of us do. These are difficult times ahead, but I think what we have shown in the past is, when we stand up and confront difficult circumstances, we can bring about greater opportunities. So thank you for being here today and thank you for the work you have done for our country.

I yield back the balance of my time.

Chairman OXLEY. The Chair is now pleased to recognize the Ranking Member, the gentlewoman from New York, Mrs. Maloney.

Mrs. MALONEY. Thank you very much, Chairman Oxley.

And welcome, Mr. Greenspan. As the person in the country whose job it is to read the direction of the economy plan years into the future, it is particularly appropriate that you are appearing before the committee today, the day after the President's speech.

To justify the size of his tax cut, the President is relying heavily on the CBO forecast of a $5.6 trillion surplus over 10 years. As Chairman Greenspan can tell us, forecasting the economy months into the future, let alone 10 years into the future, is a process wrought with guesswork and error. Risking our budget surpluses with a tax cut based on a 10-year projection reminds me of another Bush program. Perhaps we should call the President's approach "faith-based budgeting."

With all respect to Chairman Greenspan, the Fed's recent actions have shown just how difficult it can be to forecast the economy. The Fed may have contributed to the current economic slowdown by raising interest rates six times from June of 1999 to May of 2000. As late as the December Federal Open Market Committee meeting, the Fed maintained a neutral stance on the pace of economic growth, forcing them to act dramatically with a full-point rate cut when they changed their minds last month.

CBO's own report on the surplus states that due to uncertainty resulting from current economic conditions—and I quote from the

CBO report—"The longer term outlook is also unusually hard to discern at present."

While the outlook for the next 10 years is uncertain, we can be sure that in the next 10 years following, from 2011 to 2021—and you will probably still be our Federal Reserve Chairman—the country faces fiscal challenges of an historic level as we deal with entitlement pressures brought on by the retirement of the baby-boomers.

In light of the uncertainty and our aging population, I urge my colleagues to follow a prudent budget course that returns money to all the American people in a tax cut, but does so in a manner that allows us to continue to pay down the debt while not touching any of the Social Security or Medicare surpluses.

Thank you, Mr. Chairman. I look forward to your comments on this and other issues.

Chairman OXLEY. I thank the gentlewoman.

The panel now turns to a good friend, the Chairman of the Federal Reserve, Chairman Greenspan. Chairman Greenspan, it is indeed appropriate that you are our first witness for the full committee, the new Financial Services Committee. Welcome, and we hope to have you back many times in the future.

STATEMENT OF HON. ALAN GREENSPAN, CHAIRMAN, BOARD OF GOVERNORS, FEDERAL RESERVE SYSTEM

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

I certainly appreciate this opportunity to present the Federal Reserve's Semi-annual Report on Monetary Policy.

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

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

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

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

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

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

With signs of softness still patently in evidence at the time of its January meeting, the Federal Open Market Committee retained its sense that downside risks predominate. The exceptional degree of slowing so evident toward the end of last year, perhaps in part the consequence of adverse weather, seemed less evident in January and February. Nonetheless, the economy appears to be on a track well below the productivity-enhanced rate of growth of its potential, and, even after the policy actions we took in January, the risks continue skewed toward the economy's remaining on a path inconsistent with satisfactory economic performance.

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

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

Moreover, although recent short-term business profits have softened considerably, most corporate managers appear not to have altered to any appreciable extent their long-standing optimism about the future returns from using new technology. A recent survey of purchasing managers suggests that the wave of new on-line business-to-business activities is far from cresting. Corporate managers more generally, rightly or wrongly, appear to remain remarkably sanguine about the potential for innovations to continue to enhance productivity and profits. At least this is what is gleaned from the projections of equity analysts, who, one must presume, obtain most of their insights from corporate managers. According to one prominent survey, the 3- to 5-year average earnings projections of more than 1,000 analysts, though exhibiting some signs of diminishing in recent months, have generally held at a very high level. Such expectations, should they persist, bode well for continued strength in capital accumulation and sustained elevated growth of structural productivity over the longer term.

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

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

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

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

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

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

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

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

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

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

For this reason, changes in consumer confidence will require close scrutiny in the period ahead, especially after the steep falloff of recent months. But for now, at least, the weakness in sales of motor vehicles and homes has been modest, suggesting that consumers have retained enough confidence to make longer-term commitments; and as I pointed out earlier, expected earnings growth over the longer run continues to be elevated. Obviously, if the forces contributing to long-term productivity growth remain intact, the degree of retrenchment will presumably be limited. In that event, prospects for high productivity growth should, with time, bolster both consumption and investment demand. Before long in this scenario, excess inventories would be run off to desired levels. Higher demand should also facilitate the working off of a presumed excess capital stock, though doubtless at a more modest pace.

Still, as the Federal Open Market Committee noted in its last announcement, for the period ahead, downside risks predominate. In addition to the possibility of a break in confidence, we don't know how far the adjustment of the stocks of consumer durables and business capital equipment has come. Also, foreign economies appear to be slowing, which could dampen demands for exports; and continued nervousness is evident in the behavior of participants in financial markets, keeping risk spreads relatively elevated.

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

As I pointed out in summary then, although the sources of long-term strength of our economy remain in place, excesses built up in 1999 and early 2000 have engendered a retrenchment that has yet to run its full course. This retrenchment has been prompt, in part because new technologies have enabled businesses to respond more rapidly to emerging excesses. Accordingly, to foster financial conditions conducive to the economy's realizing its long-term strengths, the Federal Reserve has quickened the pace of adjustment of its policy.

Thank you, Mr. Chairman. I request that the remainder of my remarks be included for the record.

[The prepared statement of Hon. Alan Greenspan can be found on page 55 in the appendix.]

Chairman OXLEY. Without objection, so ordered, Mr. Chairman. Let me recognize myself for 5 minutes.

Mr. Chairman, back when we had our last really full-blown recession in 1982, the markets almost inexplicably rebounded very quickly and the mantra at that time was first Wall Street, and then Main Street.

Do we face a reverse of that this time? That is, are the markets potentially reflecting a downturn overall and should we be concerned about that?

Mr. GREENSPAN. Well, the history on that is mixed, Mr. Chairman. In fact, as an old colleague of mine once said, "the stock market forecasted five of the last two recessions." So we have to be careful about being fairly strict in analyzing what stock prices and equity values are doing and what is happening to demand.

Having said that, there is no question, as I indicated in earlier testimony, that the so-called "wealth effect" has been a very prominent factor in the major expansion of economic activity, especially since 1995, and clearly with the market reversing, that process does indeed reverse. Whether it, in and of itself, is enough to actually induce a significant contraction which, in retrospect, we will call a "recession," is yet too early to make a judgment on.

Chairman OXLEY. Do I read your statement correctly to mean that there actually is greater consumer confidence than has been reported?

Mr. GREENSPAN. There is also a distinction between our various measures of consumer confidence and, indeed, what people think, feel and say, and what they do. And in the last couple of months during the period when the indexes, the proxies for consumer confidence, have gone down extraordinarily rapidly, it has not been matched by a concurrent decline in consumption expenditures.

Now, to be sure, the strength, as I indicated in my prepared remarks, in passenger cars in January and February did reflect a bulge in so-called "fleet sales," and one must presume that that will unwind in the months ahead. But all in all, the demand for homes, the demand for consumer durables, while scarcely where they were a year ago, have not matched the type of weakness that we have seen in the consumer confidence indexes. What we do not know, however, is whether that merely is something which has been delayed, and that ultimately the adjustment in consumer expenditures will indeed, after the fact, reflect the most recent patterns of consumer confidence. We don't know yet what the answer to that is.

Chairman OXLEY. Mr. Chairman, in the end of your statement, you say "This retrenchment has been prompt, in part because new technology has enabled businesses to respond more rapidly to emerging excesses. Accordingly, to foster financial conditions conducive to the economy's realizing its long-term strengths, the Federal Reserve has quickened the pace of adjustment of its policy."

Can you tell us in more detail what that means?

Mr. GREENSPAN. We have gone through a decade in which very significant technological changes have occurred in the area of information, and it has dramatically altered the process by which business decisionmaking has been made. As a consequence, we have observed on the upside of the economy major changes in the way capital investment decisions are made, inventory decisions are made, indeed, virtually all business decisions.

What we have not seen is how does that new technology affect the decisionmaking process when the rate of growth begins to fall? And I guess we could reasonably presume, and indeed it was the reasonable expectation, that the just-in-time inventory process, to take one aspect of the decisionmaking process, would not only affect how inventories were accumulated on the upside, but presumably accelerate the adjustment process on the downside. And indeed, that is what we are obviously observing.

If that is the case, then all economic policy must indeed adjust itself for the changing timeframe in which the economy itself is moving. We, for example, have observed phenomena which used to take 30 months to work out, probably now take 24 months or 15 months, and those which used to take 3 or 4 weeks now happen sometimes in 3 or 4 days.

For monetary policy very specifically to maintain the same pace of adjustment that we had in the past clearly would not be consonant with what has occurred in the structure of an economy to which we must adjust. So the content of my remarks is that we have developed, and, of necessity, will continue to develop a far more quick response, presumably a far more front-loading of response to reflect the changing environment in which we find ourselves.

Chairman OXLEY. Thank you.

The gentleman from New York, Mr. LaFalce.

Mr. LAFALCE. Mr. Chairman, you strive to have a close working relationship with any President, Republican or Democrat, and the Congresses, too, that can make a meshing of monetary and fiscal policy, that can make for a better economic policy, of course.

Some would look back and say, "Well, President George Bush in 1990, 1991, 1992, might say, gee, he might have done much better in the 1992 election had Alan Greenspan been more cooperative with him." Al Gore perhaps can make the same claim.

You run a dilemma. You have to be the intellectually honest person and you want to cooperate. If you cooperate too much, you could also be used, and people could tradeoff of their association with you, can tradeoff of statements you have made, and magnify your statements tenfold, a thousandfold, bring about consequences that you yourself don't really like.

That is a concern of yours, too, I am sure. I will not ask you to comment about that, but it is a reality.

I am going to ask you some questions now. Each of my questions does have something in mind for which I will be using your response obviously, as Presidents use your responses.

First of all, I think that horses should come before carts, and I think, therefore, that we should pass a budget resolution as called for by law of the United States on April 15th, before we take up a tax cut bill; and yet I hear we might take up a tax cut bill in committee next week. I don't think we are going to pass a budget resolution until at least the budget is presented to us in some detail. Now, I understand we might not get it until April.

What do you think, which should come first, the horse or the cart?

Mr. GREENSPAN. The budget resolution is something which the Congress itself constructed. It has been a very effective tool and I think the whole budget process coming out of the 1974 Act has been a major factor in rationalizing the budget process. So it is up to the Congress to make the decision. I mean, this is a wholly political issue, and the facts——

Mr. LaFalce. But some economic consequences though, wouldn't you say?

Mr. Greenspan. No, not necessarily.

Mr. LaFalce. Oh, you don't think the budget that we pass has some economic consequences?

Mr. Greenspan. I think it certainly has some. The question of how you arrive at that budget, in and of itself, need not have economic consequences. What you are referring to——

Mr. LaFalce. Need not, but might and probably would.

Mr. Greenspan. If you are asking me, is it possible that——

Mr. LaFalce. That is not what I am asking you.

Mr. Greenspan. Are you asking, is it probable?

Mr. LaFalce. We usually deal with the laws of probabilities in framing our answers.

Mr. Greenspan. Let me be very specific.

What the budget is does matter. How you get there shouldn't, although I recognize that in the process of getting there, certain secondary things may happen which could have negative economic effects.

Mr. LaFalce. It could have an effect, especially on those most in need in American society.

Let me go to a second question. If they do bring up a tax bill, whenever they bring it up, the rule will probably permit for an alternative. One of the alternatives I was thinking of was something proposed by the Republicans in the 105th Congress, in the 106th Congress voted upon, and called for in the platform of the Texas GOP led by George Bush in the year 2000 and Dick Armey and Tom DeLay and Phil Gramm; that was to abolish the Income Tax Code. This was only an idea, but brought up in the past two Congresses, voted upon and passed in the House.

Wouldn't that be better than a tax cut, just abolishing the Income Tax Code by a date certain and then worrying about what you do in the future? That passed the House the last Congress and the Congress before.

Mr. Greenspan. Congressman, if you think you are going to get me to answer a question of that nature, I suggest——

Mr. LaFalce. It has to be taken very seriously, because it was brought to the House of Representatives in two separate Congresses by the leadership of the House of Representatives and passed.

Mr. Greenspan. I am not an expert on such issues.

Mr. LaFalce. OK. My third and last question—the question is, what do we take seriously? Social Security?

Chairman Oxley. The gentleman's time has expired.

Mr. LaFalce. Can I ask one more question?

Chairman Oxley. We have to stick to the 5-minute rule.

The gentlelady from New Jersey, Mrs. Roukema.

Mrs. Roukema. Thank you, Mr. Chairman.

Chairman Greenspan, let me say, following up on really what the Chairman asked, your last statement, as he read it to you, "accordingly, to foster financial conditions," and you answered it, but you didn't give it much specificity, I was going to ask the question regarding that statement of yours in conclusion, in the context of the new reports that we see by three groups reported in today's *New*

York Times, the Conference Board, Bloomberg Press, new home sales from the Commerce Department report and how they are down, as well as a Commerce report on durable goods, indicating quite substantial evidence of weakness in the economy.

Given that and given your summary statement here, having listened to it, I didn't hear with specificity whether or not you foresee action on monetary policy reducing interest rates in the near future. It sounds as though your analysis is more optimistic here in your report than the information that we are getting from other sources.

Mr. GREENSPAN. Well, Congresswoman, let me just say in general, as I try to outline in my prepared remarks, I think that there is an inventory adjustment process just getting under way, in effect, or perhaps starting at the beginning of the year, and that there is a capital excess, meaning the degree of physical plant capacity has got to be run off as well. So, I am arguing, in effect, that there is a big adjustment process which still has a way to run.

But commenting on the specific numbers which you just alluded to, the decline in new home sales from, as I recall, one million thirty-four seasonally adjusted annual rate in December, down to nine hundred two thousand or thereabouts in January, merely puts the number back to where it was late last year. The outlier is actually the December figure.

Housing starts in January actually were up, as were permits, so that in that area, those data cannot be used, in my judgment, as reflecting generalized weakness. The consumer confidence issue can, and that I alluded to in my prepared remarks.

Mrs. ROUKEMA. You did, and I noted that. Thank you very much; I am glad you pointed that out.

But in any case, we have a short time period ahead where we may be hearing more from the Fed on this subject?

Mr. GREENSPAN. I have no comment.

Mrs. ROUKEMA. No comment.

May I ask you also, there have been two letters sent by numbers of Members of Congress to you concerning the question of the proposed regulation, financial holding companies and financial subsidiaries with respect to real estate.

As you know, in Gramm-Leach-Bliley, I was one of the outspoken advocates for being sure that we set up firewalls to protect against mixing commerce and banking, and I am concerned. What would be your response to the questions that were raised in the letters with regard to the Fed's proposed real estate rule? I do understand that you have postponed a decision on that; is that correct?

Mr. GREENSPAN. That is correct.

Mrs. ROUKEMA. Could you give us a little pro and con on that and your own perspective? Because—I am deeply concerned, because this is the first effect of Gramm-Leach-Bliley on a regulatory basis that we are having to face, and I think we as a committee should be focused on it.

Mr. GREENSPAN. Yes. We have extended the comment period through May 1st, and indeed have had a considerable amount of input from all the various sources.

What people, I think, fail to remember is that we take the comment periods very seriously, meaning that there are certain types of information that you really cannot get effectively prior to the comment period, and we actually hope that we get full sets of comments so we can evaluate all the various arguments, some of which we may not be aware of. I grant you, most of the arguments we obviously are acquainted with, but every once in a while, and sometimes more often than not, we get very important insights in the comment period which alter our original views on the subject, and so this is an integral part of the decisionmaking process. We will wait until all of the comments are in by May the first.

Chairman OXLEY. The gentlelady's time has expired.

The Chair now recognizes the gentleman from Massachusetts, Mr. Frank.

Mr. FRANK. Mr. Chairman, I want to focus on monetary policy.

In your statement you said, the bottom of page 1, the adjustment last year occurred much faster than most businesses anticipated. Then you say on page 2, the slowdown intensified. So you talk about how businesses did not anticipate a slowdown that intensified. I think you left out, frankly, the role of the Fed, because you didn't anticipate, but you did intensify, and that is what I wanted to talk about.

Based on your own rules of thumb, the actions the Federal Reserve System took between February and May of 2000 clearly contributed to the slowdown. You have always told us it takes between 6 and 9 months for the actions to have an impact.

Now, in 1998 you did add liquidity because of the Asian crisis, but by the end of 1999 you had removed, at least in amounts, that liquidity. Interest rates stood, the Federal fund rates and the discount rate, at the end of 1999 where they had been before the Asian crisis reaction. You then, in February, March and May of 2000, raised interest rates by 100 basis points. I put this in a statement that is out there.

Take your 6 to 9 months, and that increase of 100 basis points has its maximum impact in about November of last year. In other words, just when that slowdown was intensifying was when we were feeling the impact of the Fed's rate increases of the year 2000.

My questions are several. Is there, in fact, any way to not accept that the errors the Fed made in addition to not anticipating—you, as I said, were among the non-anticipators, and that led you to be the intensifiers. So is there any other explanation of your actions than that your increases over and above what offset the Asian liquidity thing contributed to that slowdown?

Maybe the Fed has become irrelevant when I was on vacation, but if we follow the usual rule of the 6- to 9-month impact, there are 100 basis points that you increased in that period in 2000 when you would expect to have them have the impact precisely when those are slowing down.

What concerns me is not the fact you made a mistake—even the maestro hits a couple of sour notes, and we are not going to change the title of the book—but it is why, because we want to prevent them.

My problem is this: In your report here on page 5, you note core inflation remained low in 2000 in the face of sharp increases in energy prices, so obviously that could not have been the reason for a 100-basis-point increase.

What bothers me is this: I think you have been very good in arguing, as you do again here today, that there have been real productivity increases in the economy that allow us to get unemployment lower than we used to think possible without inflation. But you are not the only member of that Board. There are people on the Board, some bank presidents and some Board members, who disagree with that, who have said that they believe that unemployment had gotten too low.

What I fear is that there was pressure coming from them, because I must say, the one difference I would have with you procedurally, I get the impression while you have a great fear of inflation, you have an even greater fear of a split vote on the board of the FOMC, lest the public think this is something democracy ought to deal with. So what I am concerned with is, in the absence of other reasons for those mistakes of mid-2000, that pressure from people who disagree with you about our ability to tolerate a low interest rate without inflation may have had some impact.

Now, I did see an alternative explanation here, and what you say is that you didn't get it wrong, the public did. I mean, the public was irrational, and they got too scared, and that is why things didn't work.

I wish I had more time. I would be interested in your explanation of what this says for the theory of rational expectations and whether we take back a Nobel Prize or two. But I am concerned.

So my question, which you have time now to answer, is, one, is there any way to deny that the Fed's interest rate increases in mid-2000 intensified that very slowdown; and, second, what was the basis for the mistake and how do we collectively work to prevent its repetition, because obviously no one wants to see that.

Mr. GREENSPAN. First of all, what we do not know is whether with the new technologies and the rapid changing events, as I indicated in answer to an earlier question, whether the 6 to 9 months is foreshortened as well. My suspicion is that it has, but we don't have enough data to confirm.

Mr. FRANK. So you brought this down earlier than I thought.

Mr. GREENSPAN. Possibly. The reason that we moved in 1999 was basically because long-term interest rates had started to move up earlier in the year.

Mr. FRANK. I am talking about 2000, Mr. Greenspan.

Mr. GREENSPAN. I am at 1999. I will get to the 2000.

Chairman OXLEY. The Chair would like you to sum up. We are past the 5 minutes.

Mr. GREENSPAN. Just very quickly what we did was, in recognition of an excess of investment demand over savings, follow the path that the long-term interest rates were leading us to during that period, which is a normal reaction for an economy which was running off balance, and had we not raised interest rates, either then or through 2000, in order to hold the rates down we would have had to engender a massive increase in liquidity in the system which conceivably would have exacerbated the imbalances even more.

The issue of the economy running faster than we knew was sustainable over the longer run was fairly evident during all of that period, and it was very important to make certain that the elements of demand were contained, as indeed they eventually were.

As I look back at that period, I think that the actions we took were right at the appropriate times, and I will be glad to discuss this with you in some much greater detail, because obviously it is very difficult, as the Chairman wants me to sum up very quickly, but the bottom line is I think we do have a disagreement on this.

Chairman OXLEY. Gentleman from Nebraska, Mr. Bereuter.

Mr. BEREUTER. Thank you, Mr. Chairman.

Chairman Greenspan, thank you very much for your testimony. I have two unrelated questions if I can do it: The part in your testimony you did not read related to the impact of energy prices on the economy, and that you pointed out there was a 12 percent increase in natural gas prices during the last quarter.

This is the number one concern on the part of many of my constituents; indeed most of my constituents, broad stretches of America, the heating oil, the heating fuel of choice is natural gas; Northeast, it would be heating fuel, heating oil. Those costs are going up even 50 to 100 percent in the course of 2 months, some microregion to microregion basis, depending upon the contract that delivery entity, municipal or public utility has. So it is affecting consumer decisions, and the uncertainty about it is affecting them. Some businesses are on interruptible supply basis. They pay out a lot more, or they are cut off, in effect, which shuts down businesses. Broad stretches of America have an unusually cold winter and hydrous ammonia costs are expected to dramatically increase for farmers this spring. I wonder to what extent you are taking that into account.

Second, you pointed out that business managers have this enhanced information, they are making decisions that are compressing reactions; and you have on the other hand a positive sensibility to make better real-time surveillance and you front load as a result your response. But do you have sufficient transparency?

And do you have short enough measurement periods of information coming to you that you can adjust to this new quickened pace of economic change?

Mr. GREENSPAN. The answer is we hope so. The amount of information that we get and the real-time acceleration of its availability has been very helpful, and in that regard, as I indicate in my prepared remarks, we do have significant increased enhanced capability for surveillance.

The natural gas issue is really a relatively new one. Remember, we have had crude oil surges in the past with impacts on the economy which we are able to evaluate and we had some history to be able to understand how it works. The natural gas surge that we have seen in the last year or two is something relatively new and it is being caused by a very dramatic increase in the demand for natural gas. Even though the number of drilling rigs we have put on for gas drilling has gone up very dramatically, the technology itself has enabled us to drain reservoirs at a very rapid pace, and so the gross additions are just barely keeping even with the gross subtractions. As a result, the available production levels of natural gas have not gone up that much, which means that we need to enhance our capabilities to bring more gas in play. That is going to be an ongoing process as far as I am concerned, but it clearly has macro-economic effects, because you could see the impact of this doubling of gas bills on consumer behavior and indeed on consumer confidence.

So it is a new element in the economic outlook on which we have expended a considerable amount of effort to try to understand not only what is happening, but its implications on the overall economic outlook.

Mr. BEREUTER. Thank you.

Chairman OXLEY. The gentleman's time has expired.

The gentlelady from New York, Mrs. Maloney. The Chair would indicate we were going in order of appearance before the gavel, when the gavel came down under the committee rules.

Mrs. MALONEY. Thank you, Mr. Chairman.

Mr. Greenspan, while I know you do not speak specifically about whether or not you plan to adjust interest rates, I am concerned about the impact that a reported rise in the zero maturity money stock may have on some members of the FOMC. As you know, other monetary aggregates have also recently risen at historically high rates, and I would hope that this information would not keep the FOMC from lowering rates.

However, I was concerned by comments I read in the February 19th issue of *Barron's*, where it was reported that the annual rate of MZM increased by 16.9 percent annually from November to January. The same short article quotes an economist at the St. Louis Fed saying that he would be concerned about this increase if it continues into the summer. I truly hope this data does not discourage you from easing monetary policy.

Mr. Chairman, can you tell me whether you or members of the FOMC are concerned about the MZM and other monetary aggregates and whether this would discourage you from easing monetary policy?

Mr. GREENSPAN. Well, Congresswoman, the cause of that rise which is, as you point out, a significant acceleration, results from two factors. One, the reduction in interest rates has increased the so-called opportunity cost to hold deposits and a lot of the increase in M2 and M3 and indeed MZM has resulted from that. There has also been an apparent shift out of stocks and other financial assets into deposits as stock prices have fallen off. And so a substantial part of that rise is easily understood. The general view that we have all had over the years, as I have mentioned before this committee in the past, is while money supply has been a major issue with respect to the American economy, and money obviously is a crucial issue in inflation, indeed it is almost by definition in the sense of the relationship between units of money and units of goods, we have had extraordinary difficulty in trying to find the right proxy to measure money per se, and none of these various measures—M2, M3, MZM—as best we can judge, seem to have the characteristics necessary for "moneyness" that is at the base of concerns a number of people have with the issue of money expansion and inflation.

As a consequence, we no longer report to this committee on money supply targets, and the reason we do not is that we have not found, at least for the time being, money supply useful. Having said that, we do obviously follow it like we follow all financial variables, because money supply changes do signal what is happening in the economy and, whether those signals are telling us one thing or another are quite relevant to our overall evaluation of what economic activity is likely to do.

Mrs. MALONEY. Well, thank you for your answer; and again I hope that increases in the aggregates would not discourage the FOMC from easing its monetary policy.

On another note, the December 1999 issue of the Federal Reserve's publication, "Current Issues in Economics and Finance," had an article titled, "Explaining the Recent Divergence in Payroll and Household Employment Growth." The authors concluded that—and I quote—"The household survey probably under-reports employment because its estimates incorporate a census undercount of the working age population. The higher figures in the payroll survey are more reliable, accurately capturing the effects of the current economic expansion on the employment status of many adults overlooked by the census."

Mr. Chairman, in a matter of days, the Bush Commerce Department must decide whether the professionals at the Census Bureau will have the ability to adjust the raw census numbers by using modern scientific methods for the undercount if they see it, or whether to allow politicians at the Commerce Department, political appointees, to decide whether to adjust the numbers.

My question is: Doesn't this Federal Reserve article demonstrate that not using corrected data is unscientific and does not include all Americans? And, as a user of census statistics yourself, isn't it vitally important for all economists to have the most accurate census data with which to work? If your data is incorrect your conclusions are incorrect.

Chairman OXLEY. The gentlelady's time has expired. The Chairman of the Federal Reserve may respond to a Census Bureau question if he chooses.

Mr. GREENSPAN. Let me just say very quickly, the reason for the rise in upward revision that is going to be coming on stream in household employment data is a consequence of the upward revision in the expected level of the population, households, and number of people in the labor force that will show up in the census data, whether it is taken from the existing count that now currently exists or whether it is augmented by a sample survey. In both cases there have been significant upward revisions from the earlier preliminary numbers on which the household data series earlier was based.

Chairman OXLEY. The gentleman from Louisiana, Mr. Baker.

Mr. BAKER. Thank you, Mr. Chairman.

Good morning, Chairman Greenspan. It seems to me that the section of your comment with regard to technology and speed and efficiency of the market is one in which I have particular interest. As we move in an economy from carbon paper to memory typewriters to what was lovingly called the TRS–80 Radio Shack computer, the "Trash Eighty," today where we have gigahertz transmission capabilities, there is an enormous transfer of economic power in that type of movement in the economy. In fact, the volatility that we are concerned about today may in large measure be associated with those technological innovations, and that if one would ever assume to take credit for inventing the internet, you should also take responsibility for the volatility in the marketplace today.

But aside from that point, volatility is inherent with an economy which is transmographying itself at such a rapid rate. And I recall your earlier comment, many appearances before, in talking about the risk associated with banking activities; that banking in itself is an inherently risk-taking venture, and that we cannot escape from the fact that there will be banks that will fail despite our best efforts and the most recent up-to-date insight and knowledge.

It would appear, though, that in a market which acts so quickly and takes savings and capital and moves it rapidly based on information, that the most important thing we could have in the market, either as a regulator or as an investor, is transparency and disclosure of information to all participants on a timely basis, whether it is a new patent that allows hundreds of new jobs to be created that correspondingly eliminates 1,000 jobs in the old technology; whether it is the SEC in seriatim process considering a new accounting standard which may not be open to public discussion until the announcement is made; whether it is an LTCM-like hedge fund activity, which we were not fully aware of the scope of their endeavors nor the number of participants until very late in the process. Opening the market up is something that must happen, because we can't put the genie back in the bottle and make the internet go away.

Are we today confident as a Fed, as an FOMC, that there aren't additional steps that could be taken? Or are there steps that Congress can take to help the free flow of information? I am very concerned, for example, about the actions of the SEC not being as transparent as the SEC would like the businesses to be to the SEC. I don't think we can have a system where Government is opaque and commerce is clear and transparent. I think both sides of the system now, unfortunately, are going to have to disclose in a timely manner to attempt to limit volatility. It will never go away. I think it is inherent in the type of economy we now find ourselves living in, and the fairness is to allow all participants to have access to whatever information may be available in a timely manner.

I remember the debate over doing away with the 15-minute delay time on the ticker on the monitors and what a horrible thing it would be if people had real-time information to the markets. There are now 807,000 trades a day based on real-time information by mom-and-pop investors who are saving for their kids' education and buying a first home or whatever it might be. It has been a wonderful thing. So my question to you is what steps can we take? If I'm correct in my summation, the flow of technology and the spread of information is a positive thing for all involved in the market.

Mr. GREENSPAN. I generally agree with you. Congressman, I think that with the technology accelerating as it has over, say the past 5 to 7 years especially, we have seen a much more rapid response and indeed that is the issue which I clearly was responding to earlier.

The issue of disclosure gets down to the conflict between the obvious necessity of transparency, as you put it, and the question of property rights. Because one of the reasons why you get a lot of disinclination on the part of various players not to want to disclose is they presume that what they have is a property right. And the question is, do they? For example, you have markets which evolve float, and markets, as you know, with float are essentially giving to certain players interest-free loans. And after a while, they presume that it is their property when indeed it is not. And consequently, when you endeavor to move some of these financial transactions to being cleared and settled in a much shorter period of time, somebody's losing something and you get very significant resistance.

What is necessary is to make the judgment, do they have the right to that float, whether it is information or otherwise, and in most instances I think you are going to find the answer is no.

Chairman OXLEY. The gentleman's time has expired.

The gentleman from Pennsylvania, Mr. Mascara.

Mr. MASCARA. Thank you, Mr. Chairman.

Welcome, Chairman Greenspan. I read on Sunday an article in the *Pittsburgh Post Gazette*, the title being "Alan Greenspan Can Be Wrong, Too." How shameful. "The Federal Reserve Chairman"—and I am quoting—"should take his share of the blame for an economic downturn," says James Galbraith, "especially if he's going to go along with the wrongheaded Bush tax cut."

When you, Mr. Chairman, testified before the Senate Budget Committee last month, you made headlines when you seemed to indicate that we could afford a large tax cut. However, you seemed to backtrack somewhat from that testimony when you subsequently testified before the Senate Banking Committee. Given that somewhat conflicting testimony, what is your position on President Bush's plan to cut $1.6 trillion in taxes over 10 years?

And I just want to add an aside that I am old enough to remember the 1981 tax cut when everybody bought into supply side economics, when subsequently David Stockman left the Reagan Administration. The trickle-down theory didn't work. And I hear a lot of that now in the Bush proposal, that somehow if we now give a preponderance of the tax cut to the wealthy in the country, that somehow that is going to stimulate the economy. Would you want to comment on that, sir?

Mr. GREENSPAN. Congressman, I think you will find that nowhere in any of my testimony, written or oral, have I actually addressed the question of any particular tax or spending program in this particular context. I have argued that those are judgments that the Congress has to make.

The issue that I raised in the Senate Budget Committee, and indeed later in the Senate Banking Committee, was the implications of what one should be doing with respect to fiscal policy if you believe that these productivity gains we have seen in the last 5 to 7 years are going to be sustained. Because if indeed that is the case, we are going to get ever-increasing unified budget surpluses given so-called current services expenditures, and if that happens then the Congress has got to make a judgment that after the debt effectively gets to zero, any surplus of necessity must accrue in the way of non-Federal assets, mainly private assets. And I have argued that there are very significant problems there, and if you agree with that, then the question is there are many different alternate avenues in which that issue can be addressed.

My central focus was that we have to be very careful about a number of issues which are in the process of arising in fiscal policy as a consequence of productivity and the presumption of getting eventually to zero debt, which I support. And the questions that have come up, which I have never responded to, are do I support any particular tax program? The answer is I haven't, and I do not this morning either.

Mr. MASCARA. So you do not, then, support any particular tax cut.

Mr. GREENSPAN. No. As you know, the minority of a number of the committees have come up with alternate tax proposals. I haven't commented on those either.

Mr. MASCARA. And do you have some concern if there are some tax cuts that perhaps we should have a trigger because these are projections? As an accountant myself, I am very leery of projections, because oftentimes they just don't happen, and I think we all ought to be concerned that we don't get back into the large deficits that we had back in the 1980s when we spent more than we were taking in. And would you recommend that a trigger be in place if we do implement a tax cut?

Mr. GREENSPAN. Congressman, in my original testimony before the Senate Budget Committee, I raised the issue of whether we ought to have triggers of some form for either tax cuts or expenditure initiatives, largely because the uncertainties that one has with respect to 10-year budget forecasts are very high, and so the answer to your question is yes.

Chairman OXLEY. The gentleman's time has expired.

The Chair now recognizes the gentleman from Delaware, Mr. Castle.

Mr. BACHUS. The gentleman from Alabama.

Chairman OXLEY. We are going in order, at the order that the Members who were here at the pounding of the gavel.

Mr. BACHUS. I was here.

Chairman OXLEY. I am sorry. The gentleman from Alabama.

Mr. BACHUS. Thank you, Mr. Chairman.

Thank you, Mr. Greenspan. I think one of the things you said, most significant things, this morning, is you have talked about the major changes in the speed of economic processes. And you have said that economic policymaking cannot or should not remain unaltered in the face of this. That to me is a clear indication that the Fed is going to move quicker, is going to—it has the ability to move more accurately.

Now, if I read that right, in the past we have seen FOMC meetings and then half—50 basis point changes in the overnight rates. But that would not be to me an indication of a fast, you know, hands-on quick responding economic policy. Have you signaled today a change in that basic format to one where you respond quicker and with maybe more accuracy?

Mr. GREENSPAN. Congressman, I have raised this issue with the Senate Banking Committee and other fora. Because of the fact that the economic adjustment processes have accelerated and because of the fact that our surveillance capability has commensurately increased, we both are required to act faster, but are clearly acting on the same type of knowledge that we had previously. I am scarcely going to argue we should merely act faster just on the grounds of acting faster without any information. It is because the same technologies which are accelerating the economic process adjustments give us a much more enhanced degree of surveillance, and enable us to act more expeditiously.

I would scarcely, as I said, want to state that action for action's sake is a desirable thing. If you don't know what you are doing, and some people suggest we sometimes don't, that would be scarcely what we would want to do.

Mr. BACHUS. Because of your enhanced ability to gauge changes, there have been changes between February 13th and today. It wouldn't be necessary to wait until an FOMC meeting on March 20th therefore to act, would it? That is what I think you said here this morning.

Mr. GREENSPAN. Congressman, we have obviously specified implicitly that we prefer to act within our scheduled meetings. There are a number of technical advantages for doing that. But we have also shown over the years that when we perceive that actions are required between meetings, we have never hesitated to move. So I don't think you could read one way or the other in the comments that I have made which would alter the statement I just made, which I could just as easily have made 6 months ago.

Mr. BACHUS. Of course, in economic policymaking, you have to adapt to these changes and you have outlined some of them here this morning. One is that because of the technology and the ability of competitors in the marketplace to make quicker changes based on more accurate and real-time data, there are more severe changes in confidence. You know I have heard that when you spoke to the Senate and now again here in the House, and that is a change in the marketplace that I would think it would be appropriate for the Fed to adopt those changes in the way it deals with responding to the various data.

Mr. GREENSPAN. Well, the only thing I can say, Congressman, is that because of our enhanced technological capabilities, we are able to monitor the economy on a far closer to real-time basis than ever before. And I think we understand what is going on pretty much at the level of detail that we need to make monetary policy.

Mr. BACHUS. Well I would just say to you that, from everything you have said, I think you also have to change economic policy quicker and to a more—I mean, and be more flexible with it than in the past, in fact.

Mr. GREENSPAN. I think that is a fair statement.

Chairman OXLEY. The gentleman's time has expired.

The gentleman from Massachusetts, Mr. Capuano.

Mr. CAPUANO. Thank you, Mr. Chairman. I like these new rules.

Chairman OXLEY. It rewards people that show up on time.

Mr. CAPUANO. How about getting here early? Mr. Chairman, I have so many questions I can't get to them all, but I am sitting here trying to piece together all the things that I am facing this year as a Member, and obviously the first thing we are going to hear about is the tax cut. And I recognize you are not going to comment to that and I appreciate that, and I am not going to push you on that. But I also presume that of course you are familiar with the President's proposal and the specifics of those, so I won't even ask you, but I am presuming that and I hope that presumption is there.

Mr. GREENSPAN. Not quite. I haven't seen the budget yet.

Mr. CAPUANO. Not the budget, but the tax cut proposals.

Mr. GREENSPAN. I know what he said last night, certainly.

Mr. CAPUANO. That is right. I figured you would.

The question I have is if those tax cut proposals were enacted within a reasonable period of time, 3, 6 months, as currently proposed, would that change any of the predictions or comments that you have about the foreseeable future either in today's testimony or in the testimony contained in the report of February 13th?

Mr. GREENSPAN. Well, Congressman, as I said before the Senate Budget Committee, history has indicated that it is very difficult to get a tax cut in place to materially alter the probabilities of going into a recession. But if you get into an extended one, having cut taxes you are better off than not, and that is a general position which I think I would find the evidence has pretty much supported.

Mr. CAPUANO. I understand that, but I don't see anything in either of these two reports that indicate that you currently believe that we are heading into a long-term recession. Have I misread these?

Mr. GREENSPAN. No. What I have indicated is that, as best I can judge, that the underlying productivity growth in this country still is in place and that is a crucial issue with respect to making long-term projections. We don't know how this particular adjustment process currently underway is going to evolve, but it doesn't alter in any material way the longer-term outlook. And I would hesitate to say when the term or adjustments are going to be complete, because the truth of the matter is, we don't know.

Mr. CAPUANO. And I believe that to be fair. So I am reading that to say basically that the current tax proposals on the table, if enacted within a reasonable period of time, in the normal course of events, with the normal impacts, will have no impacts on your current projections over the next couple of years with what the economy is going to do.

If that is the case, the other part of it then I have to go to is the current projections that—you didn't mention it here in today's testimony—but you did mention in the 13th written testimony, and again, I want to make sure that I am reading this correctly, and I have seen reports that—and I know a lot of your projections are based on discussions and commentary with business leaders. Most I have heard are all believing that the unemployment rate is going to go up, and I believe you predicted that as well in the February 13th—and it wasn't mentioned today, but my presumption is that has not changed.

Mr. GREENSPAN. One would certainly conclude that when you are in an adjustment process of the type we are currently in with the rate of growth, as I indicated in my prepared remarks, effectively at zero, that being well below what the potential is in the economy, the unemployment rate would rise, and I would suspect that that is an inevitable conclusion that one would get from the type of projection that is implicit in zero growth.

Mr. CAPUANO. Fair enough. Thank you.

Mr. GREENSPAN. In the current period.

Mr. CAPUANO. I am sitting here looking at a humongous tax cut that probably will have no immediate impact on our current projections, yet will throw more people in unemployment and do nothing for them. It makes it even easier to take my position that I am leaning toward anyway, that it just doesn't make sense to do it at this point in time until things stabilize.

The other thing I wanted to ask you is to get into some of the productivity items. It strikes me, and I guess I would like to know and probably don't have time to pursue it, but at some time I would like to know exactly where you base the projections that productivity is going to continue to rise as it has in the past. And again, it is not based on empirical data at all, it is just based on pure observation on my part, most every business and every small business particularly that can and does want to do it has already computerized, has already gotten as many robotics as they can get, has already downsized as many employees as they can do.

And I wonder seriously whether we have significant room for improvement in productivity, and if we do, great—and again I want to be educated at some later time—but if we don't, then I think the whole underpinnings of the future might be subject to question.

Chairman OXLEY. The gentleman's time has expired. The Chairman may respond.

Mr. GREENSPAN. There is no question, if indeed productivity growth falls back to the 1½ percent annual rate of growth that existed prior to 1995 for the previous 20 years, then clearly the outlook is quite different from anything that we have been talking about. There are innumerable studies and innumerable evaluations which suggest otherwise. For example, a purchasing manager's survey asks plant managers: Of the existing available technology which you could apply in your plant at this particular point, what proportion have you actually implemented. And the average answer is 50 percent or less. And if you ask a number of different corporate executives who are heavily involved in the area, you will get answers which are quite similar to that.

Indeed, our new Secretary of the Treasury, the former Chairman of Alcoa, who was heavily involved in the series of innovations which enabled that company to make major advances, argues that we have only gotten 20 to 30 percent of the potential of what is out there in increased networking and internet and various different types of technology applications for which high rates of return are available.

Chairman OXLEY. The gentleman from Delaware, Mr. Castle.

Mr. CASTLE. Thank you, Mr. Chairman.

Chairman Greenspan, just a quick follow-up on the trigger issue, and I agree with your underlying premise, it is very hard to predict what is going to happen economically in 10 years. Whoever would have thought we would be talking about eliminating the debt and things like that 10 years ago? But apparently Ways and Means, according to what I am reading, is going to mark up the income tax legislation, which I don't know how much it's going to be, but I think around $1 trillion, as early as a couple of days from now.

I assume when you talk about a trigger mechanism, you are not talking about it being retroactive, you are talking about it being prospective, because I think they are going to have to stage it in order to have the greater impact of tax cuts in future years when there is more of a surplus than there is now. I just wanted to make sure what your comments on trigger mean.

Mr. GREENSPAN. The trigger that I was discussing is a trigger which essentially would, for example, be a level of net debt outstanding which would be required to be breached in order for a next tranche of an income tax cut or an expenditure increase to occur. But all previous changes are effectively grandfathered in that regard, so triggers never induce either an increase in taxes or a cut in expenditures in that regard.

Mr. CASTLE. Thank you. I thought it would be your answer but I wasn't sure. Let me go on to another topic, and if I mischaracterize what you stated, correct me on that. But as I understand it, you previously testified that ultra-low levels of Federal debt can harm the economy, because it removes the stable investment vehicle for pension plans, and so forth. There might be other reasons, too. The President last night, I think it was last night, remarked that $1.2 trillion is an area of debt where you are starting to get into prepayment penalties and other areas that would be economically negative from the point of view of the United States Government. Mr. Keisler who was formerly with the Treasury Department, commented on that and said, no, it is actually a lot less than that one way or another.

My question is how low is too low? I don't have a problem with the fact that maybe some debt still needs to be there. But what is the measuring device for that and what should we look at if you don't want to name a particular number?

Mr. GREENSPAN. I don't think the issue is that we need the debt there. Indeed, one can very readily argue that riskless Treasury securities are a value in the marketplace and clearly attract a huge amount of investment, but they are readily substitutable with other types of securities, and so while obviously it would be slightly less efficient than the riskless securities, the great advantage of reducing the debt effectively to zero, in my judgment, would overcome that. The question that is being raised here is not the issue of desirability of keeping debt, but the impossibility of reducing it in a cost-effective manner in a rapid way. And what is happening here is that people are making different projections, I suspect, about whether we keep the 10-year and 30-year bond issuance going, because obviously if you do that, you arrive at a point where the unified budget surplus can no longer reduce the debt, that is what that number is. In other words, that is what you are endeavoring to find out, and that will depend to a large extent on your judgment about the ongoing savings bond program, the State and local non-marketable series program, the extent to which you continue to issue 10- and 30-year bonds which will still be outstanding at the point we reach the effect of zero debt requirement. You run into very different numbers depending on what type of assumptions you make.

Mr. CASTLE. Thank you, Mr. Chairman. Very briefly, because the time is running out, but the President last night indicated there should be—and we haven't seen the budget yet ourselves—a 4 percent growth in Government spending. This is obviously a contrast to what we have been spending in recent years. What are the economic benefits or non-benefits of reduced Government spending?

Mr. GREENSPAN. The question really gets down to the issue of Government spending as a claim on real resources in the economy. The basic arguments are fundamentally that to the extent that the Government positions itself in a manner to put claims on a substantial amount of private resources, the argument goes that private productivity slows, standards of living slow. This is an argument that goes back many decades, and I wouldn't say that there is a strong consensus on either side, but it is a major difference amongst economists. And as you know, I come out on the side of believing that the preemption of resources by Government is, in fact, a major factor in slowing down economic growth, and would argue therefore the less of it we do, the better. But I am the first to acknowledge that the evidence is very difficult to come by and that there are very significant differences of opinion amongst those analysts who review the data.

Chairman OXLEY. The gentleman's time has expired.

The gentleman from New York, Mr. Crowley.

Mr. CROWLEY. Mr. Chairman, thank you very much.

Mr. Chairman, welcome. Had this still been the Banking Committee, I would have been a new Member from New York, and Queens primarily, and let me welcome you here today as well. I just want to go back to something I know was talked about earlier and that is the concern I have about consumer confidence. Not that your picture is entirely blooming, but it is somewhat more rosier, I think, than the message that is coming out of the White House today about the economy. The course of the White House, in my opinion, would lead some or many people to believe that the picture isn't as rosy and that we may be heading toward a recession. I think the White House is playing to some degree with a very sharp instrument here; may be doing that in order to, I believe, create an atmosphere to sell this huge tax decrease.

My question, Mr. Chairman, to you is, what, if anything, can we be doing, aside from your testimony today, to ensure that consumer confidence doesn't decrease—for 5 straight months in a row, we know it has decreased. What can we do to bolster the confidence—and the concern I have that people's retirement accounts and the smaller people, not the big players, but the average mom and pop who have invested in the stock market now, but the average consumer is invested more now than ever before—what can we do to instill confidence in them that this economy, although maybe weakening, is not going into a downfall that we should be overly concerned about?

Mr. GREENSPAN. Well, the best thing to do is to try to give as an objective appraisal of what the economy is doing as we can. If you do that, then in my judgment you are consonant with reality and the facts will eventually emerge and create the type of confidence levels that as recently as 6 months ago pretty much were general throughout our economy at all income levels. The one thing

I know you can't do is try to spin the economy one way or the other. It doesn't work. And I must say to you, I know the people in the White House who are talking, and I can tell you that is their judgment. As far as I can judge, it is not a view that materialized when the tax cut issue came up. But each of us, I think, has got to tell it the way we see it, and I hope we will continue to do that, because there is really no alternative to doing that.

Mr. CROWLEY. Are you concerned about the rhetoric and what impact it may have on the economy?

Chairman GREENSPAN. We have an open system in which economists all over the country in all industries are saying what they believe and I think that is exceptionally helpful. There is a general set of views which are basically coming from informed people about the economy which are taken seriously. I don't think that there is very much more credibility that is given to say, economists in the Central Bank, economists in the White House, or economists in the private sector. So, if you get a broad enough group of people trying to evaluate the economy and coming to conclusions, I think you get the best judgment.

Mr. CROWLEY. I don't think I am average or maybe you agree or disagree that the common individual in this country would more than likely pay attention to what the White House is saying, more so than what any institution may be saying or economic institution may be saying.

Mr. GREENSPAN. I think that was true a number of years ago, but with cable television today, I would say, and the internet, the answer is probably no, judging from the——

Mr. CROWLEY. Forty percent of the country in 1935 was dying in poverty and that caused the coming about of Social Security. Today, Social Security is still the only means of income for 33 percent of the people in this country. So we really haven't come that far economically. Although I have a great deal of confidence in the ability of the media to transmit numerous teachings of economic theory, I am not sure that trickles down to just about everybody in the country.

Mr. GREENSPAN. Well you can take that up with the media. I have a conflict of interest.

Mr. CROWLEY. Thank you.

Chairman OXLEY. The gentleman's time has expired. Won't get into that.

The gentleman from New York, Mr. King.

Mr. KING. Chairman Greenspan, if I could just follow up on the point that was raised by Mr. Castle regarding the triggers. The concern that I would have with the trigger, in your testimony both before us and before the Senate, basically you have said that so many of the rules have changed. For instance, in your answer to Mr. Frank's question about whether or not there is a 6 or 9 month lead-in as to when a cut in rates would have an impact on the economy, you said maybe those numbers don't apply anymore. And I am just wondering, can we tie into a statute, if we are talking about the level of net debt outstanding, to determine whether or not there will be a tax increase or decrease, whether or not expenditures should be rising or falling? Should we be locking a future Government into that at this rate when we are not certain ourselves what these numbers mean, or we should we allow that to the free flow of congressional debate at that time?

Mr. GREENSPAN. I am merely responding to the fact that, say, 30 years ago, forecasts of the economy beyond 1 or 2 years in budgetmaking were really not required. We didn't have the large entitlement programs. We didn't have the large long-term structural changes with which we have to deal today. We have no choice but to make long-term forecasts. If you don't make them, you are implying them. The question is, can you make the best one you can? And the answer is, you can, but the best one you can make, of necessity, has got a very wide range of potential error. And the reason I raise the trigger issue is that you can still make these long-term forecasts, but if you are turning out to be significantly off, then the presumed damage, if one can use that term, is very significantly minimized by requiring various different tranches to spending and tax programs, making them contingent on some observed statistic such as, if the purpose is to reduce the net debt, what the net debt figure is before the next tranche goes along.

Let me say that there is no question that the down side of that is actually in making it more difficult for people to make long-term commitments, because you are making the tax cut or expenditure change contingent. But the alternative is to essentially lock into place a significant program which turns out to have in fact been based on assumptions which themselves turned out to be false.

If you put together a program and you have triggers, and the triggers are never activated, which essentially means if your forecast worked, aside from this loss of certainty which does inhibit certain types of forward actions, you are not very much different from where you were if you didn't have a trigger.

Mr. KING. Couldn't the argument be made, though, that as you are entering recession and the economy is slowing down, or the surplus is starting to vanish, that it is precisely at that moment that you would need a tax cut perhaps for another year or two or whatever to get the economy going and keep the economy from sinking further?

Mr. GREENSPAN. There is nothing to prevent the Congress at that point from doing that. In other words, it may very well be that the level of net debt is higher than the trigger and therefore the particular tranche of a tax cut may not come into place, but there is nothing to prevent the Congress at that particular point from enacting one.

Mr. KING. There would also be nothing to prevent the Congress from raising taxes if they felt it was necessary if we didn't have the trigger in there.

Mr. GREENSPAN. That is correct, and I think that you are dealing with an issue of how does one rationalize making long-term projections and long-term projects and minimize the extent of what happens if you are wrong. That is what a trigger does, and the Congress has got to make a judgment as to whether the advantages from the trigger offset the negative elements with respect to a trigger.

Mr. KING. Thank you for your answer and for your sufferance.

Chairman OXLEY. The gentleman's time has expired.

The Chair recognizes the gentleman from California, Mr. Sherman.

Mr. SHERMAN. Thank you, Mr. Chairman.

Chairman Greenspan, we are thrilled to have you with us this morning. The only thing that would thrill us more is if you had spent this morning with the FOMC in some extraordinary meeting perhaps, and I want to assure you that if you ever need to cancel an appearance before this committee to cut interest rates half a point we would understand.

Chairman OXLEY. Not so fast.

Mr. SHERMAN. Many of us would understand. There is talk in this committee about the terrible worry that we will pay off the entire national debt or all of it that comes due. One of my bachelor friends is worried that Kate Moss and Julia Roberts would arrive at his home simultaneously. We should all have such worries. But I would point out that one of the techniques that is used by corporations when they have debt they would like to pay off but can be paid off only at a premium is a trust fund, or "defeasance" I think is the term.

And this is my main question, but perhaps your staff could comment in writing, whether should there be bonds, Treasury bonds that we want to pay off, whether it would be appropriate to simply buy AAA-rated corporate bonds of equal maturity, use one to pay the other.

> [Chairman Greenspan subsequently submitted the following response for inclusion in the record:
>
> [Private borrowers typically defease debt in order to remove it from their balance sheets, which may help them gain access to credit on more favorable terms. The U.S. Treasury, of course, already can borrow on very favorable terms, because the long-term health of the U.S. economy and the strengths of its political system provide investors with an extremely high level of assurance that the Federal Government will have sufficient revenues to repay its debt obligations. Thus, defeasing its debt is unlikely to improve the terms on which the Treasury can borrow. Moreover, as you know, I am deeply concerned about the potential for distorting financial markets if the Federal Government were to become a major investor in private assets. Although accumulating private assets would have the advantage of allowing Federal surpluses to continue for longer, thus helping to buoy national saving, I believe it would be virtually impossible to shield investments by the Treasury's general fund from political influence, and the resulting override of the market's allocation of credit would lead to financial and economic inefficiencies.]

I want to thank you for your answer to Mrs. Roukema's question where she brought up the idea of banks getting involved in real estate brokerage, and you indicated that you have extended the comment period. So I figured I would comment, and that is to say that at least many of us on this committee, when we voted to massively expand the activities that banks could engage in, did not anticipate that they would get involved in activities outside dealing with securities, investments and intangibles, but would instead become brokers for the quintessential opposite of intangible property, namely, real property.

But I want to turn our attention to the trade deficit and the current account deficit which is now running roughly a third of a trillion dollars a year and with no end in sight. And I would like to know how confident you are that we could continue to run merchandise, trade deficits of over $300 billion a year, run current account deficits of roughly the same number, because various other things, services on the one hand, but transfer payments on the other, canceling themselves out, the deficits are roughly equal. How confident are you that we could sustain another decade of quarter trillion dollar deficits in these areas without the dollar crashing within a decade or without some other major disruption in the international economy? Can we continue to enjoy the short-term benefit of the world sending us a third of a trillion dollars more stuff than we produce and send to them? Can we continue to enjoy that for 10 or 15 years without worry of this kind of calamity?

Mr. GREENSPAN. Only if the rest of the world invests a third of a trillion dollars annually in our economy, because clearly all current account deficits must be financed. And the fact that the flows to a large extent from Europe have continued and the fact that the exchange rates for the dollar have been fairly firm in the last year or two is suggestive of the fact that, if anything, the propensity to invest in the United States is greater than our propensity to import net on balance.

Now, that is unlikely to be capable of being continued, basically because, as I indicated before, the investments in the United States presuppose service payments to the owners of various assets which are purchased here and the net debt, or, more exactly, the net claims that foreigners have on us and hence the net payments to service those claims get us into a very awkward position where those payments themselves are added to the current account deficit, which makes it even greater, which makes the rate of change in the external claims accelerate. Clearly, that cannot go on indefinitely. At some point it must come to an end.

I said almost precisely those words 5 years ago and I have no way of knowing how long this will continue on, but I am acutely aware of the fact that we are running up against a longer-term trend which must eventually reverse. When it is we do not know. There has been no evidence, I must say, at the moment or recently, to suggest that it is imminent, but at some point, I agree with you, it cannot continue.

Chairman OXLEY. The gentleman's time has expired.

The gentlelady from New York, Mrs. Kelly.

Mrs. KELLY. Thank you, Mr. Chairman.

Mr. Greenspan, thank you very much for your patience. We appreciate having you before the committee today.

Next month, this committee is going to consider legislation to allow businesses to receive interest on their checking accounts. I would like to kind of reestablish my understanding of your thinking on this issue as we go forward. I wonder if you would be willing to give me some brief responses to three questions.

Do you continue to strongly support legislation that allows the Fed to pay interest on the Reserve banks' deposits at the Fed?

Mr. GREENSPAN. We do, Congresswoman, very much so.

Mrs. KELLY. Should the legislation allowing the Fed to pay interest be combined with legislation to allow banks to pay interest on their business checking accounts?

Mr. GREENSPAN. Yes. We believe that ideally those two issues should be joined and passed at the same time.

Mrs. KELLY. Thank you.

What is your current thinking on the language that I have proposed which allows the Fed greater flexibility in lowering the reserve requirements?

Mr. GREENSPAN. We have no intention at this particular stage, at least as far as I can judge from speaking to my colleagues, to change reserve requirements, but it certainly would have certain advantages to have a degree of flexibility, should we need to at any particular point.

Mrs. KELLY. Perhaps we can enter into a further dialogue on that. I would appreciate that.

Mr. GREENSPAN. Let me put it this way. We are supportive of your legislation.

Mrs. KELLY. You are?

Mr. GREENSPAN. Yes.

Ms. KELLY. I would like to talk with you just quickly about the Federal debt.

With the recent budget surplus projections, this year, it looks like paying it down could really be an obtainable goal. So given that the financial markets use Government securities as a benchmark to price all other corporate debt, does this large and liquid Government debt market have an irreplaceable function in the financial markets? Should we be a target size for the debt—should there be?

Mr. GREENSPAN. I do not think it is irreplaceable. It has been extraordinarily invaluable to have it as a benchmark, but the advantages of paying down the debt, in my judgment, are far more important than the loss of the benchmark, which could very readily be replaced. Indeed, whether it is a swap market or whether it is other various different types of private issues, is not all that important.

What I am reasonably certain will happen, if indeed we reduce the debt to negligible levels, is that the private markets will create new benchmarks, create new securities essentially, to replace what the Treasury market has effectively given us. Indeed, we at the Federal Reserve, holders of in excess of half a trillion dollars of U.S. Treasury instruments, are going through very significant evaluations of how we would implement open market policy without a Treasury market. It is a little more difficult, but clearly it is something we can do.

Mrs. KELLY. Thank you very much.

I yield back the balance of my time.

Chairman OXLEY. The gentlelady yields back.

The gentleman from Kansas, Mr. Moore.

Mr. MOORE. Thank you, Mr. Chairman.

Mr. Chairman, I am pleased to see you here again today. You have previously testified, today and I think in other instances in the past, that long-range forecasts, 5 and 10 years, are at best speculative; is that correct?

Mr. GREENSPAN. That is correct.

Mr. MOORE. Probably the further we go out, the more speculative those forecasts become. Would that be correct, sir?

Mr. GREENSPAN. Yes, sir.

Mr. MOORE. During the Senate Budget Committee testimony, I believe you indicated that debt reduction was still a priority for you.

Mr. GREENSPAN. Correct.

Mr. MOORE. In terms of priorities, would it be fair to say, that is your first priority, sir?

Mr. GREENSPAN. It would be.

Mr. MOORE. You also acknowledged or stated during your Senate Budget Committee testimony, that you believe now, based upon these forecasts, that we could do or afford a tax cut; is that correct, sir?

Mr. GREENSPAN. What I said is that with the size of the presumed unified budget surpluses, when we get to, in effect, de minimis debt, or zero debt, depending on how you want to look at it, there is no alternative but accumulating private assets in the Federal Government, an issue which causes me great concern, and I believe requires a great deal of evaluation. That, incidentally, is an issue I will be discussing at the House Budget Committee on Friday.

Mr. MOORE. OK. Then am I to understand what you just said to mean that until such time as there is a paydown of this national debt that we should not have tax cuts? Or am I misunderstanding what you are saying, sir?

Mr. GREENSPAN. No, I am basically saying that indeed one of the problems that I raised with the Senate Budget Committee is that if you believe these productivity numbers will continue to emerge and you believe, say, the Congressional Budget Office or OMB's forecast, we end up in the year 2005 or 2006 with a $500 billion annual unified budget surplus.

If, at that point, you want to restrict the accumulation of assets, the only private assets in Government, the only way to do that is to very rapidly eliminate the surplus, which can be done only by decreasing taxes or increasing expenditures, and I raise the issue that a $500 billion very rapid fiscal stimulus, which is exactly what would happen under those conditions, may be wholly inappropriate for what the economy is doing at that time; at which point I argued that we should direct both expenditure policy and tax policy in a manner to bring that unified budget surplus down to more credible levels prior to 2005 or 2006, which led me to conclude that in order to avoid that potential contingency, initiatives would be best implemented sooner rather than later.

Mr. MOORE. But at this point, we are still a few years away, wouldn't you agree, from zero public debt?

Mr. GREENSPAN. We are a few years away, but not that many. In other words, both the OMB in the previous Administration and CBO indicated in the fiscal year 2006 that we would start to accumulate private assets, and in my judgment, not only must we evaluate exactly what type of assets and what type of programs you would want, but also we need to make certain that the fiscal policies that are implicit in that are not disruptive to the economy.

Mr. MOORE. And you have stated here this morning that you did not endorse any particular tax cut, and there are several out there, correct?

Mr. GREENSPAN. That is correct.

Mr. MOORE. Would you agree that if there are several different uses we could make of this projected surplus over the next several years, such as tax cuts, debt reduction and some national priorities, which some may consider a political priority—and even the President last night suggested we need some new spending in the areas of education, national defense and prescription drugs, you heard that, sir?

Mr. GREENSPAN. I did.

Mr. MOORE. All right. Would it be more advisable—and I am not asking you to tell Congress what to do here, because I understand you want to stay out of the political arena—but would it be advisable to take a balanced approach here and do some debt reduction? Because I happen to agree with your first priority, and that is paying down our national debt, as well as some tax cuts in moderation, and then some of these political new initiatives which are probably going to happen on a bipartisan basis.

Chairman OXLEY. The gentleman's time has expired.

Mr. GREENSPAN. I do believe it is the Congress which has to make those judgments. They are, at root, "political," in the proper sense of the word, decisions that only the Congress and the Administration can make or should make.

Chairman OXLEY. The gentleman from Texas, Mr. Paul.

Mr. PAUL. Thank you.

Welcome, Mr. Chairman. In the last few weeks, you have received a fair amount of criticism and suggestions about what to do with interest rates and the economy, and I think that is going to continue, because I suspect that we are moving into what you call—you do not call it a "recession," but a "retrenchment." I guess that may be a new word.

But anyway, there will be a lot of suggestions as to what you should do, and I do not want to presume to make a suggestion, what interest rates should be, but I would like to address more the system that you have been asked to manage, because in many ways I think it is an unmanageable system, and yet it is key to what is happening in our economy. We have a system that you operate where you are continuously asked to lower interest rates.

I would like to remind my colleagues and everybody else that when you are asked to lower interest rates, you are asked in reality to expand the money supply, because you have to go out and buy something. You buy debt. So every time somebody says, "lower the interest rates," they say "inflate the money supply." I think that is important.

You had a little conversation before about the money supply, and conceded it is important, but you admit you don't even know what a good proxy is, so it is very difficult to talk about the money supply. I am disappointed that we don't concentrate on that, talk about it more, even to the point now that we are—that you no longer make projections. I think this is admission almost of defeat.

There is no requirement for you to say, well, we are going to expand the money supply at a precise rate, so we are past that point of a tradition that has existed for a long time. But I think it is an unmanageable system and it leads to bad ideas and bad consequences, because we concentrate on prices, which is a consequence of the inflation of the money supply. Therefore, if a PPI is satisfactory, we neglect the fact that the money supply is surging, and doing a lot of mischief. Therefore we say, "Well, maybe if we just slow up the economy. If we slow up the economy, it is going to take care of the inflation."

I think we are really missing the point. You did mention a couple of words in your testimony today that I thought were important acknowledging that there are problems in the economy that we have to address. You talked about "excesses" and "imbalances" and the need for "retrenchment."

I believe what is important is that we connect the excesses and the imbalances to the policy that you operate, because I think that is key. Instead of being reassured that the PPI is OK, if we would have looked at the excesses, maybe there would have been an indication that there was a problem in the overspeculation in the stock market.

But here we have a monetary system that creates a speculation where NASDAQ goes to 5,000, and then we have a lot of analysts telling us it is a good buy, yet you now are citing the analysts as saying there is going to be a lot of growth. I am not sure which analyst you are quoting, but I am not sure that would be all that reassuring. But I think we should really talk about the money supply and what we are doing.

In 1996, you expressed a concern about "irrational exuberance in the stock market," and I think that was very justified. But since that time, the money supply measured by M3 went up $2.25 trillion. The stock market, of course, has soared. I see the imbalances as a consequence of excessive credit. The system has defects in it.

You are expected to know what the proper interest rate is. I don't think you can know it, or the Federal Reserve can know. I think only the market can dictate the proper interest rate. I don't think you know what the proper money supply is. You admit you don't even have a good proxy for measuring the money supply. Yet that is your job, and yet all we ever hear is people coming and saying, "Mr. Greenspan, if you want to avert a downturn, if you want to save us, just print more money." That is essentially what this system is doing.

Now, the one question I have, quickly, is your plan that you mentioned in the Senate about using other securities like State bonds and foreign bonds, and others in order for you to buy more debt to monetize. I think it is ironic with a $5.7 trillion national debt, we are running out of things to buy.

Mr. GREENSPAN. Just remember that of that $5.7 trillion, a very large part is held in trust funds of the United States Government, so that the net debt is really $3.5 trillion, of which the Federal Reserve owns more than $500 billion.

Mr. PAUL. Could it be an advantage to make some of that marketable, rather than going out and buying municipal bonds, foreign debtor-state bonds?

Mr. GREENSPAN. No, because—I don't want to get into the accounting processes here, but if you are dealing with a unified budget accounting system, all of that debt is intragovernmental transfers and essentially is a wash. You have to have external securities to affect the economy.

What we were discussing in the remarks with respect to what the Federal Reserve is looking at is what type of securities we could use for so-called "repurchase agreements" which are collateralized. In other words, when we engage in an open market operation through a repurchase agreement, what we have now is Federal Government securities as collateral. The question is, if we don't have them, what other kinds of collateral would we use? We are therefore talking about, for example, State and local securities.

But the crucial issue there is that to the extent that we use securities which are more risky than the Federal Government's, we basically just take more collateral to offset that. So we can maintain the same degree of risk. And what we are trying to evaluate is various different types of securities which we can employ solely for the purpose of protecting the transaction from default.

Chairman OXLEY. The gentleman's time has expired.

The Chair recognizes the gentleman from Texas, Mr. Hinojosa.

Mr. HINOJOSA. Thank you, Mr. Chairman.

Mr. Chairman, thank you for sharing your knowledge with us. I would be interested in hearing more from you on the issue of unemployment. Despite the last few years of economic growth, my Texas Congressional District has been unable to reduce its unemployment rate to less than 12 percent. The current slowdown has jumped it upward to 14 percent, and I fear it will go even higher.

The national rate of unemployment now stands at about 4.2 percent, after having dipped as low as 3.9 percent. Just a few years ago we heard consistently from economists that we could not expect unemployment to fall below 5.5 or 6 percent without igniting inflation.

You, Mr. Greenspan, and others, have acknowledged more recently that the economy appears to be able to tolerate lower levels of unemployment. This is certainly good news for those of us who represent districts containing persistent unemployment.

What weight does the Federal Reserve give to unemployment figures when deciding monetary policy? Can monetary policy lower unemployment and should that be one of its goals?

I personally wonder if you see any peril in rising unemployment, given the tremendous amount of job growth during the past decade.

Finally, can you describe any groups of workers who are particularly at risk of being laid off in the current economic slowdown?

Mr. GREENSPAN. As I have indicated on occasions in the past, Congressman, I think the general focus in the broadest sense of all economic policy—Federal Reserve and fiscal policy—should be to find that particular set of policies which maximize sustainable long-term growth in the economy, which of necessity means maximizing real incomes and maximizing employment.

The means that what we all are seeking is not altogether self-evident at all times. The issue that you raise is an issue that economists have struggled with for a good long period of time, that is, how low can you get the unemployment rate and still maintain a sustainable long-term maximum economic growth. And you are quite right; the academic fraternity was largely arguing 5 percent, and sometimes higher than that, as recently as a decade ago or even less than that. There are still a number of economists that argue that the equilibrium, if I may put it that way, unemployment rate that which is consonant with long-term maximum sustainable growth, is still 5 percent.

I personally believe it is lower, as I have testified previously, but it is a crucial statistic which all of us deal with, and we hope that the changes that have occurred in the economy, the technological changes, the productivity changes and, more importantly, the flexibility of the labor market, have enabled us to basically maintain long-term economic growth at a lower unemployment rate than we had in the past.

Mr. HINOJOSA. Mr. Chairman, I yield back the rest of my time.

Chairman OXLEY. Thank you.

The gentleman from Alabama, Mr. Riley.

Mr. RILEY. Thank you, Mr. Chairman.

Welcome, Mr. Chairman. Mr. Chairman, when I left the office this morning, I picked up this off of my desk from *Congress Daily.* “Trade Deficit Hits New High.” The Nation’s trade deficit with the rest of the world climbed to an all-time high of $369 billion, up 39.5 percent higher than the previous records of $265 billion. China now has taken over Japan as our country with the largest imbalance of $83 billion. Japan, which was up 22 percent last year. Japan rose another 10 percent.

But when we are having these type of numbers, when we are having a 40 percent increase in the trade deficit, I know you answered earlier that it is of a concern, but when does it become alarming?

Mr. GREENSPAN. It doesn’t become alarming in any sense. In other words, the way I put it previously, clearly it is a function of the extent to which there are perceived long-term rates of return on investment in the United States, and to a very large extent, it is the technology acceleration which I have discussed earlier which is at the root, in certain respects, of this trade deficit which we now have.

Mr. RILEY. Excuse me, but are you talking about the technology advances in other countries, or in ours?

Mr. GREENSPAN. In ours. In the sense that, as I indicated before, if your exchange rate is rising, it is basically suggesting that there is a greater demand for investment in your country than in other countries. And the result of that is that the only way to engender a very significant current account deficit, which is the other side of a capital account surplus of investment coming into the United States, is to have a trade deficit. In other words—I don’t want to get into the technicalities of it—but to a large extent, our trade deficit is being financed basically by the desire on the part of foreigners to invest in the United States, and the reason is quite apparently the extent of the technological advances which we have created and the very high rates of return on investment which we have relative to other countries.

Now, that can't go on indefinitely, and at some point it is going to change.

Mr. RILEY. Let me ask you this, sir. Could you compare where we are today with this record imbalance to where we were 10 years ago?

Mr. GREENSPAN. Well, 10 years ago, you may recall, we actually had a current account surplus—literally 10 years ago—part of which was payments that we received as a result of our assistance in the Gulf War. But in any event, it was quite low, even adjusting for that. And there has been a major increase in the current account deficit and in the trade deficit and in the extent of investment in the United States.

Those trends, as best I can judge, cannot continue indefinitely.

Mr. RILEY. Let me ask you one final question, if I can. What impact, if any, would a tax cut at this time, what effect would it have on future trade deficits?

Mr. GREENSPAN. Well, the usual way that question is asked is to what extent would a reduction in the unified budget surplus, or, more exactly, Government savings, have on the savings we borrow from abroad? The presumption is that if we have less savings in Government, we have to borrow more from abroad. But that is a static view of the way the world works, and I think a more dynamic view really gets to the question of whether or not, say, a tax cut enhances productivity in the economy, increases the rate of return, and essentially induces an offset to the loss of savings from Government. I don't want to get into the complexity of this, or we will be here all morning.

Chairman OXLEY. The gentleman's time has expired.

The gentleman from Tennessee, Mr. Ford.

Mr. FORD. Mr. Chairman, if you want to finish 30 seconds, that answer with Mr. Riley, I would be happy to yield.

Mr. GREENSPAN. I would just say if you would like for me to answer you in more detail, send me a letter and I will be glad to respond to it.

Mr. RILEY. I appreciate the gentleman from Tennessee. The only thing I would like to know, as far as incentivizing small businesses, especially with so many people using sub S corporations today, would a tax cut eventually help our productivity to the point it would help offset some of the trade imbalances?

Mr. GREENSPAN. It might. But there are so many other elements involved in that equation, I would hesitate to give you an unqualified answer.

Mr. FORD. Mr. Chairman, my name is Harold Ford, I am from Tennessee. I thank you again, as all my colleagues thank you for being here.

Mr. GREENSPAN. I know you well.

Mr. FORD. My question is a simple one. My State is experiencing a significant sort of revenue shortfall, as are several States throughout the South, and one of the challenges that I am having as we, the congressional delegation, prepares to meet with our Governor on Monday, is trying to reconcile these enormous surplus projections that are coming from the Congressional Budget Office with the reality of what is happening in States all across the Nation, particularly southern States, even the State of our current President, which is also facing a revenue challenge.

What I can't seem to understand is, I would have to think that these States have experienced some prosperity and growth over the last 8 years. At least those are the numbers I saw and the numbers that the former Administration disseminated. How do you reconcile the two, these huge budget surplus projections with the realities of the States trying to take care of Medicaid programs, education challenges at the lower and higher levels?

It is hard for me to figure out, particularly when I go home and people are craving for the tax cuts, as all of us are. I liken it to, I don't know, of a business in America that would give out Christmas bonuses for 2002, 2003, 2004, 2005, all the way to 2012, on February 28 of 2000, based on projections of how well they think they are going to do over the next 21 years.

That being said, I would love to hear your response to the first one, to the extent you might be able to answer that.

Mr. GREENSPAN. Well, Congressman, as you know, there have been significant improvements in State fiscal accounts over the last 5, 6, 7 years. There has been an erosion of revenues recently and a goodly part of that I suspect is essentially sales tax and other types of revenues which are not exactly matched on the Federal side. But without looking at the individual details within each State, it is very difficult to generalize on this.

I remember a significant amount of the income tax that States have, which is a significant part of their revenue obviously, are often really coming off the Federal income tax form, and therefore almost directly relate to the same adjusted gross incomes that people report for the Federal returns.

The difference, I suspect, is that there have been a lot of tax cuts in numbers of the States where that has not been the case comparably within the Federal Government. But also you look at the individual accounts, it is very tough to make a generalization.

Mr. FORD. I would agree. But ironically, this Administration suggested at one point that the tax cut was an insurance policy against a recession. In another breath, the President said last night he was here on behalf of the American people to ask for a refund. I know Treasury Secretary O'Neill has taken a different position from the President at different times.

Let's just assume the White House and the Administration is working from the same hymnal, and they believe we will have a combination, a refund and they ought to look at stimulating the economy.

If many of these States are experiencing this shortfall because of a tax cut that then-Governors of these States and current Governors suggested would produce increases in productivity, would help us close the trade deficit gap, all of these wonderful things, and it is not occurring—as a 30-year-old, I have to pay most of this debt back, my generation does, if this stuff doesn't pan out like some of my friends in the Congress, and even the Administration, are suggesting.

So I guess my question to you is, as much as you haven't taken a look at some of these individual States, I hope maybe I can write at some point and you and your staff may have a opportunity to take a look. It would be different if it was just one State or an anomaly in two or three States. But you are finding States all across the Nation, particularly in my part of the country, that are experiencing difficulties and challenges that we here at the Federal level, our numbers don't seem to reflect at all. Maybe they do, and I just don't understand how losses over here produce huge projected gains on the other side of the equation.

Chairman OXLEY. The gentleman's time has expired.

Mr. GREENSPAN. We will be glad to respond to your question.

> [Chairman Greenspan subsequently submitted the following response for inclusion in the record:
>
> [As I indicated at the hearing, there were significant improvements in State budget positions throughout much of the mid to late 1990s, though the fiscal position of a number of States appears to have eroded in recent months. There are two factors that have contributed to an erosion of State revenues that have not affected the Federal Government to the same extent. First, much of the weakness in State revenues that has been identified so far has come from sales and excise taxes, which make up almost half of State revenue from taxes and fees. So, weakness in the revenue source can create a noticeable problem for many State governments. By contrast, only about 5 percent of Federal Government revenue is derived from these sorts of taxes. Also, about 40 percent of State taxes come from individual and corporate income taxes compared with around 60 percent of Federal tax receipts. Second, the States, as a group, have cut taxes, on net, in every year from 1995 to 2000. While most of the reductions were fairly small, some States reduced taxes more than once, and, on balance, several years of reductions turned out to be quite significant for the States. The National Conference of State Legislatures has estimated that the reductions sum to almost 8 percent of collections over the 1995 to 2000 period. By comparison, the cut in Federal Taxes in 1997 was only about 1¼ percent of revenues.]

Chairman OXLEY. The Chair would observe that we have 5 votes on the floor of the House, and it would be the Chair's obligation to recognize Mrs. Biggert as our final questioner, and then we will proceed to adjourn, respect the Chairman's schedule, and also the fact this will probably take about 40 minutes on the floor.

Let me recognize the gentlelady from Illinois, Mrs. Biggert.

Mrs. BIGGERT. Thank you. I will be very brief, because we do have the votes shortly.

Just how does the savings issue fit in to the issue of tax relief? I think the last time you were here, and it was a time when the high-tech industry equities were doing very well, and you said at that time you had some concern, if not opposed to tax cuts, because the Americans were not saving enough and had no savings and didn't create then capital formation. But now that doesn't seem to be the case. Is that true?

Mr. GREENSPAN. Well, as you may recall, earlier on, even though the official savings that we report from the Department of Commerce out of income were very low and indeed currently are negative, the average household didn't view that as representative of what they themselves felt they were doing, because they had 401(k)s or the equivalent, and as far as they were concerned, they may have been registered as a negative saver by the Department of Commerce, but the accumulation of assets which they had clearly suggested otherwise.

As a consequence of that, the general view that of the United States as being a low saving country was not effectively supported by the average person.

That is going to change with the lower values of stock prices and as net household wealth declines, and how that has evolved or how that affects savings out of income to offset it, is going to be a very important issue with respect to how the economy evolves.

Chairman OXLEY. The gentlelady's time has expired.

Mr. Chairman, again thank you for your appearance before this committee. We always appreciate your courtesy and your excellent testimony. The hearing stands adjourned.

[Whereupon, at 12 noon, the hearing was adjourned.]

A P P E N D I X

February 28, 2001

Opening Statement
Chairman Michael G. Oxley
House Committee on Financial Services
Domestic Monetary Policy Testimony by Fed Chairman Alan Greenspan
February 28, 2001

Good morning. Chairman Greenspan, Members and guests, welcome to the first working hearing of the new Committee on Financial Services.

I can't think of a better witness for our first hearing. Today, we'll receive testimony from the "maestro" himself, Chairman of the Federal Reserve's Board of Governors, Alan Greenspan. Welcome Chairman Greenspan.

This committee reflects the new financial and monetary architecture created by Gramm-Leach-Bliley. Our jurisdiction stretches across domestic and international monetary policy, banking, housing, securities, and insurance, among other issues – frankly, the jurisdiction IS the economy. Chairman Greenspan's semi-annual report to Congress on the state of the economy and on monetary policy – especially in view of the sluggishness that infected the economy in the latter half of last year – is an important and fitting place to start.

Chairman Greenspan already fulfilled his legislative obligation when he appeared before the Senate two weeks ago. He's here today of his own free will and is graciously allowing us to pepper him with questions. Thank you for your time, Chairman Greenspan. We're anxious to see if you're going to commit news today.

We now have had two quarters of very slow growth, and industrial production has declined for each of the past four months. The U.S. economy entered a period of slowdown in the middle of last summer. Chairman Greenspan, you noted the early signs in your last report to Congress in July. In the fourth quarter, markets slid, inventories grew, and consumer confidence wavered. High energy prices were aggravated by low winter temperatures.

Also, we are mindful of economic woes in Japan, strife in Indonesia, and economic chaos in our important strategic partner, Turkey.

Mr. Chairman, perhaps you can shed some light on the "alphabet" debate, whether we can look for a slowdown and recovery that is V-shaped, U-shaped, or W-shaped. //Republicans are partial to the letter "W," but we'd much prefer a V-shaped recovery.

The bears are out in force, and yet we have so many reasons for optimism. Chairman Greenspan, in addition to your superb stewardship of economic and monetary policy, we have a new President with a simple but profound vision to return part of the surplus to the people who earned it.

This Committee will do its part by working to eliminate the hidden taxes that

American investors overpay in SEC fees. This represents billions of dollars that ought to stay in pension funds rather than going into government coffers.

Supported by your strong testimony before the Senate, the overall debate now centers over how much of a tax cut to grant, not whether one is necessary. Also, you gave Congress a good talking-to about the wise use of our hard-won surplus.

President Bush has heeded your counsel, telling Congress last night that he wants to pay down all of the available debt as it comes due.

We are fortunate to have a system where both monetary and fiscal policy tools can be used to encourage recovery. I know the Committee is looking forward to your assessment of the inflation risk that could constrain the Fed. We'd appreciate your insights about the relationship between monetary policy and consumer and business confidence, and how quickly a monetary policy action could result in economic stimulation.

Some contend that the Fed can handle the downturn by easing the Federal funds rate, with the two recent moves and further cuts as necessary. Others, including the President and me, argue that interventions are important, but that short- and long-term tax relief will strengthen the economy and continue growth. As the President told us last night, we can return some of the recent budget surplus to taxpayers, while still budgeting for responsible spending that takes care of the nation's needs.

We must take the long view and see the silver lining in the cloud. Part of the reason for the speed of the slowdown was the underlying strength of our economy. Often, the more sudden the storm the more quickly it passes.

I look forward to your testimony, Chairman Greenspan, and recognize Mr. LaFalce for his opening statement.

Wm. Lacy Clay

STATEMENT OF HONORABLE WM. LACY CLAY
COMMITTEE ON FINANCIAL SERVICES
FEBRUARY 28, 2001

Mr. Chairman. As a freshman member of Congress I am very happy to have been given an opportunity to serve on the newly reorganized Financial Services Committee. This is my first hearing and I am most interested in hearing Chairman Greenspan's remarks on the economic issues shaping our future.

The importance of sound, effective Federal Reserve Board policy is invaluable. For the first time in generations, Americans have enjoyed a long period of sustained economic growth and prosperity under President Clinton's administration. I am deeply concerned about the growing signs of a softening economy and most anxious to lend my support to those budget, tax and monetary policies that will ensure the current economic slow down is short lived. It is in the mutual interest of business and working Americans that we implement fiscal policies that promote real growth and economic stability. Most of our nation's working families were just beginning to feel the bona fide benefits of full employment and economic prosperity when the economy began experiencing a slow down. It is now imperative to make certain that the weakening economy does not spiral out of control and become a long term economic recession.

While many economists may make forecasts; it is simply impossible to know the future. I am hopeful that Chairman Greenspan's analysis of the past economic performance will help to enlighten us as we work to enact those tax and budget polices that will keep us to the path of genuine prosperity.

Congressman Joseph Crowley
Committee on Financial Services
Humphrey-Hawkins Remarks
February 28, 2001

Good Morning Mr. Chairman

While everyone here is a new Member of this Committee, I am one of the newest additions to this new Committee

I welcome you today and very much look forward to hearing your testimony

Our nation is at a critical juncture. While America has enjoyed the greatest economic expansion in our history over the past eight years, we now have a new President and a new economic horizon

A horizon that is neither as bright nor picturesque as our people have enjoyed over the past eight years, but one of uncertainty and doubt. Not since the last recession in the United States of the early 1990's have your words and actions - and the monetary decisions made by the Federal Reserve Bank - been more important to the state of our aggregate economy and the quality of life of our constituents

We have seen industrial production decrease over the last four quarters - an ominous statistic our nation has not witnessed since the recession of the early 1990's

Last week, the government reported a sharp increase in inflation - something that has been virtually non-existent over the previous eight years

Unemployment has risen from a historic peacetime rate of 3.9% to 4.2% -- still extremely low but a troubling sign that it is increasing, not decreasing

Similarly, while unemployment is going up, consumer confidence is plummeting

The American people are continuing to lose confidence in the economy. Reviewing data reported yesterday, Americans displayed more pessimism than they had in well over four years. Specifically, after taking its biggest single-month plunge ever in January, consumer confidence fell in February for the fifth straight month and touched its lowest level since June 1996, according to the Conference Board, the New York research group that maintains the Consumer Confidence Index.

One prominent economist, Ian C. Shepherdson, chief domestic economist at High Frequency Economics told the New York Times on February 27, that these signs demonstrate that it will be "very difficult to avoid recession."

Most signs in our economy are not pointing in the same direction that have during the previous Administration, when our nation boomed economically.

Our nation is used to job creation not job loss. I am concerned as the representative of a working and middle class district in Queens and the Bronx, a district dotted with small industrial companies, mom&pop businesses and service industries that the first jobs to be lost are in places like Jackson Heights or Parkchester in my District

Our nation expects a decrease in the rate of poverty - not increases. New York City has ridden the rollercoaster of economic growth of the last decade. I worry about the increase in poverty, especially among Hispanics and African Americans that have so strongly benefited over the past eight years, will return. It is places like Queens and the Bronx New York that suffer first, hardest and longest during recessions and economic downturns

Donald Trump went bankrupt during the last recession - and he got to keep his skyscrapers; when my constituents go bankrupt - they lose their homes and their neighbors suffer through higher interest rates at their local credit unions or banks and depressed real estate values

Our nation demands real increases in wage growth - not lay-offs, job losses and increasing rates of bankruptcy. But if this Administration continues its foolhardy course of essentially begging for a recession to enact his questionable tax cut -- a tax cut that will be of huge benefit to the New Yorkers of Manhattan and little benefit to the New Yorkers of Queens and the Bronx - lay-offs, job losses and increased personal bankruptcies will be the result

Congress and the President must work together, and with guidance from the Fed, to address these ominous economic signs before our nation plunges into recession

Unfortunately, I fear that the current Administration will squander the economic progress made over the past eight years - progress that eliminated the annual deficits, inflation and high unemployment. Both through a calculated attempt to weaken consumer confidence by questioning the stability of our economy and by providing risky tax cuts that will spend our entire nation's surplus, while at the same time as our nation's baby boomers begin to retire and call upon the social safety nets of Social Security and Medicare

Instead, I believe the economic priorities of the last Administration and of the Democrats in Congress are the right ones.

Our surplus is the people's money - it is not the government's money - there we all agree

Therefore, these funds should be used to benefit the people

That is why I support a budget strategy commonly referred to as 1/3, 1/3, 1/3 - where our country would use 1/3 of the surplus for tax cuts; 1/3 for debt reduction; and 1/3 for increased spending

I believe one-third of our surplus should be returned to the American people in the form of a tax cut. Not one like the President supports which would reward almost $1 trillion of his $2 trillion plan to the richest one percent of Americans --but a fair tax plan

I support and have voted for the elimination of the marriage penalty. Using one-third of our surplus, this is possible. Also possible with this money is providing families and small businesses estate tax relief

My district is covered from Long Island City, Queens to Throggs Neck in the Bronx with Mom&Pop establishments. Under current tax code laws, these people and their heirs suffer the greatest damage under the estate tax laws in current law

These people are not rich but hard working and it is these people that deserve and are entitled to tax relief. The IRS should not be taking away everything people have worked for when they die. Our nation should be encouraging - not discouraging - small business creation and entrepreneurship

We can also work to provide payroll tax relief, the fairest overall form of tax relief the Congress could offer

Another 1/3 of our surplus must be used to pay down our national debt. I have two young children, I do not want them and millions of other children to inherit a $3.5 trillion publicly held debt, because I would not provide any fiscal discipline

That is morally and economically wrong. The past 8 years America has borne witness to the wonders debt relief and deficit elimination will have on our nation's overall economy and growth rates - this is undisputed, regardless of what some of my Republican friends insist

If a family ran its budget like the Republicans want America to run its budget, we'd be in bankruptcy court, losing everything we worked for - we cannot let that happen

The other third, in my opinion, should be used for new spending. Just as the Chairman has stated before that his own political philosophy drives him to generally oppose new spending programs, my political philosophy drives me to support some spending programs that will better assist my constituents improve the quality of their lives

I support a prescription drug plan under Medicare as I have met seniors in my own district who ration their own medications because they cannot pay for their fair doses

I also support increased public investments in our nation's crumbling schools. I released a study just last work showing 97% of the school children in my district studying in overcrowded and antiquated classrooms.

I believe our children should be introduced to the Internet and computers at a young age

The Chairman has been fond to note that the internet economy has sparked much of our nation's boom, and the high technology of the last decade has greatly improved our nation's economic output and productivity levels, a reason why inflation has been virtually non-existent

We need an economic policy for all of America- not just the richest of America

I hope that the remarks of the Chairman today will better guide this Congress and the White House on the best course of action - that of paying our debts and eliminating the massive debts from our children, or squandering years of fiscal discipline so the richest 1% receive almost $1 trillion in tax cuts

I eagerly anticipate your testimony

Thank you

HOUSE COMMITTEE ON FINANCIAL SERVICES
HEARING ON CONDUCT OF MONETARY POLICY
FEBRUARY 28, 2001

OPENING STATEMENT OF CONG. BARNEY FRANK

The course of the economy in the past few months strongly argues that the Federal Reserve erred significantly in its interest rate increases last year.

The explanation given by some is that the Federal Reserve was simply removing from the economy the increased liquidity it had provided in response to the Asian financial crisis of 1998, but the facts contradict this.

In fact, the Federal Reserve's actions in 2000 left the Federal Funds rate and the Discount rate substantially higher than they had been before the Asian crisis. In September 1998, before the reaction to the Asian crisis, the Federal Funds rate was 5 ½ %. When the Federal Reserve finished its rounds of increases in May 2000, that rate was 6 ½ %. The figures for the Discount rate are 5% in 1998 and 6% in mid 2000.

By the Fed's own rule for calculating the impact of interest rate increases, the increases which put the rates above those which predated the Asian crisis had their full impact beginning with the fourth quarter of last year, and carried into the first quarter of this year.

According to Chairman Greenspan, the time it takes for the Fed rate changes to affect the economy fully is between 6 and 9 months. In February 2000, after three 1/4 point increases in 1999, the Fed funds rate was at the level it had been before the Fed reacted to the Asian crisis.

Then, in February, March and May 2000, the Fed raised that rate by a total of 100 basis points over the pre-Asian crisis rate. Fully half of that increase came in May 2000. By the Fed's rule for measuring the impact of rate increases, here is when these changes had their economic impact:

February 2, 2000, 1/4 % -- impact between August and November 2000.
March 21, 2000, 1/4 % -- impact between September and December 2000.
May 16, 2000, ½ % -- impact between November 2000 and February 2001.

That is, a full percentage point increase in the Federal Funds rate (and an equal amount in the discount rate) had maximum impact on the economy in a period centered in last year's fourth quarter. This quarter was, of course, also one of the weakest in recent economic memory.

The burden of proof at the very least is on the Fed to show that these last three increases were not an important factor in the economic slowdown which marked the fourth quarter and continues today. Note again, by the Fed's own measurement, the decreases of recent months will not be felt in the economy until the end of this year's second quarter, and will be having their impact in the second and third quarters.

Table 1. Interest Rate Changes: 1995-2001

	Federal Funds Rate[a]			Discount Rate		
Date	Before	Change	After	Before	Change	After
July 6, 1995	6	-¼	5¾	5¼	none	5¼
Dec. 19, 1995	5¾	-¼	5½	5¼	none	5¼
Jan. 31, 1996	5½	-¼	5¼	5¼	-¼	5
Mar. 25, 1997	5¼	+¼	5½	5	none	5
Sept. 29, 1998	5½	-¼	5¼	5	none	5
Oct. 15, 1998	5¼	-¼	5	5	-¼	4¾
Nov. 17, 1998	5	-¼	4¾	4¾	-¼	4½
June 30, 1999	4¾	+¼	5	4½	none	4½
Aug. 23, 1999	5	+¼	5¼	4½	+¼	4¾
Nov. 16, 1999	5¼	+¼	5½	4¾	+¼	5
Feb. 2, 2000	5½	+¼	5¾	5	+¼	5¼
Mar. 21, 2000	5¾	+¼	6	5 ¼	+¼	5½
May 16, 2000	6	+½	6½	5½	+½	6
Jan. 3, 2001	6½	-½	6	6	-½	5½
Jan. 31, 2001	6	-½	5½	5½	-½	5

Source: Federal Reserve System [a] Rates are approximate.

Opening Statement of Rep. Stephanie Tubbs Jones
Chairman Alan Greenspan's Testimony before the Committee on Financial Services
February 28, 2001

Good Morning, Chairman Oxley, Ranking Member LaFalce and Members of this Committee. Mr. Chairman, I ask unanimous consent that my full statement be included in the Record.

I wish to open my remarks by thanking Chairman Alan Greenspan for coming today. Indeed, in light of the projections of surpluses and tax plans, it is appropriate to hear from you today.

It is very important for the Committee on Financial Services to understand our role in understanding, legislating and regulating aspects of the financial services industry. We must not take our role too lightly because of the direct impact our actions have on the financial futures of industries and consumers.

I am challenged, however, Mr. Greenspan, by the large projected budget surpluses and the plethora of things listed for which this surplus will cover. My reality is that most projections often do not materialize, and thus, many key programs will not achieve priority status. I agree with the premise that it is easier to enact additional tax cuts and budget increases in coming years if the projections hold up or improve versus it becoming more difficult to enact tax increases or budget cuts in future years if the projections prove to have been too optimistic.

I have key concerns for my constituents who rely heavily on both Social Security and Medicare. I want to assure them that we will not mortgage our future for present gains to go to those who benefited greatly from the expansion of the last ten years. Moreover, when I see the Congressional Budget Office, Office of Management and Budget and other forecasts, we all know projection error and margins of error. The problem is exascerbated by the fact that the average range of uncertainty encompasses the possibility of noticeable deficits excluding Social Security and Medicare. I also realize that the Baby Boomer era moves closer and closer to retirement age, my question is, "Have we actually accounted for that great increase?" I do not believe we have.

Next, housing. I have read articles and economists mentioning that we have too much housing or that we have too many homeowners. Homeownership is critical in this nation. We know that from the founding of this nation, property and homeownership meant something. And it does today. Homeownership, often for minorities, is often their sole route to additional equity financing and or middle class status. It is also often the single financial instrument to be passed down from one generation to another. I hope that your testimony this morning does not hamper the spirit of homeownership that is producing new dreams for many Americans.

Taxes. Generally, I can support a tax cut. My problem, however, comes in when the rhetoric says it is across the board to reach those who need relief the most. Then, I read and realize that this "across the board" only goes but so far, definitely not to those who need it most—low to moderate income families, single parent mothers and and greater support for children. If relief it is to be provided to Americans, give it back via a payroll tax reduction.

We must, as a committee, work to find ways to continue sound capital markets and financial services. In the complex financial services arena, the issue over taxes, budget surpluses, homeownership and the state of the economy all go hand in hand. I hope that our approach is comprehensive and not rushed. Too much of our future is at stake.

I hope your testimony this morning provides this committee and the nation greater insight into budgetary plans and projections, surpluses or deficits, and ways of keeping this nation's growth intact. Again, thank you, Chairman Greenspan for your attendance and sharing your perspective with this committee.

Thank you again, Mr. Chairman, for bringing this hearing to this committee.

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

ALAN GREENSPAN
CHAIRMAN

March 26, 2001

The Honorable Charles A. Gonzalez
House of Representatives
Washington, D.C. 20515

Dear Congressman:

This letter is in response to your question following my testimony before the House Financial Services Committee. As you know, I believe that it is better for the federal budget surpluses to be lowered by tax cuts than by spending increases. As history illustrates, spending initiatives, particularly those that create open-ended commitments, most often end up costing far more than initially envisioned. By contrast, the revenue losses associated with tax reductions are not so uncertain, and have downside limits. Thus, if long-term financial stability is the criterion, tax cuts are far preferable to spending increases.

That said, there are, of course, certain spending programs that contribute to the nation's welfare and, when appropriately structured, enhance the long-term prospects for the security and well being of our economy. Certainly, the Congress would be wise to consider the long-term economic consequences when making spending decisions. But, at the end of the day, decisions about which spending programs to fund are inherently political in nature, and are best left up to the Congress.

Sincerely,

Statement of

Alan Greenspan

Chairman

Board of Governors of the Federal Reserve System

before the

Committee on Financial Services

United States House of Representatives

February 28, 2001

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

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

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

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

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

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

Against this background, the Federal Open Market Committee (FOMC) undertook a series of aggressive monetary policy steps. At its December meeting, the FOMC shifted its announced assessment of the balance of risks to express concern about economic weakness, which encouraged declines in market interest rates. Then on January 3, and again on January 31, the FOMC reduced its targeted federal funds rate 1/2 percentage point, to its current level of

5-1/2 percent. An essential precondition for this type of response was that underlying cost and price pressures remained subdued, so that our front-loaded actions were unlikely to jeopardize the stable, low inflation environment necessary to foster investment and advances in productivity.

With signs of softness still patently in evidence at the time of its January meeting, the FOMC retained its sense that downside risks predominate. The exceptional degree of slowing so evident toward the end of last year (perhaps in part the consequence of adverse weather) seemed less evident in January and February. Nonetheless, the economy appears to be on a track well below the productivity-enhanced rate of growth of its potential and, even after the policy actions we took in January, the risks continue skewed toward the economy's remaining on a path inconsistent with satisfactory economic performance.

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

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

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

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

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

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

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

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

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

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

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

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

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

For this reason, changes in consumer confidence will require close scrutiny in the period ahead, especially after the steep falloff of recent months. But for now, at least, the weakness in sales of motor vehicles and homes has been modest, suggesting that consumers have retained enough confidence to make longer-term commitments; and, as I pointed out earlier, expected earnings growth over the longer-run continues to be elevated. Obviously, if the forces contributing to long-term productivity growth remain intact, the degree of retrenchment will presumably be limited. In that event, prospects for high productivity growth should, with time, bolster both consumption and investment demand. Before long in this scenario, excess inventories would be run off to desired levels. Higher demand should also facilitate the working-off of a presumed excess capital stock, though, doubtless, at a more modest pace.

Still, as the FOMC noted in its last announcement, for the period ahead, downside risks predominate. In addition to the possibility of a break in confidence, we don't know how far the adjustment of the stocks of consumer durables and business capital equipment has come. Also, foreign economies appear to be slowing, which could damp demands for exports; and continued nervousness is evident in the behavior of participants in financial markets, keeping risk spreads relatively elevated.

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

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

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

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

In summary, then, although the sources of long-term strength of our economy remain in place, excesses built up in 1999 and early 2000 have engendered a retrenchment that has yet to run its full course. This retrenchment has been prompt, in part because new technologies have enabled businesses to respond more rapidly to emerging excesses. Accordingly, to foster financial conditions conducive to the economy's realizing its long-term strengths, the Federal Reserve has quickened the pace of adjustment of its policy.

Board of Governors of the Federal Reserve System

Monetary Policy Report to the Congress

Pursuant to section 2B of the Federal Reserve Act

February 13, 2001

Letter of Transmittal

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

THE PRESIDENT OF THE SENATE
THE SPEAKER OF THE HOUSE OF REPRESENTATIVES

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

Sincerely,

Alan Greenspan

Alan Greenspan, Chairman

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Monetary Policy Report to the Congress

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

MONETARY POLICY AND THE ECONOMIC OUTLOOK

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

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

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

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

That rebound should also be encouraged by underlying strengths of the economy that still appear to be present despite the sluggishness encountered of late. The most notable of these strengths is the remarkable step-up in structural productivity growth since the mid-1990s, which seems to be closely related to the spread of new technologies. Even as the economy slowed in 2000, evidence of ongoing efficiency gains were apparent in the form of another year of rapid advance in output per worker hour in the nonfarm business sector. With households and businesses still in the process of putting recent innovations in place and with technological breakthroughs still occurring, an end to profitable investment opportunities in the technology area does not yet seem to be in sight. Should investors continue to seek out emerging opportunities, the ongoing transformation and expansion of the capital stock will be maintained, thereby laying the groundwork for further gains in productivity and ongoing advances in real income and spending. The impressive performance of productivity and the accompanying environment of low and stable underlying inflation suggest that the longer-run outlook for the economy is still quite favorable, even though downside risks may remain prominent in the period immediately ahead.

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

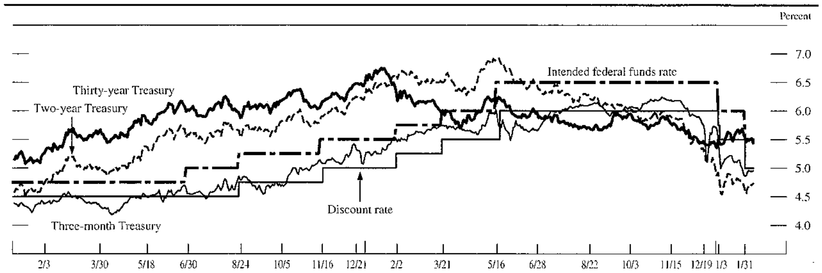
As described in the preceding Monetary Policy Report to the Congress, the very rapid pace of economic growth over the first half of 2000 was threatening to place additional strains on the economy's resources, which already appeared to be stretched thin. Private long-term interest rates had risen considerably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

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

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

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

Selected interest rates



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

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

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

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

The Committee's action improved financial conditions to a degree. Over the next few weeks, equity prices rose, on net. Investors seemed to become less wary of credit risk, and yield spreads narrowed across most corporate bonds even as the issuance of these securities picked up sharply. But in some other respects, investors remained cautious, as evidenced by widening spreads in commercial paper markets. Incoming data pointed to further weakness in the manufacturing sector and a sharp decline in consumer confidence. Moreover, slower U.S. growth appeared to be spilling over to several important trading partners. In late January, the FOMC cut the intended federal funds rate ½ percentage point while the Board of Governors approved a decrease in the discount rate of an equal amount. Because of the significant erosion of consumer and business confidence and the need for additional adjustments to production to work off elevated inventory levels, the FOMC indicated that the risks to the outlook continued to be weighted toward economic weakness.

Economic Projections for 2001

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

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

Economic projections for 2001
Percent

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

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

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

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

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

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

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

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

Economic and Financial Developments in 2000 and Early 2001

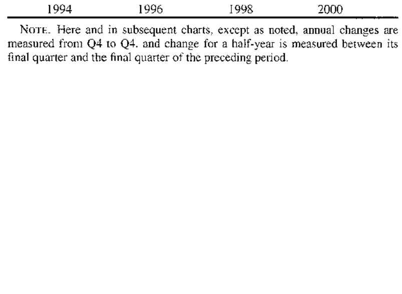
The combination of exceptionally strong growth in the first half of 2000 and subdued growth in the second half resulted in a rise in real GDP of about 3½ percent for the year overall. Domestic demand started out the year with incredible vigor but decelerated thereafter and was sluggish by year-end. Exports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

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

The Household Sector

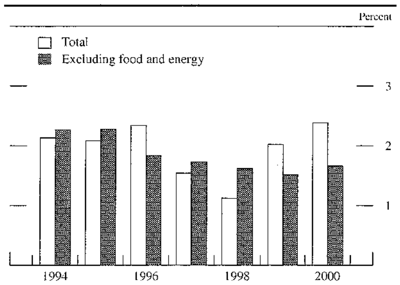
Personal consumption expenditures increased 4½ percent in real terms in 2000 after having advanced

Change in real GDP



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

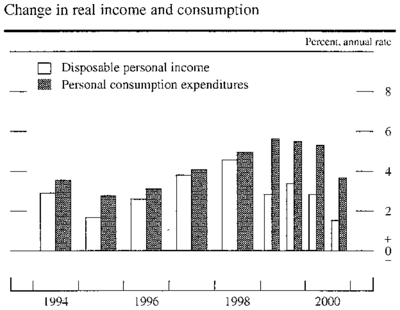
Change in PCE chain-type price index



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

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

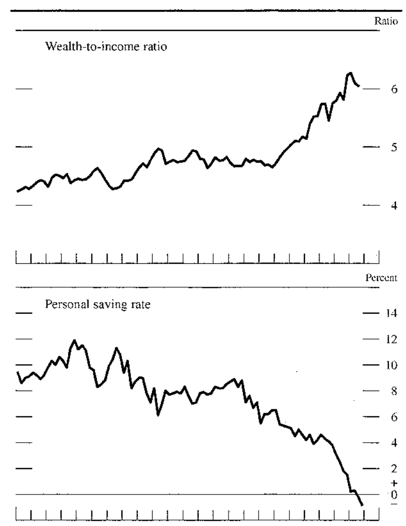
Change in real income and consumption



because of continued strength in real outlays for other types of services.

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

Wealth and saving



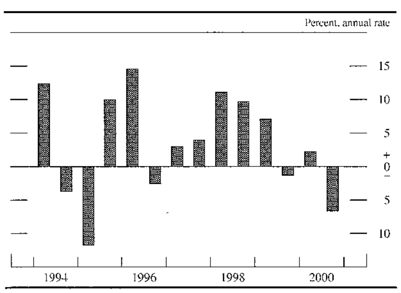
NOTE. The wealth-to-income ratio is the ratio of household net worth to disposable personal income and extends through 2000:Q3; the personal saving rate extends through 2000:Q4.

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

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

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

Change in real residential investment



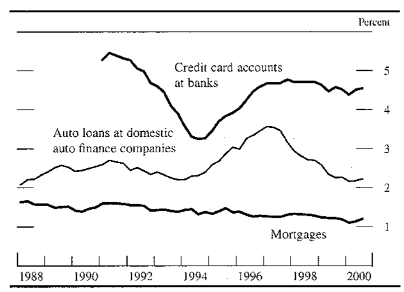
New construction held up even as rates were rising in 1999 and early 2000, but it softened in the spring of last year. Starts and permits for single-family houses declined from the first quarter to the third quarter.

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

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

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

Delinquency rates on household loans



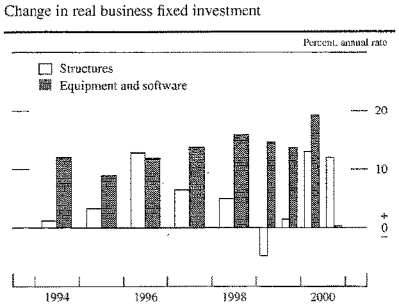
NOTE. The data are quarterly and extend through 2000:Q3. Data on credit-card delinquencies are from bank Call Reports; data on auto loan delinquencies are from the Big Three automakers; data on mortgage delinquencies are from the Mortgage Bankers Association.

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

The Business Sector

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

Change in real business fixed investment

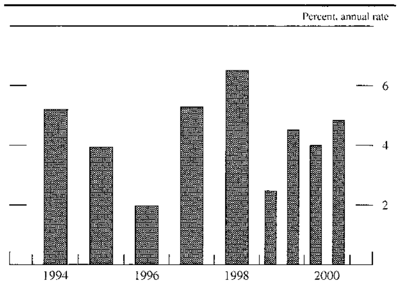


Fixed investment in equipment and software was up 9½ percent in 2000, with the bulk of the gain coming in the first half of the year. Spending slowed to a rate of growth of about 5½ percent in the third quarter and then declined in the fourth quarter. Business investment in motor vehicles fell roughly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

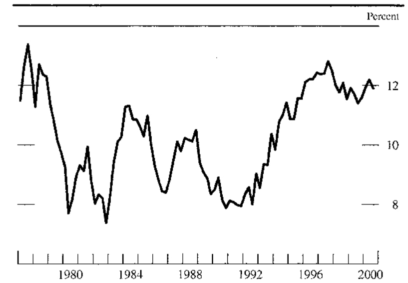
Investment in nonresidential structures rose substantially in 2000, about 12½ percent in all, after having declined 1¾ percent in 1999. Investment in factory buildings, which had fallen more than 20 percent in 1999 in an apparent reaction to the economic disruptions abroad and the associated softness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

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

Change in real nonfarm business inventories



Before-tax profits as a share of GDP



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

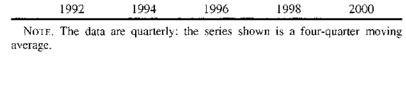
not decelerate quite as quickly, and inventories began to rise more rapidly. Incoming information through the summer suggested that some firms might be encountering a bit of backup in stocks but that the problems were not severe overall. In the latter part of the year, however, inventory–sales ratios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

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

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

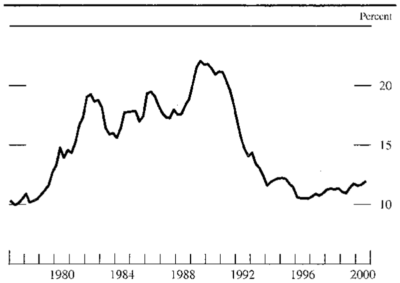
Business borrowing slowed appreciably in the second half of the year. As economic growth moderated and profits weakened, capital spending decelerated

Default rate on outstanding junk bonds



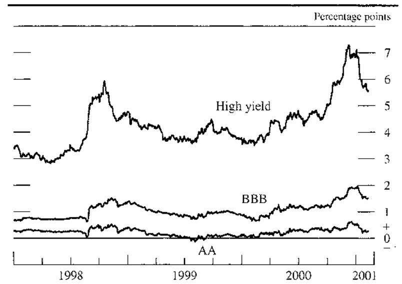
NOTE. The data are quarterly; the series shown is a four-quarter moving average.

Net interest payments of nonfinancial corporations relative to cash flow



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

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



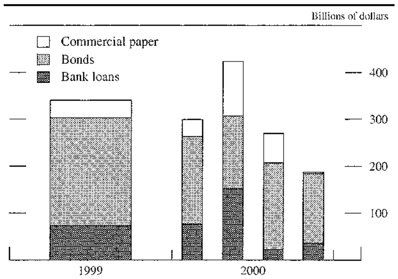
NOTE. The data are daily and extend through February 8, 2001. The spreads compare the yields on the Merrill Lynch AA, BBB, and 175 indexes with the ten-year swap rate.

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

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

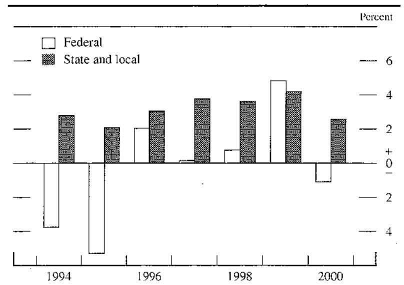
In early 2001, borrowing appears to have picked up from its sluggish fourth-quarter pace. Following the easing of monetary policy in early January, yield spreads on corporate bonds reversed a considerable portion of their rise over the latter part of 2000, with spreads on high-yield bonds narrowing more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

Major components of net business financing



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

Change in real government expenditures on consumption and investment



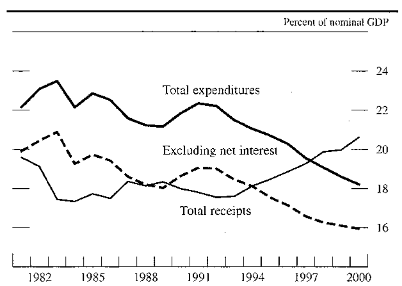
Growth in commercial mortgage debt slowed last year to an estimated rate of 9¼ percent, and issuance of commercial-mortgage-backed securities in 2000 fell back from its 1999 pace. Spreads on lower-rated commercial-mortgage-backed securities over swap rates widened by a small amount late in the year,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

The Government Sector

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

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

Federal receipts and expenditures



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

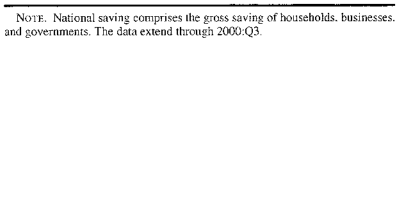
decline of nearly 3 percent in net interest payments in fiscal 2000 after a somewhat larger drop in these payments in fiscal 1999.

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

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

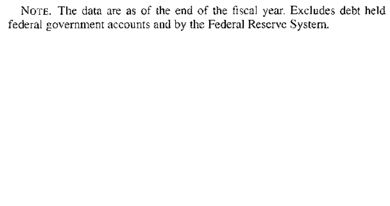
The burgeoning federal budget surplus allowed the Treasury to pay down its debt last year at an even faster pace than in recent years. As of the end of fiscal 2000, the stock of marketable Treasury debt outstanding had fallen about $500 billion from its peak in 1997. The existing fiscal situation and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

National saving



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

Federal government debt held by the public



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

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

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

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

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

The External Sector

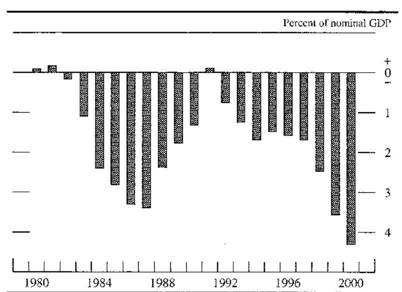
Trade and Current Account

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

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

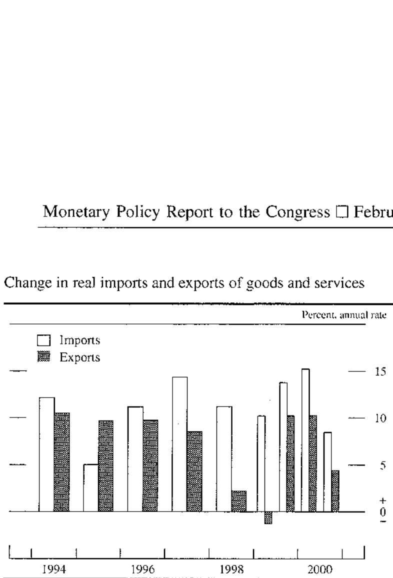
The quantity of imported goods and services expanded rapidly during the first three quarters of

U.S. current account



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

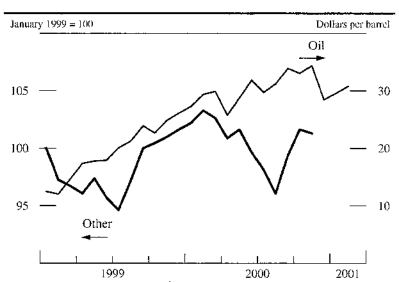
Change in real imports and exports of goods and services



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

The price of imported oil rose nearly $7 per barrel over the four quarters of 2000. During the year, oil prices generally remained high and volatile, with the spot price of West Texas intermediate (WTI) crude fluctuating between a low of $24 per barrel in April

Prices for oil and other commodities



NOTE. The data are monthly; the last observation for oil is the average of trading days through February 8, 2001; the last observation for other commodities is November 2000. The oil price is the spot price of West Texas intermediate crude oil. The price for other commodities is a weighted average of thirty-nine nonfuel primary-commodity prices from the International Monetary Fund.

and a high above $37 per barrel in September. Strong demand—driven by robust world economic growth—kept upward pressure on oil prices even as world supply increased considerably. Over the course of 2000, OPEC raised its official production targets by 3.7 million barrels per day, reversing the production cuts made in the previous two years. Oil production from non-OPEC sources rebounded as well. During the last several weeks of 2000, oil prices fell sharply as market participants became convinced that the U.S. economy was slowing. In early 2001, however, oil prices moved back up when OPEC announced a planned production cut of 1.5 million barrels per day.

Financial Account

The counterpart to the increased U.S. current account deficit in 2000 was an increase in net capital inflows. As in 1999, U.S. capital flows in 2000 reflected the relatively strong cyclical position of the U.S. economy for most of the year and the global wave of corporate mergers. Foreign private purchases of U.S. securities were exceptionally robust—well in excess of the record set in 1999. The composition of U.S. securities purchased by foreigners continued the shift away from Treasuries as the U.S. budget surplus, and the attendant decline in the supply of Treasuries, lowered their yield relative to other debt. Last year private foreigners sold, on net, about $50 billion in Treasury securities, compared with net sales of $20 billion in 1999. Although sizable, these sales were slightly less than what would have occurred had foreigners reduced their holdings in proportion to the reduction in Treasuries outstanding. The increased sale of Treasuries was fully offset by larger foreign purchases of U.S. securities issued by government-sponsored agencies. Net purchases of agency securities topped $110 billion, compared with the previous record of $72 billion set in 1999. In contrast to the shrinking supply of Treasury securities, U.S. government-sponsored agencies accelerated the pace of their debt issuance. Private foreign purchases of U.S. corporate debt grew to $180 billion, while net purchases of U.S. equities ballooned to $170 billion compared with $108 billion in 1999.

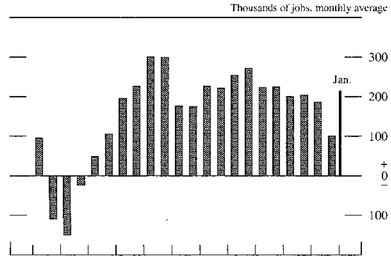
The pace of foreign direct investment inflows in the first three quarters of 2000 also accelerated from the record pace of 1999. As in the previous two years, direct investment inflows were driven by foreign acquisition of U.S. firms, reflecting the global strength in merger and acquisition activity. Of the roughly $200 billion in direct investment inflows in the first three quarters, about $100 billion was directly attributable to merger activity. Many of these mergers were financed, at least in part, by an exchange of equity, in which shares in the U.S. firm were swapped for equity in the acquiring firm. Although U.S. residents generally appear to have sold a portion of the equity acquired through these swaps, the swaps likely contributed significantly to the $97 billion capital outflow attributed to U.S. acquisition of foreign securities. U.S. direct investment abroad was also boosted by merger activity and totaled $117 billion in the first three quarters of 2000, a slightly faster pace than that of 1999.

Capital inflows from foreign official sources totaled $38 billion in 2000—a slight increase from 1999. Nearly all of the official inflows were attributable to reinvested interest earnings. Modest official sales of dollar assets associated with foreign exchange intervention were offset by larger inflows from some non-OPEC oil exporting countries, which benefited from the elevated price of oil.

The Labor Market

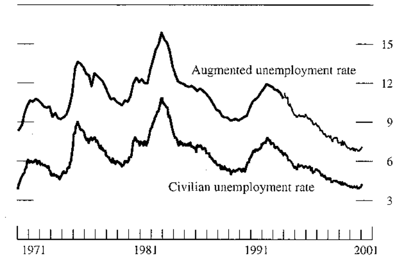
Nonfarm payroll employment increased about 1½ percent in 2000, measured on a December-to-December basis. The job count had risen slightly more than 2 percent in 1999 and roughly 2½ percent a year over the 1996–98 period. Over the first few months of 2000, the expansion of jobs proceeded at a faster pace than in 1999, boosted both by the federal government's hiring for the decennial Census and by a somewhat faster rate of job creation in the private sector. Indications of a moderation in private hiring started to emerge toward mid-year, but because of volatility of the incoming data a slowdown could not be identified with some confidence until late summer.

Net change in payroll employment



NOTE. Private nonfarm.

Measures of labor utilization



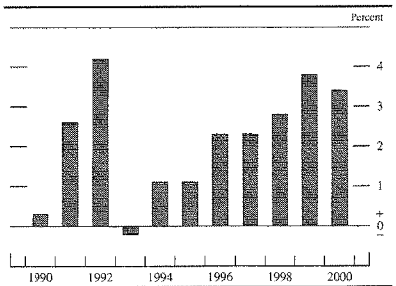
NOTE. The augmented unemployment rate is the number of unemployed plus those who are not in the labor force and want a job, divided by the civilian labor force plus those who are not in the labor force and want a job. The break in data at January 1994 marks the introduction of a redesigned survey; data after that point are not directly comparable with those of earlier periods. The data extend through January 2001.

Over the remainder of the year monthly increases in private employment stepped down further. Job growth came almost to a stop in December, when severe weather added to the restraint from a slowing economy. In January of this year, employment picked up, but the return of milder weather apparently accounted for a sizable portion of the gain.

Employment rose moderately in the private service-producing sector of the economy in 2000, about 2 percent overall after an increase of about 3 percent in 1999. In the fourth quarter, however, hiring in the services-producing sector was relatively slow, in large part because of a sizable decline in the number of jobs in personnel supply—a category that includes temporary help agencies. Employment in construction increased about 2½ percent in 2000 after several years of gains that were considerably larger. The number of jobs in manufacturing was down for a third year, owing to reductions in factory employment in the second half of the year, when manufacturers were adjusting to the slowing of demand. Those adjustments in manufacturing may also have involved some cutbacks in the employment of temporary hires, which would help to account for the sharp job losses in personnel supply. The average length of the workweek in manufacturing was scaled back as well over the second half of the year.

The slowing of the economy did not lead to any meaningful easing in the tightness of the labor market in 2000. The household survey's measure of the number of persons employed rose 1 percent, about in line with the expansion of labor supply. On net, the unemployment rate changed little; its fourth-quarter

Change in output per hour

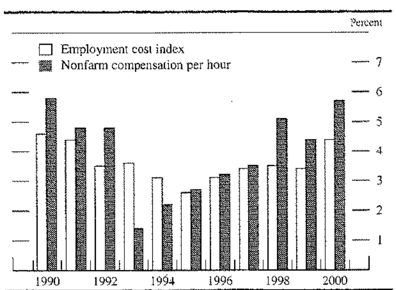


NOTE. Nonfarm business sector.

average of 4.0 percent was down just a tenth of a percentage point from the average unemployment rate in the fourth quarter of 1999. The flatness of the rate through the latter half of 2000, when the economy was slowing, may have partly reflected a desire of companies to hold on to labor resources that had been difficult to attract and retain in the tight labor market of recent years. January of this year brought a small increase in the rate, to 4.2 percent.

Productivity continued to rise rapidly in 2000. Output per hour in the nonfarm business sector was up about 3½ percent over the year as a whole. Sizable gains in efficiency continued to be evident even as the economy was slowing in the second half of the year. Except for 1999, when output per hour rose about 3¾ percent, the past year's increase was the largest since 1992, a year in which the economy was in cyclical recovery from the 1990–91 recession. Cutting through the year-to-year variations in measured productivity, the underlying trend still appears to have traced out a pattern of strong acceleration since the middle part of the 1990s. Support for a step-up in the trend has come from increases in the amount of capital per worker—especially high-tech capital—and from organizational efficiencies that have resulted in output rising faster than the combined inputs of labor and capital.

Measures of the change in hourly compensation

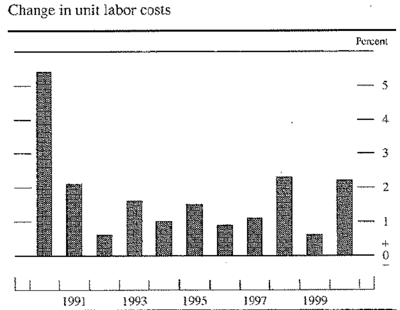


NOTE. For the ECI, change is from December to December; for nonfarm compensation, Q4 to Q4. The ECI is for private industry excluding farm and household workers. Nonfarm compensation per hour is for the nonfarm business sector.

Alternative measures of the hourly compensation of workers, while differing in their coverage and methods of construction, were consistent in showing some acceleration this past year. The employment cost index for private industry (ECI), which attempts to measure changes in the labor costs of nonfarm businesses in a way that is free from the effects of employment shifts among occupations and industries, rose nearly 4½ percent during 2000 after having increased about 3½ percent in 1999. Compensation per hour in the nonfarm business sector, a measure that picks up some forms of employee compensation that the ECI omits but that also is more subject to eventual revision than the ECI, showed hourly compensation advancing 5¾ percent this past year, up from a 1999 increase of about 4½ percent. Tightness of the labor market was likely one factor underlying the acceleration of hourly compensation in 2000, with employers relying both on larger wage increases and more attractive benefit packages to attract and retain workers. Compensation gains may also have been influenced to some degree by the pickup of consumer price inflation since 1998. Rapid increases in the cost of health insurance contributed importantly to a sharp step-up in benefit costs.

Unit labor costs, the ratio of hourly compensation to output per hour, increased about 2¼ percent in the

Change in unit labor costs



NOTE. Nonfarm business sector.

nonfarm business sector in 2000 after having risen slightly more than ½ percent in 1999. Roughly three-fourths of the acceleration was attributable to the faster rate of increase in compensation per hour noted above. The remainder stemmed from the small deceleration of measured productivity. The labor cost rise for the latest year was toward the high end of the range of the small to moderate increases that have prevailed over the past decade.

Prices

Led by the surge in energy prices, the aggregate price indexes showed some acceleration in 2000. The chain-type price index for real GDP, the broadest measure of goods and services *produced* domestically, rose 2¼ percent in 2000, roughly ¾ percentage point more than in 1999. The price index for gross domestic purchases, the broadest measure of prices for goods and services *purchased* by domestic buyers, posted a rise of almost 2½ percent in 2000 after having increased slightly less than 2 percent the previous year. Prices paid by consumers, as measured by the chain-type price index for personal consumption expenditures, picked up as well, about as much as the gross purchases index. The consumer price index (CPI) continued to move up at a faster pace than the PCE index this past year, and it exhibited slightly more acceleration—an increase of nearly 3½ percent in 2000 was ¾ percentage point larger than the 1999 rise. Price indexes for fixed investment and government purchases also accelerated this past year.

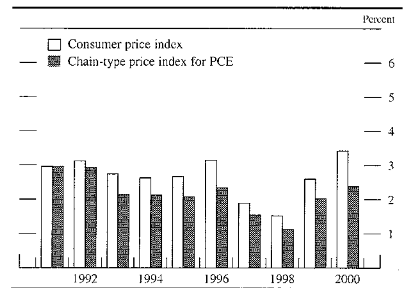
The prices of energy products purchased directly by consumers increased about 15 percent in 2000, a few percentage points more than in 1999. In response to the rise in world oil prices, consumer prices of motor fuels rose nearly 20 percent in 2000, bringing the cumulative price hike for those products over the past two years to roughly 45 percent. Prices also rose rapidly for home heating oil. Natural gas prices

Alternative measures of price change
Percent

Price measure	1999	2000
Chain-type		
Gross domestic product	1.6	2.3
Gross domestic purchases	1.9	2.4
Personal consumption expenditures	2.0	2.4
Excluding food and energy	1.5	1.7
Fixed-weight		
Consumer price index	2.6	3.4
Excluding food and energy	2.1	2.6

NOTE. Changes are based on quarterly averages and are measured to the fourth quarter of the year indicated from the fourth quarter of the preceding year.

Change in consumer prices

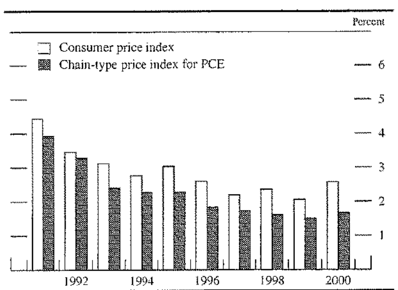


increased 30 percent, as demand for that fuel outpaced the growth of supply, pulling stocks down to low levels. Prices of natural gas this winter have been exceptionally high because of the added demand for heating that resulted from unusually cold weather in November and December. Electricity costs jumped for some users, and prices nationally rose faster than in other recent years, about 2¼ percent at the consumer level.

Businesses had to cope with rising costs of energy in production, transportation, and temperature control. In some industries that depend particularly heavily on energy inputs, the rise in costs had a large effect on product prices. Producer prices of goods such as industrial chemicals posted increases that were well above the average rates of inflation last year, and rising prices for natural gas sparked especially steep price advances for nitrogen fertilizers used in farming. Prices of some services also exhibited apparent energy impacts: Producers paid sharply higher prices for transportation services via air and water, and consumer airfares moved up rapidly for a second year, although not nearly as much as in 1999. Late in 2000 and early this year, high prices for energy inputs prompted shutdowns in production at some companies, including those producing fertilizers and aluminum.

Despite the spillover of energy effects into other markets, inflation outside the energy sector remained moderate overall. The ongoing rise in labor productivity helped to contain the step-up in labor costs, and the slow rate of rise in the prices of non-oil imports meant that domestic businesses had to remain cautious about raising their prices because of the potential loss of market share. Rapid expansion of capacity in manufacturing prevented bottlenecks from developing in the goods-producing sector of the economy

Change in consumer prices excluding food and energy



when domestic demand was surging early in the year; later on, an easing of capacity utilization was accompanied by a softening of prices in a number of industries. Inflation expectations, which at times in the past have added to the momentum of rising inflation, remained fairly quiescent in 2000.

Against this backdrop, core inflation remained low in 2000. Producer prices of intermediate materials excluding food and energy, after having accelerated through the first few months of 2000, slowed thereafter, and their four-quarter rise of 1¾ percent was only a bit larger than the increase during 1999. Prices of crude materials excluding food and energy fell moderately this past year after having risen about 10 percent a year earlier. At the consumer level, the CPI excluding food and energy moved up 2½ percent in 2000, an acceleration of slightly less than ½ percentage point from 1999 when put on a basis that maintains consistency of measurement. The rise in the chain-type price index for personal consumption expenditures excluding food and energy was 1¾ percent, just a bit above the increases recorded in each of the two previous years.

Consumer food prices rose 2½ percent in 2000 after an increase of about 2 percent in 1999. In large part, the moderate step-up in these prices probably reflected cost and price considerations similar to those at work elsewhere in the economy. Also, farm commodity prices moved up, on net, during 2000, after three years of sharp declines, and this turnabout likely showed through to the retail level to some extent. Meat prices, which are linked more closely to farm prices than is the case with many other foods, recorded increases that were appreciably larger than the increases for food prices overall.

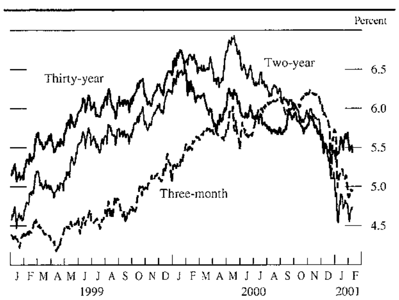
The chain-type price index for private fixed investment rose about 1¾ percent in 2000, but that small increase amounted to a fairly sharp acceleration from the pace of the preceding few years, several of which had brought small declines in investment prices. Although the price index for investment in residential structures slowed a little, to about a 3½ percent rise, the index for nonresidential structures sped up from a 2¾ percent increase in 1999 to one of 4½ percent in 2000. Moreover, the price index for equipment and software ticked up slightly, after having declined 2 percent or more in each of the four preceding years. To a large extent, that turnabout was a reflection of a smaller rate of price decline for computers; they had dropped at an average rate of more than 20 percent through the second half of the 1990s but fell at roughly half that rate in 2000. Excluding computers, equipment prices increased slightly in 2000 after having declined a touch in 1999.

U.S. Financial Markets

Financial markets in 2000 were influenced by the changing outlook for the U.S. economy and monetary policy and by shifts in investors' perceptions of and attitudes toward risk. Private longer-term interest rates generally firmed in the early part of the year as growth remained unsustainably strong and as market participants anticipated a further tightening of monetary policy by the Federal Reserve. Later in the year, as it became apparent that the pace of economic growth was slowing, market participants began to incorporate expectations of significant policy easing into asset prices, and most longer-term interest rates fell sharply over the last several months of 2000 and into 2001. Over the course of the year, investors became more concerned about credit risk and demanded larger yield spreads to hold lower-rated corporate bonds, especially once the growth of the economy slowed in the second half. Banks, apparently having similar concerns, reported widening credit spreads on business loans and tightening standards for lending to businesses. Weakening economic growth and tighter financial conditions in some sectors led to a slowing in the pace of debt growth over the course of the year.

Stock markets had another volatile year in 2000. After touching record highs in March, stock prices turned lower, declining considerably over the last four months of the year. Valuations in some sectors fell precipitously from high levels, and near-term earnings forecasts were revised down sharply late in the year. On balance, the broadest stock indexes fell more than 10 percent last year, and the tech-heavy Nasdaq was down nearly 40 percent.

Rates on selected Treasury securities



NOTE. The data are daily and extend through February 8, 2001.

Interest Rates

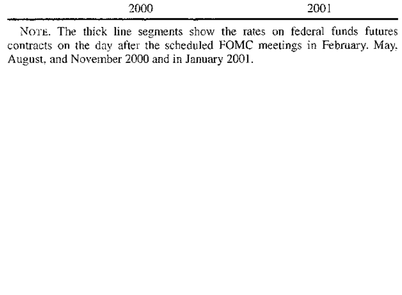
The economy continued to expand at an exceptionally strong and unsustainable pace in the early part of 2000, prompting the Federal Reserve to tighten its policy stance in several steps ending at its May meeting. Private interest rates and shorter-term Treasury yields rose considerably over that period, reaching a peak just after the May FOMC meeting. Investors apparently became more concerned about credit risk as well; spreads between rates on lower-rated corporate bonds and swaps widened in the spring, adding to the upward pressure on private interest rates. Long-term Treasury yields, in contrast, remained below their levels from earlier in the year, as market participants became increasingly convinced that the supply of those securities would shrink considerably in coming years and incorporated a "scarcity premium" into their prices. By mid-May, with the rapid expansion of economic activity showing few signs of letting up, rates on federal funds and eurodollar futures, which can be used as a rough gauge of policy expectations, were indicating that market participants expected additional policy tightening going forward.

Signs of a slowdown in the growth of aggregate demand began to appear in the incoming data soon after the May FOMC meeting and continued to gradually accumulate over subsequent months. In response, market participants became increasingly convinced that the FOMC would not have to tighten its policy stance further, which was reflected in a flattening of the term structure of rates on federal funds and eurodollar futures. Interest rates on most corporate bonds declined gradually on the shifting outlook for the economy, and by the end of August had fallen more than ½ percentage point from their peaks in May.

Most market interest rates continued to edge lower into the fall, as the growth of the economy seemed to moderate further. Over the last couple months of 2000 and into early 2001, as it became apparent that economic growth was slowing more abruptly, market participants sharply revised down their expectations for future short-term interest rates. Treasury yields plummeted over that period, particularly at shorter maturities: The two-year Treasury yield dropped more than a full percentage point from mid-November to early January, moving below the thirty-year yield for the first time since early 2000. Yields on inflation-indexed securities also fell considerably, but by less than their nominal counterparts, suggesting that the weakening of economic growth lowered expectations of both real interest rates and inflation.

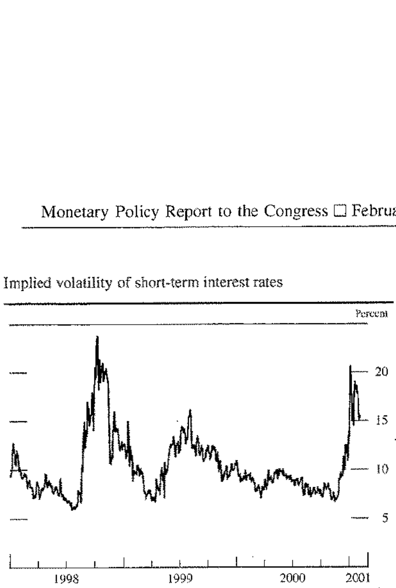
Although market participants had come to expect considerable policy easing over the first part of this year, the timing and magnitude of the intermeeting cut in the federal funds rate in early January was a surprise. In response, investors built into asset prices anticipations of a more rapid policy easing over the near-term. Indeed, the further substantial reduction in the federal funds rate implemented at the FOMC meeting later that month was largely expected and elicited little response in financial markets. Even with a full percentage point reduction in the federal funds rate in place, futures rates have recently pointed to expectations of additional policy easing over coming months. Investors appear to be uncertain about this outlook, however, judging from the recent rise in the

Federal funds futures rates and the intended federal funds rate



NOTE. The thick line segments show the rates on federal funds futures contracts on the day after the scheduled FOMC meetings in February, May, August, and November 2000 and in January 2001.

Implied volatility of short-term interest rates

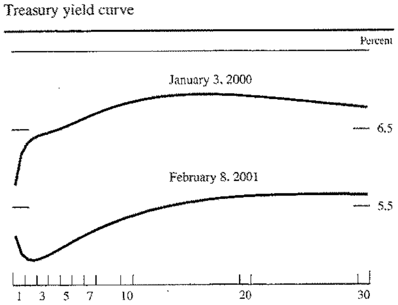


NOTE. The data are daily and extend through February 8, 2001. The series shown is the implied volatility of the three-month eurodollar rate over the coming four months, as calculated from option prices.

implied volatilities of interest rates derived from option prices. On balance since the beginning of 2000, the progressive easing in the economic outlook, in combination with the effects of actual and prospective reductions in the supply of Treasury securities, has resulted in a sizable downward shift in the Treasury yield curve.

The prospect of a weakening in economic growth, along with sizable declines in equity prices and downward revisions to profit forecasts, apparently caused investors to reassess credit risks in the latter part of last year. Spreads between rates on high-yield corporate bonds and swaps soared beginning in September, pushing the yields on those bonds substantially higher. Concerns about credit risk also spilled over into the investment-grade sector, where yield spreads widened considerably for lower-rated securities. For most investment-grade issuers, though, the effects of the revised policy outlook more than offset any widening in risk spreads, resulting in a decline in private interest rates in the fourth quarter. Since the first policy easing in early January, yield spreads on corporate bonds have narrowed considerably, including a particularly large drop in the spread on high-yield bonds. Overall, yields on most investment-grade corporate bonds have reached their lowest levels since the first half of 1999, while rates on most high-yield bonds have fallen about 2 percentage points from their peaks and have reached levels similar to those of mid-2000.

Treasury yield curve



NOTE. Yield curves are estimated from off-the-run Treasury coupon securities. Yields shown are those on notional par Treasury securities with semiannual coupons.

Although investors at times in recent months appeared more concerned about credit risk than they were in the fall of 1998, the recent financial environment, by most accounts, did not resemble the market turbulence and disruption of that time. The Treasury and investment-grade corporate bond markets remained relatively liquid, and the investment-grade market easily absorbed the high volume of bond issuance over 2000. Investors continued to show a heightened preference for larger, more liquid corporate issues, but they did not exhibit the extreme desire for liquidity that was apparent in the fall of 1998. For example, the liquidity premium for the on-the-run ten-year Treasury note this year remained well below the level of that fall.

Nonetheless, the Treasury market has become somewhat less liquid than it was several years ago. Moreover, in 2000, particular segments of the Treasury market occasionally experienced bouts of unusually low liquidity that appeared related to actual or potential reductions in the supply of individual securities. Given the possibility that liquidity could deteriorate further as the Treasury continues to pay down its debt, market participants reportedly increased their reliance on alternative instruments—including interest rate swaps and debt securities issued by government-sponsored housing agencies and other corporations—for some of the hedging and pricing functions historically provided by Treasury securities. Fannie Mae and Freddie Mac continued to issue large amounts of debt under their Benchmark and Reference debt programs, which are designed to mimic characteristics of Treasury securities—such as large issue sizes and a regular calendar of issuance—that are believed to contribute to their liquidity. By the end of 2000, the two firms together had more than \$300 billion of notes and bonds and more than \$200 billion of bills outstanding under those programs. Trading volume and dealer positions in agency securities have risen considerably since 1998, and the market for repurchase agreements in those securities has reportedly become more active. Also, several exchanges listed options and futures on agency debt securities. Open interest on some of those futures contracts has picked up significantly, although it remains small compared to that on futures contracts on Treasury securities.

The shrinking supply of Treasury securities and the possibility of a consequent decline in market liquidity also pose challenges for the Federal Reserve. For many years, Treasury securities have provided the Federal Reserve with an effective asset for System portfolio holdings and the conduct of monetary policy. The remarkable liquidity of Treasury securities has allowed the System to conduct sizable policy operations quickly and with little disruption to markets, while the safety of Treasury securities has allowed the System to avoid credit risk in its portfolio. However, if Treasury debt continues to be paid down, at some point the amount outstanding will be insufficient to meet the Federal Reserve's portfolio needs. Well before that time, the proportion of Treasury securities held by the System could reach levels that would significantly disrupt the Treasury market and make monetary policy operations increasingly difficult or costly. Recognizing this possibility, last year the FOMC initiated a study to consider alternative approaches to managing the Federal Reserve's portfolio, including expanding the use of the discount window and broadening the types of assets acquired in the open market. As it continues to study various alternatives, the FOMC will take into consideration the effect that such approaches might have on the liquidity and safety of its portfolio and the potential for distorting the allocation of credit to private entities.

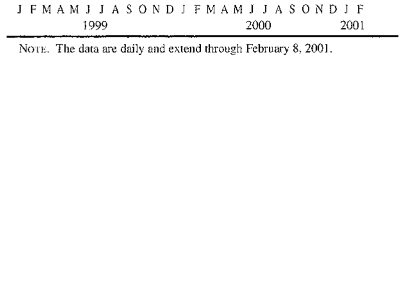
Meanwhile, some measures have been taken to prevent the System's holdings of individual Treasury securities from reaching possibly disruptive levels and to help curtail any further lengthening of the average maturity of the System's holdings. On July 5, 2000, the Federal Reserve Bank of New York announced guidelines limiting the System's holdings of individual Treasury securities to specified percentages of their outstanding amounts, depending on the remaining maturity of the issue. Those limits range from 35 percent for Treasury bills to 15 percent for longer-term bonds. As a result, the System has redeemed some of its holdings of Treasury securities on occasions when the amount of maturing holdings has exceeded the amount that could be rolled over into newly issued Treasury securities under these limits. Redemptions of Treasury holdings in 2000 exceeded $28 billion, with more than $24 billion of the redemptions in Treasury bills. In addition, the Federal Reserve accommodated a portion of the demand for reserves last year by increasing its use of longer-term repurchase agreements rather than by purchasing Treasury securities outright. The System maintained an average of more than $15 billion of longer-term repurchase agreements over 2000, typically with maturities of twenty-eight days.

Equity Prices

After having moved higher in the first quarter of 2000, equity prices reversed course and finished the year with considerable declines. Early in the year, the rapid pace of economic activity lifted corporate profits, and stock analysts became even more optimistic about future earnings growth. In response, most major equity indexes reached record highs in March, with the Wilshire 5000 rising 6¾ percent above its 1999 year-end level and the Nasdaq soaring 24 percent, continuing its rapid run-up from the second half of 1999. Equity prices fell from these highs during the spring, with a particularly steep drop in the Nasdaq, as investors grew more concerned about the lofty valuations of some sectors and the prospect of higher interest rates.

Broader equity indexes recovered much of those losses through August, supported by the decline in market interest rates and the continued strength of earnings growth in the second quarter. But from early September through the end of the year, stock prices fell considerably in response to the downshift in economic growth, a reassessment of the prospects for some high-tech industries, and disappointments in corporate earnings. In December and January, equity

Major stock price indexes



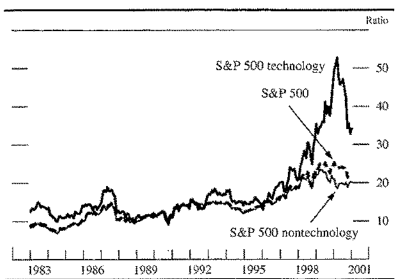
NOTE. The data are daily and extend through February 8, 2001.

analysts significantly reduced their forecasts for year-ahead earnings for the S&P 500. However, analysts apparently view the slowdown in earnings as short-lived, as long-run earnings forecasts did not fall much and remain at very high levels, particularly for the technology sector.

On balance, the Wilshire 5000 index fell 12 percent over 2000—its first annual decline since 1994. The Nasdaq composite plunged 39 percent, leaving it at year-end more than 50 percent below its record high and erasing nearly all of its gains since the beginning of 1999. The broad decline in equity prices last year is estimated to have lopped more than $1¾ trillion from household wealth, or more than 4 percent of the total net worth of households. Nevertheless, the level of household net worth is still quite high—about 50 percent above its level at the end of 1995. Investors continued to accumulate considerable amounts of equity mutual funds over 2000, although they may have become increasingly discouraged by losses on their equity holdings toward the end of the year, when flows into equity funds slumped. At that time, money market mutual funds expanded sharply, as investors apparently sought a refuge for financial assets amid the heightened volatility and significant drops in equity prices. So far in 2001, major equity indexes are little changed, on balance, as the boost from lower interest rates has been countered by continued disappointments over corporate earnings.

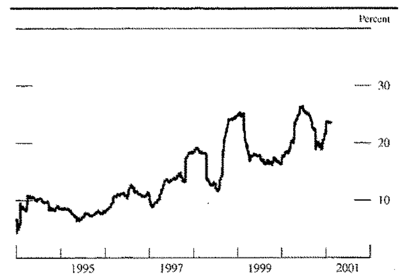
Some of the most dramatic plunges in share prices in 2000 took place among technology, telecommunications, and Internet shares. While these declines partly stemmed from downward revisions to near-term earnings estimates, which were particularly severe in some cases, they were also driven by a reassessment of the elevated valuations of many companies in these sectors. The price–earnings ratio (calculated using operating earnings expected over the next year) for the technology component of the S&P 500 index fell substantially from its peak in early 2000, although it remains well above the ratio for the S&P 500 index as a whole. For the entire S&P 500 index, share prices fell a bit more in percentage terms than the downward revisions to year-ahead earnings forecasts, leaving the price–earnings ratio modestly below its historical high.

Price–earnings ratios for the S&P 500
and selected components



NOTE. The data are monthly and extend through January 2001. The ratios are based on I/B/E/S consensus estimates of earnings over the coming twelve months.

Wilshire 5000 volatility



NOTE. The data, which are daily and extend through February 8, 2001, are the standard deviations of daily percent changes in the Wilshire 5000 index over the previous six months, with the standard deviations expressed on an annual basis.

The volatility of equity price movements during 2000 was at the high end of the elevated levels observed in recent years. In the technology sector, the magnitudes of daily share price changes were at times remarkable. There were twenty-seven days during 2000 in which the Nasdaq composite index moved up or down by at least 5 percent; by comparison, such outsized movements were observed on a total of only seven days from 1990 to 1999.

Despite the volatility of share price movements and the large declines on balance over 2000, equity market conditions were fairly orderly, with few reports of difficulties meeting margin requirements or of large losses creating problems that might pose broader systemic concerns. The fall in share prices reined in some of the margin debt of equity investors. After having run up sharply through March, the amount of outstanding margin debt fell by about 30 percent over the remainder of the year. At year-end, the ratio of margin debt to total equity market capitalization was slightly below its level a year earlier.

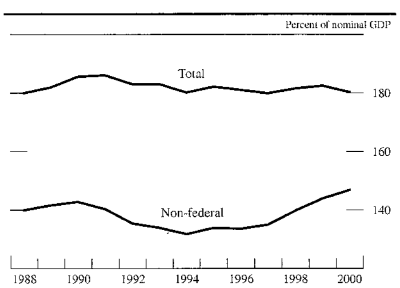
The considerable drop in valuations in some sectors and the elevated volatility of equity price movements caused the pace of initial public offerings to slow markedly over the year, despite a large number of companies waiting to go public. The slowdown was particularly pronounced for technology companies, which had been issuing new shares at a frantic pace early in the year. In total, the dollar amount of initial public offerings by domestic nonfinancial companies tapered off in the fourth quarter to its lowest level in two years and has remained subdued so far in 2001.

Debt and the Monetary Aggregates

Debt and Depository Intermediation

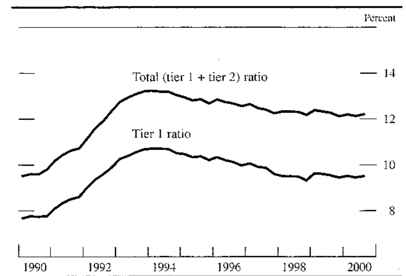
Aggregate debt of domestic nonfinancial sectors increased an estimated 5¼ percent over 2000, a considerable slowdown from the gains of almost 7 percent posted in 1998 and 1999. The expansion of nonfederal debt moderated to 8½ percent in 2000 from 9½ percent in 1999; the slowing owed primarily to a weakening of consumer and business borrowing in the second half of the year, as the growth of durables consumption and capital expenditures fell off and financial conditions tightened for some firms. Some of the slowdown in total nonfinancial debt was also attributable to the federal government, which paid down 6¾ percent of its debt last year, compared with 2½ percent in 1999. In 1998 and 1999, domestic nonfinancial debt increased faster than nominal GDP, despite the reduction in federal debt over those years. The ratio of nonfinancial debt to GDP edged down in 2000, however, as the federal debt paydown accelerated and nonfederal borrowing slowed.

Domestic nonfinancial debt



NOTE. The data are annual.

Regulatory capital ratios of commercial banks

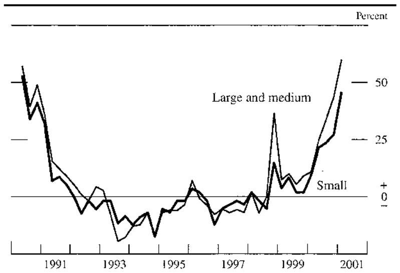


NOTE. The data, which are quarterly and extend through 2000:Q3, are ratios of capital to risk-weighted assets. Tier 1 capital consists primarily of common equity and certain perpetual preferred stock. Tier 2 capital consists primarily of subordinated debt, preferred stock not included in tier 1 capital, and a limited amount of loan-loss reserves.

Depository institutions continued to play an important role in meeting the demand for credit by businesses and households. Credit extended by commercial banks, after adjustment for mark-to-market accounting rules, increased 10 percent over 2000, well above the pace for total nonfinancial debt. Bank credit expanded at a particularly brisk rate through late summer, when banks, given their ample capital base and solid profits, were willing to meet strong loan demand by households and businesses. Over the remainder of the year, the growth of bank credit declined appreciably, as banks became more cautious lenders and as several banks shed large amounts of government securities.

Banks reported a deterioration of the quality of their business loan portfolios last year. Delinquency and charge-off rates on C&I loans, while low by historical standards, rose steadily, partly reflecting some repayment difficulties in banks' syndicated loan portfolios. Several large banks have stated that the uptrend in delinquencies is expected to continue in 2001. Higher levels of provisioning for loan losses and some narrowing of net interest margins contributed to a fallback of bank profits from the record levels of 1999. In addition, capitalization measures slipped a bit last year. Nevertheless, by historical standards banks remained quite profitable overall and appeared to have ample capital. In the aggregate, total capital (the sum of tier 1 and tier 2 capital) remained above 12 percent of risk-weighted assets over the first three quarters of last year, more than two percentage points above the minimum level required to be considered well-capitalized.

Net percentage of domestic banks tightening standards for commercial and industrial loans, by size of firm



NOTE. The data are based on the Federal Reserve's Senior Loan Officer Opinion Survey on Bank Lending Practices, which is generally conducted four times per year. The data extend through January 2001. Small firms are those with annual sales of less than $50 million.

In response to greater uncertainty about the economic outlook and a reduced tolerance for risk, increasing proportions of banks reported tightening standards and terms on business loans during 2000 and into 2001, with the share recently reaching the highest level since 1990. The tightening became widespread for loans to large and middle-market firms. A considerable portion of banks reported firming standards and terms on loans to small businesses as well, consistent with surveys of small businesses indicating that a larger share of those firms had difficulty obtaining credit in 2000 than in previous years. With delinquency rates for consumer and real estate loans having changed little, on net, last year, banks did not tighten credit conditions significantly for loans to households over the first three quarters of 2000. More recently, however, an increasing portion of banks increased standards and terms for consumer loans other than credit cards, and some of the banks surveyed anticipated a further tightening of conditions on consumer loans during 2001.

The Monetary Aggregates

The monetary aggregates grew rather briskly last year. The expansion of the broadest monetary aggregate, M3, was particularly strong over the first three quarters of 2000, as the robust growth in depository credit was partly funded through issuance of the managed liabilities included in this aggregate, such as large time deposits. M3 growth eased somewhat in the fourth quarter because the slowing of bank credit led depository institutions to reduce their reliance on managed liabilities. Institutional money funds increased rapidly throughout 2000, despite the tightening of policy early in the year, in part owing to continued growth in their provision of cash management services for businesses. For the year as a whole, M3 expanded 9¼ percent, well above the 7¾ percent pace in 1999. This advance again outpaced that of nominal income, and M3 velocity—the ratio of nominal income to M3—declined for the sixth year in a row.

Growth of money and debt
Percent

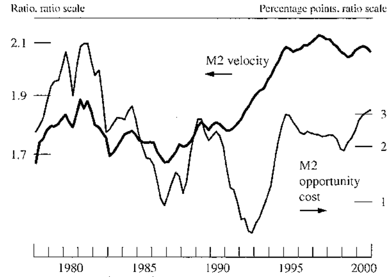
Period	M1	M2	M3	Domestic nonfinancial debt
Annual[1]				
1990	4.2	4.2	1.9	6.7
1991	7.9	3.1	1.2	4.5
1992	14.4	1.8	.6	4.5
1993	10.6	1.3	1.0	4.9
1994	2.5	.6	1.7	4.8
1995	−1.5	3.8	6.1	5.4
1996	−4.5	4.5	6.8	5.3
1997	−1.2	5.6	8.9	5.4
1998	2.2	8.4	10.9	6.9
1999	1.8	6.2	7.7	6.8
2000	−1.5	6.3	9.2	5.3
Quarterly (annual rate)[2]				
2000:1	2.0	5.8	10.6	5.6
2	−1.8	6.4	9.0	6.2
3	−3.7	5.8	8.9	4.7
4	−2.7	6.6	7.1	4.1

NOTE. M1 consists of currency, travelers checks, demand deposits, and other checkable deposits. M2 consists of M1 plus savings deposits (including money market deposit accounts), small-denomination time deposits, and balances in retail money market funds. M3 consists of M2 plus large-denomination time deposits, balances in institutional money market funds, RP liabilities (overnight and term), and eurodollars (overnight and term). Debt consists of the outstanding credit market debt of the U.S. government, state and local governments, households and nonprofit organizations, nonfinancial businesses, and farms.

1. From average for fourth quarter of preceding year to average for fourth quarter of year indicated.

2. From average for preceding quarter to average for quarter indicated.

M2 velocity and opportunity cost



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

M2 increased 6¼ percent in 2000, about unchanged from its pace in 1999. Some slowing in M2 growth would have been expected based on the rise in short-term interest rates over the early part of the year, which pushed up the "opportunity cost" of holding M2, given that the interest rates on many components of M2 do not increase by the same amount or as quickly as market rates. However, with the level of long-term rates close to that of short-term rates, investors had much less incentive to shift funds out of M2 assets and into assets with longer maturities, which helped support M2 growth. M2 was also boosted at times by households' increased preference for safe and liquid assets during periods of heightened volatility in equity markets. On balance over the year, the growth of M2 slightly exceeded that of nominal income, and M2 velocity edged down.

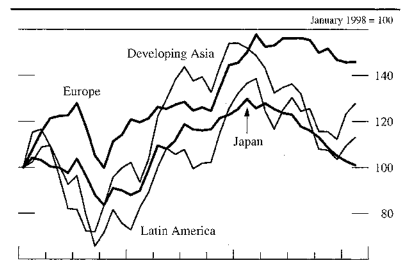
The behavior of the components of M2 was influenced importantly by interest rate spreads. The depressing effect of higher short-term market interest rates was most apparent in the liquid deposit components, including checkable deposits and savings accounts, whose rates respond very sluggishly to movements in market rates. Small time deposits and retail money market mutual funds, whose rates do not lag market rates as much, expanded considerably faster than liquid deposits. Currency growth was held down early in the year by a runoff of the stockpile accumulated in advance of the century date change. In addition, it was surprisingly sluggish over the balance of the year given the rapid pace of income growth, with weakness apparently in both domestic and foreign demands.

International Developments

In 2000, overall economic activity in foreign economies continued its strong performance of the previous year. However, in both industrial and developing countries, growth was strongest early, and clear signs of a general slowing emerged later in the year. Among industrial countries, growth in Japan last year moved up to an estimated 2 percent, and growth in the euro area slowed slightly to 3 percent. Emerging market economies in both Asia and Latin America grew about 6 percent on average in 2000. For Asian developing economies, this represented a slowing from the torrid pace of the previous year, while growth in Latin America, especially Mexico, picked up from 1999. Average foreign inflation edged up slightly to 3 percent, mainly reflecting higher oil prices. Over the first part of the year, monetary authorities moved to tighten conditions in many industrial countries, in reaction to continued strong growth in economic activity that was starting to impinge on capacity constraints, as well as some upward pressures on prices. Interest rates on long-term government securities declined on balance in most industrial countries, especially toward year-end when evidence of a slowdown in global economic growth started to emerge.

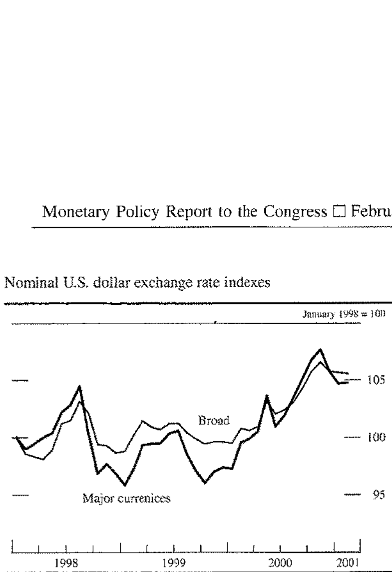
Conditions in foreign financial markets were somewhat more unsettled than in the previous year. Overall stock indexes in the foreign industrial countries generally declined, most notably in Japan. As in the United States, technology-oriented stock indexes were extremely volatile during the year. After reaching peaks in the first quarter, they started down while experiencing great swings toward mid-year, then fell sharply in the final quarter, resulting in net declines

Foreign equity indexes



NOTE. The data are monthly. The last observations are the average of trading days through February 8, 2001.

Nominal U.S. dollar exchange rate indexes



NOTE. The data are monthly. Indexes are trade-weighted averages of the exchange value of the dollar against major currencies and against the currencies of a broader group of important U.S. trading partners. Last observations are the average of trading days through February 8, 2001.

for the year of one-third or more. Stock prices in emerging market economies were generally quite weak, especially in developing Asia, where growth in recent years has depended heavily on exports of high-tech goods. Although there was no major default or devaluation among emerging market economies, average risk spreads on developing country debt still moved higher on balance over the course of the year, as the threat of potential crises in several countries, most notably Argentina and Turkey, heightened investor concerns.

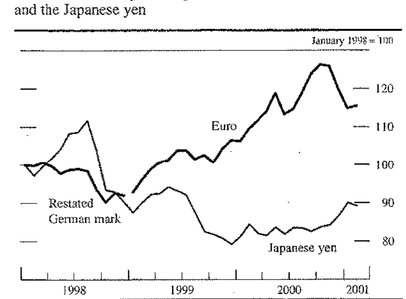
The dollar's average foreign exchange value increased over most of the year, supported by continued robust growth of U.S. activity, rising interest rates on dollar assets, and market perceptions that longer-term prospects for U.S. growth and rates of return were more favorable than in other industrial countries. Part of the rise in the dollar's average value was reversed late in the year when evidence emerged that the pace of U.S. activity was slowing much more sharply than had been expected. Despite this decline, the dollar's average foreign exchange value against the currencies of other major foreign industrial countries recorded a net increase of over 7 percent for the year as a whole. The dollar also strengthened nearly as much on balance against the currencies of the most important developing country trading partners of the United States. So far this year, the dollar's average value has remained fairly stable.

Industrial Economies

The dollar showed particular strength last year against the euro, the common currency of much of Europe. During the first three quarters of the year, the euro continued to weaken, and by late October had fallen to a low of just above 82 cents, nearly one-third below its value when it was introduced in January 1999. The euro's decline against the dollar through most of last year appeared to be due mainly to the vigorous growth of real GDP and productivity in the United States contrasted with steady but less impressive improvements in Europe. In addition, investors may have perceived that Europe was slower to adopt "new economy" technologies, making it a relatively less attractive investment climate. In September, a concerted intervention operation by the monetary authorities of G-7 countries, including the United States, was undertaken at the request of European authorities to provide support for the euro. The European Central Bank also made intervention purchases of euros on several occasions acting on its own. Late in the year, the euro abruptly changed course and started to move up strongly, reversing over half of its decline of earlier in the year. This recovery of the euro against the dollar appeared to reflect mainly a market perception that, while growth was slowing in both Europe and the United States, the slowdown was much sharper for the United States. For the year as a whole, the dollar appreciated, on net, about 7 percent against the euro.

The European Central Bank raised its policy interest rate target six times by a total of 175 basis points over the first ten months of the year. These increases reflected concerns that the euro's depreciation, tightening capacity constraints and higher oil prices would put upward pressure on inflation. While core inflation—inflation excluding food and energy—

U.S. dollar exchange rate against the euro and the Japanese yen



NOTE. Foreign currency units per dollar. Restated German mark is the mark–dollar exchange rate rescaled by the official conversion factor between the mark and the euro. Last observations are the average of trading days through February 8, 2001.

remained well below the 2 percent inflation target ceiling, higher oil prices pushed the headline rate above the ceiling for most of the year. Real GDP in the euro area is estimated to have increased about 3 percent for 2000 as a whole, only slightly below the rate of the previous year, although activity slowed toward the end of the year. Growth was supported by continued strong increases in investment spending. Net exports made only a modest contribution to growth, as rapid increases in exports were nearly matched by robust imports. Overall activity was sufficiently strong to lead to a further decline in the average euro-area unemployment rate to below 9 percent, a nearly 1 percentage point reduction for the year.

The dollar rose about 12 percent against the Japanese yen over the course of 2000, roughly reversing the decline of the previous year. Early in the year, the yen experienced periods of upward pressure on evidence of a revival of activity in Japan. On several of these occasions, the Bank of Japan made substantial intervention sales of yen. By August, signs of recovery were strong enough to convince the Bank of Japan to end the zero interest rate policy that it had maintained for nearly a year and a half, and its target for the overnight rate was raised to 25 basis points. Later in the year, evidence emerged suggesting that the nascent recovery in economic activity was losing steam, and in response the yen started to depreciate sharply against the dollar.

For the year as a whole, Japanese real GDP is estimated to have increased about 2 percent, a substantial improvement from the very small increase of the previous year and the decline recorded in 1998. Growth, which was concentrated in the first part of the year, was led by private nonresidential investment. In contrast, residential investment slackened as the effect of tax incentives waned. Consumption rebounded early in the year from a sharp decline at the end of 1999 but then stagnated, depressed in part by record-high unemployment and concerns that ongoing corporate restructuring could lead to further job losses. Public investment, which gave a major boost to the economy in 1999, remained strong through the first half of last year but then fell off sharply, and for the year as a whole the fiscal stance is estimated to have been somewhat contractionary. Inflation was negative for the second consecutive year, with the prices of both consumer goods and real estate continuing to move lower.

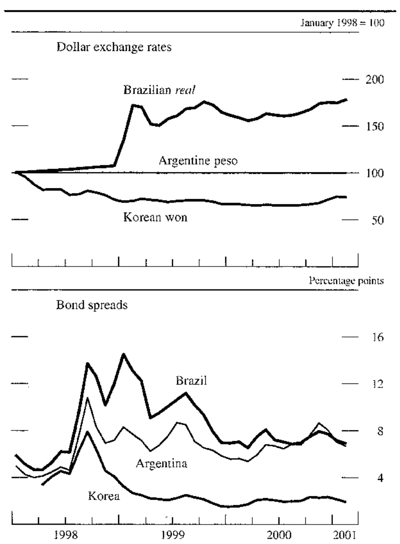
The dollar appreciated 4 percent relative to the Canadian dollar last year. Among the factors that apparently contributed to the Canadian currency's weakness were declines in the prices of commodities that Canada exports, such as metals and lumber, and a perception by market participants of unfavorable differentials in rates of return and economic growth prospects in Canada relative to the United States. For the year as a whole, real GDP growth in Canada is estimated to have been only slightly below the strong 5 percent rate of 1999, although, as in most industrial countries, there were signs that the pace of growth was tailing off toward the end of the year. Domestic demand continued to be robust, led by surging business investment and solid personal consumption increases. In the first part of the year, the sustained rapid growth of the economy led Canadian monetary authorities to become increasingly concerned with a buildup of inflationary pressures, and the Bank of Canada matched all of the Federal Reserve's interest rate increases in 2000, raising its policy rate by a total of 100 basis points. By the end of the year, the core inflation rate had risen to near the middle of the Bank of Canada's 1 percent to 3 percent target range, while higher oil prices pushed the overall rate above the top of the range. So far this year, the Bank of Canada has only partially followed the Federal Reserve in lowering interest rates, and the Canadian dollar has remained little changed.

Emerging Market Economies

In emerging market economies, the average growth rate of economic activity in 2000 remained near the very strong 6 percent rate of the previous year. However, there was a notable and widespread slowing near the end of the year, and results in a few individual countries were much less favorable. Growth in developing Asian economies slowed on average from the torrid pace of the previous year, while average growth in Latin America picked up somewhat. No major developing country experienced default or devaluation in 2000, but nonetheless, financial markets did undergo several periods of heightened unrest during the year. In the spring, exchange rates and equity prices weakened and risk spreads widened in many emerging market economies at a time of a general heightening of financial market volatility and rising interest rates in industrial countries, as well as increased political uncertainty in several developing countries. After narrowing at mid-year, risk spreads on emerging market economy debt again widened later in the year, reflecting a general movement on financial markets away from riskier assets, as well as concerns that Argentina and Turkey might be facing financial crises that could spread to other emerging market economies. Risk spreads generally narrowed in the early part of 2001.

Among Latin American countries, Mexico's performance was noteworthy. Real GDP rose an estimated 7 percent, an acceleration from the already strong result of the previous year. Growth was boosted by booming exports, especially to the United States, favorable world oil prices, and a rebound in domestic demand. In order to keep inflation on a downward path in the face of surging domestic demand, the Bank of Mexico tightened monetary conditions six times last year, pushing up short-term interest rates, and by the end of the year the rate of consumer price inflation had moved below the 10 percent inflation target. The run-up to the July presidential election generated some sporadic financial market pressures, but these subsided in reaction to the smooth transition to the new administration. Over the course of the year, the risk spread on Mexican debt declined on balance, probably reflecting a favorable assessment by market participants of macroeconomic developments and government policies, reinforced by rating upgrades of Mexican debt. During 2000, the peso depreciated slightly against the dollar, but by less than the excess of Mexican over U.S. inflation.

Selected emerging markets



NOTE. The data are monthly. Bond spreads are the J.P. Morgan Emerging Market Bond Index (stripped Brady-bond) spreads over U.S. Treasuries. Last observations are the average of trading days through February 8, 2001.

Argentina encountered considerable financial distress last year. Low tax revenues due to continued weak activity along with elevated political uncertainty greatly heightened market concerns about the ability of the country to fund its debt. Starting in October, domestic interest rates and debt risk spreads soared amid market speculation that the government might lose access to credit markets and be forced to abandon the exchange rate peg to the dollar. Financial markets began to recover after an announcement in mid-November that an IMF-led international financial support package was to be put in place. Further improvement came in the wake of an official announcement in December of a $40 billion support package. The fall in U.S. short-term interest rates in January eased pressure on Argentina's dollar-linked economy as well.

Late in the year, Brazilian financial markets received some negative spillover from the financial unrest in Argentina, but conditions did not approach those prevailing during Brazil's financial crisis of early 1999. For 2000 as a whole, the Brazilian economy showed several favorable economic trends. Real GDP growth increased to an estimated 4 percent after being less than 1 percent the previous two years, inflation continued to move lower, and short-term interest rates declined.

Growth in Asian developing countries in 2000 slowed from the previous year, when they had still been experiencing an exceptionally rapid bounceback from the 1997–1998 financial crises experienced by several countries in the region. In Korea, real GDP growth last year is estimated to have been less than half of the blistering 14 percent rate of 1999. Korean exports, especially of high-tech products, started to fade toward the end of 2000. Rapid export growth had been a prominent feature of the recovery of Korea and other Asian developing economies following their financial crises. In addition, a sharp fall in Korean equity prices over the course of the year, as well as continued difficulties with the process of financial and corporate sector restructuring, tended to depress consumer and business confidence. These developments contributed to the downward pressure on the won seen near the end of the year. Elsewhere in Asia, market concerns over heightened political instability were a major factor behind financial pressures last year in Indonesia, Thailand, and the Philippines. In China, output continued to expand rapidly in 2000, driven by a combination of surging exports early in the year, sustained fiscal stimulus, and some recovery in private consumption. In contrast, growth in both Hong Kong and Taiwan slowed, especially in the latter part of the year. In Taiwan, the exchange rate and stock prices both came under downward pressure as a result of the slowdown in global electronics demand and apparent market concerns over revelations of possible weaknesses in the banking and corporate sectors.

Turkey's financial markets came under severe strain in late November as international investors withdrew capital amid market worries about the health of Turkey's banks, the viability of the government's reform program and its crawling peg exchange rate regime, and the widening current account deficit. The resulting liquidity shortage caused short-term interest rates to spike up and led to a substantial decline in foreign exchange reserves held by the central bank. Markets stabilized somewhat after it was announced in December that Turkey had been able to reach loan agreements with the IMF, major international banks, and the World Bank in an effort to provide liquidity and restore confidence in the banking system.