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# ERAL RESERVE'S FIRST MONETARY POLICY REPORT FOR 1997

# HEARING

BEFORE THE

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

ONE HUNDRED FIFTH CONGRESS

FIRST SESSION

ON

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

FEBRUARY 26, 1997

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# CONTENTS

## WEDNESDAY, FEBRUARY 26, 1997


| | Page |
|---|---|
| Opening statement of Chairman D'Amato | 1 |
| Opening statements, comments, or prepared statements of: | |
| Senator Sarbanes | 2 |
| Senator Shelby | 4 |
| Senator Mack | 4 |
| Prepared statement | 33 |
| Senator Bennett | 5 |
| Senator Allard | 5 |
| Senator Hagel | 5 |
| Senator Faircloth | 22 |
| Prepared statement | 33 |
| Senator Dodd | 23 |
| Senator Reed | 27 |
| Senator Moseley-Braun | 34 |


## WITNESS


| | |
|---|---|
| Alan Greenspan, Chairman, Board of Governors of the Federal Reserve System, Washington, DC | 5 |
| Prepared statement | 35 |
| Response to Written Questions of Senator D'Amato | 41 |
| Attachment 1 | 48 |
| Attachment 2 | 50 |


## ADDITIONAL MATERIAL SUPPLIED FOR THE RECORD


| | |
|---|---|
| Monetary Policy Report to Congress, February 26, 1997 | 54 |
| Letter from Alan Greenspan, Chairman, Federal Reserve, to Senator Richard C. Shelby, dated April 10, 1997 with Attachments | 80 |
| Joint Committee on Taxation Chart | 86 |

# FEDERAL RESERVE'S FIRST MONETARY POLICY REPORT FOR 1997

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**WEDNESDAY, FEBRUARY 26, 1997**

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

The Committee met at 10:10 a.m., in room SD–106 of the Dirksen Senate Office Building, Senator Alfonse M. D'Amato (Chairman of the Committee) presiding.

## OPENING STATEMENT OF CHAIRMAN ALFONSE M. D'AMATO

The CHAIRMAN. The Committee will come to order.

The Committee is pleased to welcome Chairman Greenspan this morning to hear the Federal Reserve's semiannual report on the economy to Congress.

Chairman Greenspan, I have shared this with others. You might be wondering what we were gathering about. This past Sunday, *The Washington Post Magazine* on page 5 had one of the absolutely, most interesting analyses of Chairman Greenspan. I have passed copies out to the Members. Senator Hagel, do you have a copy of this analysis?

Senator HAGEL. Yes, Mr. Chairman. Thank you.

The CHAIRMAN. I would commend it to all of those soothsayers and those who hang on every single word of the Chairman's, particularly as it relates to their anxieties about just how high is high.

Let me just share a few of these. It is entitled, "Reading Mr. Greenspan." Of course, it has his famous eyeglass pose. You notice that one? He goes like this [indicating]. When he does that, adjusting the eyeglasses with fingertips, it says, that's the Wait-and-See posture. Then his most famous pose of resting his face on his hands, that's the Need-to-Support-the-Dollar. Arms-Akimbo—and we have seen that several times—that's a possible hike in interest rates. When he does that, the entire table over there, the press, they race out to make their phone calls to let everyone know. And then last but not least, that's the one-handed pushups. I don't know how many of you have seen that. That's a warning that he might not be able to reduce rates.

Anyway, Mr. Chairman, it is good to have you here. The fact is *The Wall Street Journal* today also attempted to explain how you interpret the vast volumes of data. Their conclusion seems to be that you alone have a unique ability that isn't easily duplicated. And we agree with that.

I think you have done an outstanding job. You have brought confidence to the marketplace and we are pleased and delighted to have you with us today.

The serious parts of my statement have been duplicated many times before, so I am not going to bother even putting them into the record. But I want to say, welcome. We're delighted to have you and look forward to your message.

Senator Sarbanes.

## OPENING STATEMENT OF SENATOR PAUL S. SARBANES

Senator SARBANES. Thank you very much, Chairman D'Amato.

I am pleased to join in welcoming Chairman Greenspan to the Banking Committee this morning to testify on the Federal Reserve's semiannual report to Congress on monetary policy.

Since January 1996, over a year ago, the Federal Reserve has left short-term interest rates unchanged. This policy of the Fed's, I think, has been vindicated by the performance of the economy. Evidence largely points to an economy that is growing at a sustainable pace with no evidence of inflation.

In fact, earlier this month the Labor Department reported that consumer prices rose one-tenth of 1 percent in January. The core portion of the Consumer Price Index, which excludes volatile food and energy prices, also rose only one-tenth of 1 percent last month.

Over the past 12 months, the core CPI has risen 2½ percent, matching the figure for the 12 months ending December 1994, the smallest such increase in 31 years. So, with the exception of 1994, this is the best performance in 31 years.

The Labor Department also reported earlier this month that the prices charged by American producers fell in January, the first monthly decline in 2 years. The Producer Price Index for finished goods fell three-tenths of 1 percent. These benign results are regarded by many analysts as further confirmation that inflation poses little threat and that the economy's growth rate has eased from its rapid pace in the fourth quarter of 1996.

A senior economist at Merrill Lynch in fact stated: "Never, never, never has inflation been so low at such an advanced stage of a business cycle. We believe it will remain low."

This outstanding inflation performance is being buttressed by the rapid growth in business investment. As Janet Yellen, a former colleague of Chairman Greenspan's at the Federal Reserve Board who was recently confirmed by the Senate to be the Chairman of the Council of Economic Advisers, said at her confirmation hearing before this Committee, and I quote her:

> Throughout our long expansion, inflation has remained low and fallen by most broad measures; and investment in plant and equipment—the driving force of this expansion—has grown at a phenomenal pace.

The rapid growth in business investment has increased the productive capacity of many industries. Indices of industrial commodity prices have been trending downward. Earlier this month, the National Association of Purchasing Management said delivery of items ordered by manufacturers speeded up in January, a clear sign there is no strain in that part of the economy.

Contrary to the predictions of some, the unemployment rate has now been below 6 percent for 2½ years, while the economy has enjoyed this previously recited outstanding performance on inflation.

Now, my recollection, Chairman Greenspan, is that you have expressed skepticism about this so-called concept of the natural rate of unemployment. My understanding of your past testimony is that the workings of the economy are far more complex than that and that is a concept that is perhaps not helpful to us.

Although there were many who have asserted that if you get unemployment down below 6 percent, then inflation is going to go up. Of course, if we had abided by that counsel, we would have forsaken a lot of growth and a lot of jobs, if we had taken policies consistent with that particular dogma.

Unemployment has remained stable at about 5.4 percent for the past year. And the continued demand for workers has been strong across the country. A record share of the U.S. population over age 15, nearly two-thirds had a job in January, the Labor Department reported.

I just want to make one final observation. And that is that this extended period now of relatively low unemployment, I think, is bringing us beneficial results, much to be desired and results that I do not think would otherwise have occurred had we not had such a sustained period.

*The New York Times,* at the beginning of this month, had an article entitled, "A Sharp Decrease in Welfare Cases Is Gathering Speed." And it then went on to point to this drop in the welfare rolls across the country, and I quote them:

> Much of the decline seems driven by the country's economic expansion, which has kept the unemployment rate below 6 percent for 28 consecutive months. But some of it also seems to stem from the efforts of many States in the last few years to place welfare recipients in jobs.

Then it goes on to note:

> Researchers are uncertain which force is dominant: good times or tough laws.

They discuss various State programs to move people from welfare to work. And they also discuss, of course, the strong performance of the economy.

I don't think one has to necessarily decide that issue in terms of allocating percentages. I think it is clear that the good performance of the economy and a sustained period of low unemployment is an important contributor to helping to bring down the welfare rolls. In fact, later in this article, after discussing some States that have substantially changed the welfare policy, the article notes:

> West Virginia has also had a sharp reduction in welfare, with its rolls shrinking 33 percent since March 1994, but it is also one of the few States that did not change welfare policy. Officials have attributed the reduction to a growth of jobs as the State's unemployment rate fell from 8.9 percent in 1994 to 6.8 percent at the end of last year.

So I want to underscore the very important contribution which I think a strongly growing economy and a low-unemployment rate over a sustained period of time makes toward helping to reduce the welfare rolls. I think it is also reflected in the improvement in unemployment in many of our major cities. It takes a period of sustained good times and lowered unemployment before it really reaches into our urban centers with very positive results, which we are now seeing across the country.

I very much hope, Mr. Chairman, that the Fed keeps this dimension in mind as it considers monetary policy as we move into 1997.

Thank you, Mr. Chairman.

The CHAIRMAN. Thank you, Senator.

Senator Shelby.

## OPENING COMMENTS OF SENATOR RICHARD C. SHELBY

Senator SHELBY. Thank you, Mr. Chairman.

I'm looking forward to hearing your statement, Chairman Greenspan. I am particularly interested in your testimony today because it seems that a lot of people are reading the economic data and have been lulled into complacency, believing that we are in a state of nirvana. On the contrary, I believe we should be very concerned because it's times like this when we least expect it that inflation will show its ugly head. We have seen it before. I hope not.

I point to this record of low inflation and continued expansion as evidence that monetary policy should strive for price stability and zero inflation, as you have enunciated here many, many times. This can only be achieved, I believe, with a strong, independent central bank, which you've chaired.

I want to credit, Mr. Chairman, the Federal Reserve and thank them for their continued efforts and their success in achieving low inflation over the course of this expansion that Senator Sarbanes brought up. Inflation, however, remains a very real and important concern of mine and other people. I hope it remains, Chairman Greenspan, a concern of the Federal Open Market Committee.

I look forward to hearing your testimony.

The CHAIRMAN. Senator Mack.

## OPENING COMMENTS OF SENATOR CONNIE MACK

Senator MACK. Mr. Chairman, I would ask that my statement be included in the record.

The CHAIRMAN. So ordered.

Senator MACK. I just want to welcome Chairman Greenspan and also echo the other thoughts that have been expressed here in commending the Federal Reserve for the work that they've done over the years in moving toward price stability.

I will be reintroducing legislation that I introduced last year, the "Economic Growth and Price Stability Act," which, in essence, says that there ought to be a single objective for the Federal Reserve, and that's price stability.

I believe that one of the significant factors with respect to the economic growth that we have experienced is because we have seen long-term interest rates come down. And long-term interest rates are a reflection of people's expectations. The Fed can't control long-term interest rates. They can affect short-term interest rates. But because of the belief that the Fed is committed to price stability, long-term interest rates have come down. Long-term interest rates affect many, many factors of the economy and consumers.

So, again, I congratulate you on the work that you have done and look forward to hearing your testimony.

The CHAIRMAN. Senator Bennett.

## OPENING COMMENTS OF SENATOR ROBERT F. BENNETT

Senator BENNETT. Thank you, Mr. Chairman.

I have no opening statement, but I have some questions that I'll pursue when we get to that point. I simply want to welcome the Chairman and tell him I'm looking forward to his comments.

The CHAIRMAN. Senator Allard.

## OPENING COMMENTS OF SENATOR WAYNE ALLARD

Senator ALLARD. Thank you, Mr. Chairman.

I have some brief remarks to Mr. Greenspan and the Committee. I have heard his testimony before as a member of the Budget Committee over on the House side and I am looking forward to your comments here today.

I would just like to take this opportunity to welcome you to the Senate Banking Committee and thank you for your leadership in helping to sustain the economic expansion while controlling inflation. And while I appreciate your role in the monetary policy of this Nation, I am particularly concerned with the future of the main governmental component in the economy, and that's fiscal policy.

Although we have been successful in bringing down the deficit in recent years, I am concerned that Congress will lack the willpower to bring the reforms needed to finally balance the budget. If Congress fails to reform entitlements and does not continue to control discretionary spending, the deficit will begin to rise and will rise very quickly.

I look forward to hearing your assessment of the importance to the economy of balancing the budget and about the economic effects of failing to address the root causes of the deficit problem.

Again, I thank you for coming before this Committee today and I appreciate any insight that you may give to address my concerns.

Thank you.

The CHAIRMAN. Thank you, Senator.

Senator Hagel.

## OPENING COMMENTS OF SENATOR CHUCK HAGEL

Senator HAGEL. Mr. Chairman, thank you.

Mr. Greenspan, welcome. I too look forward to your testimony and the exchange this morning. I am particularly pleased that you are here in this bigger room. It gives me on the end a little more space.

[Laughter.]

So welcome. Nice to have you.

The CHAIRMAN. Thank you, Senator.

Mr. Chairman, I think this is probably the earliest we have ever gotten to you. Generally, we take about an hour with all of our speeches. So I want to commend all my colleagues and now turn to you, Chairman Greenspan.

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

Chairman GREENSPAN. I thank them all and you, Mr. Chairman, for these kind remarks.

I will be excerpting from my prepared remarks and request, as usual, that the full remarks be included in the record.

The CHAIRMAN. So ordered.

Chairman GREENSPAN. It is always a pleasure to appear before this Committee every 6 months to present the Federal Reserve's semiannual report on monetary policy.

The performance of the U.S. economy over the past year has been quite favorable. Real GDP growth picked up to more than 3 percent over the four quarters of 1996, as the economy progressed through its sixth year of expansion. Employers added more than 2½ million workers to their payrolls in 1996 and the unemployment rate fell further.

Senator SARBANES. Mr. Chairman, could you pull the microphone a little closer? I think it would help all of us a bit.

Chairman GREENSPAN. Nominal wages and salaries have increased faster than prices, meaning workers have gained ground in real terms, reflecting the benefits of rising productivity. Outside the food and energy sectors, increases in consumer prices actually have continued to edge lower with core CPI inflation only 2½ percent over the past 12 months.

Low inflation last year was both a symptom and a cause of the good economy. It was symptomatic of the balance and the solidity of the expansion and the evident absence of major strains on resources. At the same time, continued low levels of inflation and inflation expectations have been a key support for healthy economic performance. They have helped to create a financial and economic environment conducive to strong capital spending and longer-range planning generally, and so to sustained economic expansion. Consequently, the Federal Open Market Committee believes it is crucial to keep inflation contained in the near term and ultimately to move toward price stability.

Looking ahead, the members of the FOMC expect inflation to remain low and the economy to grow appreciably further. However, as I shall be discussing, the unusually good inflation performance of recent years seems to be owed in large part to some temporary factors, of uncertain longevity.

Thus, the FOMC continues to see the distribution of inflation risks skewed to the upside and must remain especially alert to the possible emergence of imbalances in financial and product markets that ultimately could endanger the maintenance of the low-inflation environment. Sustainable economic expansion for 1997 and beyond depends on it.

For some, the benign inflation outcome of 1996 might be considered surprising, as resource utilization rates, particularly of labor, were in the neighborhood of those that historically have been associated with building inflation pressures. To be sure, an acceleration in nominal labor compensation, especially its wage component, became evident over the past year. But the rate of pay increase still was markedly less than historical relationships with labor market conditions would have predicted. Atypical restraint on compensation increases has been evident for a few years now and appears to be mainly the consequence of greater worker insecurity.

The reluctance of workers to leave their jobs to seek other employment as the labor market tightened has provided evidence of such concern, as has the tendency toward longer labor union contracts. The low level of work stoppages of recent years also attests to concern about job security. Thus, the willingness of workers in recent years to trade off smaller increases in wages for greater job security seems to be reasonably well documented.

The unanswered question is why this insecurity persisted even as the labor market, by all objective measures, tightened considerably. One possibility may lie in the rapid evolution of technologies in use in the work place. Technological change almost surely has been an important impetus behind corporate restructuring and downsizing. Also, it contributes to the concern of workers that their job skills may become inadequate.

Certainly, other factors have contributed to the softness in compensation growth in the past few years. The sharp deceleration in health care costs, of course, is cited frequently. Another is the heightened pressure on firms and their workers in industries that compete internationally. Domestic deregulation has had similar effects on the intensity of competitive forces in some industries. In any event, although I do not doubt that all of these factors are relevant, I would be surprised if they were nearly as important as job insecurity.

If heightened job insecurity is the most significant explanation of the break with the past in recent years, then it is important to recognize that, as I indicated in last February's Humphrey–Hawkins testimony, suppressed wage cost growth as a consequence of job insecurity can be carried only so far. At some point, the trade-off of subdued wage growth for job security has to come to an end. In other words, the relatively modest wage gains we have experienced are a temporary rather than a lasting phenomenon. Even if real wages were to remain permanently on a lower upward track than otherwise, as a result of the greater sense of insecurity, the rate of change of wages would revert at some point to a normal relationship with inflation. The unknown is when this transition period will end.

Indeed, some recent evidence suggests that the labor markets bear especially careful watching for signs that the return to more normal patterns may be in process. The Bureau of Labor Statistics reported that people were somewhat more willing to quit their jobs to seek other employment in January than previously. The possibility that this reflects greater confidence by workers accords with a recent further rise in the percent of households responding to a Conference Board survey who perceive that job availability is plentiful. Of course, the job market has continued to be quite good recently. Employment in January registered robust growth and initial claims for unemployment insurance have been at a relatively low level of late. Wages rose faster in 1996 than in 1995 by most measures, perhaps also raising questions about whether the transitional period of unusually slow wage gains may be drawing to a close.

To be sure, the pickup in wage gains has not shown through to underlying price inflation. Increases in the core CPI, as well as in several broader measures of prices, have stayed subdued or even edged off further in recent months. As best we can judge, faster productivity growth last year meant that rising compensation gains did not cause labor costs per unit of output to increase any more rapidly. Nonlabor costs, which are roughly a quarter of total consolidated costs of the nonfinancial corporate sector, were little changed in 1996.

Owing in part to this subdued behavior of unit costs, profits and rates of return on capital have risen to high levels. As a consequence, businesses believe that, were they to raise prices to boost profits further, competitors with already ample profit margins would not follow suit. Instead, that they would use the occasion to capture a greater market share. This interplay is doubtless a significant factor in the evident loss of pricing power in American business.

Intensifying global competition also may be further restraining domestic firms' ability to hike prices, as well as wages. Clearly, the appreciation of the dollar on balance over the past 18 months or so, together with low inflation in many of our trading partners, has resulted in a marked decline in non-oil import prices that has helped to damp domestic inflation pressures. Yet it is important to emphasize that these influences, too, would be holding down inflation only temporarily; they represent a transition to a lower price level than would otherwise prevail, not to a permanently lower rate of inflation.

Against the background of all of these considerations, the FOMC has recognized the need to remain vigilant for signs of potentially inflationary imbalances that might, if not corrected promptly, undermine our economic expansion. The FOMC, in fact, has signaled a state of heightened alert for possible policy tightening since last July in its policy directives. But, we have also taken care not to act prematurely. The FOMC refrained from changing policy last summer, despite expectations of a near-term policy firming by many financial market participants. In light of the developments I have just discussed affecting wages and prices, we thought inflation might well remain damped and, in any case, was unlikely to pick up very rapidly, in part because the economic expansion appeared likely to slow to a more sustainable pace. In the event, inflation has remained quiescent since then.

Given the lags with which monetary policy affects the economy, however, we cannot rule out a situation in which a pre-emptive policy tightening may become appropriate before any sign of actual higher inflation becomes evident. If the FOMC were to implement such an action, it would be judging that the risks to the economic expansion of waiting longer had increased unduly and had begun to outweigh the advantages of waiting for the uncertainties to be reduced by the accumulation of more information about economic trends. Indeed, the hallmark of a successful policy to foster sustainable economic growth is that inflation does not rise. I find it ironic that our actions in 1994 and early 1995 were criticized by some because inflation did not turn upward. That outcome, of course, was the intent of the tightening, and I am satisfied that our actions then were both necessary and effective, and helped to foster the continued economic expansion.

To be sure, 1997 is not 1994. The real Federal funds rate today is significantly higher than it was 3 years ago. Then we had just completed an extended period of monetary ease which addressed the credit stringencies of the early 1990's, and with the abatement of the credit crunch, the low real Federal funds rate of early 1994 was clearly incompatible with containing inflation and sustaining growth going forward. In February 1997, in contrast, our concern is a matter of relative risks rather than of expected outcomes. The real funds rate, judging by core inflation, is only slightly below its early 1995 peak for this cycle and might be at a level that will promote continued noninflationary growth, especially considering the recent rise in the exchange rate of the dollar. Nonetheless, we can't be sure. The risks of being wrong are clearly tilted to the upside.

I wish it were possible to lay out in advance exactly what conditions have to prevail to portend a build-up of inflation pressures or inflationary psychology. However, the circumstances that have been associated with increasing inflation in the past have not followed a single pattern. The processes have differed from cycle to cycle and what may have been a useful leading indicator in one instance has given off misleading signals in another.

I have already discussed the key role of labor market developments in restraining inflation in the current cycle and our careful monitoring of signs that the transition phase of trading off lower real wages for greater job security might be coming to a close. As always, with resource utilization rates high, we would need to watch closely a situation in which demand was clearly unsustainable because it was producing escalating pressures on resources, which could destabilize the economy. And we would need to be watchful that the progress that we have made in keeping inflation expectations damped was not eroding. In general, though, our analysis will need to encompass all potentially relevant information, from financial markets as well as the economy, especially when some signals, like those in the labor market, have not been following their established patterns.

The ongoing economic expansion to date has reinforced our conviction about the importance of low inflation—and the public's confidence in continued low inflation.

This year overall inflation is anticipated to stay restrained. The central tendency of the forecasts made by the Board members and Reserve Bank presidents has the increase in the total CPI slipping back into a range of 2¾ to 3 percent over the four quarters of the year. This slight fall-off from last year's pace is expected to owe in part to a slower rise in food prices as some of last year's supply limitations ease. More importantly, world oil supplies are projected by most analysts to increase relative to world oil demand, and futures markets project a further decline in prices, at least in the near-term. Nonetheless, the trend in inflation rates in the core CPI and in broader price measures may be somewhat less favorable than in recent years.

The unemployment rate, according to Board members and Bank presidents, should stay around 5¼ to 5½ percent through the fourth quarter, consistent with their projections of measured real GDP growth of 2 to 2¼ percent over the four quarters of the year.

The usual uncertainties in the overall outlook are especially focused on the behavior of consumers. Consumption should rise roughly in line with the projected moderate expansion of disposable income, but both upside and downside risks are present. According to various surveys, sentiment is decidedly upbeat. Consumers have enjoyed healthy gains in their real incomes, along with the extraordinary stock market driven rise in their financial wealth over the last couple of years.

It is possible, however, that households have been reluctant to spend much of their added wealth because they see a greater need to keep it to help support spending in retirement. Many households have expressed heightened concern about their financial security in old age, which reportedly has led to the increased provision for retirement.

Moreover, consumer debt burdens are near historic highs, while credit card delinquencies and personal bankruptcies have risen sharply over the past year. These circumstances may make both borrowers and lenders a bit more cautious, damping spending.

The Federal Reserve will be weighing all of these influences as it endeavors to help extend the current period of sustained growth. The participants in financial markets seem to believe that in the current benign environment the FOMC will succeed indefinitely. There is no evidence, however, that the business cycle has been repealed. Another recession will doubtless occur some day owing to circumstances that could not be, or at least were not, perceived by policymakers and financial market participants alike. History demonstrates that participants in financial markets are susceptible to waves of optimism, which can in turn foster a general process of asset-price inflation that can feed through into markets for goods and services. Excessive optimism sows the seeds of its own reversal in the form of imbalances that tend to grow over time. When unwarranted expectations ultimately are not realized, the unwinding of these financial excesses can act to amplify a downturn in economic activity, much as they can amplify the upswing. As you know, Mr. Chairman, last December, I put the question this way: "How do we know when irrational exuberance has unduly escalated asset values, which then become subject to unexpected and prolonged contractions?"

We have not been able, as yet, to provide a satisfying answer to this question, but there are reasons in the current environment to keep this question on the table. Clearly, when people are exposed to long periods of relative economic tranquility, they seem inevitably prone to complacency about the future. This is understandable. We have had 15 years of economic expansion interrupted by only one recession, and that was 6 years ago. As the memory of such past events fades, it naturally seems ever less sensible to keep up one's guard against an adverse event in the future. Thus, it should come as no surprise that, after such a long period of balanced expansion, risk premiums for advancing funds to businesses in virtually all financial markets have declined to near record lows.

Is it possible that there is something fundamentally new about this current period that would warrant such complacency? Yes, it is possible. Markets may have become more efficient, competition is more global, and information technology has doubtless enhanced the stability of business operations. But, regrettably, history is strewn with visions of such "new eras" that, in the end, have proven to be a mirage. In short, history counsels caution.

Such caution seems especially warranted with regard to the sharp rise in equity prices during the past 2 years. These gains have obviously raised questions of sustainability. Analytically, current stock market valuations at prevailing long-term interest rates could be justified by very strong earnings growth expectations. In fact, the long-term earnings projections of financial analysts have been marked up noticeably over the last year and seem to imply very high earnings growth and continued rising profit margins, at a time when such margins are already up appreciably from their depressed levels of 5 years ago. It could be argued that, although margins are the highest in a generation, they are still below those that prevailed in the 1960's. Nonetheless, further increases in these margins would evidently require continued restraint on costs: labor compensation continuing to grow at its current pace and productivity growth picking up. Neither, of course, can be ruled out. But we should keep in mind that, at these relatively low long-term interest rates, small changes in long-term earnings expectations could have outsized impacts on equity prices.

Caution also seems warranted by the narrow yield spreads that suggest perceptions of low risk, possibly unrealistically low risk. Considerable optimism about the ability of businesses to sustain this current healthy financial condition seems, as I indicated earlier, to be influencing the setting of risk premiums, not just in the stock market, but throughout the financial system. This optimistic attitude has become especially evident in quality spreads on high-yield corporate bonds—what we used to call "junk bonds." In addition, banks have continued to ease terms and standards on business loans, and margins on many of these loans are now quite thin. Many banks are pulling back a little from consumer credit card lending as losses exceed expectations. Nonetheless, some bank and nonbank lenders have been expanding aggressively into the home equity loan market and so-called "subprime" auto lending, although recent problems in the latter may already be introducing a sense of caution.

Why should the central bank be concerned about the possibility that financial markets may be overestimating returns or mispricing risk? It is not that we have a firm view that equity prices are necessarily excessive right now or risk spreads patently too low. Our goal is to contribute as best we can to the highest possible growth of income and wealth over time, and we would be pleased if the favorable economic environment projected in markets actually comes to pass. Rather, the FOMC has to be sensitive to indications of even slowly building imbalances, whatever their source, that, by fostering the emergence of inflation pressures, would ultimately threaten healthy economic expansion.

I will conclude, Mr. Chairman, on the same upbeat note about the U.S. economy with which I began. Although a central banker's occupational responsibility is to stay on the outlook for trouble, even I must admit that our economic prospects in general are quite favorable. The flexibility of our market system and the vibrancy of our private sector remain examples for the whole world to emulate. The Federal Reserve will endeavor to do its part by continuing to foster a monetary framework under which our citizens can prosper to the fullest possible extent.

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

The CHAIRMAN. Mr. Chairman, I would like to make a prediction on your conclusion with respect to the prospects of the market. I predict it will probably close about 120 points up today.

[Laughter.]

I hope no one bets on that.

[Laughter.]

Senator MACK. For selling short.

[Laughter.]

The CHAIRMAN. Mr. Chairman, recently, you testified before the Budget Committee that you supported a capital gains tax rate of zero. You also indicated that that tax cut could actually produce revenue for the Government. What impact do you believe such a cut would have on the average American citizen?

Chairman GREENSPAN. Well, the point I made before the Budget Committee, Mr. Chairman, was that if the capital gains tax were eliminated, we would presumably, over time, see increased economic growth which would raise revenues from the personal and the corporate income taxes, as well, obviously, as other taxes which we have.

It's not clear exactly to what extent the degree of revenue would fully offset the loss in taxes that are associated with the capital gains tax itself. But I also went on to say that the crucial issue about the capital gains tax is not in its revenue-raising capacity. I think it's a very poor tax for that purpose and, indeed, its major impact, as best I can judge, is to impede entrepreneurial activity and capital formation.

While all taxes impede economic growth to one extent or another, the capital gains tax, in my judgment, is at the far end of the scale. And so, I have argued that the appropriate capital gains tax rate was zero and, short of that, any cuts and especially indexing would, in my judgment, be an act that would be appropriate policy for this Congress.

The CHAIRMAN. Well, I want to thank you, Mr. Chairman, and I hope that some of our colleagues and the Administration would listen to your remarks.

Certainly, if there's anybody who has credibility with respect to what the impact of various tax policies should have, it would be yourself. I think this business of saying, well, this is going to help wealthy people and that the impact would not be felt throughout the entire economy is not correct. As you have indicated, the effect of a cut or reduction would be felt at all levels, and create jobs and free up the capital system. But coming from you, I hope that that maybe gives us an impetus to continue that push.

Let me ask you one thing, maybe somewhat esoteric. In previous reports, you have noted that the increasing usage of retail sweep accounts by banks in order to get around the reserve requirements because they don't get interest on those requirements was something of concern. How serious a threat to implementing monetary policy are these sweep accounts? And is there a threat as it relates to the Fed's being able to have some impact as to interest rates?

Chairman GREENSPAN. Mr. Chairman, what that does is affect our reserve position and our ability to employ standard open market monetary policy to affect the financial condition of the banking system and the markets generally.

Part of the problem is being offset by the fact that even though reserve balances are falling because of these sweep accounts, clearing balances, required and otherwise, which banks use for purposes of obtaining services from the Federal Reserve, have been reasonably high. We have not experienced any specific problem in implementing monetary policy.

Far more important, however, is that this is truly a technical issue. If we were to run into difficulty, there are many other regimes for the implementation of monetary policy which we could bring forth and obtain pretty much the same result we get today. It would be an inconvenience, but it would not be anything which we could consider to be a significant problem.

So while our technicians do worry about it and, indeed, we are concerned, especially during the period which has just passed when reserves are exceptionally low for seasonal reasons, that we would run into some difficulty, we haven't. And so I think it's a technical problem and I would not give it terribly much thought.

The CHAIRMAN. One last question, Mr. Chairman. Should Congress authorize the Fed to pay interest on bank reserves?

Chairman GREENSPAN. We have always argued that were we to pay interest on bank reserves, the problem that a number of the banks are having with respect to so-called sterile reserves on their balance sheets would disappear, and we have advocated that. And indeed, we have also advocated the abolition of the restriction on payment of interest on demand deposits as well.

The problem, as I'm sure you're aware, is that that would induce a fairly significant reduction in Federal budget receipts because a substantial amount of payment on those reserves clearly offsets the amount that we would be paying to the Treasury. However, I would stipulate that as reserves fall, the aggregate amounts that we are paying decline, so that it may become an issue which gradually disappears by itself.

The CHAIRMAN. I think that your views are certainly worthy of our consideration. I would ask some of my colleagues to consider joining in a legislative effort to do just that because banks are placed in a position where, in order to offset this loss, they are getting involved in other machinations—sweep accounts and other things. The revenue loss is about $500 million annually. It's theirs. I think we should let banks earn interest on it. And maybe we ought to take a good look at it.

I thank you, Mr. Chairman.

Senator Sarbanes.

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

First of all, Chairman Greenspan, I've been observing very carefully, and I don't think up to this point you have yet used any one of the postures that was in this handout that Chairman D'Amato distributed at the beginning of the meeting.

Your testimony reminds me a bit of the admonition that President Truman once gave that he wanted a one-armed economist. When asked why, he said, "because all I am getting from them is, on the one hand and on the other hand."

[Laughter.]

And I thought this was a very balanced statement in terms of combining, on the one hand, a willingness to explore the possibility that there have been some changes in fundamental arrangements that make past benchmarks inapplicable. In other words, previous trigger points maybe don't work any more.

On the other hand, as you say, history counsels caution. So we have to keep that in mind as well. And I sense in this statement the Fed sort of, as it were, puzzling through the economic situation since we have seen things happening that are contrary to historical pattern.

Although it depends which historical pattern you make reference to. I think there may be a tendency to be very much in a short-term historical pattern. I was interested, for instance, in your comment where you say, "although margins are the highest in a generation, they are still below those that prevailed in the 1960's." So it depends what time perspective you're taking.

I want to ask just one question to make sure I understand it. In your prepared statement, you say: "Saving out of current income by households in the upper income quintile, who own nearly three-fourths of all nonpension equities held by households." In other words, the top fifth of households own about three-quarters of all nonpension equities held by households. Is that correct?

Chairman GREENSPAN. That is correct, Senator.

Senator SARBANES. The Fed in the past has expressed some concern, in fact, I think have done some studies, about inequity in income and wealth in the United States. Is the Fed continuing with those studies? Or what is the latest report on that?

Chairman GREENSPAN. The latest survey we have made with respect to consumer finances is for the year 1995. These data which I am citing are a combination of our flow of funds data accounts and the 1995 and 1992 surveys.

Senator SARBANES. OK. Now, your reference to a zero capital gains not costing revenues because the economy would improve so much that other taxes would compensate for it. Is that right?

Chairman GREENSPAN. I didn't mean to say that it would cost no revenues. It would raise additional revenues other than capital gains taxes. In other words, if the capital gains tax went to zero and, as I suspect, the economy would pick up on a path greater than it would otherwise be, then other tax revenues would rise. But I have no way of knowing whether or not that rise would be less than, equal to, or more than the loss in the revenues from the capital gains tax.

Senator SARBANES. In any event, it would be time-delayed, would it not?

Chairman GREENSPAN. It would.

Senator SARBANES. There would obviously be a loss of revenues in the short-run because you couldn't get the—whether or not you got the upsurge. But if you were to get it, you wouldn't get it immediately in the resulting revenues. Would that be correct?

Chairman GREENSPAN. That is correct, Senator.

Senator SARBANES. Let me ask you about this *New York Times* article on the decline in the welfare caseloads, which I made reference to in my opening statement. Would you agree with the proposition that the relatively low level of unemployment over quite a sustained period of time has been a contributor to this decline in the number of people on welfare?

Chairman GREENSPAN. I have not done any analytical work on that. But clearly, from analyses I have done in the past on things similar to it, AFDC workloads, that does, in fact, contribute to changes in the level of welfare. So my suspicion is there's probably something there.

Senator SARBANES. Actually, as the labor markets tighten a bit, it would become an incentive, would it not, on employers to try to draw people into the workforce and to more adequately train the people that they already have in the workforce?

Chairman GREENSPAN. I think they are doing that.

Senator SARBANES. Yes. I see my time is up. I just want to underscore again the point I made in my opening statement. I think that's a very important dimension of having unemployment at low levels over a lengthy period of time, as has been the case now for the past couple of years. I think we are reaping benefits, both on the welfare issue and on the question of employment in the inner cities. I don't think we reach those problems until the economy has worked in a positive way for a fairly sustained period of time. And I very much hope, as I indicated, that it will be a matter kept in the thinking of the Federal Reserve and the Open Market Committee as you address the question of monetary policy.

Thank you very much, Mr. Chairman.

The CHAIRMAN. Thank you, Senator.

I would note for the record that Senator Moseley-Braun has just joined us. I don't know if she has a statement for the record. Senator Bryan and Senator Faircloth have also joined us.

There is a vote underway right now. Let me suggest that we take a brief 5-minute break so that we can go down and vote, unless Senator Mack, would you want to proceed right now?

Senator MACK. I wouldn't mind doing that. But, again, I can do that while you all go vote and then go.

The CHAIRMAN. Either way. All right. Senator Shelby is on his way back. So why don't we do this to keep the continuity going. Senator Mack, would you take your 5 minutes now and then Senator Shelby will be back to follow up. How's that?

Senator MACK. Thanks.

The CHAIRMAN. So we will continue, and I hope you'll bear with us, Mr. Chairman.

Senator MACK. Thank you, Mr. Chairman.

There are a couple of areas I want to try to touch on. First, in a sense, it seems like the Treasury agrees with your comments with respect to indexing, even though they may not have said it directly with respect to capital gains. But it seems to me that one can make the argument that if Treasury wants to protect investors in Treasury bonds by indexing, that they would be interested in protecting those who make investments in other areas as well. Would you agree or disagree with that?

Chairman GREENSPAN. I would say there is a simple way to find out—ask them.

[Laughter.]

Senator MACK. Well, let me ask you. I would assume that, again, you are supportive of the concept of indexing capital gains. If you had to establish some priorities, lowering the tax rate or indexing, which would you do?

Chairman GREENSPAN. Actually, I would go to indexing. And the reason I would is that it's really wrong to tax a part of a gain in the value of assets which is attributable to a decline in the purchasing power of the currency which in turn is attributable to poor governmental economic policy.

So, for the Government to tax people's assets which rise as a consequence of inferior actions on the part of Government, strikes me as most inappropriate. Therefore, I would say that, at a minimum, indexing capital gains at least eliminates that problem. And I must say to you, had capital gains been indexed several years ago when there seemed to be some general bipartisan interest in doing so, I think you would find that all of the discussions of rate cuts currently would have, in fact, been implemented by the previous indexing that could have occurred.

I just want to say, I don't deny there are very considerable difficulties in managing from an IRS point of view indexed capital gains. But there's an awful lot of problems that we have elsewhere there, too, in all sorts of complex income determinations.

Senator MACK. Of the lower tax rate or indexing, which one from an economic standpoint—you addressed it, I think, the issue, more from a fairness, equity—but which of the two do you think has the greater economic effect? And obviously, it would depend on how low you brought the rate?

Chairman GREENSPAN. I don't know the answer to that, sir. One of the reasons is that the way in which the capital gains tax works is very complex and subtle and the way it could raise revenues and lose revenue is very difficult to tell.

Economists who have endeavored to apply detailed econometric analyses to these elements, in my judgment, have not come up with any really robust answers. It may be that somebody knows the answer to that question. At the moment, I do not. Maybe I will become informed at a later date.

Senator MACK. Let me move to another and much broader area. It has to do with, again, a number of people who feel like there has been a kind of shift in the fundamentals of the economy.

You talk with folks on Wall Street and you get the sense that they believe that this expansion can continue for years and years, that the business cycle is dead, or at least the business cycle has been substantially extended. And I think in your comments this morning, you pretty much indicated that you don't accept that.

I am not sure that I buy it, in fact, at this point, I would be much more cautious as well. But it appears to me that there are some fundamentals that have changed in this respect. We used to focus a lot, for example, on capacity utilization. When capacity utilization would hit whatever the magic number was—84, 85, 86—people would start to get nervous.

Today, there is the ability to move production from one country to another. Therefore, it really raises the question of the importance of capacity utilization, and I would make the argument in a number of other areas as well. I would be interested in your reaction to that.

Chairman GREENSPAN. Well, I think those arguments are valid with respect to longer-term growth, and there's no doubt that with the extraordinary expansion of information technologies, computer applications of all sorts, the changing infrastructure of many markets as we deregulate them, that the underlying forces leading to higher growth may well be there, and I certainly hope that is, in fact, the case.

The business cycle, however, is a different breed. It occurs, apparently, as a consequence of human nature, at least as best I can judge. Therefore, what we tend to see from history is significant variations in long-term trends in productivity and, hence, in economic growth. But superimposed on that is a cyclical pattern of activity which is, to a certain extent, endogenous, in that people's attitudes tend to overextend—at least history has case after case of a degree of optimism building into various different types of overexpansion which gluts markets and creates contractions. The most recent obvious example is what happened in commercial real estate in this country. And that was really a big issue.

Senator MACK. Mr. Chairman, I'm sorry, but I've been informed there's only a couple minutes left in the vote and I'm going to have to go do that.

Thank you.

Chairman GREENSPAN. OK.

Senator SHELBY. Mr. Chairman, since I have already voted, I will continue to ask questions.

Mr. Chairman, is the reluctance of workers to leave their jobs more prevalent in any particular sector of the economy? In other words, does it matter, or is it overall? Is it uniform or fairly uniform or widespread?

Chairman GREENSPAN. I don't know the answer to that, Senator, but the data are actually available in the sense that one measure that we tend to use is the data which the Bureau of Labor Statistics produces on so-called job leavers—that is, people who voluntarily become unemployed for the purpose of seeking another job.

We have those data in some detail, but they are not published, and the reason that they are not published is the Bureau of Labor Statistics considers their statistical qualities inadequate for publication. But they are there and that's an interesting question and I will endeavor to see if I can find out whether those data enlighten us on that particular question because I, too, would like to find the answer to that. And I will submit it for the record.

Senator SHELBY. I appreciate that for the record.

Workers leaving their jobs, does it have any geographical significance? Is it uniform geographically, or is it in certain areas? Is it more in the East, reluctance to leave their jobs? The South? The West? The Midwest?

Chairman GREENSPAN. Again, we have those data in that form.

Senator SHELBY. That would be interesting to look at.

Chairman GREENSPAN. Yes. My suspicion is that it probably is not particularly evident, largely because the unemployment rate is generally low pretty much throughout the country and the level of confidence and the various confidence indexes with respect to employment seem to be pretty general as well.

Senator SHELBY. Does the substantial rise in equity values justify to some degree the historical highs in consumer debt? In other words, do people feel like they have more wealth because the market is up or because their mutual funds are doing better and all this? And they feel better about putting on more debt.

Chairman GREENSPAN. I suspect that there's probably something to that. But when you disaggregate the various income groups by upper, middle, middle-lower, that sort of thing, by quintile or by deciles, what you find is that the households in the middle-lower- and lower-income groups have predominantly more consumer credit than they have equities, whether directly or through mutual funds.

While I do not deny, and I am sure there's got to be something to this, that as the values of those assets go up, they would be inclined to feel more comfortable taking out debt and meeting the monthly payment requirements, but I would be doubtful that it is a big deal. It's because of the different households having different mixes of assets and liabilities.

Senator SHELBY. About how much of the net worth in the market ascendancy is held in directly by pension funds as opposed to individuals in the stock market?

Chairman GREENSPAN. You mean what proportion of stocks?

Senator SHELBY. Yes. In other words, you have a big rise in the stock market. But a great proportion of that money is not held by individual stock owners. It is the pension funds and institutional investors, too, have benefited.

Chairman GREENSPAN. That is correct. They are major holders.

Senator SHELBY. Major holders. So when we see the market go up so much, as it has, it doesn't necessarily mean that a lot of the individuals are benefiting directly.

Chairman GREENSPAN. No. That is the reason why I mentioned that, in the upper quintile, three-fourths of nonpension equities are held by that income group.

But remember that everyone's 401(k)'s have some of that, and then there are these still very large, defined contribution benefit programs which hold, mostly equities in their accounts. If one were to take the total market value of stocks and work through to their ultimate owners—in other words, to try to allocate what's in pension funds and in other general funds, life insurance or whatever—a significant part would end up as increased assets, net, within the lower income groups.

Senator SHELBY. As far as measuring productivity, the accuracy of productivity measurements continue to be an issue of debate, even by you. At times you have used, I believe, a qualifier, "as best we can judge." How does the Federal Reserve reconcile the apparent shortcomings in productivity measurements? Are there any supplementary indicators that are useful in identifying productivity gains?

Chairman GREENSPAN. We suspect that our productivity measures in the manufacturing area are probably not too bad in the sense that even though we do have some difficulty in measuring output of goods, we probably come as close as possible to getting the right numbers in manufacturing output. Therefore, since the people working in manufacturing are pretty accurately estimated, we can make some pretty good estimates of what proportion of the temporary worker pool is in manufacturing. We have output and hours, so we can do pretty well in measuring productivity.

We have a very difficult time in measuring output and therefore, productivity, in a vast number of services, clearly, in the medical services profession, in the legal profession, and in business services, generally.

Indeed, we went through an exercise fairly recently in which we endeavored to make judgments as to what the implied productivity trends were in a lot of these service industries, if you used only the data which the Department of Commerce uses in constructing its national income and product accounts. They, of course, do break down on an annual basis periodically the gross domestic product by industry. And since we have the hours data reasonably well documented, we can calculate what the implicit productivity numbers must be for those service industries in the GDP accounts.

What we found is that for the last 20 years, for a lot of those major service industries, the level of productivity has been going down by 1 to 2 percent a year, which is clearly just utterly noncredible, considering the technologies we're all aware of in medical services and in the legal area. You go into a law firm these days and all you see is computers. And that tells you that, presumably, they're doing more work of value.

Senator SHELBY. But in the measurement of productivity, et cetera, it's a key issue in determining actual inflation, is it not?

Chairman GREENSPAN. It is, indeed, because to the extent where we have only dollar information on output and we must convert those dollars into real units, the price indexes we employ to do that are obviously very crucial. And if, as is almost surely the case, that there is significant upward bias, especially in these service areas, you get a situation in which the measured productivity very evidently is biased, as indeed the price indexes are biased.

The fact that the productivity data are so noncredible suggests that prices are biased. That is one of the reasons we believe that the Boskin Commission's estimate of CPI price bias, from where we can judge it, is probably fairly accurate.

Senator SHELBY. Mr. Chairman, you brought that up before I got into it. But if the CPI, the Consumer Price Index, is overstated by 1.1 percent, or whatever that was, why can't the Bureau of Labor Statistics adjust that on their own?

Chairman GREENSPAN. They can do part of it.

Senator SHELBY. What can they do and what can't they do?

Chairman GREENSPAN. Well, my recollection is that the Boskin report had about six-tenths of that 1.1 as quality adjustments.

Senator SHELBY. OK. About quality adjustments—you're going to identify that. Go ahead.

Chairman GREENSPAN. Quality change is very tough to measure. We often only have orders of magnitude. In other words, we know that certain things are improving. We know, for example, that using the number of hours of doctors' input as a measure of, or the cost of physicians' input as a measure of output and level of health service is clearly inadequate because the quality of what we have been getting in the medical profession has improved so dramatically. We would have great difficulty in getting the number exactly.

But we know it's plus. In other words, we know it's not negative and we know it's a substantial plus.

Since all prices within the Consumer Price Index are approximations—some more approximate than others—the argument that there is a certain necessary precision in this procedure is clearly false. What concerns me, and I discussed this at length at the Senate Finance Committee, is that we presume that if we cannot get something exact, that the best estimate is zero.

We know the bias with a high degree of probability is plus for quality adjustment. At the moment, the estimate that is employed is zero. That is a highly-biased estimate and not a professionally accurate one. I am arguing to do the professionally supportable thing, which is to put a number which has a higher probability of being right than zero.

Senator SHELBY. Of course, this is a political question and an economic question, and we know sometimes that that doesn't mix. But if you're looking for the truth as much as you can get dealing with the CPI, a guess is something we are going to have to deal with, or not deal with.

Mr. Chairman, thank you.

The CHAIRMAN. Thank you.

Senator Bennett.

Senator BENNETT. Thank you, Mr. Chairman.

Chairman Greenspan, either you're getting clearer, or I'm finally beginning to break the code.

[Laughter.]

I found this statement to be extremely clear and very useful. I understood it all, which is unusual for me.

I have several comments and would like your reactions.

You say the business cycle is not repealed, and I accept that and agree with that. But isn't there a possibility that its swings are being dampened by the changes that are occurring in the economy as we move more from a manufacturing-based and industrial-dominant economy toward a service economy and an information age kind of economy, where the old inventory recession where you get a build-up of inventory in the exuberance, to use your phrase, of the sales curve suddenly hits you and you have to have economic activity shutdown until the inventory gets sold off?

As we move away from that being the dominant pattern into the service economy and the information age, isn't it possible that that structural change is dampening the swings of the business cycle?

Chairman GREENSPAN. I think that's probably correct. There are two really important elements which generate the business cycle. One is the inventories that you suggest, and they are really a surprisingly large factor in the change in GDP, even though it's only goods and goods are, as you know, themselves a modest part of the total economic output.

We also have the issue of the level of assets. In other words, the amount of capital we have invested in plants and equipment, in steel mills and electric utilities and the like, and the large stock of assets that exists in the household sector—houses, autos, and appliances.

And what clearly is the case is that both of those stocks of inventories—and you can use inventory in the general sense—tend to fluctuate, largely because we get ahead of ourselves and we have to adjust. What engenders the business cycle to a large extent, or has over the past, has been the readjustment of the stock of inventories.

As we have gone to increasing just-in-time inventory analysis and availability, we have clearly reduced the amplitude of the inventory fluctuation, and it may well be that that in itself has also fed into reducing the amplitude in the fluctuations in what I would call the gross property accounts in our system. So it is a reasonable hypothesis that the shift has probably damped the business cycle to a certain extent.

I would be careful, however, to generalize that too far because, to the extent that financial factors are an element in the fluctuation, there is no significant evidence that I am aware of which has changed that environment.

Senator BENNETT. Thank you for that. Let's talk about the CPI for a minute in perhaps a different context.

I am wondering if the time has not come for us to abandon the notion of a single CPI. If we are looking at a basket of goods and service, the basket of goods and services that my children, for example, would purchase as they're furnishing new homes, starting out new families, having children, is fairly different from the basket of goods and services that my wife and I are looking at, with no children left in the home, our home's fully paid for, fully furnished. I don't know that I'm going to ever want to buy another bedroom set again.

Not only in different demographics, but a CPI geared to regions. I look at my own staff's circumstance. I pay staffers in Washington more than I pay staffers in Utah who do exactly the same kind of thing and deserve the same salary. But frankly, they can live at a certain standard of living for less money in Utah than they can in the Greater Washington area.

Federal employees get hardship money, if you will, if they live in certain areas. My son used to work for the FDIC. He was posted in Los Angeles. They paid him a premium for being in Los Angeles and said if he were in another office, he would get less because the cost of living in Los Angeles was higher than elsewhere. Would you comment about a CPI that varies by demographics and regions?

Chairman GREENSPAN. Senator, as you know, the BLS does do several different types of CPI's. It has one, the original one for wage-earners, and then it has another one which it publishes side-by-side for urban consumers. It also has significant indexes for a lot of cities. But what it doesn't have is a difference in the levels. In other words, it has the rate of change in prices city-by-city so that you can tell what the relative changes have been between, say, Los Angeles and Atlanta, but it does not have data which are published on the level of differences in the market basket which they are pricing.

I think the answer to your question really depends on what do we need it for.

Senator BENNETT. Precisely, yes.

Chairman GREENSPAN. Clearly, it depends on what purpose it is employed for. In the private sector, there are innumerable re-estimations of indexes which are used very specifically for individual contracts, whether it be, say, a real estate contract or something which requires a special index.

I remember I used to construct a lot of them myself for clients who were looking for something which would be an appropriate index within a contract to price a certain service over a period of 10 or 15 years.

We do have a vast number of individual types of contracts, both consumer-type, CPI-type, retail-type, wholesale-type. And I would not argue for a fragmentation of these indexes.

I would subscribe to the arguments that the Boskin Commission made with respect to perhaps taking some of the resources that are being used for some of these regional indexes and employing them to improve the quality of the overall index because that serves such an important purpose in Government policy and specifically, in the innumerable elements of the budget, both on the receipts and expenditure side, which are indexed to that particular price index.

And then, of course, there are still a not insubstantial number of labor union contracts and other contracts in the private sector which are locked into the CPI.

So the issue of improving the quality of the single index, or even of the two indexes which we currently produce using the same sampling techniques, is probably a far greater priority, as far as I see it, than augmenting the number of indexes that we have.

Senator BENNETT. Thank you. I would like to pursue this, but my time is gone.

Thank you, Mr. Chairman.

The CHAIRMAN. Thank you, Senator.

Senator Faircloth.

**OPENING COMMENTS OF SENATOR LAUCH FAIRCLOTH**

Senator FAIRCLOTH. Thank you, Mr. Chairman.

Congratulations, Chairman Greenspan, on your engagement since we last saw you.

Mr. Chairman, this is the first time we have had a chance to visit with you since your, I think, very appropriate statement that a rational exuberance might be a factor in the stock market's rapid climb. But since your statement, it has continued to go up. Is there something in the economy other than maybe an irrational exuberance or a temporary excitement to create a bull market? Or is there simply so much money in savings and retirement accounts that there isn't anywhere to put it, that it's forcing the market up? Which is causing it, or tell us as much as you feel comfortable?

Chairman GREENSPAN. First, Senator, let me repeat what I said in my prepared statement. The issue I put on the table back in December was a question for monetary policy considerations.

Senator FAIRCLOTH. I'm sorry. I wasn't here when you made your statement.

Chairman GREENSPAN. I want to emphasize that it is a very difficult judgment for us to make when we believe that there is irrational exuberance out there. It is not markets that are irrational. Markets merely reflect the values of people. It's people who become irrationally exuberant on occasion and take actions that induce what economists like to call bubbles, which eventually burst. That's what happened in the commercial real estate market.

Senator FAIRCLOTH. What happened? I'm sorry. I didn't catch your last statement.

Chairman GREENSPAN. That's what happened in the commercial real estate market.

Senator FAIRCLOTH. Oh, yes. Yes. I'm sorry.

Chairman GREENSPAN. As you remember, people decided to build. I would ask: Why are you building this building when there's a brand-new office building which is empty across the street? And they would say, it's a different corner. I would consider that irrational exuberance.

The more important question which you raise is what is driving the market? The market is being driven not, as best I can judge, by the large expansion of funds. In other words, we have seen this really quite extraordinary growth in the mutual fund industry, for example. I think you can explain the current market levels by what economists call the risk factors, the discount factors involved in discounting forward-expected earnings in corporations, and that is low. It has declined quite significantly because long-term interest rates have declined.

There are two components. One is the riskless rate of return, which is best proxied by long-term U.S. Treasury rates. And the second is what we call an equity premium, which is the rate of return on equities which the market requires for equities over and above the riskless rate.

And the analytical breakdown of the market change in the last several years is explainable in terms of a dramatic increase in expected earnings growth over the long run and the decline in the risk premium, the discount factor.

It is not required that we look at the flows of funds to explain what is happening. Indeed, history tells us that flows of funds very rarely impact the level of stock prices which in turn, remember, are the present value of expected future returns for individual companies. Who owns the stock and how much is moved around, obviously, does affect the price in the short run. But in the long run, the price is determined by how good a company it is.

Senator FAIRCLOTH. I see my time is almost up. I won't start another question.

Thank you, Mr. Chairman.

The CHAIRMAN. Thank you, Senator.

Senator Dodd.

## OPENING COMMENTS OF SENATOR CHRISTOPHER J. DODD

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

Welcome, Chairman Greenspan. It is a pleasure to have you before the Committee.

You may have addressed part of this in response to Senator Faircloth, but let me ask something else first. It is in regard to the concerns you raise in your prepared statement about the overvaluation of the market, and referencing the 1960's, which I think has some real value to us here.

Now, I am wondering if what you are suggesting here is that the problem may be more duplicative of what happened? Many would argue that as a result of what happened in the 1960's, we saw the broader implications to the economy in the 1970's and early 1980's.

Or whether we are talking more about something along the 1987 version where you had that market adjustment and it was more of an isolated impact. It didn't have the broad implications to the economy.

So, I would read your statement as being a warning that what you're seeing could have broader economic implications along the lines of what happened in the 1960's, if you buy into the assumption that what happened then was in no small measure responsible for some of the economic dislocations we saw in the 1970's and early 1980's.

Chairman GREENSPAN. The issue, I believe, is pretty complex in that I've always thought and I think most economists believe that the Vietnam War had a really very deleterious effect on the 1970's in that the financing of the war, as you may recall, was not complete, so to speak. We had a period which we had not experienced before, which we called stagflation.

I wouldn't at this stage relate that particularly to stock market changes or the like. I don't deny that the stock market had some effects along the way. Indeed, I am sure it did. But the oil price shock had clearly a very significant effect on our economy, as indeed, the Vietnam War did.

I would say that a goodly part of the impact of what occurred reflected that and I think the erosion of our fiscal situation was a not inconsequential element in what subsequently developed. If you're worried about the 1970's, I would be more focused on the fiscal issue than I would about other things.

Senator DODD. All right. I appreciate your response and it leads me to the second question.

I would suggest that most of us here, regardless of party or ideology, would agree that over the last 4 to 6 years, we've made some significant strides in adopting a culture here that Congress is skeptical about any new spending increases.

I would say that my colleagues on this side in no small measure deserve the credit for causing everyone to raise an eyebrow and to ask the steely questions about how do you pay for this? I don't care what the idea is. How do you pay for it? And I think we're in better shape as a result of that culture having taken over here. The questions that I find the hardest to get answered are when it comes to tax cuts.

Now let me quickly add here, I don't know of anyone that doesn't like to support a tax cut when you can. There's no great genius in that. Obviously, if you can provide tax relief to your constituents, you are all for it. But I'm concerned about the fact that we don't seem to get as firm about that side of the equation as we have over the spending side.

Just in January, in statements I think before the Budget Committee, you said it's far more important that budget balancing be achieved in a manner which implies balance in later years.

I just want to send down to you a chart prepared by the Joint Committee on Taxation. It's sort of a nonpartisan formulation here of what happens as you get out into the 5 to 10 years and beyond, with some of the proposed tax cuts that we're looking at.

I would like you to address this, if you would, because I think you have taken the position you don't stand up here and necessarily offer us recommendations on how we ought to deal with fiscal matters, but, rather, have suggested that we ought to be doing everything we can to be fiscally prudent, and I respect that.

You may have your own views on a particular variation of how that could be achieved, but our job here is to try and present at least at the end of the day budgets that reflect that we are heading in the right direction to achieve that fiscal responsibility. My concern in taking your statement earlier about not just balance in the first, second, or third year, but what happens in the out-years?

If the Joint Committee on Taxation is even remotely close, you can see in the chart the first 5 years the cost of the tax cut is $200 billion. The cost to the second 5 is $325 billion, bringing the cost for the first decade to $525 billion. And the estimated cost, according to this chart, for the second decade is a whopping $763 billion.

Now it seems to me that if we ask the question when someone raises the issue of spending for education or health care, whatever else, where is the steely question here to how do we pay for this?

I can understand when we get $40 or $50 billion in Medicare here or there, but where are the dollars that come up for this? And if we can't come up with it, are we not, in fact, running smack into your warning of a few days ago about not having balance in the first, second, third, and fourth year, but in these out-years down the road?

I wonder if you might offer some observations with regard to this in terms of some warnings to us up here? I am not arguing. We all have various tax cut proposals around here, but I just get concerned when we talk about the spending, that we also need to focus on this as well.

With these charts, and there were some people earlier today that had something more to say about this. But I saw the chart and it sort of stunned me when I look at that $763 billion total, and I don't hear a lot of observations as to how that number is paid for. And if not, we are back at a major deficit problem again.

Chairman GREENSPAN. Senator, I personally have always been in favor of whatever tax cuts can be made, but whatever tax cuts can be made and paid for.

The problem that this Congress is going to have is to find a path toward budget balance in the year 2002 and thereafter because one of the very considerable dangers is to find yourself focusing on 2002 as though that's the end result of a process.

That year doesn't have any significant meaning. What has very important meaning are these various wedges that we have that are implicit in the receipts and expenditure side of our system.

Years ago, when a very substantial part of the outlay part of the budget was discretionary, a lot of programs got canceled. You had a big construction program and you built whatever it was that you were building and you stopped. You had various different types of training programs and the like which were scheduled for a particular purpose and they ended.

Now virtually everything we have on both sides of the ledger, receipts and outlays, are wedge-type factors, so that if you lower the slope now in the process of moving toward balance in the year 2002, you have a very dramatic, positive effect toward budget balance in the out-years.

To the extent that you put in various different types of programs which achieve balance in the year 2002, but then the deficit pops back up, it is an exercise in futility.

The concern that I have is that we will be focused too much on the next few years to create a balance and may very well succeed and then wonder why it didn't create the big pay-off in terms of lower long-term interest rates and greater long-term growth that we thought would be the appropriate dividends of such a policy.

Senator DODD. I thank you. My time has expired.

Thank you, Mr. Chairman.

The CHAIRMAN. Thank you, Senator.

Senator Hagel.

Senator HAGEL. Mr. Chairman, thank you.

Mr. Greenspan, I would like to pick up a little bit on my colleague, Mr. Dodd's, comments regarding a balanced budget. I noted in your testimony, you cautioned regarding our consumer debt burden being near historical highs. And you add that to the fact that certainly, our budget debt is not in much better shape. You know the numbers far better than this panel. I would like you, if you would, Mr. Greenspan, to comment on that totally and maybe expand a little on your response to Mr. Dodd.

And I might add, to my friend from Connecticut, if you look at tax cuts, tax cuts from the Kennedy days, from the Reagan days, increased our revenues. It was the spending that we didn't control. I think that's pretty well documented.

I have wondered as well, when we look at this entire area of debt and balanced budget, why we do not produce budgets around here based on revenues? We produce budgets based on expenditures. Therefore, we have a $5.3 trillion national debt and we are adding to that about $700 billion a year. So, I certainly do not have the answer, Mr. Greenspan, but I would very much appreciate your thoughts on this entire universe.

Chairman GREENSPAN. There is an underlying bias that we are all acutely aware of in our system which tends to engender growth in programs on the expenditure side which have a tendency generally to exceed the growth in the tax base. And we have been running up against this problem now for years and the reason why it is so difficult to cut entitlement programs is that they are locked in to our underlying fiscal system. We all recognize, those of us who do the arithmetic, that under current law, we will engender an unstable fiscal situation as we move into the year 2010, 2015, and the like, and that is substantially a demographic issue. That is, we will have a very large increase in retirees and those subject to Social Security, to civil service retirement, and a whole variety of other programs which will create some very substantial increases on the expenditure side and, one must presume, in the deficit as well because while, in the short run, one can offset rises in expenditures by increasing taxes, over the long run, the more you increase taxes, the greater you inhibit the growth in the economy and in the tax base itself and therefore, ultimately, you cannot solve long-term deficits from the receipt side. It has to be from the expenditure side.

One place where I don't think there is really any significant disagreement on the part of most everybody is that, under current law, there are projections of the budget which are not fundamentally stable.

It's terribly important that we address them while they are still relatively easy to effect because, as I mentioned before, that wedge issue is very crucial. You would be surprised, just by making very minor changes in certain programs, you have effects in the out-years which are very large. If you wait until you get to the out-years, they are very difficult to cut.

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

Senator DODD. A quick comment to my colleague from Nebraska. My concern is that I have never had a person with a tax cut proposal that didn't tell me it was going to produce revenues. And I can also recall people with expenditure increases, that it wasn't going to reduce costs. We both get those arguments on it. No one has ever come up to me and said, Senator, I want you to support this tax cut and, by the way, this is a money-loser. Or would you support this spending increase and, by the way, this is really going to cost us a lot of money. We never hear those arguments.

All I'm asking is that we be as tough—because we have to have some real budgeting. If you are going to have these spending increases, they have to be paid for. I think we all agree on that today. I hope we do. And if we're going to propose tax cuts, while I realize there's an argument that there will be revenue increases to some extent, that we need to be much more realistic about how do you pay for it? If you end up having indexing where these things just grow exponentially, without some idea of where the offsets come from, my concern is exactly what the Chairman is pointing out, we look pretty good by anyone's analysis up to 2002, and then we blow a hole in this so big that future Congresses will have an awful time wrestling with those deficits.

I apologize, but I just wanted to make that point. We have to apply some equal standards here on these issues, or we will end up, whether it's actual cost expenditures or tax expenditures, right in the same position.

Senator HAGEL. I am always grateful for my distinguished colleague's enlightenment.

Thank you, Senator.

Senator DODD. Thank you.

The CHAIRMAN. Thank you, Senator.

Senator Reed.

## OPENING COMMENTS OF SENATOR JACK REED

Senator REED. Thank you, Mr. Chairman.

I apologize, Mr. Greenspan. I was upstairs at another hearing and I didn't have an opportunity to listen to your testimony.

Generally, we might be approaching a dilemma because I think you pointed out in your testimony that some of the wage restraint has been the result of labor market activity. And now that labor market activity seems to be at the point where wages are going to come up, putting inflationary pressure on the economy, which would require or might induce the Fed to take an active position in raising interest rates.

I would wonder if that would cause us a problem in terms of overall economic growth in the country. Just as working families are beginning to realize some increases in their real wages, the Fed policy would be to raise interest rates, causing a contraction in the economic activity.

Chairman GREENSPAN. Senator, our central focus is to keep sustainable economic growth going, so that, as I said in my prepared remarks and, indeed, in previous testimony as well, our central focus is to maintain maximum sustainable economic growth. It's our judgment, and I think the evidence increasingly supports that judgment, that low inflation or stable prices are a necessary condition to achieve that.

Our focus is not on wages, per se, or prices per se. It's on what changes in the financial and economic structure are telling us about the sustainability of economic growth. Our concern is that if we allow inflationary imbalances to start to emerge, then history tells us that the end of the expansion is near at hand.

Our focus is to try to find that set of policies which continues the process. And as I indicated in my remarks, it is conceivable that that may require, because of the long leads in certain types of policy actions, that we decide to move because we think it's appropriate to move before you see actual evidence of real inflation emerging.

We have learned over the years that a monetary policy which waits to see changes in inflation or economic activity before it acts will probably be counterproductive, meaning it has in the past, as best we can all judge, exacerbated the business cycle and created far more hardship for the American people than anybody intended by the types of policies that were implemented.

We hope we have learned the lesson. And that lesson is that monetary policy, to be effective in achieving the maximum sustainable long-term growth goal has to be anticipatory. It's that which we find the most difficult thing for us to do, but necessary to achieve our goals.

Senator REED. If I may follow-up, Mr. Chairman. If we accept your analysis in that you have to look for things before inflation starts growing, what are you looking for now in this new economy?

Chairman GREENSPAN. As I said in my prepared remarks, it is very difficult for me to outline in detail. What I've said in the past about certain different types of things is that we always watch, for example, whether in fact there are pressures in the industrial sector. We have found in the past that increasing lead times on the deliveries of materials, for example, is suggestive of congestion and imbalances emerging in the industrial sector which in the past have suggested that the economy was beginning to unbalance and that to hold it on balance would be something which would be necessary to contribute to longer-term growth.

I should emphasize that wages, per se, are not in and of themselves an issue which would signal that because if wages are rising and productivity is matching it, clearly, that is not something which is destabilizing the economy.

Senator REED. Just one final question because time is drawing close. In terms of your approach to the economy, there is an argument that we have to do much more in terms of investment, which implies fiscal policy as well as monetary policy. And I wonder if you could just comment generally about sort of the investment challenges that faces us in public investment and in encouraging private investment both for the monetary aspect and, if you want to, on the fiscal side, too.

Chairman GREENSPAN. I have always argued that savings are a necessary but not sufficient condition to get capital investment in the private sector, and that if we have inadequate private savings, even though incentives for capital investment are there, it makes it tougher. If you have both the incentives and the available private savings, then I think you get the maximum growth in the capital goods markets and maximum growth in productivity and in standards of living.

One concern that I have always had and I have indicated this before this Committee on innumerable occasions, is that Government deficits absorb private savings which could be otherwise more appropriately used, and therefore, eliminating the deficit is, in my judgment, a very important element in overall economic policy in that it would enhance the availability of private savings for productivity-improving investments.

Senator REED. Thank you, Mr. Chairman.

The CHAIRMAN. Thank you, Senator.

Senator Mack.

Senator MACK. Just one last question. And this may have been touched on while I was gone, but it has to do with the consumption component of the economy.

Reading back through your testimony, I really didn't get a sense of concern about future consumption. I just want to get a better feel from you about your feelings—if there is a high level of job insecurity, it would seem to me that somewhere along the line, that begins to translate into confidence levels. If people are, in fact, now starting to think more about their retirement and particularly with the high level of household debt that's out there, that seems to me to be really raising some flags about future consumer spending.

Chairman GREENSPAN. The vast majority of consumer expenditures are financed by current income.

Indeed, if the saving rate is 5 percent, the other way of looking at it is that the consumption rate is 95 percent, so that, while all these other elements undoubtedly do impact on the level of spending, the crucial factor is the level of disposable consumer income. And so long as the economy is moving forward and productivity is advancing, then real incomes over the long run will rise and so will real consumption expenditures as a consequence.

Senator MACK. Let me ask you this. Isn't consumption running faster, growing faster than real incomes?

Chairman GREENSPAN. Not at the moment, no. The saving rate, if anything, has edged up, which arithmetically says that, if anything, the growth in real consumption is slightly less than the growth in real disposable income, but I should add that those data can very readily be revised.

The more general answer is that there is no evidence that consumption is advancing at a pace significantly different from the pace of real incomes.

Senator MACK. Thank you, Mr. Chairman.

The CHAIRMAN. Are there any other Senators who wish to ask the Chairman any questions? I don't want to prolong this.

Senator Faircloth.

Senator FAIRCLOTH. I had one brief question, if I may.

The CHAIRMAN. OK.

Senator FAIRCLOTH. Chairman Greenspan, this issue seems to be foremost in Congress, the Senate, today and in the next day or two. You were on the commission that rescued Social Security in 1983 and set it on a proper course. In your opinion, do you think a Constitutional amendment to balance the budget would threaten Social Security?

Chairman GREENSPAN. As you know, Senator, I am not in favor of a balanced budget amendment for several reasons. First, I do not like economic policy to be embodied in a document such as the American Constitution, which is a set, hopefully, of principles rather than operational imperatives. Second, my concern is that, should Congress and/or the Administration fail to live up to the Constitutional amendment, then it falls to the courts, which can do a number of different things, but I see no reason why any particular program is at risk or any tax level or rates at risk any more than any others.

What that amendment would apparently do is put to the courts a solution to the expenditure and receipt side. But there's nothing in that process which suggests to me that any particular element, either on the receipt side or the expenditure side, is any more at risk than any of the others.

Senator FAIRCLOTH. Mr. Chairman, thank you for being with us.

The CHAIRMAN. Senator Bennett.

Senator BENNETT. Thank you, Mr. Chairman.

I would just say to my colleague from Connecticut, I will be glad to argue with you about capital gains. I think you are on a much stronger basis when you are talking about the child tax credit. In my view, the child tax credit is really a spending issue rather than a tax cut. And it's spending that's dressed in tax cut clothes because it seems to sell a little better on that basis.

Senator DODD. Well, thank you.

Senator BENNETT. But the capital gains tax thing, I think we can make a stronger case.

Senator DODD. I think you can make it, depending on how you frame it. I think if there's a chance here, not to encroach on the time of the Chairman, but I think there's some common ground that could be struck on a capital gains tax proposal. And my hope would be that an effort might be made along those lines.

Senator BENNETT. That's what I'm trying to do, to lay a groundwork for a priority that I think is very good.

Senator DODD. But we're going to have to pay for it, too.

Senator BENNETT. I understand. Mr. Chairman, I would like you to comment about the rise in credit card debt and the impact of people having access to credit which is the most seductive and, at the same time, the most expensive that a consumer can have.

I think there are lots of social benefits that come from the accessibility of credit through credit cards. I know in my own family, my children would not go to the bank and take out a traditional loan and thereby learn the discipline of payments. Maybe a car loan they might.

But the whole credit card experience that is so easily available to them has been for them a very sobering learning experience and brought a degree of discipline that no amount of jawboning on dad's part can match.

So, I am not one who says we should make sure credit cards are not available to college students and so on. But the overall numbers are beginning to get a little scary in terms of delinquencies and bankruptcies and so on, on credit card debt, and I would like you to comment on that in the overall context of your testimony today.

Chairman GREENSPAN. Senator, you are certainly correct that delinquencies have been rising quite substantially, and while there is no direct relationship, the sharp rise in personal bankruptcies is really quite startling when you look at it on a chart in the last few years.

Credit card debt has been profitable for those who issue it largely because, at the interest rates that the markets seem to converge on, you can take some fairly substantial losses and still have some fairly good rates of return on capital.

Nonetheless, there's been some pulling back clearly on the part of lenders who have been quite startled by the fact that, whereas, in years past, they could trace 30-day delinquencies, 60-day delinquencies, and default at some point, right now they go from good risk to default with nothing in between.

Senator BENNETT. No warning signs.

Chairman GREENSPAN. No warning signs. And that has, I think, gotten their attention.

I think it is a particular localized problem. We are all acutely aware of it. But we have to remember that it is not a large number, that is, it's a relatively small part of aggregate household debt and not a major factor in the economy as such.

While it does have very important consequences to individual households and has created, I suspect, a very considerable amount of distress for a lot of people who have been finding themselves overextended, it's not a macroeconomic problem in the sense that it's threatening to have a significant effect on banks generally or on the financial system.

Largely because there is an increasing awareness of some of the risks involved, my judgment is that the banking system is taking appropriate action in pulling back where they are the key players in bank credit card extensions.

Senator BENNETT. Thank you, Mr. Chairman.

The CHAIRMAN. Do my colleagues have any questions?

[No response.]

Mr. Chairman, we want to thank you for your time and for your patience.

I also have to say that I want to commend Senator Hagel for what I think was a very probing question and for your response. I don't know how many people picked it up. But the longer we put off dealing with the explosive growth in the out-years of these very important entitlement programs and very necessary ones, and ones that we want to keep strong and healthy and vibrant because they are important to our country, the more difficult, if not impossible, dealing with that problem becomes.

We have an obligation to do something here. Maybe not always to be the most popular, but to do something in a meaningful way.

We can take a small dose of medicine now and cure the patient or we can wait until we have a very, very sick patient that needs the kind of rescue that sometimes becomes very, very, very painful and almost counterproductive. And you wonder why we see people go through some of the procedures that they do.

I would liken it to an elderly patient who has a severe disease and the physician has to take just heroic efforts to rescue the patient and it becomes very costly and very painful. I think that's where we're headed, unfortunately.

I want to thank the Chairman. And I also want to get another signature on one of these strips.

[Laughter.]

We stand in recess.

[Whereupon, at 12:17 p.m., the Committee was recessed.]

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

## PREPARED STATEMENT OF SENATOR CONNIE MACK

I would like to thank Chairman Greenspan for appearing before the Banking Committee this morning. I always look forward to hearing his views on the state of monetary policy and the economy.

Under his guidance, the Federal Reserve has done a tremendous job of focusing on a stable and sound monetary policy that is essential for strong economic growth. There is no doubt that Mr. Greenspan's solid leadership has produced confidence and certainty among investors throughout the world.

Mr. Greenspan, when you became Federal Reserve Chairman in August 1987, gold was $461 per ounce and 30-year Treasury bond yields were almost 9 percent. Today, gold prices are down to around $350, 30-year Treasuries are trading around 6.6 percent, and for the past 5 years, inflation has remained around 3 percent.

I firmly believe that the main reason for low inflation is your careful management of monetary policy. Your dedication to price stability is apparent, and you should be commended for the current state of low inflation.

As we have discussed in previous hearings, I believe that monetary policy is most effective when focused on a single goal of price stability. Unfortunately, under the current Humphrey-Hawkins law, the Fed is expected to follow numerous mandates that in the long-run could be very damaging to the economy. Easing monetary policy for short-term gains will only lead to higher price levels in the future. This is why I intend to reintroduce the "Economic Growth and Price Stability Act," which would limit the Federal Reserve's mandate to the primary goal of price stability.

Even with relatively low inflation and interest rates, the economy is not performing to its potential. We have seen our economic growth rate fall from a robust 4.4 percent average during the last five expansions to around 2.5 percent since 1992. One of my concerns is that we have become complacent about current growth levels.

Of course, many incorrectly blame the Federal Reserve for slow economic growth. However, the Federal Reserve should remain focused on price stability. Chairman Greenspan and I certainly agree that simply printing more money or artificially holding down interest rates is not the way to boost long-term economic growth.

Genuine growth comes from hard work, creative ideas, improved productivity, and capital formation. Therefore, we must be sure our fiscal policies foster and reward saving, investing, and risk taking while the Federal Reserve is best focused on reducing inflation.

I believe our economy can and should grow faster. Stronger growth would mean more jobs, better paychecks, and a higher standard of living for all Americans. And, faster growth would help in the effort to balance the budget by boosting revenues without raising taxes. Stronger economic growth would bring new opportunities to all Americans. This is something every policymaker should strive for.

I believe the best way to achieve stronger growth is to remove the fiscal burdens that have been placed on this economy. In recent years, major tax hikes, excessive regulations, and increased Government spending have taken their toll on the economy and the American family. The Federal Reserve has done an outstanding job with monetary policy and controlling inflation. Now, it's time for Congress and the Administration to do their part by pursuing a more pro-growth fiscal policy. I am optimistic to see our current budget debate focused on bipartisan support for balancing the budget through less spending and lower taxes. With lower tax burdens, less regulation, and a balanced budget this economy can maximize its potential.

I welcome Chairman Greenspan and I am anxious to hear his analysis.

## PREPARED STATEMENT OF SENATOR LAUCH FAIRCLOTH

Good morning, Mr. Greenspan, its good to see you again.

Mr. Chairman, it appears we are enjoying a relatively healthy economy with low inflation and a decent level of economic growth.

I think that much of the credit can go to you, Mr. Greenspan, for your leadership at the Federal Reserve. Many of us up on Capitol Hill have tried to tell you how to do your job—but you have done it with a steady hand and I thinks it has worked.

I also think, however, that the Republican Congress deserves much of the credit. The American people have a sense that we are making progress, getting our fiscal house in order. We were the first Congress to actually cut spending in 40 years.

I don't think as much credit should go to this Administration. Their fiscal policy has been all over the map. Four years ago, they wanted a stimulus package. Now, they say they want a balanced budget, but the President's latest budget actually has the deficit going back up—before it balances in 2002. And, of course, the President is against a Constitutional amendment to balance the budget.

All of this just confirms my view that we need a Constitutional amendment to balance the budget, so that it is not left to the whim of who controls Congress whether we are going to put ourselves deeper in debt.

Finally, but just as important, I think we need a real capital gains tax cut. I am not sure why we have come to believe that a 2 percent growth is all we can achieve. With lower taxes and less Government regulation, I think we can do better—direction needs to come from Congress.

Thank you, Mr. Chairman, I look forward to Mr. Greenspan's testimony.

## PREPARED STATEMENT OF SENATOR CAROL MOSELEY-BRAUN

Mr. Chairman, I am very pleased to have this opportunity to hear the distinguished Chairman of the Federal Reserve Board, Alan Greenspan, present his views on the conduct of monetary policy and the state of our economy.

At the outset, I think it is worth noting that the current economic news is generally good. We have produced more than 11 million new jobs over the last 4 years. The economy continues to expand and according to the Congressional Budget Office, in the report it released last month entitled, "The Economic and Budget Outlook: Fiscal Years 1998–2007," economic growth seems likely to continue into the future. The Wage Cost Index rose only 0.8 percent in the fourth quarter of 1996, indicating that the current recovery is not likely to overheat, and that a return of inflation is unlikely.

The budget news is also much better than it was not very many years ago. The budget deficit in FY 1996 was only slightly more than one-third of what it was in 1982—down from over $290 billion then to only $107 billion in FY 1996. And the Congressional Budget Office's newest projections of Federal baseline deficits over the next 10 years are "one-third lower than last year's."

This good news is a testament to the deft way Chairman Greenspan has conducted monetary policy since he became the head of the Federal Reserve Board. President Clinton and Secretary Rubin also deserve a commendation from this Committee for the roles the President and Secretary played in producing this economic and budget success.

Despite the fact that the economy is generally strong, inflation is in abeyance, and the budget deficit is in retreat, the longer-term outlook illustrates that we are rapidly running out of time to address the challenges now on the horizon. The CBO's summary analysis pointed out that "Despite the improved outlook through 2007 . . . the budget situation will start to deteriorate rapidly only a few years later with the retirement of the first Baby Boomers and the continued growth of per-person health care costs." The projections for the rate of economic growth over the next decade are also far too low, only 2.1 percent. I, therefore, hope this Committee will go beyond the relatively good news that we can reasonably expect over the next few years, and begin to have an honest dialogue about what is on the horizon, and the challenges the future holds for us and our children.

I think we need to focus on two interrelated issues: enhancing retirement security and creating public policies that encourage greater efficiency in our economy and higher rates of economic growth. There is no issue more important than retirement security; there is no issue more important to the future of every American. The challenges we face in ensuring that future generations of Americans will be able to enjoy the same kind of retirement security that current retirees have is immense. Social Security, the cornerstone of retirement security in this country, is currently underfunded and needs substantial reform to fulfill its mission in a future where there will only be two working Americans for every retiree, instead of the three there are now, and the five there were not very many years ago. Ensuring that Social Security will continue to serve the needs of Americans in the future becomes even more important as we consider the impact of the changeover in private pension plans from defined benefit plans to defined contribution plans—a change that could add to the uncertainty facing future generations of retirees. Despite the good news on the deficit reduction front, private savings rates in the United States are still far too low, about half of all U.S. families have less than $1,000 in net financial assets.

As we attempt to come to grips with these issues, however, it is worth keeping in mind that the health care and retirement programs, which, together with the huge run-up in debt-service costs, are driving the increases in Federal spending, are amazing successes. Poverty among the elderly is currently at the lowest level since we have been keeping statistics, in no small part because of the retirement and health security provided by Social Security, Medicare, and Medicaid. It is impossible to underestimate the difference these Federal programs have made in the lives of literally tens of millions of Americans, and to our country generally. What makes the achievement even more remarkable is that we have accomplished this goal while holding Social Security administrative costs below 1 percent of benefits paid, and Medicare administrative costs below 3 percent of benefits paid—levels far below anything the private sector has been able to achieve.

We on this Committee can make an important contribution in addressing all of these issues for at least two reasons: this Committee plays the key role in protecting the savings of the American people, and this Committee has jurisdiction over our financial system, which is critically important to both our future economic health and the retirement security of American families. I would hope that Chairman Greenspan, the President, and all of the Members of this Committee will do three things: Focus on the long-term now, rather than wait until we face a crisis in little more than a decade from now; begin bringing the American people into the dialogue now by ensuring the American people have all of the information they need to fully participate in the critically important decisions that must be made; and approach the reforms that will need to be made in Federal retirement security programs and other Federal economic policies with a full appreciation of the enormous success we have already achieved, and with a determination to build on that success for the future. If we do that, we will have met our responsibility to the public we serve.

I want to conclude by stating one final truth, which is that the demographic, budget, and fiscal challenges we face are not unique to the United States. The entire industrialized world has to address the same set of issues. Change is, therefore, imperative. We can no more ignore the need for change—now—than we can ignore the enormous changes now underway in the world economy. These momentous changes require real leadership, which is why it is particularly important that the Chairman of the Federal Reserve is with us this morning. The Federal Reserve has a vital role to play in this time of momentous change. Based on the skill and competence with which the Chairman has met his responsibilities so far, I am confident that the Federal Reserve will be a positive force in addressing the budgetary and economic challenges that we must all face.

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## PREPARED STATEMENT OF ALAN GREENSPAN

CHAIRMAN, BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM

FEBRUARY 26, 1997

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

The performance of the U.S. economy over the past year has been quite favorable. Real GDP growth picked up to more than 3 percent over the four quarters of 1996, as the economy progressed through its sixth year of expansion. Employers added more than two-and-a-half million workers to their payrolls in 1996, and the unemployment rate fell further. Nominal wages and salaries have increased faster than prices, meaning workers have gained ground in real terms, reflecting the benefits of rising productivity. Outside the food and energy sectors, increases in consumer prices actually have continued to edge lower, with core CPI inflation only 2½ percent over the past 12 months.

Low inflation last year was both a symptom and a cause of the good economy. It was symptomatic of the balance and solidity of the expansion and the evident absence of major strains on resources. At the same time, continued low levels of inflation and inflation expectations have been a key support for healthy economic performance. They have helped to create a financial and economic environment conducive to strong capital spending and longer-range planning generally, and so to sustained economic expansion. Consequently, the Federal Open Market Committee (FOMC) believes it is crucial to keep inflation contained in the near term and ultimately to move toward price stability.

Looking ahead, the members of the FOMC expect inflation to remain low and the economy to grow appreciably further. However, as I shall be discussing, the unusually good inflation performance of recent years seems to owe in large part to some temporary factors, of uncertain longevity. Thus, the FOMC continues to see the distribution of inflation risks skewed to the upside and must remain especially alert to the possible emergence of imbalances in financial and product markets that ultimately could endanger the maintenance of the low-inflation environment. Sustainable economic expansion for 1997 and beyond depends on it.

For some, the benign inflation outcome of 1996 might be considered surprising, as resource utilization rates—particularly of labor—were in the neighborhood of those that historically have been associated with building inflation pressures. To be sure, an acceleration in nominal labor compensation, especially its wage component, became evident over the past year. But the rate of pay increase still was markedly less than historical relationships with labor market conditions would have predicted. Atypical restraint on compensation increases has been evident for a few years now and appears to be mainly the consequence of greater worker insecurity. In 1991, at the bottom of the recession, a survey of workers at large firms by International Survey Research Corporation indicated that 25 percent feared being laid off. In 1996, despite the sharply lower unemployment rate and the tighter labor market, the same survey organization found that 46 percent were fearful of a job layoff.

The reluctance of workers to leave their jobs to seek other employment as the labor market tightened has provided further evidence of such concern, as has the tendency toward longer labor union contracts. For many decades, contracts rarely exceeded 3 years. Today, one can point to 5- and 6-year contracts—contracts that are commonly characterized by an emphasis on job security and that involve only modest wage increases. The low level of work stoppages of recent years also attests to concern about job security.

Thus, the willingness of workers in recent years to trade off smaller increases in wages for greater job security seems to be reasonably well documented. The unanswered question is why this insecurity persisted even as the labor market, by all objective measures, tightened considerably. One possibility may lie in the rapid evolution of technologies in use in the workplace. Technological change almost surely has been an important impetus behind corporate restructuring and downsizing. Also, it contributes to the concern of workers that their job skills may become inadequate. No longer can one expect to obtain all of one's lifetime job skills with a high school or college diploma. Indeed, continuing education is perceived to be increasingly necessary to retain a job. The more pressing need to update job skills is doubtless also a factor in the marked expansion of on-the-job training programs, especially in technical areas, in many of the Nation's corporations.

Certainly, other factors have contributed to the softness in compensation growth in the past few years. The sharp deceleration in health care costs, of course, is cited frequently. Another is the heightened pressure on firms and their workers in industries that compete internationally. Domestic deregulation has had similar effects on the intensity of competitive forces in some industries. In any event, although I do not doubt that all these factors are relevant, I would be surprised if they were nearly as important as job insecurity.

If heightened job insecurity is the most significant explanation of the break with the past in recent years, then it is important to recognize that, as I indicated in last February's Humphrey-Hawkins testimony, suppressed wage cost growth as a consequence of job insecurity can be carried only so far. At some point, the tradeoff of subdued wage growth for job security has to come to an end. In other words, the relatively modest wage gains we have experienced are a temporary rather than a lasting phenomenon because there is a limit to the value of additional job security people are willing to acquire in exchange for lesser increases in living standards. Even if real wages were to remain permanently on a lower upward track than otherwise as a result of the greater sense of insecurity, the rate of change of wages would revert at some point to a normal relationship with inflation. The unknown is when this transition period will end.

Indeed, some recent evidence suggests that the labor markets bear especially careful watching for signs that the return to more normal patterns may be in process. The Bureau of Labor Statistics reports that people were somewhat more willing to quit their jobs to seek other employment in January than previously. The possibility that this reflects greater confidence by workers accords with a recent further rise in the percent of households responding to a Conference Board survey who perceive that job availability is plentiful. Of course, the job market has continued to be quite good recently; employment in January registered robust growth and initial claims for unemployment insurance have been at a relatively low level of late. Wages rose faster in 1996 than in 1995 by most measures, perhaps also raising questions about whether the transitional period of unusually slow wage gains may be drawing to a close.

To be sure, the pickup in wage gains has not shown through to underlying price inflation. Increases in the core CPI, as well as in several broader measures of prices, have stayed subdued or even edged off further in recent months. As best we can judge, faster productivity growth last year meant that rising compensation gains did not cause labor costs per unit of output to increase any more rapidly. Non-labor costs, which are roughly a quarter of total consolidated costs of the nonfinancial corporate sector, were little changed in 1996.

Owing in part to this subdued behavior of unit costs, profits and rates of return on capital have risen to high levels. As a consequence, businesses believe that, were they to raise prices to boost profits further, competitors with already ample profit margins would not follow suit; instead, they would use the occasion to capture a greater market share. This interplay is doubtless a significant factor in the evident loss of pricing power in American business.

Intensifying global competition also may be further restraining domestic firms' ability to hike prices as well as wages. Clearly, the appreciation of the dollar on balance over the past 18 months or so, together with low inflation in many of our trading partners, has resulted in a marked decline in non-oil import prices that has helped to damp domestic inflation pressures. Yet it is important to emphasize that these influences, too, would be holding down inflation only temporarily; they represent a transition to a lower price *level* than would otherwise prevail, not to a permanently lower rate of inflation.

Against the background of all these considerations, the FOMC has recognized the need to remain vigilant for signs of potentially inflationary imbalances that might, if not corrected promptly, undermine our economic expansion. The FOMC, in fact, has signaled a state of heightened alert for possible policy tightening since last July in its policy directives. But, we have also taken care not to act prematurely. The FOMC refrained from changing policy last summer, despite expectations of a near-term policy firming by many financial market participants. In light of the developments I have just discussed affecting wages and prices, we thought inflation might well remain damped, and in any case was unlikely to pick up very rapidly, in part because the economic expansion appeared likely to slow to a more sustainable pace. In the event, inflation has remained quiescent since then.

Given the lags with which monetary policy affects the economy, however, we cannot rule out a situation in which a preemptive policy tightening may become appropriate before any sign of actual higher inflation becomes evident. If the FOMC were to implement such an action, it would be judging that the risks to the economic expansion of waiting longer had increased unduly and had begun to outweigh the advantages of waiting for uncertainties to be reduced by the accumulation of more information about economic trends. Indeed, the hallmark of a successful policy to foster sustainable economic growth is that inflation does not rise. I find it ironic that our actions in 1994–95 were criticized by some because inflation did not turn upward. That outcome, of course, was the intent of the tightening, and I am satisfied that our actions then were both necessary and effective, and helped to foster the continued economic expansion.

To be sure, 1997 is not 1994. The real Federal funds rate today is significantly higher than it was 3 years ago. Then we had just completed an extended period of monetary ease which addressed the credit stringencies of the early 1990's, and with the abatement of the credit crunch, the low real funds rate of early 1994 was clearly incompatible with containing inflation and sustaining growth going forward. In February 1997, in contrast, our concern is a matter of relative risks rather than of expected outcomes. The real funds rate, judging by core inflation, is only slightly below its early 1995 peak for this cycle and might be at a level that will promote continued noninflationary growth, especially considering the recent rise in the exchange value of the dollar. Nonetheless, we cannot be sure. And the risks of being wrong are clearly tilted to the upside.

I wish it were possible to lay out in advance exactly what conditions have to prevail to portend a buildup of inflation pressures or inflationary psychology. However, the circumstances that have been associated with increasing inflation in the past have not followed a single pattern. The processes have differed from cycle to cycle, and what may have been a useful leading indicator in one instance has given off misleading signals in another.

I have already discussed the key role of labor market developments in restraining inflation in the current cycle and our careful monitoring of signs that the transition phase of trading off lower real wages for greater job security might be coming to a close. As always, with resource utilization rates high, we would need to watch closely a situation in which demand was clearly unsustainable because it was producing escalating pressures on resources, which could destabilize the economy. And we would need to be watchful that the progress we have made in keeping inflation expectations damped was not eroding. In general, though, our analysis will need to encompass all potentially relevant information, from financial markets as well as the economy, especially when some signals, like those in the labor market, have not been following their established patterns.

The ongoing economic expansion to date has reinforced our conviction about the importance of low inflation—and the public's confidence in continued low inflation. The economic expansion almost surely would not have lasted nearly so long had monetary policy supported an unsustainable acceleration of spending that induced a buildup of inflationary imbalances. The Federal Reserve must not acquiesce in an upcreep in inflation, for acceding to higher inflation would countenance an insidious weakening of our chances for sustaining long-run economic growth. Inflation interferes with the efficient allocation of resources by confusing price signals, undercutting a focus on the longer run, and distorting incentives.

This year overall inflation is anticipated to stay restrained. The central tendency of the forecasts made by the Board members and Reserve Bank presidents has the increase in the total CPI slipping back into a range of 2¾ to 3 percent over the four quarters of the year. This slight falloff from last year's pace is expected to owe in part to a slower rise in food prices as some of last year's supply limitations ease. More importantly, world oil supplies are projected by most analysts to increase relative to world oil demand, and futures markets project a further decline in prices, at least in the near term. The recent and prospective declines in crude oil prices not only should affect retail gasoline and home heating oil prices but also should relieve inflation pressures through lower prices for other petroleum products, which are imbedded in the economy's underlying cost structure. Nonetheless, the trend in inflation rates in the core CPI and in broader price measures may be somewhat less favorable than in recent years. A continued tight labor market, whose influence on costs would be augmented by the scheduled increase in the minimum wage later in the year and perhaps by higher growth of benefits now that considerable health care savings already have been realized, could put upward pressure on core inflation. Moreover, the effects of the sharp rise in the dollar over the last 18 months in pushing down import prices are likely to ebb over coming quarters.

The unemployment rate, according to Board members and Bank presidents, should stay around 5¼ to 5½ percent through the fourth quarter, consistent with their projections of measured real GDP growth of 2 to 2¼ percent over the four quarters of the year. Such a growth rate would represent some downshifting in output expansion from that of last year. The projected moderation of growth likely would reflect several influences: (1) declines in real Federal Government purchases should be exerting a modest degree of restraint on overall demand; (2) the lagged effects of the increase in the exchange value of the dollar in recent months likely will damp U.S. net exports somewhat this year; and (3) residential construction is unlikely to repeat the gains of 1996. On the other hand, we do not see evidence of widespread imbalances either in business inventories or in stocks of equipment and consumer durables that would lead to a substantial cutback in spending. And financial conditions overall remain supportive; real interest rates are not high by historical standards and credit is readily available from intermediaries and in the market.

The usual uncertainties in the overall outlook are especially focused on the behavior of consumers. Consumption should rise roughly in line with the projected moderate expansion of disposable income, but both upside and downside risks are present. According to various surveys, sentiment is decidedly upbeat. Consumers have enjoyed healthy gains in their real incomes along with the extraordinary stock-market driven rise in their financial wealth over the last couple of years. Indeed, econometric models suggest that the more than $4 trillion rise in equity values since late 1994 should have had a larger positive influence on consumer spending than seems to have actually occurred.

It is possible, however, that households have been reluctant to spend much of their added wealth because they see a greater need to keep it to support spending in retirement. Many households have expressed heightened concern about their financial security in old age, which reportedly has led to increased provision for retirement. The results of a survey conducted annually by the Roper Organization, which asks individuals about their confidence in the Social Security system, shows that between 1992 and 1996 the percent of respondents expressing little or no confidence in the system jumped from about 45 percent to more than 60 percent.

Moreover, consumer debt burdens are near historical highs, while credit card delinquencies and personal bankruptcies have risen sharply over the past year. These circumstances may make both borrowers and lenders a bit more cautious, damping spending.

In fact, we may be seeing both wealth and debt effects already at work for different segments of the population, to an approximately offsetting extent. Saving out of current income by households in the upper income quintile, who own nearly three-fourths of all nonpension equities held by households, evidently has declined in recent years. At the same time, the use of credit for purchases appears to have leveled off after a sharp runup from 1993 to 1996, perhaps because some households are becoming debt constrained and, as a result, are curtailing their spending.

The Federal Reserve will be weighing these influences as it endeavors to help extend the current period of sustained growth. Participants in financial markets seem to believe that in the current benign environment the FOMC will succeed indefinitely. There is no evidence, however, that the business cycle has been repealed.

Another recession will doubtless occur some day owing to circumstances that could not be, or at least were not, perceived by policymakers and financial market participants alike. History demonstrates that participants in financial markets are susceptible to waves of optimism, which can in turn foster a general process of asset-price inflation that can feed through into markets for goods and services. Excessive optimism sows the seeds of its own reversal in the form of imbalances that tend to grow over time. When unwarranted expectations ultimately are not realized, the unwinding of these financial excesses can act to amplify a downturn in economic activity, much as they can amplify the upswing. As you know, last December I put the question this way: ". . . how do we know when irrational exuberance has unduly escalated asset values, which then become subject to unexpected and prolonged contractions . . . ?"

We have not been able, as yet, to provide a satisfying answer to this question, but there are reasons in the current environment to keep this question on the table. Clearly, when people are exposed to long periods of relative economic tranquility, they seem inevitably prone to complacency about the future. This is understandable. We have had 15 years of economic expansion interrupted by only one recession—and that was 6 years ago. As the memory of such past events fades, it naturally seems ever less sensible to keep up one's guard against an adverse event in the future. Thus, it should come as no surprise that, after such a long period of balanced expansion, risk premiums for advancing funds to businesses in virtually all financial markets have declined to near-record lows.

Is it possible that there is something fundamentally new about this current period that would warrant such complacency? Yes, it is possible. Markets may have become more efficient, competition is more global, and information technology has doubtless enhanced the stability of business operations. But, regrettably, history is strewn with visions of such "new eras" that, in the end, have proven to be a mirage. In short, history counsels caution.

Such caution seems especially warranted with regard to the sharp rise in equity prices during the past 2 years. These gains have obviously raised questions of sustainability. Analytically, current stock-price valuations at prevailing long-term interest rates could be justified by very strong earnings growth expectations. In fact, the long-term earnings projections of financial analysts have been marked up noticeably over the last year and seem to imply very high earnings growth and continued rising profit margins, at a time when such margins are already up appreciably from their depressed levels of 5 years ago. It could be argued that, although margins are the highest in a generation, they are still below those that prevailed in the 1960's. Nonetheless, further increases in these margins would evidently require continued restraint on costs: labor compensation continuing to grow at its current pace and productivity growth picking up. Neither, of course, can be ruled out. But we should keep in mind that, at these relatively low long-term interest rates, small changes in long-term earnings expectations could have outsized impacts on equity prices.

Caution also seems warranted by the narrow yield spreads that suggest perceptions of low risk, possibly unrealistically low risk. Considerable optimism about the ability of businesses to sustain this current healthy financial condition seems, as I indicated earlier, to be influencing the setting of risk premiums, not just in the stock market but throughout the financial system. This optimistic attitude has become especially evident in quality spreads on high-yield corporate bonds—what we used to call "junk bonds." In addition, banks have continued to ease terms and standards on business loans, and margins on many of these loans are now quite thin. Many banks are pulling back a little from consumer credit card lending as losses exceed expectations. Nonetheless, some bank and nonbank lenders have been expanding aggressively into the home equity loan market and so-called "subprime" auto lending, although recent problems in the latter may already be introducing a sense of caution.

Why should the central bank be concerned about the possibility that financial markets may be overestimating returns or mispricing risk? It is not that we have a firm view that equity prices are necessarily excessive right now or risk spreads patently too low. Our goal is to contribute as best we can to the highest possible growth of income and wealth over time, and we would be pleased if the favorable economic environment projected in markets actually comes to pass. Rather, the FOMC has to be sensitive to indications of even slowly building imbalances, whatever their source, that, by fostering the emergence of inflation pressures, would ultimately threaten healthy economic expansion.

Unfortunately, because the monetary aggregates were subject to an episode of aberrant behavioral patterns in the early 1990's, they are likely to be of only limited help in making this judgment. For three decades starting in the early 1960's, the public's demand for the broader monetary aggregates, especially M2, was reasonably predictable. In the intermediate term, M2 velocity—nominal income divided by the stock of M2—tended to vary directly with the difference between money market yields and the return on M2 assets—that is, with its short-term opportunity cost. In the long run, as adjustments in deposit rates caused the opportunity cost to revert to an equilibrium, M2 velocity also tended to return to an associated stable equilibrium level. For several years in the early 1990's, however, the velocities of M2 and M3 exhibited persisting upward shifts that departed markedly from these historical patterns.

In the last 2 to 3 years, velocity patterns seem to have returned to those historical relationships, after allowing for a presumed permanent upward shift in the levels of velocity. Even so, given the abnormal velocity behavior during the early 1990's, FOMC members continue to see considerable uncertainty in the relationship of broad money to opportunity costs and nominal income. Concern about the possibility of aberrant behavior has made the FOMC hesitant to upgrade the role of these measures in monetary policy.

Against this background, at its February meeting, the FOMC reaffirmed the provisional ranges set last July for money and debt growth this year: 1 to 5 percent for M2, 2 to 6 percent for M3, and 3 to 7 percent for the debt of domestic nonfinancial sectors. The M2 and M3 ranges again are designed to be consistent with the FOMC's long-run goal of price stability: For, if the velocities of the broader monetary aggregates were to continue behaving as they did before 1990, then money growth around the middle portions of the ranges would be consistent with noninflationary, sustainable economic expansion. But, even with such velocity behavior this year, when inflation is expected to still be higher than is consistent with our long-run objective of reasonable price stability, the broader aggregates could well grow around the upper bounds of these ranges. The debt aggregate probably will expand around the middle of its range this year.

I will conclude on the same upbeat note about the U.S. economy with which I began. Although a central banker's occupational responsibility is to stay on the lookout for trouble, even I must admit that our economic prospects in general are quite favorable. The flexibility of our market system and the vibrancy of our private sector remain examples for the whole world to emulate. The Federal Reserve will endeavor to do its part by continuing to foster a monetary framework under which our citizens can prosper to the fullest possible extent.

## RESPONSE TO WRITTEN QUESTIONS OF SENATOR D'AMATO FROM ALAN GREENSPAN

**Q.1.a.** A recent NASDAQ survey indicates 40 percent of all Americans now own mutual funds, compared to only 13 percent in 1990. Since you appeared before this Committee last July, the Dow has climbed over 1,500 points. Market bears say the market may be due for a price correction of anywhere from 10 to 20 percent. In your view, does the increased individual investment have any impact on the potential for, or depth of, a market downturn?

**A.1.a.** Evidence from a variety of sources suggests that a broad segment of U.S. households own shares in mutual funds and that many of these shareholders may not have experienced a bear market. The prospect for investors in equity mutual funds to intensify a downturn in share prices is an issue we have considered. The experience to date, however, suggests that mutual fund shareholders have not been inclined to react to a price decline by heavy selling. In part, this may be because many investors hold shares as components of their retirement programs and thus view them as long-term investments. Nonetheless, the essence of our market system is that shareholders may choose to reallocate their investments. The paramount public policy concern—and one upon which the SEC has focused much of its regulatory effort—is to ensure that markets and mutual funds can absorb any shocks with which they are faced.

**Q.1.b.** How has the Working Group you are involved in with the SEC and others taken this individual investment into consideration in the Group's crisis planning?

**A.1.b.** Staff of the agencies that participate in the Working Group have discussed the increased role of individual investors in mutual funds, and the principals of the Working Group have been briefed on these discussions. The SEC maintains close contacts with large mutual funds and monitors share redemptions by investors, particularly during times of market volatility. The SEC staff keep staff of other members of the Working Group apprised of developments, as necessary.

**Q.1.c.** Should the various circuit breakers be set in percentage terms, rather than absolute levels?

**A.1.c.** Ideally, circuit breakers would be set in percentage terms, but their administration would be much more difficult if they were defined as percentages. Market participants, exchanges, and clearing organizations would be faced with determining new circuit breakers every day and adjusting their behavior to the new levels. The SEC has indicated to exchanges the need to review periodically the levels of circuit breakers. A process of periodic review will have much the same effect as circuit breakers set in percentage terms but without the administrative difficulties.

**Q.2.a.** A recent *American Banker* article noted that banks are encouraging borrowers to transfer unsecured debt to home equity lines, partly in response to rising default rates on other types of consumer loans. I recognize that home equity loans may be more advantageous for the consumer because of the tax deductibility.

However, the loans may also pose risks to the consumer since their home is at stake. What can you tell us about the extent of this practice?

**A.2.a.** The *American Banker* article to which you allude (February 11, 1997 edition) cites a Federal Reserve System study as the basis for the article. The study, the January 1997 Senior Loan Officer Opinion Survey on Bank Lending Practices, surveyed 57 banks, the assets of which account for approximately 40 percent of the banking industry's aggregate assets. Responses from several of the survey's participants suggest that the recent rapid growth in home equity loans was, in part, the result of substitution for unsecured forms of consumer credit. This shift reportedly has arisen from bank promotion of such substitution as well as from the initiative of borrowers attempting to consolidate their debt and gain the attendant advantage of deducting all or a portion of interest paid on their home equity loan debt. To a much lesser extent, respondents report that the easing of home equity loan terms was a factor in the recent rapid growth in these loans.

The aggregate financial data for all insured commercial banks as of year-end 1996 confirm the growing popularity of home equity loans. With total outstandings of $85 billion, home equity loans held by commercial banks comprise 7 percent of all consumer loan outstandings, the smallest segment of the consumer loan sector. Unsecured credit (i.e., credit cards and consumer installment loans) totalled $565 billion and accounts for 46 percent of consumer loans. (Residential mortgages comprise the balance.) Home equity credit line outstandings at commercial banks increased by 8 percent during 1996, the highest growth rate in 6 years. Conversely, the rate of growth for unsecured credit last year was 5 percent, a marked slowdown from the double-digit growth experienced in 1995 and 1994. And most notably, delinquencies in unsecured credit portfolios have risen significantly during the past year while the credit quality of home equity loan portfolios either improved or remained stable.

Home equity loan borrowing has increased steadily since 1986 when Federal tax reform allowed for the deductibility of home equity loan interest and phased out interest deductions on nonmortgage credit such as credit cards and auto loans. Given these tax advantages, in combination with low interest rates relative to unsecured credit alternatives, and the convenience and benefits of debt consolidation, we anticipate home equity demand will continue to expand. Furthermore, the low delinquency and default rates of home equity loans along with the increasing riskiness of, and the increased competition for, unsecured credit makes the risk-adjusted yield on home equity loans more attractive to banks. Based on these data and the anecdotal evidence collected from our Senior Loan Officer Opinion Survey, we expect continued marketing and substitution promotion of these loans among commercial banks.

**Q.2.b.** What are your examiners doing to make sure that these loans are safely underwritten and don't involve excessively high loan-to-value ratios?

**A.2.b.** Federal Reserve supervisory officials and examiners monitor lending standards and practices in connection with ongoing supervisory activities and the conduct of on-site examinations. The Federal Reserve System issued Guidance on Home Equity Lending and Compliance with the Interagency Real Estate Standards Guidelines (SR Letter 95–31, a copy of which is attached) on May 30, 1995. These guidelines specifically discuss the topic of home equity lending where combined mortgage indebtedness results in very high loan-to-value (LTV) ratios. When reviewing a State member bank's residential real estate lending activities, Federal Reserve System examiners are directed to ensure that the bank's home equity lending policies for originating and acquiring such loans comply with the Real Estate Lending Standards Guidelines (12 CFR Subpart C, sections 208.51 and 208.52, and Appendix C).

In addition, the Federal Reserve System issued Bank Lending Terms and Standards (SR Letter 95–36, a copy of which is also attached) on June 19, 1995, which discusses the inclination for some banks to relax lending terms and conditions beyond prudent bounds when faced with heightened lending competition. This letter provides examiners with specific guidance and procedures for evaluating bank loan portfolios, with an emphasis on determining whether credit terms and standards have eased, and if so, whether the bank's lending activities remain within the bounds of prudent underwriting practice.

Board of Governors staff and senior officers from each Federal Reserve Bank's Supervision and Regulation function regularly meet to discuss pertinent credit issues and the potential impact on the banking industry. Staff recently met to discuss the topics of subprime lending and home equity lending. Evidence suggests that few State member banks offer loans with LTV ratios in excess of 90 percent; rather, evidence points to finance companies and subprime lenders as the major providers of these loans. Underwriting standards and/or loan terms offered by banks may be affected by competitive pressures in the home equity market and may be driven by mounting competition from finance companies and subprime lenders.

**Q.3.a.** Banks are apparently attempting to expand their loan portfolios by going after riskier credits or what some refer to as the "subprime" or "nonprime" lending market. My concerns are twofold: One is whether consumers are being taken advantage of by companies which grant loans on overvalued collateral—such as used cars. Second, I point to the practices of companies like Mercury Finance which engaged in fictitious accounting to overstate profits. What is the size of this market and what is the extent of bank involvement?

**A.3.a.** *Subprime* and *nonprime* are generic terms applied to a wide spectrum of loans made to borrowers with blemished credit histories and varying degrees of greater risk. Estimating the size of this market is difficult as these terms are loosely defined and may vary from lender to lender. Many lenders assign a letter grade to loans, where "A" credits are traditional bankable loans and riskier credits are categorized as "B" and "C" and sometimes even "D" loans. Grading credits in this fashion is also a subjective matter. In an attempt to standardize the definition of subprime, some lenders have assigned a letter grade based on the score ascribed a borrower under the widely used Fair, Isaacs and Company credit scoring system.

Finance companies have traditionally specialized in these types of credits but banks and their affiliates are participating in this potentially profitable segment in increasing numbers. In general, the size of subprime lending relative to prime lending is comparatively small. The primary driving force behind banks' growing involvement in the subprime lending market is high competition for, and a dwindling supply of "A" credits. Despite greater risk and a higher operating cost structure, subprime lending offers significantly higher returns than traditional lending. As an indication of the growing appeal of subprime lending, the number of publicly traded subprime lenders has doubled in the past year. There are over twenty publicly traded subprime auto finance companies, for whom Wall Street has raised over $1 billion in equity capital alone since 1993.

Commercial banks gain involvement in subprime lending by engaging directly in subprime lending themselves or by investing in securities issued by subprime lenders. The issuance of securities backed by loans of the subprime specialists rose from $200 million in 1995 to $1.6 billion in 1996. While banks routinely bear exposure to risk by investing in these or in any asset-backed securities, we have not yet seen widespread defaults or deterioration in the quality of instruments issued by the subprime specialists. With one notable exception, most of the independent finance companies rely on asset securitization rather than commercial paper for financing. The one exception, Mercury Finance, to which you refer, is the only independent finance company involved in subprime auto lending that has a commercial paper program. Of all participants in the subprime industry, the parties that appear to bear the greatest risk are finance company shareholders. Following Mercury Finance's disclosure of accounting inconsistencies and Jayhawk Acceptance Company's announcement of large fourth quarter losses, a broad sell-off of finance company shares occurred, resulting in a sharp decline in share prices and a high loss of market capitalization.

Banks may also enter the subprime lending arena by acquiring seasoned finance companies, by expanding existing finance company subsidiaries, or by simply establishing specialized subprime lending staffs within existing lending operations.

**Q.3.b.** What are your views on the growing bank involvement in this area?

**A.3.b.** Subprime lending is a potentially lucrative business for those who thoroughly understand the business, fully recognize the risks involved, and are capable of effectively managing those risks. There are characteristics unique to this segment that are entirely distinct from traditional lending. Subprime lending is viewed by many as asset- or collateral-based lending, and, as such, requires underwriting and collection philosophies far different from traditional lending. Given the disturbing trends in consumer loan delinquencies and personal bankruptcies, the Federal Reserve would increase its oversight of a bank contemplating or engaging in this or any activity without a full understanding of the inherent risks involved.

**Q.3.c.** What is the Fed doing to monitor behavior in this area, particularly for those institutions who have little experience dealing with these types of riskier credits?

**A.3.c.** In addition to SR Letter 95–36 (Bank Lending Terms and Standards, as discussed earlier), Board of Governors staff and Federal Reserve Bank officers continually evaluate the latest trends and developments in the banking industry as well as in the nonbank arena. Staff has been closely following the recent developments in the subprime market to assess the impact, if any, on specific institutions and on the banking system as a whole. We are currently evaluating whether the recent events warrant the issuance of further guidance to assist our examiners in the review of banks' subprime lending operations. In addition, other discussions of these topics take place regularly in the context of meetings of the senior officers of Reserve Banks, conferences of examination staffs, and other informally constituted groups. Federal Reserve System staff also recently conducted a survey of several banks and affiliated finance companies in connection with a variety of retail credit issues. Furthermore, Board of Governors staff have met with staff of the other regulatory agencies to disseminate information on subprime lending and to discuss the potential impact of this segment's growth.

**Q.4.a.** You and I are both very interested in seeing that the benefits of technology in the financial services area be extended to consumers. In November, I wrote asking you to evaluate whether the Fed should only allow banks to hold nonlocal checks for 4 days—1 day less than permitted under the schedule Congress established in 1987. When do you anticipate having an analysis completed on that issue?

**A.4.a.** As discussed in your letter of November 19, 1996, and my response of December 9, 1996, the Federal Reserve is investigating whether the availability schedule for nonlocal checks should be shortened by one business day, from the five business days currently permitted by the Expedited Funds Availability Act (EFAA) to four business days. Although the Federal Reserve's *Report to the Congress on Funds Availability Schedules and Check Fraud* found that, on average, almost two-thirds of nonlocal checks that are not paid are returned to the depositary bank within four business days, this percentage represents a national average and does not reflect potential differences in return times between various regions in the United States. For example, a bank in New York might receive a returned check drawn on a Cleveland bank faster than a returned check drawn on a Dallas or Los Angeles bank.

The Federal Reserve Banks are collecting detailed data on the return times between different sections of the country, including urban and rural areas where access to transportation may vary significantly. Board's staff expects to receive the raw data later this spring, and it will then analyze the data to determine the return times for nonlocal checks between each pair of Federal Reserve offices. This analysis should be completed by the fall. If the results indicate that a change in the availability schedule for all or some nonlocal checks may be warranted, the Board would request public comment on proposed changes to the Regulation CC availability schedule.

In its September report to Congress on local checks, the Fed recommended that the holding period be extended from 2 to 3 days.

**Q.4.b.** How can members of Congress reasonably be expected to tell their constituents that in light of technological advances banks need to hold their money longer?

**A.4.b.** The Check-Fraud Report found that the Board's Regulation CC, which implemented the EFAA, reduced the average time for a dishonored check to be returned to the depositary bank by approximately 20 percent by reducing the number of intermediary institutions that might handle a returned check and by requiring the use of technology to speed the processing of those checks. The survey found, however, that, even with this improvement, fewer than half of returned local checks were returned within the two business-day period provided by the EFAA. There continue to be physical limitations to the speed with which a paying bank can review and initiate the return of a dishonored check and with which paper checks can be processed and transported to depositary banks. Extending the maximum permissible hold period for local checks by one business day would increase the likelihood that depositary banks would receive returned checks before they were. required to release funds and would improve banks' ability to manage their risk.

While the Federal Reserve continues to investigate alternatives for expediting the processing and delivery of returned checks to depositary banks, there are limits to the improvements that can be made in processing paper documents. As a result, the Federal Reserve encourages the use of electronic payment alternatives to improve the certainty of payments and consumers' access to their funds. The use of direct deposit for Social Security payments, veterans' benefits, payroll payments, and corporate dividend payments provides users with assurance that payments will be made and funds will be received in a timely, reliable, efficient, and secure fashion. If an employer does not offer direct deposit, individuals should request their employer to provide direct deposit as an alternative to traditional pay checks.

**Q.4.c.** Do all of the Fed banks and branches use electronic check presentment?

**A.4.c.** All Federal Reserve check processing offices offer electronic check presentment, which was first piloted by the Reserve Banks in 1985. Under the Uniform Commercial Code and the Board's Regulation CC, prior agreement between collecting banks and paying banks is required before checks can be presented electronically. Thus, although the Federal Reserve encourages banks to accept electronic check presentment as legal presentment for checks, it cannot compel them to do so. In 1996, approximately 9 percent of the checks presented through the Federal Reserve were presented electronically, an increase from the 1 percent of checks presented electronically in 1993.

Although electronic check presentment can improve the efficiency of the check clearing system, it cannot fully eliminate the need to handle and transport paper checks. The Federal Reserve believes that there are limits to the speed with which payments can be processed as long as paper instruments are used.

**Q.4.d.** If check fraud is a significant issue, why is extending the hold period the best solution? Shouldn't other fraud-cutting alternatives be considered?

**A.4.d.** Because banks incur losses from many types of check fraud, no single solution can prevent all types of fraud. Therefore, the banking industry is pursuing many avenues to deter and prevent check fraud. The Board made legislative recommendations on hold periods for local checks because this was the specific issue that Congress, in the Riegle Community Development and Regulatory Improvement Act of 1994, directed the Board to address. At the same time, the Board has made its report to Congress available to the public so that all interested parties could use the survey results to assist them in their efforts to combat check fraud.

ATTACHMENTS

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

DIVISION OF BANKING
SUPERVISION AND REGULATION

**SR 95-31 (SUP)**

**May 30, 1995**

**TO THE OFFICER IN CHARGE OF SUPERVISION
AT EACH FEDERAL RESERVE BANK**

**SUBJECT:** Guidance on Home Equity Lending and Compliance with the Interagency Real Estate Lending Standards Guidelines

Recent information suggests that there has been a significant increase in home equity lending where the combined first and second mortgages result in very high loan-to-value (LTV) ratios, in some cases up to or exceeding 100 percent. Reserve Banks are reminded that a state member bank making or acquiring high LTV home equity loans may not be adhering to the Interagency Real Estate Lending Standards Guidelines.[1] While these guidelines do not apply to bank holding companies and their non-bank subsidiaries nor U.S. operations of foreign banking organizations, these organizations are expected to operate in a prudent manner when underwriting real estate loans.

The current higher level of interest rates has resulted in fewer residential mortgage refinancings. It appears that banks are seeking to offset the decline in the refinancing business by competing more aggressively for home equity loan business. At the same time, demand for such loans is increasing as they provide a relatively low-cost funding source for consumer purchases. In a number of markets across the country, banks are offering 100 percent LTV home equity loans in order to remain competitive with other local residential lenders.

During the course of reviewing a state member bank's residential real estate lending activities, examiners should ensure that the bank's home equity lending policies for originating and acquiring such loans comply with the Real Estate Lending Standards Guidelines. While the guidelines do not set an explicit LTV limit for mortgages and home equity loans on owner-occupied 1-to-4 family *residential properties*, they do provide that, for loans with LTVs equal to or exceeding 90 percent, banks must have appropriate credit enhancements, in the form of either mortgage insurance or readily marketable collateral.[2] "While the guidelines permit banks to make residential real estate loans with LTVs in excess of 90 percent without these credit enhancements, such loans are treated as exceptions to the guidelines and subject to an aggregate limitation of 100 percent of total capital." In addition to examining for compliance with the Real Estate Lending Standards Guidelines, examiners should ensure that a bank with a high concentration of home equity loans with

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[1] Refer to 12 CFR Subpart C, sections 208.51 and 208.52 and Appendix C.

[2] For home equity loans, the guidelines define the loan amount in the LTV ratio calculation as the amount of the home equity loan plus the outstanding amount of all senior liens on the property.

excessively high combined LTVs has proper controls to manage such exposure. Banks with concentrations that lack proper controls and monitoring procedures should be criticized for these credit deficiencies. If these deficiencies are considered severe in the examiner's judgment, the bank should be cited for unsafe and unsound banking practices.

The situation is somewhat different for non-bank subsidiaries of bank holding companies (e.g., mortgage companies and finance companies) and U.S. operations of foreign banking organizations. While these organizations are not subject to the Real Estate Lending Standards Guidelines, they are expected to employ prudent lending standards. Accordingly, examiners should consider whether such organizations' underwriting and credit standards for home equity loans are adequate to ensure that this type of lending is being carried out in a safe and sound manner.

Any questions on the Real Estate Lending Standards Guidelines should be directed to Virginia Gibbs, Supervisory Financial Analyst, at 202/452-2521.

Stephen C. Schemering

Stephen C. Schemering
Deputy Director

Cross Reference - Commercial Bank Examination Manual: Section 2090.1

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

DIVISION OF BANKING
SUPERVISION AND REGULATION

SR 95-36 (SUP)

June 19, 1995

TO THE OFFICER IN CHARGE OF SUPERVISION
AT EACH FEDERAL RESERVE BANK

**SUBJECT:** Bank Lending Terms and Standards

Introduction

Federal Reserve supervisory officials and examiners monitor lending standards and practices in connection with ongoing supervisory activities and the conduct of on-site examinations. For some time, surveys of senior lending officers, reports from examiners, anecdotal information on competitive conditions from bankers, and discussions with trade and advisory groups have indicated that commercial banks have been easing terms and conditions on loans to their business customers. Such adjustments may be altogether appropriate if they are being made prudently by banks that significantly tightened their credit standards in the late 1980s and early 1990s in response to serious credit problems and weak banking conditions. In today's intensely competitive lending markets, however, there is the potential that some banks may be relaxing, or may be inclined to relax, lending terms and conditions beyond prudent bounds in efforts to obtain new customers or retain existing customers.

Supervisory experience suggests that credit underwriting terms have eased from those prevailing in the early 1990s in a variety of ways which include, but are not limited to, smaller loan fees, narrower spreads, larger credit lines, lower debt service coverage ratios, lengthening of maturities, lower collateral coverage, less frequent personal guarantees and generally fewer or more liberal protective covenants. In addition to the easing associated with commercial loans, some lenders have loosened terms on credit card and home equity facilities to individuals.

Examination Considerations

The process by which banks alter their lending terms and standards, as well as their overall appetite for risk-taking, can involve decisions by senior management and boards of directors to amend operating policies and procedures. Alternatively, a change in a bank's risk profile can sometimes result from more subtle or gradual revisions or modifications in how a bank's lending policies and procedures are applied in practice. The latter process may be less apparent, but both can, if not controlled over time, result in significant loan problems. Senior bank management and bank examiners need to be sensitive to both types of credit easing and their potential impact on a bank's risk profile.

Banking necessarily entails making business judgements about taking and pricing risks and, of course, the potential for loss is inherent in the lending process. Banks must have the discretion to make reasonable adjustments to lending rates, fees and other terms in order to serve their communities and customers, maintain market position, and operate profitably. However, sound banking practice requires that banks have policies and procedures in place to ensure that all credit risks are properly identified, monitored, and controlled, and that loan pricing, terms, and other safeguards against non-performance and default are commensurate with the level of risk undertaken. The experience of the recent past demonstrates that lax lending standards or practices can lead to heavy loan losses that place a material strain on earnings and capital.

Over the last several years, consumers and business borrowers have generally experienced quite favorable financial and economic conditions, which have contributed to the recent growth and strong performance of bank loan portfolios. However, examiners should recognize that these conditions have been affected, in part, by the particular circumstances of the business cycle. The performance of loans, especially those that are not properly structured, can be adversely affected should the condition of borrowers deteriorate. Therefore, banks should ensure that their loan underwriting terms and standards for both consumer and commercial loans are appropriate to a variety of borrower and economic conditions -- they should not be based solely on "best case" scenarios for the particular borrower or for the economy overall. Current loan delinquency and default rates reflect, in part, the relatively recent vintage of many loans, as well as the prevailing economic environment, and may not be indicative of the performance of the loan portfolio over time. It is the borrower's ability to repay in the future, that is, at maturity -- when the borrower's condition or the economic environment may be different -- that ultimately determines whether a loss will be suffered on a loan. As part of the credit risk management process, banks should consider the potential effect of a wide range of borrower default rates and losses on the institution, especially on loans with more relaxed terms.

<u>Examination Procedures</u>

One of the principal objectives of an on-site examination is to evaluate loan underwriting practices and the quality of bank loan portfolios. As part of the routine procedures for evaluating bank loan portfolios, examiners should ascertain whether credit terms and standards have eased since prior examinations, and if so, whether the bank's lending activities remain within the bounds of prudent underwriting practice. Accordingly, examination procedures for consumer and business loans should, where appropriate, continue to emphasize the following:

- Identification of changes in loan policies or in credit underwriting terms, standards or practices since the last examination.

- Comparison of credit terms on noncriticized (pass) loans of comparable risk between the current and prior examinations.

- Evaluation of trends in the number, volume and frequency of any loans that involve exceptions to the bank's loan policies and underwriting standards.

- The quality of the bank's internal credit scoring or loan risk rating system and the ongoing effectiveness of the loan review process.

- Evaluation of trends in the number and volume of credits in higher risk categories based upon the bank's internal credit scoring or loan risk rating systems.

- Assessment of changes in concentration levels, especially for credits with higher risk ratings.

- The quality, accuracy and timeliness of management information systems on internal loan risk ratings and loan portfolio performance.

- The degree to which the bank considers the potential performance of the portfolio under various economic and financial scenarios, including, where appropriate, stress testing.

- Assessment of the loan loss reserve methodology in light of any changes in credit terms or standards.

- The overall effectiveness of the credit risk management process and internal controls in light of any changes in credit terms and standards.

- Degree of independent oversight over the lending process provided by the board of directors.

After each examination, the exit interview should include a general discussion of the bank's lending policies and practices. As part of this discussion, an effort should be made to determine management's views on the bank's current lending terms and standards, as well as on market practices more generally. Where applicable, management and directors should be reminded of the necessity to take into account the potential effects of eased standards and changing economic conditions when evaluating the adequacy of loan loss reserves and capital, assigning internal loan risk ratings, and interpreting management reports.

If questionable or unwarranted easing is identified, examiners should discuss their findings in detail with senior management and, if necessary, the board of directors, and include appropriate comments and recommendations in the examination report. This should be done regardless of whether or not classified assets or other quantitative indicators of problem loans have begun to increase. Care should be taken to ensure that management and directors are fully aware of the risks that questionable or imprudent lending standards or practices could present to the safety and soundness of their institutions in the event of a change in general economic conditions or in the condition of individual borrowers.

The steps outlined above are consistent with the Federal Reserve's longstanding examination policy of assessing the impact of the quality of a bank's loan portfolio and credit risk management procedures on its overall financial condition and risk profile. This letter is intended to ensure a continuing balanced review of asset quality during on-site examinations; nothing in this letter is meant to bring about or suggest a fundamental change in the scope, content or depth of System examinations.

Richard Spillenkothen
Director

**For use at 10:00 a.m., E.S.T.**
**Wednesday**
**February 26, 1997**

Board of Governors of the Federal Reserve System

# Monetary Policy Report to the Congress Pursuant to the Full Employment and Balanced Growth Act of 1978

February 26, 1997

# Letter of Transmittal

BOARD OF GOVERNORS OF THE
FEDERAL RESERVE SYSTEM
Washington, D.C., February 26, 1997

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 the Full Employment and Balanced Growth Act of 1978.

Sincerely,

Alan Greenspan, Chairman

## Table of Contents


| | | Page |
|---|---|---|
| **Section 1:** | Monetary Policy and the Economic Outlook | 1 |
| **Section 2:** | Economic and Financial Developments in 1996 and Early 1997 | [illegible] |

# Section 1: Monetary Policy and the Economic Outlook

The economy performed impressively this past year, and members of the Board of Governors and Reserve Bank presidents anticipate that 1997 will bring further appreciable economic expansion with relatively low inflation. In 1996, solid advances in the real expenditures of households and businesses led to sizable gains in output. Employment rose briskly, and the unemployment rate edged down to its lowest level of the current expansion. Consumer price inflation increased owing to the likely temporary effects of firmness in food and energy markets, but some broader price measures showed inflation holding steady or even declining. With the economy strengthening, intermediate- and long-term interest rates rose on net, but credit continued to be amply available to businesses and most households, and equity prices soared.

Several factors helped to restrain price increases this past year in the face of high levels of resource utilization. With workers still concerned to some degree about job security, acceleration in hourly compensation was not so pronounced as in comparable periods in the past; wage increases picked up relatively moderately, and further success in controlling health care costs helped to temper the rise in benefits. Moreover, significant declines in the prices of U.S. imports, owing to low inflation abroad and appreciation of the dollar on foreign exchange markets, tended to hold down domestic prices. Damped inflation expectations probably contributed as well to the favorable price performance: A lengthening run of years during which inflation has been in a more moderate range, together with an understanding of the Federal Reserve's commitment to maintaining progress toward price stability, may have discouraged aggressive pricing behavior. Business firms continued to rely on cost control and gains in productivity, rather than on price increases, as the primary channels for achieving profit growth.

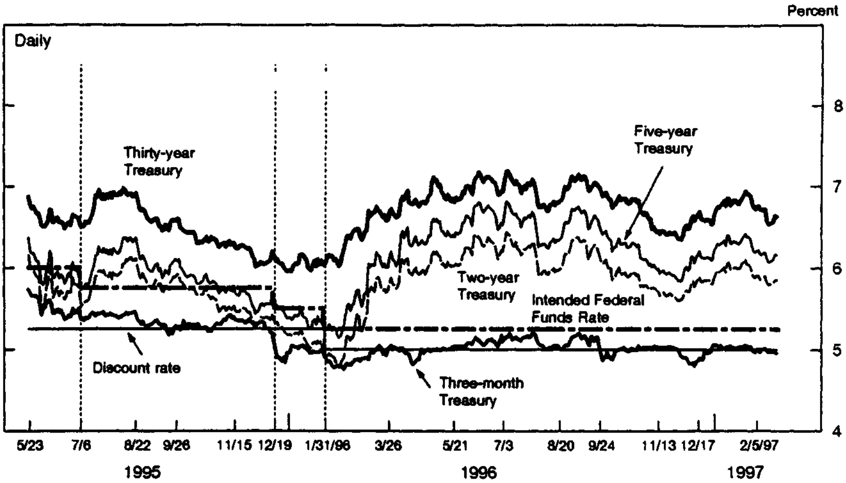
Still, the Federal Open Market Committee (FOMC) recognized the danger that pressures emanating from the tight labor market might trigger an acceleration of prices, which could eventually undermine the ongoing economic expansion. Consequently, although conditions last year were not deemed to warrant immediate policy action, the Committee's policy directives starting in mid-1996 reflected a perception that the most likely direction of any policy action would be toward greater restraint in the provision of reserves to the banking system. Forestalling a disruptive buildup of inflationary pressures in the near term and moving toward price stability over time remain central to the System's mission of promoting maximum sustainable growth of employment and production.

## Monetary Policy, Financial Markets, and the Economy in 1996

The FOMC eased the stance of monetary policy twice around the beginning of last year—in December 1995 and in January—lowering the federal funds rate ½ percentage point in total, to 5¼ percent. These actions were taken to offset the effect on the level of the real federal funds rate of declines in inflation and inflation expectations in the second half of 1995 and thereby to help ensure the resumption of moderate economic growth after the marked slowdown and inventory correction in late 1995. By the spring, economic growth had become more vigorous than either the Committee or financial markets had foreseen. In response, intermediate- and longer-term interest rates as of mid-May were up around a full percentage point from the two-year lows reached early in the year. In combination with some softening of economic activity abroad and declines in interest rates in major foreign industrial countries, these developments contributed to a further appreciation of the dollar, building on the rise that had started in mid-1995. The Committee anticipated that the increase in the cost of credit, along with the higher exchange value of the dollar, would be sufficient to foster a downshift in economic expansion to a more sustainable pace and contain price pressures; thus, it left its policy stance unchanged at its spring meetings.

By early summer, however, the continued momentum in demand and pressures on labor resources that were being reflected in faster growth in wages were seen as posing a threat of increased inflation. Core inflation remained moderate, but in light of the heightened risk that it would turn upward, the Committee in its early July directive to the Manager of the Open Market Account indicated its view that near-term economic developments were more likely to lead to a tightening of policy than to an easing. Labor markets continued to be taut over the balance of the year, and this bias toward restraint was included in directives adopted at all of the Committee's remaining meetings in 1996.

Selected Interest Rates




Note. Dotted vertical lines indicate days on which the Federal Open Market Committee (FOMC) announced a monetary policy action. The dates on the horizontal axis are those on which the FOMC held scheduled meetings.

After peaking during mid-summer, interest rates moved down on balance through the fall, as expansion of consumer spending and economic activity in general appeared to be moderating and markets saw less likelihood of a need for Federal Reserve firming action. Equity prices fell back for a time during the summer, reversing some of the substantial increase registered over the first half of the year, but by autumn they had reached new highs. Interest rates and dollar exchange rates turned back up late in the year when signs of rapid growth and more intense use of the economy's resources reemerged. Since year-end, interest rates have changed little, on net. The foreign exchange value of the dollar has posted further gains, in part reflecting greater-than-expected weakness in Europe and renewed pessimism about economic and financial prospects in Japan. Equity prices have registered new highs since the start of the year. As of mid-February, intermediate- and long-term interest rates were up about ½ to ¾ percentage point, on balance, since early 1996, and the value of the dollar was up around 9 percent against an average of other G-10 currencies.

For the nonfinancial business sector, the effect of the higher intermediate- and long-term interest rates on the overall cost of funds last year was offset to some degree by an easing of lending terms at banks and a narrowing of yield spreads on corporate bonds over Treasuries, as well as by declines in the cost of capital in the equity market. Encouraged, perhaps, by the prospects of sustained economic expansion and low inflation, banks, market lenders, and equity investors displayed a strong appetite for business obligations and seemed willing to require less compensation for the possible risks entailed. Some households, by contrast, faced a tightening of standards and terms with respect to credit card debt and some other types of consumer debt last year, as banks reacted to a rising volume of delinquencies and charge-offs on these instruments. However, credit availability under home equity lines increased, particularly from finance companies but also from banks. Overall debt growth slowed slightly but remained near the midpoint of its 3 percent to 7 percent monitoring range. The growth rates of M2 and M3 edged up last year and, as was anticipated in the monetary policy reports to the Congress last February and July, both aggregates ended 1996 near or above the upper end of their growth ranges. Again last year, the growth of M2 relative to nominal income and interest rates was generally in line with historical relationships, in contrast to its behavior during the early years of the decade.

**Economic Projections for 1997**
Percent

| Indicator | Federal Reserve governors and Reserve Bank presidents: Range | Central tendency | Administration |
|---|---|---|---|
| *Change, fourth quarter to fourth quarter*[1] | | | |
| **Nominal GDP** | 4¼ to 5¼ | 4½ to 4¾ | 4.6 |
| **Real GDP**[2] | 2 to 2½ | 2 to 2¼ | 2.0 |
| **Consumer price index**[3] | 2¾ to 3½ | 2¾ to 3 | 2.6 |
| *Average level, fourth quarter* | | | |
| **Civilian unemployment rate** | 5¼ to 5½ | 5¼ to 5½ | 5.4 |

1. Change from average for fourth quarter of 1996 to average for fourth quarter of 1997.
2. Chain-weighted.
3. All urban consumers.

## Economic Projections for 1997

With the economy free of serious imbalances, prospects appear favorable for further growth of activity and expansion of job opportunities in the coming year, although resource constraints seem likely to keep the pace of growth below that of 1996. The central tendency of the GDP growth forecasts put forth by members of the Board of Governors and the Reserve Bank presidents is from 2 percent to 2¼ percent, measured as the change in real output between the final quarter of 1996 and the final quarter of 1997. Output growth of this magnitude is expected to result in little change in the civilian unemployment rate, which is projected to be between 5¼ percent and 5½ percent in the fourth quarter of this year. These forecasts of GDP growth and unemployment are similar to those of the Administration. The central tendency of the policymakers' CPI forecasts for 1997 spans the relatively narrow interval of 2¾ percent to 3 percent, with the lower bound near the inflation forecast of the Administration.

Consumer spending, which accounts for about two-thirds of total GDP, should be supported in coming quarters by further gains in income and the substantial increase in household net worth that has occurred over the past two years; debt problems, although rising of late, do not seem to be so widespread as to threaten the ongoing expansion of household expenditures in the aggregate. In the business sector, balance sheets are strong, profits have been rising, and efforts to bolster efficiency through the use of technologically advanced equipment are continuing at an intense pace. In the commercial real estate market, the supply–demand balance has shifted in many locales to a point at which interest in office building projects has picked up noticeably. These conditions, together with the ready access to a wide variety of sources of finance that businesses currently are enjoying, should keep investment spending on an upward trajectory. Foreign demand for U.S. products should continue to rise with growth of the world economy, even in the wake of the significant appreciation of the dollar since the first half of 1995; however, imports also seem likely to remain on a clear upward trend, given the prospects for continued expansion of the U.S. economy. Government expenditures for consumption and investment probably will follow recent trends, with further cutbacks in real outlays at the federal level and moderate increases in the combined purchases of state and local governments.

Although the risk of increased inflation pressures is significant, especially in view of the tightness of the labor market and the strength in activity that has been evident recently, Federal Reserve policymakers expect this year's rise in the consumer price index to be somewhat smaller than that of 1996. The major reason for expecting a smaller CPI increase this year is a more favorable outlook for food and energy prices. Prices of farm products have dropped back from the highs of last summer, and, barring further

**Ranges for Growth of Monetary and Debt Aggregates**
Percent

| Aggregate | 1995 | 1996 | 1997 |
|---|---|---|---|
| M2 | 1 to 5 | 1 to 5 | 1 to 5 |
| M3 | 2 to 6 | 2 to 6 | 2 to 6 |
| Debt | 3 to 7 | 3 to 7 | 3 to 7 |

Note. Change from average for fourth quarter of preceding year to average for fourth quarter of year indicated.

weather problems, this year's rise in food prices at retail should be considerably smaller than that of 1996. Oil prices have recently declined and seem likely to ease further in coming months as world production and consumption come back into better balance; this price relief is important not only because of the direct effects on the price of gasoline and other consumer energy items but also because petroleum is a major element in the cost of producing and distributing many other goods. By contrast to the favorable outlook for food and energy prices, some risk exists that core inflation could turn up during the coming year. The minimum wage will be moving up further in 1997, compounding whatever cost pressures might be in train as a result of labor market tightness, and the degree to which businesses can continue to absorb stepped-up increases in labor costs without raising prices more rapidly is not certain.

As noted in the July 1996 monetary policy report, the CPI forecasts of the governors and Reserve Bank presidents incorporate allowances for the technical improvements to this index that have been made by the Bureau of Labor Statistics. These technical changes are estimated to have trimmed the reported rate of CPI inflation slightly in each of the past two years, and additional changes will be affecting the rise in the index in 1997. In view of the remaining difficulties of accurately measuring price change in a highly complex and rapidly changing economy, alternative price indexes will continue to be given substantial weight, along with the CPI, in monitoring progress toward the long-run goal of price stability. Some of the broad measures of inflation derived from the GDP accounts slowed in 1996; the Committee is concerned that, even if the CPI decelerates as expected in 1997, other indexes—with different scope and weights—may pick up in reflection of the pressures on productive resources.

## Money and Debt Ranges for 1997

Again in 1997, the Committee has set ranges for M2 and M3 that would encompass monetary growth expected to be consistent with approximate price stability and a sustainable rate of real economic growth, assuming that the behavior of velocity is in line with historical norms. These ranges are unchanged from those for 1996: 1 to 5 percent for M2 and 2 to 6 percent for M3.

As has been the case for several years, the 1997 ranges for M2 and M3 were set against a backdrop of uncertainty about the stability and predictability of their velocities. A long-run pattern of reasonably stable velocity behavior broke down in the early 1990s when the public's holdings of monetary assets were depressed by several factors: the contraction of the thrift industry; a tightening of credit supplies and deleveraging by businesses and households; an extremely wide spread between short- and intermediate-term interest rates that heightened the attractiveness of capital market instruments relative to bank deposits; and the expanding availability and growing acceptance of stock and bond mutual funds as household investments.

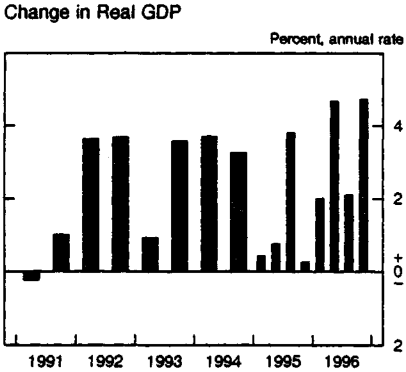
With the waning of all but the last of these influences, movements in velocity have become more predictable over the past couple of years. This recent evidence of stability, however, covers only a relatively brief period, and its durability remains uncertain. In these circumstances, the Committee has opted to continue treating the ranges as benchmarks for the trends of money growth consistent with price stability rather than as short-run targets for policy. Meanwhile, the actual behavior of the monetary measures will be monitored for such information as it may convey about underlying economic developments.

The central tendency of the Committee's expectations for nominal GDP growth in 1997 is slightly below that registered in 1996. Thus, if velocity behaves as it did last year, M2 and M3 might decelerate a bit but even so would again expand around the upper ends of their growth ranges. Debt of the nonfinancial sectors is anticipated to increase this year at around the pace of last year, remaining near the midpoint of its unchanged 3 to 7 percent range.

# Section 2: Economic and Financial Developments in 1996 and Early 1997

The economy turned in a remarkably favorable performance this past year. Preliminary estimates indicate that real GDP rose more than 3 percent over the four quarters of 1996, one of the larger gains of the past several years and appreciably more than the FOMC was expecting a year ago. Although intermediate- and long-term interest rates moved up, credit remained readily available to most borrowers, and equity prices rose substantially. Expansion of the debt of nonfinancial sectors continued at about the 5 percent rate it has maintained over the past several years, and growth of the stock of money picked up a little to its most rapid pace this decade. These financial developments provided support for strong advances in the real expenditures of households and businesses, and the growth of exports held up well in the face of an appreciating dollar. Tightness of the labor market led to a moderate pickup in wage increases in 1996. However, acceleration of prices was confined largely to the food and energy sectors; prices for other consumer products decelerated, as did prices paid by businesses for capital goods and materials. Economic data for early 1997 show the unemployment rate holding in a low range with the inflation trend still subdued.

Change in Real GDP

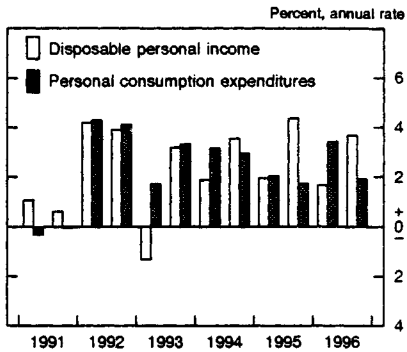



## Economic Developments

### *The Household Sector*

After rising less than 2 percent in 1995, real personal consumption expenditures moved up 2¾ percent in 1996. Although debt problems arose with greater frequency this past year, households benefited from healthy increases in real income and another year of sizable gains in wealth. Consumers were relatively optimistic about prospects for the economy at the start of 1996, and they became more so as the year progressed.

Change in Real Income and Consumption




Real outlays for consumer durables rose more than 5 percent in 1996 after a gain of only 1¼ percent during 1995. As has been true for many years, real expenditures on computers and electronic equipment outpaced the growth of other household outlays by a wide margin in 1996. Sizable increases were also reported for most other types of consumer durables. However, real expenditures on vehicles changed little on net over the year, as gains achieved during the first half were reversed after mid-year. Late in 1996, sales of light vehicles may have been constrained to some degree by supply shortages that arose during strikes in the United States and Canada; early in 1997, vehicle sales strengthened. Consumer purchases of nondurables rose 1¾ percent in 1996 after increasing 1 percent during 1995. Spending for services rose 2½ percent last year, about the same as the average gain in previous years of the expansion.

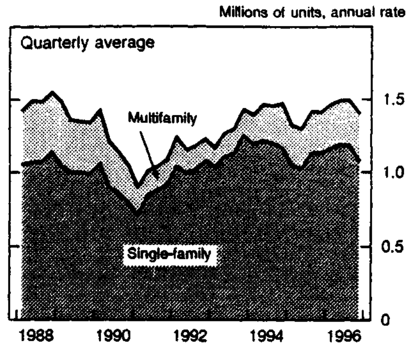
After-tax personal income increased 5 percent in nominal terms over the four quarters of last year. Wages and salaries rose briskly, and the income of farm proprietors surged. Other types of income generally exhibited moderate gains. Given the low level of price inflation, the rise in nominal income translated into another significant advance in real disposable income—about 2¾ percent over the year.

As in 1995, strong cross-currents continued to shape individual households' willingness—and ability—to spend from current income. Huge increases in stock market wealth provided some households the wherewithal to boost spending at a pace considerably faster than the growth of disposable income. But a number of households were likely held back by the need to divert income to the servicing of debt, and according to some survey evidence, households have become more concerned about saving for retirement. Responding to these influences, the annual average of the personal saving rate was up slightly from that of 1995; however, it remained relatively low compared with its longer-run average.

Residential investment expenditures posted a gain of 4 percent in real terms over the four quarters of 1996, more than reversing a small decline in the previous year. Demand for single-family housing was especially strong. Although interest rates on longer-term fixed-rate mortgage loans moved up considerably in 1996, a substantial number of homebuyers side-stepped at least the initial costs by using adjustable-rate loans that were available at lower rates. The effects of the rate increases on the single-family market were cushioned by other influences as well, most notably the growth of employment and income. Even for fixed-rate loans, mortgage financing costs held at a level that, by historical standards, was low relative to household incomes. All told, sales of new homes surged to the highest annual total of the current expansion, and sales of existing homes established a historical high. New construction of single-family dwellings also rose but not so dramatically as sales, as builders apparently chose to work off some of their inventories of unsold units, which had climbed in 1995. Mild sluggishness in starts toward the end of 1996—which was probably exacerbated by poor weather in December—was followed by more upbeat indicators of new construction in January of this year.

Construction of multifamily units maintained a path of recovery from the extreme lows of the early 1990s, moving up about 13 percent in terms of annual totals. The number of multifamily units started—about 315,000—was double the number started in 1993, when construction of these units was at a low. However, compared with previous peaks, the 1996 total was less impressive—starts were twice as high in some years of the 1970s and 1980s. Although

Private Housing Starts

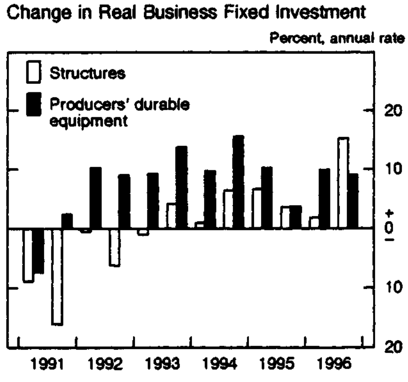



market conditions for multifamily properties varied considerably from city to city in 1996, the national average vacancy rate for multifamily rental units remained relatively high, and demographic influences were probably less supportive of multifamily housing than they were a decade or so ago. Also, manufactured houses have provided an increased number of families with an alternative to rental apartments in recent years.

### *The Business Sector*

Business fixed investment recorded a fifth consecutive year of strong expansion in 1996, rising about 9 percent according to the initial estimate. As in other recent years, investment was driven by rising profits, favorable trends in the cost of capital, and the ongoing efforts of businesses to boost efficiency. Although

Change in Real Business Fixed Investment



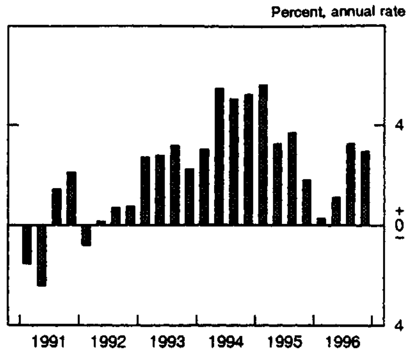
much of the investment spending was to replace depreciated equipment, the net addition to the aggregate capital stock appears to have been substantial. The rate of rise in the stock has picked up over the past two or three years after subpar growth through the latter half of the 1980s and first few years of the 1990s; the resulting rise in the level of capital per worker should enhance labor productivity and potential output.

Equipment outlays moved up almost 9½ percent in real terms in 1996. Business purchases of office and computing equipment once again rose much faster than the outlays for other types of equipment. Computer purchases were propelled by many of the same forces that have been at work in other recent years—most particularly, the expansion of networks and the availability of new models of computers embodying substantially improved computing power at highly attractive prices. Outlays for communications equipment also rose quite rapidly in 1996. Gains for other types of equipment were generally more modest.

Investment in nonresidential structures also rose substantially over the four quarters of 1996, posting the largest advance in several years. Business spending on structures went through an extended contraction in the latter part of the 1980s and early 1990s, and until recently, the subsequent recovery has been relatively slow. That the 1996 gain in nonresidential investment would be so large was not evident until late in the year, when incoming data began to trace out sizable increases in new construction for many types of buildings. Investment in office buildings scored an especially large gain over the year, amid widespread reports of firming market conditions and reduced vacancy rates, and real outlays for other commercial structures moved up for a fifth consecutive year. Financing appears to be in ample supply for commercial construction, and according to reports from the District Reserve Banks, speculative office building projects—that is, those without pre-committed tenants—are becoming more common.

Inventory investment was relatively subdued in 1996. The stock of nonfarm business inventories rose less than 2 percent over the four quarters of the year, the smallest increase since 1992. Businesses had been moving toward a reduced rate of stockpiling over much of 1995, and the rate of accumulation came almost to a halt in early 1996, when stocks of motor vehicles plummeted in conjunction with a strike at two plants that manufacture auto parts. Thereafter, inventory developments were relatively uneventful.

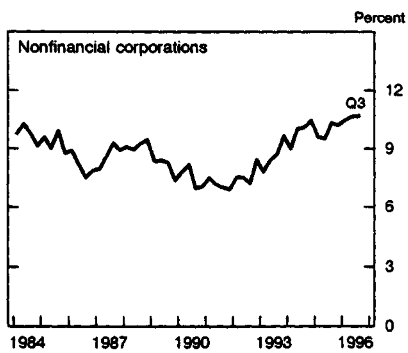
Change in Real Nonfarm Business Inventories




Stocks of vehicles changed little on net over the final three quarters of the year, and accumulation of inventories by other nonfarm businesses was moderate on average. Stocks at year-end generally appeared to be at comfortable levels relative to recent trends in sales.

Business profits turned in another strong performance in 1996. Economic profits of all U.S. corporations rose at an annual rate of more than 10 percent from the final quarter of 1995 to the third quarter of 1996. Profits earned by foreign subsidiaries of U.S. corporations fluctuated from quarter to quarter but remained at high levels, and returns from domestic operations rose substantially, for both financial and nonfinancial firms. Domestic profits of

Before-Tax Profit Share of GDP



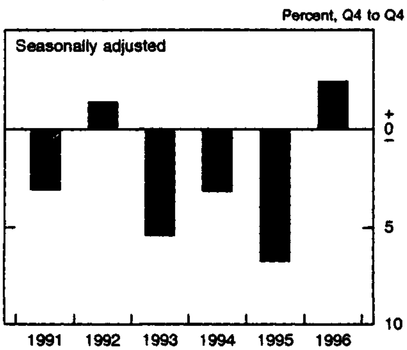

Note. Profits from domestic operations with inventory valuation and capital consumption adjustments, divided by gross domestic product of nonfinancial corporate sector.

nonfinancial corporations amounted to 10.7 percent of the nominal value of these firms' output in the third quarter, the highest reading of the current expansion.

### *The Government Sector*

Real federal expenditures on consumption and gross investment—the part of federal spending that is included in GDP—rose about 2½ percent, on net, from the fourth quarter of 1995 to the fourth quarter of 1996, but the rise was mostly an artifact of late-1995 real purchases having been pushed to especially low levels by government shutdowns. The underlying trend of federal consumption and investment expenditures probably is better represented by the 2½ percent annual rate of decline from the fourth quarter of 1994 to the final quarter of 1996. Reductions have been apparent over the past two years both in real defense purchases and in real nondefense purchases.

**Change in Real Federal Expenditures on Consumption and Investment**

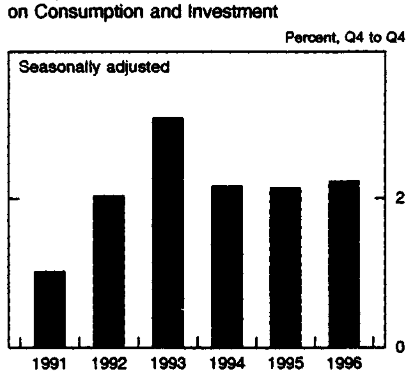



Federal expenditures in the unified budget increased about 3 percent in nominal terms in fiscal 1996 after having increased 3¾ percent in fiscal 1995. Slower growth was recorded across many budgetary categories this past year, and outright declines were reported in some. Combined expenditures on health, social insurance, and income security—items that account for more than half of all federal outlays—moved up 4½ percent, the smallest increase this decade. Defense spending was down about 2¼ percent in nominal terms, and net interest outlays rose much less rapidly than in fiscal 1995. Measured relative to the size of nominal GDP, total outlays in the most recent fiscal year were the smallest since 1979. Legislative restraint has led to cuts in a number of discretionary programs in recent years, and the expanding economy has relieved pressure on those outlays that tend to vary inversely with the strength of activity.

Federal receipts increased about 7½ percent in fiscal 1996, the third year in which growth of receipts outpaced growth of nominal GDP by a significant margin. Receipts from individual income taxes climbed more than 11 percent in the most recent fiscal year, in conjunction with healthy increases in households' taxable earnings from capital and labor. Taxes on corporate profits also continued to rise rapidly, more or less in step with the growth of business earnings. The rapid growth of receipts, coupled with the restrained growth of expenditures, brought the unified budget deficit down to $107 billion in fiscal 1996 from almost $165 billion in fiscal 1995. The deficit as a share of nominal GDP was 1.4 percent, the smallest in more than twenty years.

The aggregate consumption and investment expenditures of state and local governments rose 2¼ percent in real terms over 1996. This gain was about the same as those of the two previous years. Outlays for services, which consist mainly of employee compensation and account for more than two-thirds of all state and local purchases, rose roughly 1¼ percent in real terms last year. Investment expenditures, which make up the next biggest portion of state and local purchases, rose about 4½ percent in real terms. In the aggregate, the budget picture for state and local governments was relatively stable in 1996, as the surplus of nominal receipts over

**Change in Real State and Local Expenditures on Consumption and Investment**

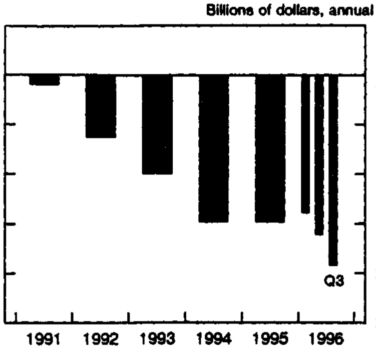


nominal current expenditures changed little from the positive readings of other recent years.

### *The External Sector*

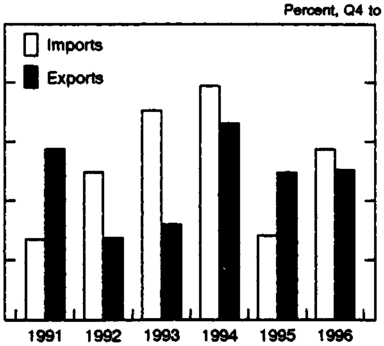
The nominal trade deficit for goods and services widened to $115 billion in 1996 from $105 billion the previous year. For the first three quarters of the year, the current account deficit totaled $165 billion at an annual rate, somewhat greater than the $150 billion deficit recorded in 1995.

U.S. Current Account




The quantity of imports of goods and services rose strongly over the four quarters of 1996—about 8½ percent according to the preliminary estimate—after expanding only 4¼ percent the previous year. The pickup in U.S. real output growth boosted the demand for imported goods, as did the declines in the prices of non-oil imports. Sizable increases in import volume were widespread among most major merchandise trade categories, with the notable exceptions of oil and semiconductors.

Change in Real Imports and Exports of Goods and Services




Very strong export growth in the fourth quarter of 1996 raised the yearly gain in the quantity of exports of goods and services to 7½ percent. Growth in the economies of our major trading partners was only moderate on average but was somewhat faster than in 1995. As a consequence, growth of exports was similar to the 1995 rate despite the appreciation of the dollar. Over the past year, most of the rise in the value of merchandise exports went to Canada and Latin America. Exports to Western Europe and Asia were only marginally higher than they were a year earlier.

In most of the major industrial countries abroad, real economic activity accelerated last year from a relatively weak performance in 1995. In the United Kingdom, real output growth firmed through the year, as growth in consumption spending rebounded from its low 1995 rate. In Germany and France, real GDP growth strengthened but was still too low to prevent a further rise in the unemployment rate in both countries. In Italy, output growth slowed as the rebound in the lira from its previous depreciation sharply reduced the growth of exports and depressed investment spending. For most continental European countries, further fiscal restraint is planned this year as governments hoping to participate in the third stage of European Monetary Union strive to meet the Maastricht Treaty's 1997 reference standard of a budget deficit no larger than 3 percent of GDP. In Japan, fiscal stimulus spurred economic expansion early last year; subsequently, slower private consumption, reduced inventory accumulation, and decreased government investment spending reduced output growth. In contrast, Canada's real output growth rose over 1996 as inventory adjustment was completed during the first half of the year and as exports strengthened.

Except in the United Kingdom, inflation pressures in the foreign industrial countries continued to decline or remained subdued during 1996. Consumer prices in Japan were flat. Consumer price inflation fell sharply in Italy and remained below 2 percent in Germany and France. In the United Kingdom, consumer prices excluding mortgage interest payments accelerated to an annual rate of more than 3 percent.

The Mexican economy continued on a course of recovery that returned GDP to its pre-crisis level in the fourth quarter of 1996. Increases in income and a strengthening of the price-adjusted value of the peso contributed to a reduction in the Mexican merchandise trade surplus over 1996. Argentina and Brazil also continued to recover from recessions. In Chile, real GDP growth moderated from the very high rate recorded in 1995 to about 6 percent in 1996. In Venezuela, windfall oil revenues softened the decline in real GDP in 1996 and improved the prospects for 1997.

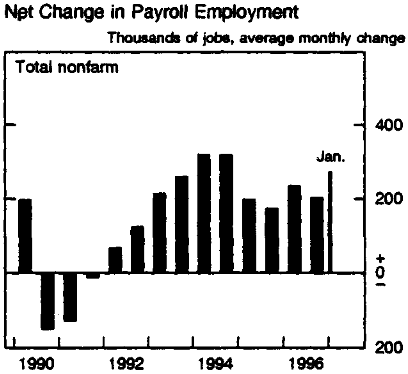
In our major trading partners in Asia other than Japan, real output growth generally slowed from its 1995 pace, despite a pickup in many countries toward year-end in response to more accommodative monetary policies and a partial recovery in export markets. In China, the slowdown of growth to about 10 percent last year from the 12 to 14 percent annual rates experienced during 1992–94 reflected a substantial deceleration in investment spending, owing to China's efforts to reduce inflation by tightening central bank credit to state-owned enterprises and by restricting investment.

Consumer price inflation in Mexico was around 28 percent in 1996, significantly lower than the 1995 inflation rate of over 50 percent. Venezuela's inflation rate in 1996 exceeded 100 percent, but inflation in most other Latin American countries was at levels well under 10 percent. Inflation rates generally remained low in Asia.

### *The Labor Market*

The number of jobs on nonfarm payrolls rose more than 2½ million from December 1995 to December 1996, an increase of about 2¼ percent. Employment gains were substantial in each quarter last year, and the labor market report for January of this year showed a further sizable expansion of payrolls.

Net Change in Payroll Employment

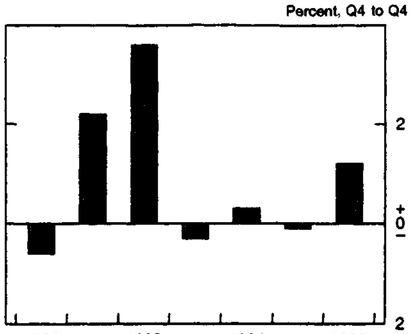



Employment in the private service-producing sector, in which nearly two-thirds of all nonfarm workers are employed, increased about 3 percent during 1996. Moderate employment gains were posted in retail trade, transportation, and finance, and sizable gains in hiring continued in some other service-producing industries, such as data processing, computer services, and engineering and management. Job growth at suppliers of personnel—a category that includes temporary help agencies—was about 6½ percent, a touch faster than in 1995 but much slower than it had been over 1992–94; with the tightening of labor markets in the past couple of years, longer-lasting commitments in hiring may have come back into greater favor among some employers.

Employment changes among producers of goods were mixed in 1996. In construction, employment climbed about 5½ percent, to a new high that was almost 4 percent above the peak of the last business expansion. In manufacturing, increases in factory jobs through the latter part of 1996 were not sufficient to reverse declines that had taken place earlier in the year. On net, last year's loss of factory jobs amounted to about ½ percent, a shade less than the average rate of decline since 1979, the year in which manufacturing employment peaked. Manufacturers of durable goods boosted employment slightly last year, but many producers of nondurables implemented further job cuts. As in many other recent years, reductions in factory employment were accompanied by strong gains in worker productivity. Consequently, increases in output were sizable—the rise in the Federal Reserve's index of manufacturing production cumulated to 4¼ percent over the year.

Growth of output per hour in the nonfarm business sector as a whole picked up in 1996, rising about 1¼ percent over the year according to preliminary data. However, coming after a three-year period in which output per hour changed little, this rise left the average rate of productivity growth in the 1990s a bit below that of the 1980s and well below the average gains achieved in the first three decades after World War II. The sustained sluggishness in measured productivity growth this decade is difficult to explain, as it has occurred during a period when high levels of investment in new capital and extensive restructuring of business operations should have been boosting the efficiency of workers. Of course, measure-

Change in Output per Hour




Note. Nonfarm business sector.

ment problems could be distorting the data. As a summary measure that relates aggregate output to aggregate input of labor, the nonfarm productivity index is affected by whatever deficiencies might be present either in adding up the nominal expenditures for goods and services in the economy or adjusting those expenditures for price change. A considerable amount of recent research suggests that growth of output and productivity is in fact understated, but whether the degree of understatement has been increasing over time is less clear.

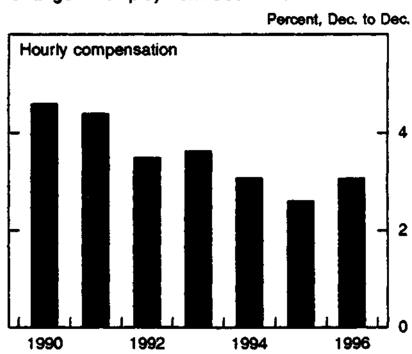
In contrast to the experience of most other recent years, this past year's rise in employment was accompanied by a sustained pickup in the labor force participation rate. The rise in participation boosted the labor supply and helped to relieve pressures on the labor market. Nonetheless, hiring during 1996 was sufficient to reduce the civilian unemployment rate from a December 1995 rate of 5.6 percent to a December 1996 rate of 5.3 percent. In January of this year, the rate remained low, at 5.4 percent.

Civilian Unemployment Rate


Note. The break in data at January 1994 marks the introduction of a redesigned survey; data from that point on are not directly comparable with the data of earlier periods.

Tightness of the labor market appears to have exerted some upward pressure on the cost of labor in 1996, even as some workers continued to express anxiety about job security. The employment cost index (ECI) for the private nonfarm sector of the economy showed compensation per hour moving up 3.1 percent over the year. The index had risen 2.6 percent in 1995. The step-up in hourly pay increases was to some extent the result of a hike in the minimum wage that took place at the start of October. More generally, however, businesses probably had to boost hourly compensation either to attract workers or to retain them at a time when alternative employment opportunities were perceived to be more widely available.

Change in Employment Cost Index




Note. Private industry excluding farm and household workers.

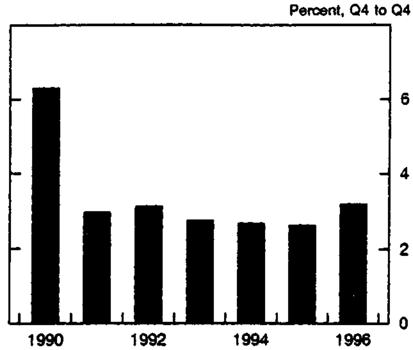
As in 1995, increases in hourly compensation in 1996 came more as wage and salary increases than as increases in fringe benefits. According to the ECI, the rise in wage rates for workers in the nonfarm sector amounted to nearly 3½ percent this past year after a rise of 2¾ percent in 1995. By contrast, the ECI measure of the hourly cost of benefits rose only 2 percent, slightly less than it did in 1995 and much less than it rose on average over the past decade. Increases in the cost of benefits have been held down in recent years by reduced inflation for medical services and by the actions that many firms have taken to shift employees into managed care arrangements and to require them to assume a greater portion of the cost of health insurance and other medical benefits.

### *Prices*

The consumer price index rose more rapidly than in 1995, but the step-up was concentrated in the food and energy sectors—areas in which prices were affected by supply limitations that seemed likely to be of temporary duration. The CPI excluding food and energy—often called the "core" CPI—rose just a touch more than 2½ percent after increasing 3 percent during 1995. Both the total CPI and the core CPI have been affected in the past two years by technical improvements implemented by the Bureau of Labor Statistics that are aimed at obtaining more accurate readings of price change; the rise in the CPI in 1996 would have been somewhat greater if procedures used through 1994 had not been altered.

Other price indexes generally rose less rapidly than the CPI. Like the overall CPI, the chain type price index for personal consumption expenditures (PCE) accelerated somewhat in 1996, but its rate of rise, shown in the accompanying table, was significantly lower than that of the CPI. The two measures of consumer prices differ to some degree in their weights and methods of aggregation. They also differ somewhat in their selection of price data, with the PCE measure relying on alternative data in some areas in which the accuracy of the CPI has been questioned. The chain type price index for gross domestic purchases, which takes account of the prices paid by businesses and governments as well as those paid by consumers, moved up 2¼ percent during 1996, about the same as the percentage rise during 1995. By contrast, price measures associated with GDP decelerated in 1996 to thirty-year lows of around 2 percent or less. Conceptually, the GDP measures are indica-

**Change in Consumer Prices**




Note. Consumer price index for all urban consumers.

**Alternative Measures of Price Change**
Percent

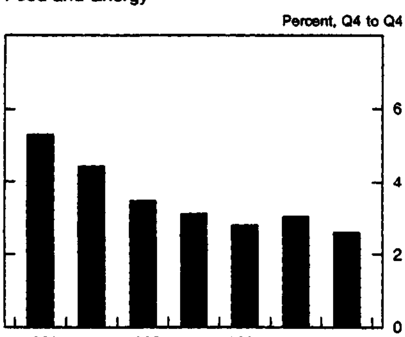
| Price measure | 1995 | 1996 |
|---|---|---|
| *Fixed weight* | | |
| Consumer price index | 2.7 | 3.2 |
| Excluding food and energy | 3.0 | 2.6 |
| *Chain type* | | |
| Personal consumption expenditures | 2.1 | 2.5 |
| Excluding food and energy | 2.3 | 2.0 |
| Gross domestic purchases | 2.3 | 2.2 |
| Gross domestic product | 2.5 | 2.1 |
| *Deflator* | | |
| Gross domestic product | 2.5 | 1.8 |

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

tive of price changes for goods and services that are produced domestically rather than price changes for goods and services purchased domestically—foreign trade accounting for the difference.

The 1996 outcomes for all these measures reflected an economy in which inflation pressures were muted. Sharp declines in non-oil import prices during the year lowered input costs for many domestic firms and likely caused other firms to restrain their product prices for fear of losing market share to foreign competitors. Also important, in all likelihood, were the favorable imprints that several years of moderate and relatively stable rates of inflation have left on inflation expectations. Despite the uptick in hourly compensation and adverse developments in the food and energy sectors, survey data showed little change in consumers' expectations of inflation, and private forecasters' views of the prospects for prices held steady. Businesses commonly described the situation as one in which competitive pressures were intense and the "leverage" for raising prices simply was not present.

Change in Consumer Prices Excluding Food and Energy



Note. Consumer price index for all urban consumers.

Food and energy prices were the exceptions. In the food sector, steep increases in grain prices in 1995 and the first few months of 1996 caused production adjustments among livestock farmers and substantial price increases for some livestock products. Later in the year, grain prices fell back, but livestock production could not recover in time to prevent significant price advances for some retail foods. Consumer prices for pork, poultry, and dairy products registered their largest increases in several years. Retail beef prices also rose but only moderately: Expansion of the cattle herd in previous years had laid the groundwork for a high flow of product to consumers, and herd reductions that occurred in 1996 augmented that flow. Elsewhere in the food sector, acceleration was reported in the price index for food away from home—a category that has a weight of almost 40 percent in the CPI for food; the rise in the minimum wage appears to have been an important factor in the acceleration. All told, the 1996 rise in CPI food prices amounted to 4¼ percent, the largest increase since 1990.

The energy sector was the other major part of the economy in which significant inflation pressures were evident this past year. Crude oil prices, which had started firming in the latter part of 1995, continued on an upward course through much of 1996, rising more than 30 percent in total. Stocks of crude oil and petroleum products were tight during the year, even after allowing for an apparent downward trend in firms' desired inventories. Inventory building was forestalled by production disruptions at refineries, a string of weather problems here and abroad that boosted fuel requirements for heating or cooling, and a reluctance of firms to take on inventories that seemed likely to fall in value once renewed supplies from Iraq became available. Natural gas, too, was in tight supply at times, and its price surged. With retail prices of gasoline, fuel oil, and natural gas all moving up substantially, the CPI for energy rose about 7½ percent over the four quarters of 1996, the largest increase since the Gulf War.

The CPI for goods other than food and energy rose 1 percent during 1996, one of the smallest increases of recent decades. As in 1995, price increases for new vehicles were moderate last year, and prices of used cars turned down after several years of sizable advances. Prices of apparel and house furnishings also fell; these prices, as well as the prices of vehicles, may have been heavily affected by the softness of import prices. Moderate increases were the rule among most other categories of goods in the CPI. In the producer price index, prices of capital equipment rose less than ½ percent over 1996; computer prices continued to plunge, and the prices of other types of equipment rose moderately, on balance. Materials prices were weak: Prices of intermediate materials excluding food and energy declined about 1¼ percent from the fourth quarter of 1995 to the final quarter of 1996, and the producer price index for crude materials excluding food and energy dropped more than 6½ percent over that period. Productive capacity was adequate among domestic producers of materials, and supplies of many materials were readily available at competitive prices on the world market.

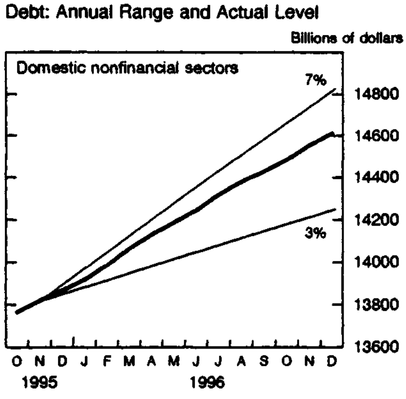
The CPI for non-energy services increased 3¼ percent in 1996. The rise was somewhat smaller than the increases of most other recent years. Prices of medical services decelerated for a sixth consecutive year, and increases in the cost of shelter were held down by another year of moderate advances in residential rent and owners' equivalent rent. Large increases were evident only in scattered categories: Airfares posted a large increase, and educational costs, maintaining a long-established trend, continued to rise quite rapidly relative to prices in general.

## Financial Developments

### *Debt*

Growth of the debt of nonfinancial sectors slowed slightly last year, to 5¼ percent. The growth of household sector debt dropped from 8¼ percent to 7½ percent, a deceleration accounted for entirely by a sharp slowing of consumer credit. The expansion of business borrowing was held below its 1995 pace by an increase in internally generated funds, but at 5¼ percent, it was faster than in any other year since 1989. Its strength reflected robust spending, extremely favorable credit conditions, and financing needs associated with a high level of mergers and acquisitions. Federal government debt grew 3¾ percent, the lowest rate in more than two decades. The debt outstanding of the state and local sectors was unchanged.

Debt: Annual Range and Actual Level



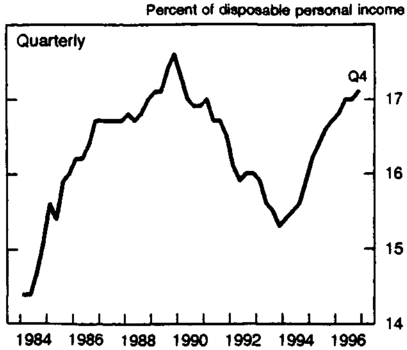

***The Household Sector.*** Consumer credit grew 8¼ percent last year, just a bit over half the pace of the preceding two years. The sharp retrenchment likely reflected the burdens associated with a substantial accumulation of outstanding consumer debt over recent years as well as some tightening of lending terms and standards by commercial banks, particularly with respect to credit cards.

The slowing in consumer credit growth also was associated with a shift toward increased use of home equity loans. These loans were marketed vigorously, particularly by finance companies, in part as a vehicle for consolidating credit card and other outstanding consumer debt. Some of the growth in home equity loans reflected moves by finance companies and banks into the sub-prime market—lending either to higher-risk customers or on terms entailing unusually high loan-to-value ratios, or both. The push to expand home equity lending last year offset to some degree the effect of tighter lending standards and terms on credit cards and other forms of consumer credit.

The shift toward home equity loans, along with a strong housing market, led to a pickup in mortgage debt growth last year to a rate of 7½ percent, the largest advance since 1990. Mortgage borrowing for home purchases was restrained surprisingly little by the increase in interest rates over the first half of the year. As noted previously, many borrowers were able to put off, at least for a time, much of the impact of the increase in rates by shifting to adjustable-rate mortgages, the rates on which rose much less last year than those on fixed-rate mortgages.

Although the growth of household sector debt fell off a bit from the pace of recent years, it still exceeded that of disposable income. With loan rates up on average for mortgages and down only a little on consumer loans, debt service burdens continued to rise last year, and some households experienced difficulties servicing certain kinds of debt. Delinquency rates on banks' consumer loans, particularly credit card loans, posted a second year of considerable increase, although they remained below levels in the early 1990s. At finance companies that are subsidiaries of automakers, auto loan delinquency rates rose to very high levels; but this rise apparently resulted in large part from a business strategy to compete in the vehicle market by easing lending standards. Auto loan delinquency rates at commercial banks also rose but remained well within historical ranges. Delinquency rates on residential mortgages remained low.

Household Debt Service Burden

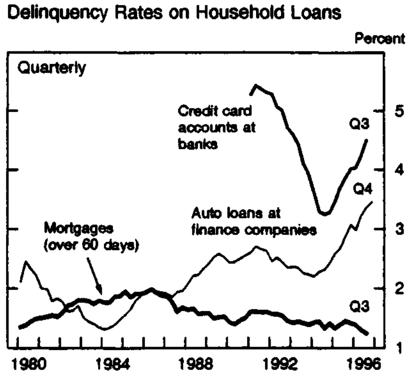



Note. Debt service is the sum of required interest and principal payments on consumer and household-sector mortgage debt.

In the segment of the finance company market that deals in "sub-prime" auto loans, some problems emerged last month. A small firm in this market defaulted on its commercial paper after it restated earlier earnings at lower levels, and another firm filed for bankruptcy. Although the share prices of these and other firms primarily engaged in sub-prime lending declined along with their earnings outlook, this sector constitutes a very small part of the overall auto loan market, and the implications for the availability of credit to the household sector overall appear slight.

Charge-off rates on consumer loans rose at banks in 1996 to around the peak levels of the last recession in 1990–91. According to Federal Reserve surveys of senior loan officers, banks had anticipated some deterioration in the quality of their consumer loan portfolios last year, but they were surprised by its extent. These surveys also showed that banks considered the rate of charge-offs last year to be high relative to the level of delinquencies and that the credit-scoring models most banks use to evaluate consumer lending decisions have tended to be too optimistic. An important reason for the high level of charge-offs and the apparent shortcomings of the credit-scoring models was a 30 percent increase in personal bankruptcies. This surge stemmed in part from changes in the bankruptcy code that became effective at the beginning of last year against a backdrop of an apparently reduced stigma associated with this method of dealing with financial problems. Banks responded to the deterioration in their consumer loan portfolios by tightening standards and terms, especially on credit cards. In contrast, banks eased terms and conditions on home equity loans.

Delinquency Rates on Household Loans




Despite the rise in delinquencies on consumer debt, household balance sheets appear healthy overall, as growth of household assets over the past two years has more than kept pace with the growth of debt. Although year-end balance sheet figures are not yet complete, the net worth of households appears to have risen approximately $5 trillion from the end of 1994 to the end of 1996, an amount that is equal to almost a full year's personal disposable income. Roughly two-thirds of that gain has been accounted for by the surge in the prices of corporate shares, which has lifted the value of a wide range of household investments, not only directly held stocks but also assets held in other forms such as pension plans. The ratio of household net worth to personal disposable income continued to climb this past year, moving to its highest level in recent decades.

***The Business Sector.*** Although many interest rates rose last year, businesses continued to find credit readily available and at favorable terms. This accommodation likely resulted in part from the strong financial condition of this sector, reflected in minimal delinquency rates on bank loans to businesses and very low default rates on corporate bonds, including those of low-rated issuers. With securitization of household debt instruments proceeding apace and with high levels of capital, banks appeared to have ample room on their balance sheets for business loans. This situation encouraged the development of a highly competitive lending environment in which banks further eased a variety of credit terms, such as covenants and markups over base rates. In capital markets, interest rate spreads of private debt instruments over Treasuries narrowed, particularly in the case of high-yield bonds. Surveys by the National Federation of Independent Business revealed a rising tendency of small businesses to borrow over 1996, with credit availability reported to be in a range more favorable than at any time in the current economic expansion.

On a gross basis, a pickup in bond issuance by nonfinancial firms last year was accounted for mainly by speculative-grade offerings, likely in part a reaction to the improved pricing. In the fourth quarter, however, investment-grade issuance was substantial, responding to the decline in interest rates that began in late summer. Commercial paper declined in the final months of the year, primarily because of paydowns from bond proceeds, but bank lending to businesses was strong, owing in some part to robust merger activity. Despite a marked increase in gross stock issuance—with strong gains both for initial public offerings and for seasoned offerings—equity continued to be retired on net last year, as merger activity remained brisk and businesses used ample cash resources to repurchase their outstanding shares.

***The Government Sector.*** The growth of federal debt was held down in 1996 by legislative constraints on spending and by the boost to tax receipts from both the stronger economy and a booming stock market. Two years of contraction of state and local government debt ended last year. The declines had occurred as issues that were prerefunded earlier in the decade, when interest rates were unusually favorable, matured or became eligible to be called. Pre-refunded debt continued to be called last year, albeit at a reduced pace, but this decline was just offset by gross issuance, which picked up.

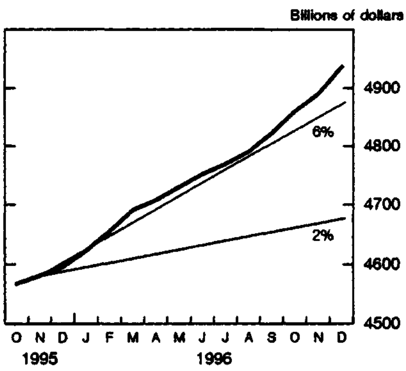
***Depository Intermediation.*** The expansion of depository credit slowed last year, entirely reflecting a slower advance in bank credit. Growth at thrift institutions picked up, benefiting from strong demand for residential mortgages and improved capital positions. Growth of commercial bank loans moderated, as loans to businesses and, especially, consumers decelerated from elevated rates of growth in 1995. Bank portfolio expansion also appears to have been damped somewhat by a faster pace of asset securitization, likely spurred by receptive capital markets. For example, real estate loan growth at banks was a subdued 4 percent last year, despite a robust housing market and a pickup in commercial real estate. At the same time, outstanding securities backed by mortgage pools expanded at a $179 billion annual rate in the first three quarters of last year, well above the pace of 1995. Commercial banks are a major source of securitized mortgages. The outstanding amount of consumer credit that had been securitized by banks also rose at a brisk pace last year, although not so rapidly as in 1995. As a result of the slowing of bank credit, the share of last year's advance in nonfederal debt that ended up on the books of depositories fell to about 38 percent, down from around 44 percent in the preceding two years.

The balance sheets and operating results of depositories remained strong in 1996. Bank profits through the third quarter were at historically high levels for the fourth consecutive year, reflecting the maintenance of relatively wide interest rate margins, further loan growth, and substantial fee income related to sales of mutual funds as well as to securitization and other off-balance-sheet activities. As of the third quarter, almost 99 percent of commercial bank assets were held at banks classified as "well capitalized." Underlying thrift profits were also stronger last year. However, profits at thrift institutions and at banks with deposits insured by the Savings Association Insurance Fund (SAIF) were held down temporarily by a special assessment on deposits to recapitalize SAIF. (Some bank deposits are SAIF-insured because of mergers with thrifts or acquisitions of them.)

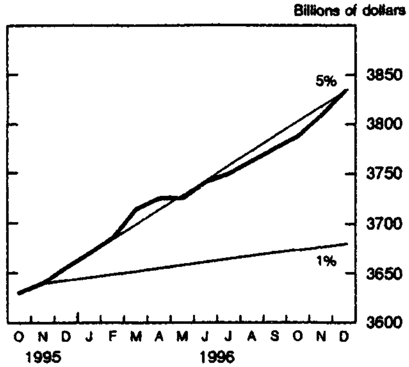
### *The Monetary Aggregates*

Despite the slowing of depository credit, growth of the broader monetary aggregates strengthened last year: M3 expanded 7 percent, up 1 percentage point from 1995 and also 1 percentage point above the upper end of its 2 to 6 percent annual range. M2 grew

**M3: Annual Range and Actual Level**



M2: Annual Range and Actual Level

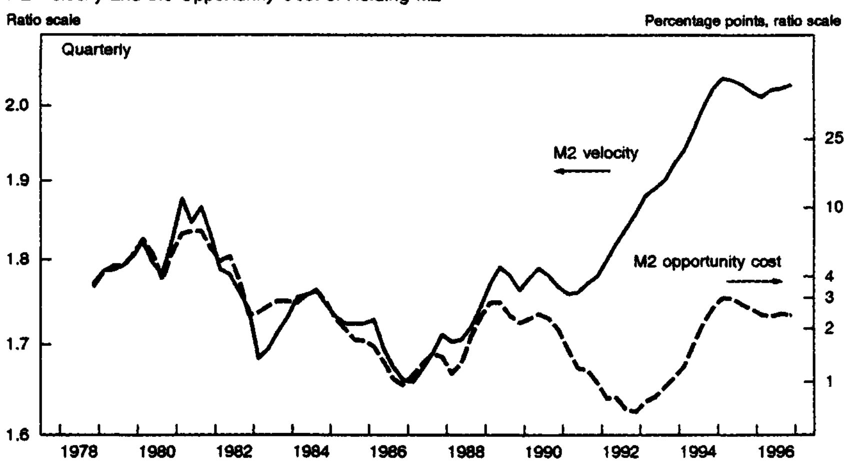



4½ percent, up ½ percentage point and in the upper portion of its 1 to 5 percent range. As noted in Section 1, the ranges for monetary growth last year had been chosen to be consistent with approximate price stability and a sustainable rate of real economic growth, rather than as indicators of the range of money growth rates likely to prevail under expected economic conditions.

The acceleration of M3 was caused partly by a shift in the way banks financed their credit—specifically, substituting issuance of large time deposits for borrowings from offices abroad. Both foreign and domestically chartered banks paid down net borrowing from foreign head offices and branches last year. For domestic banks, this paydown may have been related to the reduction to zero of insurance assessments on deposits, beginning with the last quarter of 1995. In addition, the greater growth of M3 relative to that of M2 reflected the need to fund particularly strong loan growth at U.S. branches and agencies of foreign banks, which do not offer the retail accounts that dominate deposits in M2.

Growth of both M2 and M3 was supported again last year by continuing robust advances in money market mutual funds (MMMFs). Because the yields on these funds are based on the average return earned on their assets, they lag changes in yields on new market instruments; thus, the funds tend to attract additional inflows when market rates are falling. Accordingly, MMMFs advanced most rapidly in the early part of last year, when the monetary easings of December and January pulled down short-term rates, and also later in the year, when short-term rates were again declining. However, these instruments expanded briskly even in the third quarter, when short-term rates were rising, suggesting that part of the attractiveness of MMMFs is the convenience they offer those investors engaged in moving funds in and out of stock and bond mutual funds, which expanded

M2 Velocity and the Opportunity Cost of Holding M2




Note. M2 opportunity cost is a two-quarter moving average of the three-month Treasury bill rate less the weighted average rate paid on M2 components.

at a record pace last year. In addition, institution-only funds seem to be having considerable success in marketing cash management programs that capture excess cash of corporations and municipalities. Likely reflecting the attractiveness of money market and capital market mutual funds last year, deposits in M2 actually showed little growth in 1996. Retail deposit growth also may have been damped by a lack of aggressive pricing of deposits on the part of banks, as demand for their loans slipped and they apparently found it cheaper to finance a larger share of loan originations through securitizations and large time deposits.

The behavior of M2 relative to income last year, as summarized by its income velocity, again bore a fairly systematic relationship to M2's opportunity cost—the return on M2 assets relative to yields available on alternative instruments. The relationship of velocity to opportunity costs was reasonably stable historically, but it broke down in the early 1990s, a period characterized by extensive restructuring of balance sheets by households, businesses, and banks. In the process, M2 velocity rose substantially and, apparently, permanently. Since 1993, velocity no longer appears to be shifting higher, and M2 velocity and opportunity costs are moving together about as they did before 1990. However, the recent period of relative stability in this relationship has been too short for the Federal Reserve to place increased reliance on M2 as a guide to policy at this time.

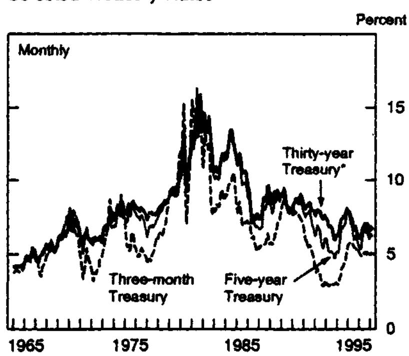
M1 contracted 4½ percent last year, as the pace at which new arrangements were established to sweep reservable retail transactions deposits to nonreservable nontransaction accounts accelerated. The initial amounts removed from transaction accounts by sweep arrangements established last year amounted to $116 billion, compared with $45 billion in 1995. M1 continued to be supported by currency growth last year, when foreign demands, which were depressed earlier in the year partly in anticipation of the new $100 bill, picked up in the second half. Adjusted for the initial amounts removed from transaction accounts by sweep arrangements, M1 grew 5¼ percent last year. The sweeping of transaction deposits contributed to a contraction of almost 12 percent in required reserves—twice the rate of decline of the previous year. The monetary base decelerated only a little, however, as growth of its major component, currency, was little changed between 1995 and 1996.

Continued declines in the levels of required reserves have the potential to impinge on the Federal Reserve's ability to exert close day-to-day control over the federal funds rate—the overnight rate on reserves traded among depository institutions. Depositories hold balances at Reserve Banks to meet daily clearing needs in addition to satisfying statutory reserve requirements. At low enough levels, reserve balances may provide inadequate protection against adverse clearings, and banks' attempts to avoid overdrafts could generate highly variable daily demands for balances at the Federal Reserve and a volatile federal funds rate. To date, however, no serious problems have emerged, in part because the substantial drop in depositories' required reserve balances attributable to sweeps has been partially offset by increases in their holdings of required clearing balances—an arrangement whereby depositories pay for services provided by the Federal Reserve through the holding of specified amounts in reserve account balances. In addition, advances in banks' techniques of monitoring balances at the Federal Reserve and gauging their clearing needs have enabled them to operate efficiently and smoothly at relatively low levels of balances. Sweeps have had an effect on Federal Reserve earnings and the amounts it remits to the Treasury. The decline in reserve balances of around $12 billion owing to sweeps must be matched by an accompanying lower level of Treasury securities on the books of Reserve Banks. The Federal Reserve continues to monitor sweep activity closely.

### *Interest Rates, Equity Prices, and Exchange Rates*

***Interest Rates.*** Declines in interest rates during the second half of last year on evidence that eco-

Selected Treasury Rates

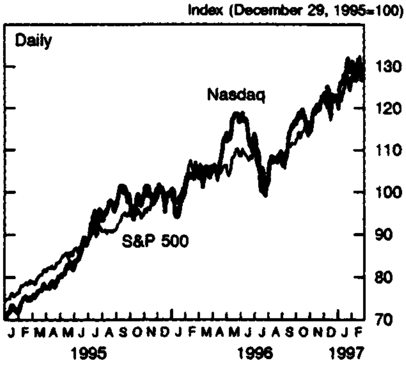



*The twenty-year Treasury bond rate is shown until the first issuance of the thirty-year Treasury bond in February 1977.

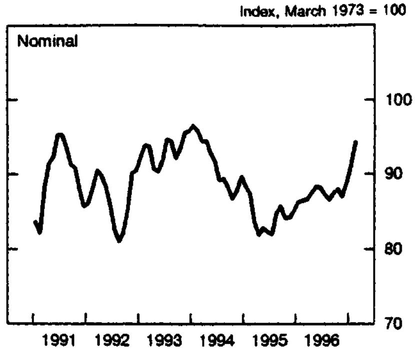
nomic growth had moderated only partially reversed the increases over the first half. Reflecting the surprising strength in economic activity last year, longer-term Treasury rates rose on balance on the order of ½ percentage point over the year, and intermediate rates were up somewhat more. Spreads between most private rates and Treasuries narrowed markedly last year, reflecting the high quality of business balance sheets. Municipal rates moved up comparatively little over the first half of 1996 as earlier relative increases in these yields associated with discussions of fundamental tax reform were reversed when the likelihood of such changes to the tax code diminished. Movements in interest rates over the year appeared to be basically in their real component, as inflation expectations were little changed, according to surveys.

***Equity Prices.*** The substantial rise in equity prices last year was only a bit below that registered in 1995. However, in contrast to 1995, when bond rates declined substantially, the equity gains last year came despite the net rise in bond rates. Corporate earnings were robust last year, but their advance fell short of share price increases, and price-earnings ratios rose to unusually high levels; dividend-price ratios were even more out of line with historical experience. Market participants appear to be anticipating further robust earnings growth, and they also seem to be requiring much less compensation for the extra risk of holding equities compared to, say, Treasury bonds. Such evaluations may be based on a perceived environment of persisting low inflation and balanced economic growth that would lower the odds of disruptions to economic activity. Other asset prices

Major Stock Price Indexes




Weighted Average Exchange Value of the U.S. Dollar

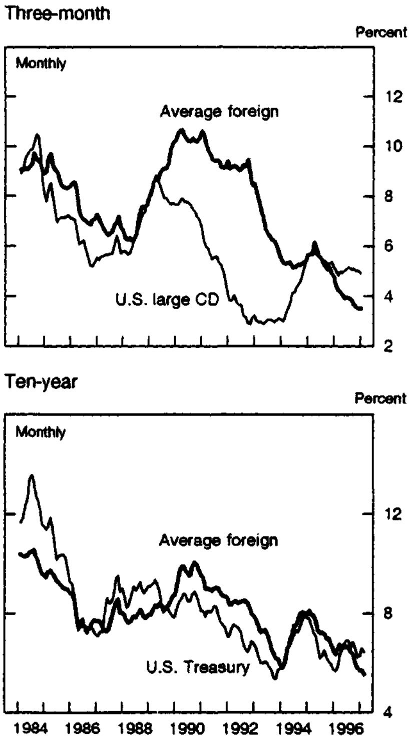



Note. In terms of the currencies of the other G-10 countries. Weights are based on 1972–76 global trade of each of the ten countries.

were generally subdued. Commodity prices were flat to down. Commercial real estate prices, although no longer falling, rose at little more than the rate of inflation. Residential real estate prices increased moderately.

***Exchange Rates.*** The foreign exchange value of the dollar in terms of the currencies of the other G-10 countries rose about 4 percent during 1996. When measured in terms of the currencies of a broader group of U.S. trading partners and adjusted for differences in consumer price inflation, the appreciation of the dollar last year was also about 4 percent. Much of the rise in the exchange value of the dollar occurred during the first half of the year. Indications of greater-than-expected underlying strength in the U.S. economy and signs of weakness in some European economies in the first two quarters reinforced market expectations that U.S. monetary policy was less likely to be eased than was policy in the other industrial countries. These expectations boosted U.S. long-term interest rates relative to those abroad and contributed to upward pressure on the dollar. The dollar fluctuated somewhat from June through December but on balance changed little. Over the course of 1996, the dollar appreciated 12 percent in terms of the yen and 7¾ percent in terms of the mark. During the first weeks of 1997, the dollar's average value against the G-10 currencies has again moved up, appreciating about 7 percent since the end of December, as economic data have suggested additional strength in the U.S. economy and have raised questions about

U.S. and Foreign Interest Rates




Note. Average foreign rates are the global trade-weighted average, for the other G-10 countries, of yields on instruments comparable to U.S. instruments shown.

the vigor of economic expansions in several foreign industrial countries.

On average, yields on ten-year government securities in the major foreign industrial countries fell about 80 basis points last year, with most of the decline coming in the second half. In Italy, long-term rates declined much more, about 375 basis points, in response to low growth in real output, substantial progress in lowering inflation, and sizable, credible measures to reduce the government deficit. In contrast, long-term rates in the United Kingdom rose slightly as the economy strengthened. Rates in Japan rose early in the year as the economy spurted, but subsequent indicators of a weakening expansion caused rates to turn back down; over the year, they declined about 40 basis points on net. Long-term rates abroad have moved down slightly further so far this year. Short-term market rates in the foreign industrial countries on average declined about 120 basis points during 1996. Except in Japan, official central bank lending rates were lowered in the foreign G-10 countries last year, contributing to the decline in market rates.

Equity prices in most industrial countries rose strongly last year. The major exception was Japan, where prices on balance fell slightly. The general decline in long-term interest rates abroad and moves toward monetary ease were among the factors contributing to the upward movement in stock prices.

The dollar appreciated in nominal terms about 2½ percent on balance against the Mexican peso during 1996, with much of that appreciation coming over a few weeks in October. After fluctuating in a narrow range for most of the year, the Mexican peso depreciated in terms of the dollar when market participants became concerned about the loss of competitiveness of Mexican exports during the year and about the partial nature of the government's planned privatization of the petrochemical industry. Peso interest rates rose in October and November, but have since more than retraced that increase as the peso has stabilized. In January, Mexican officials repaid all remaining outstanding obligations to the Exchange Stabilization Fund of the U.S. Treasury, completing repayment to the United States of all borrowings that were made following the peso crisis in late 1994; a partial early repayment was made to the International Monetary Fund as well.

In the first three quarters of 1996, large increases were reported in both foreign ownership of assets in the United States and U.S. ownership of assets abroad. Over the same period, foreign official assets in the United States increased almost $90 billion. Part of this increase was associated with exchange market intervention by the Japanese authorities to counter a brief strengthening of the exchange value of the yen early in the year, but a larger part reflected the repurchase of reserves by several European countries whose currencies strengthened against the mark. About half reflected increases in reserves of newly industrializing countries.

Private foreigners also added substantially to their assets in the United States in the first three quarters of 1996. Net purchases of U.S. Treasury securities by private foreigners amounted to $85 billion through September, and net purchases of corporate and government agency bonds were equally large. Foreign direct investment in the United States surged to a record $71 billion in the first three quarters, reflecting numerous mergers and acquisitions of U.S. companies by foreigners.

U.S. private investors also added rapidly to their holdings of foreign assets in the first three quarters of 1996. In contrast to foreign investors in the United States, U.S. portfolio investors favored foreign stocks over bonds. Net purchases in Japan were particularly large in the first half of the year. In addition, U.S. direct investment abroad remained strong, reflecting acquisitions and continued privatizations of foreign firms.

**Growth of Money and Debt**
Percent

| Period | | M1 | M2 | M3 | Domestic nonfinancial debt |
|---|---|---|---|---|---|
| *Annual*[1] | | | | | |
| 1980 | | 7.5 | 8.7 | 9.6 | 9.5 |
| 1981 | | 5.4 (2.5)[2] | 9.0 | 12.4 | 10.2 |
| 1982 | | 8.8 | 8.8 | 9.7 | 9.9 |
| 1983 | | 10.3 | 11.8 | 9.5 | 11.9 |
| 1984 | | 5.4 | 8.1 | 10.8 | 14.5 |
| 1985 | | 12.0 | 8.6 | 7.7 | 14.2 |
| 1986 | | 15.5 | 9.1 | 9.0 | 13.2 |
| 1987 | | 6.3 | 4.2 | 5.8 | 10.0 |
| 1988 | | 4.3 | 5.7 | 6.3 | 9.0 |
| 1989 | | 0.5 | 5.2 | 4.0 | 7.9 |
| 1990 | | 4.1 | 4.1 | 1.8 | 6.9 |
| 1991 | | 7.9 | 3.1 | 1.2 | 4.6 |
| 1992 | | 14.4 | 1.8 | 0.6 | 4.7 |
| 1993 | | 10.6 | 1.3 | 1.1 | 5.1 |
| 1994 | | 2.5 | 0.6 | 1.7 | 5.2 |
| 1995 | | -1.6 | 4.0 | 6.2 | 5.5 |
| 1996 | | -4.6 | 4.6 | 6.9 | 5.3 |
| *Quarterly (annual rate)*[3] | | | | | |
| 1996 | Q1 | -3.5 | 5.3 | 6.6 | 5.0 |
| | Q2 | -1.4 | 4.5 | 6.3 | 5.7 |
| | Q3 | -6.5 | 3.4 | 5.4 | 5.3 |
| | Q4 | -7.4 | 5.0 | 8.5 | 4.9 |

1. From average for fourth quarter of preceding year to average for fourth quarter of year indicated.
2. Adjusted for shifts to NOW accounts in 1981.
3. From average for preceding quarter to average for quarter indicated.

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

ALAN GREENSPAN
CHAIRMAN

April 10, 1997

The Honorable Richard C. Shelby
United States Senate
Washington, D.C. 20510-0103

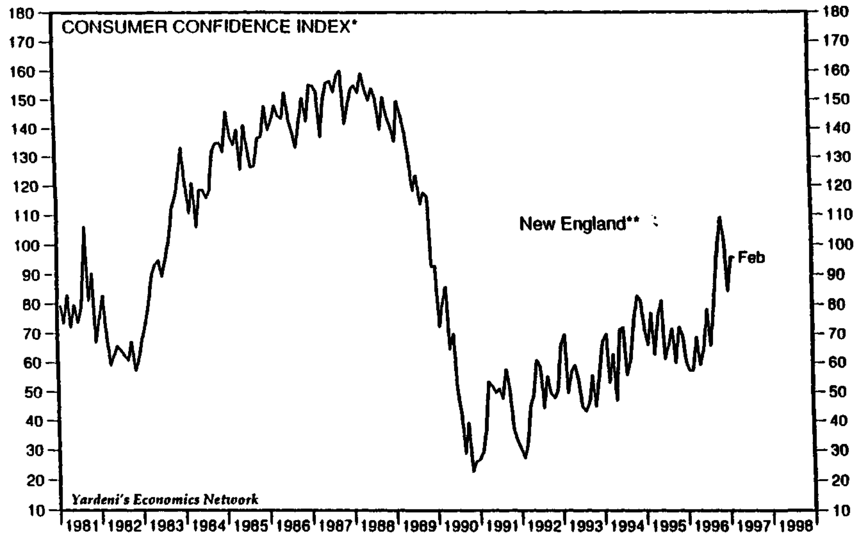
Dear Senator:

At the recent hearing on the Federal Reserve's semiannual Humphrey-Hawkins Report on monetary policy before the Banking Committee, you asked if there was any evidence to suggest that the reluctance of workers to leave their jobs differed significantly across industrial sectors or geographical regions. As it turns out, the data on job leavers needed to make such comparisons are not readily available for individual industries or regions, and based on our discussions with the Bureau of Labor Statistics, it would appear that any industry- or region-specific estimates that might be constructed from the microdata would be based on too small a sample to be of much help in answering this question.

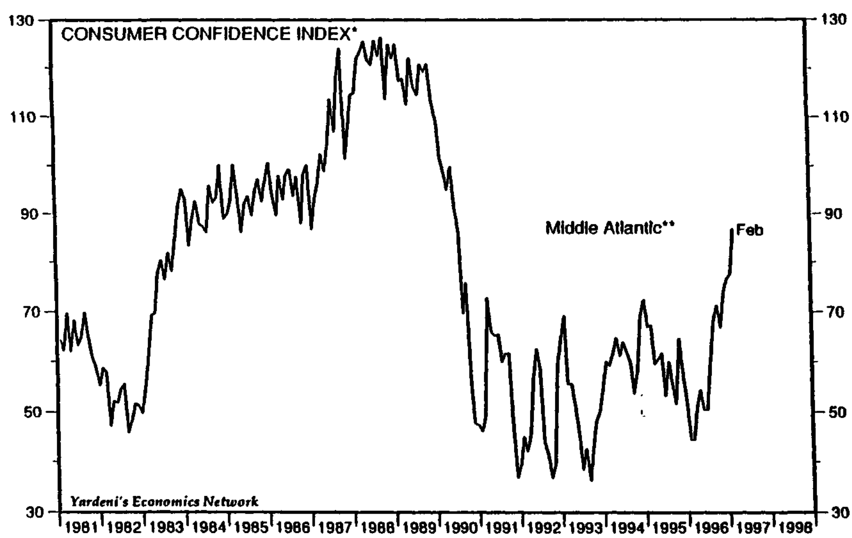
I have, however, enclosed a set of charts from the Conference Board that shows their index of consumer confidence separately for each of the nine major Census regions. Relative to the highs posted in the late 1980s, consumers appear most upbeat in the Midwest and Mountain regions of the United States, but somewhat less optimistic in the regions that make up the Atlantic and Pacific coasts. Even in this latter set of regions, however, the consumer confidence indexes are generally still at their highest levels since 1990.

Sincerely,

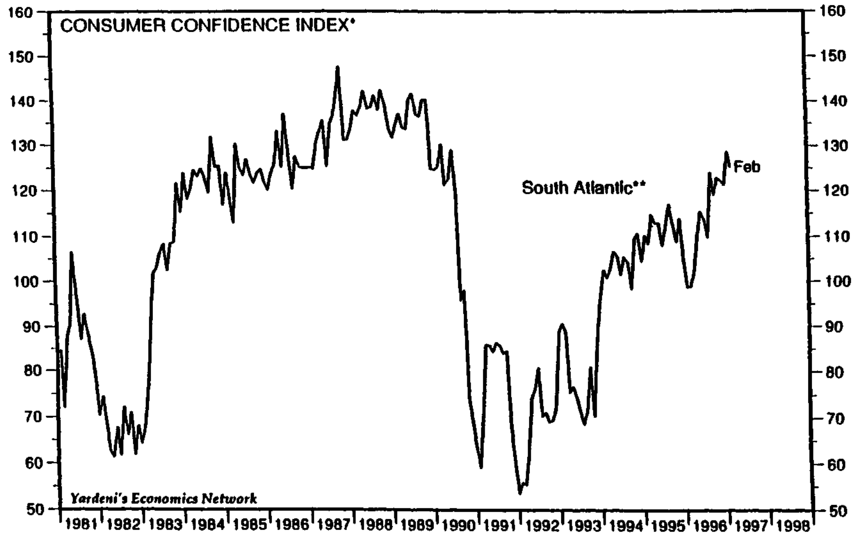
Enclosures




* The Conference Board
** Includes Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont.

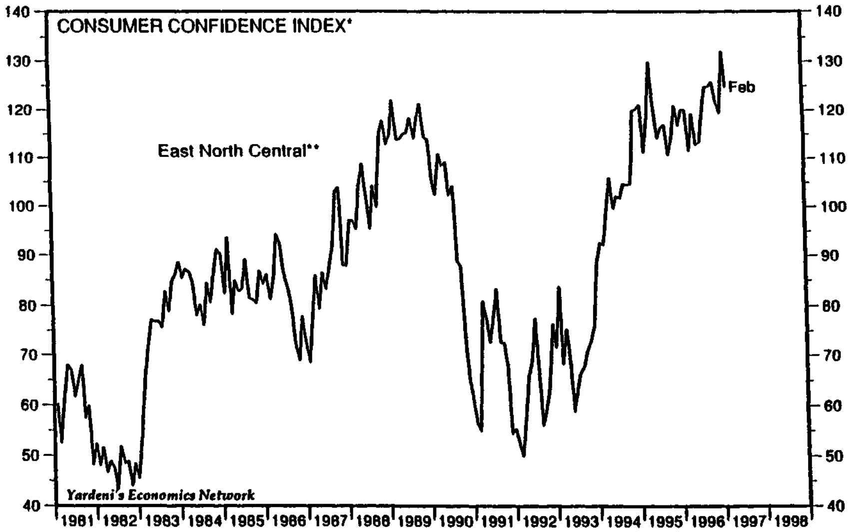



* The Conference Board
** Includes New Jersey, New York and Pennsylvania.



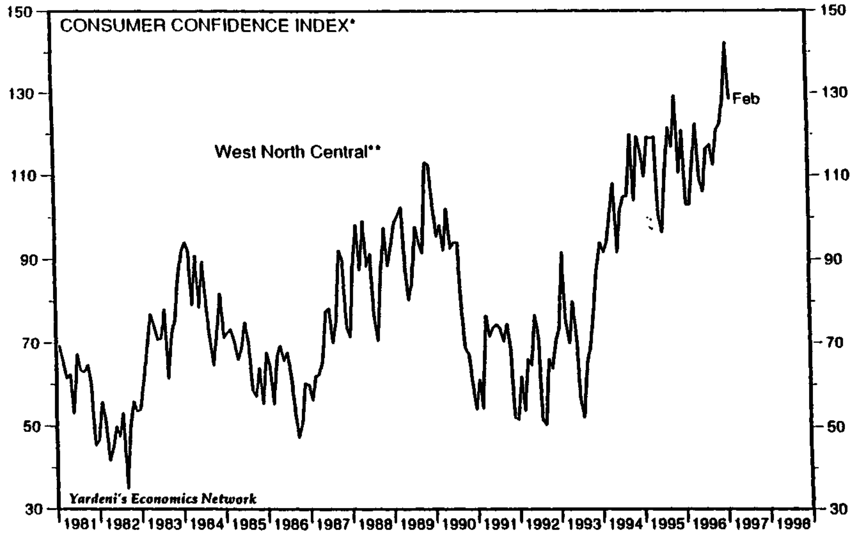

* The Conference Board

** Includes Delaware, the District of Columbia, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia and West Virginia.

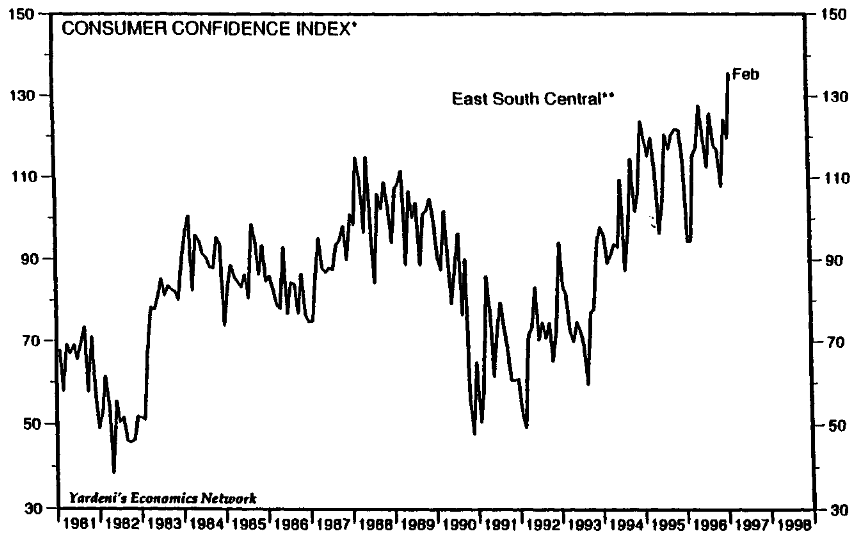



* The Conference Board

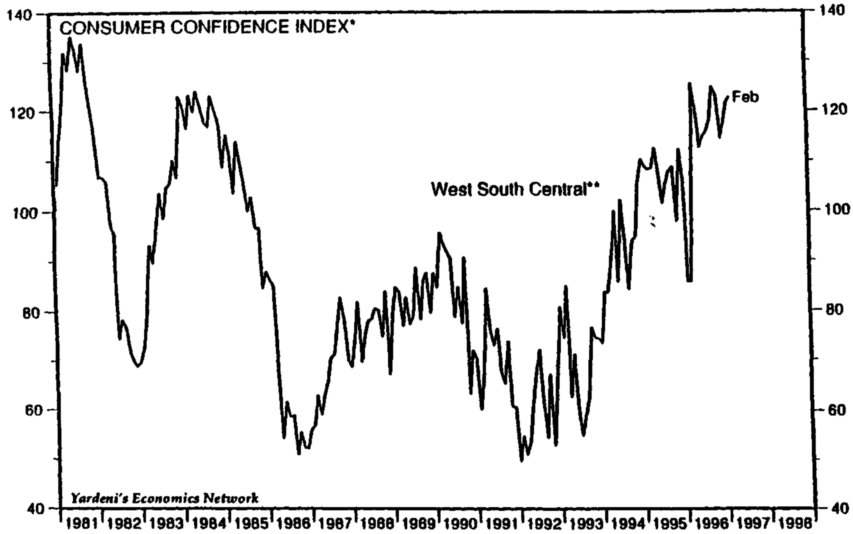
** Includes Illinois, Indiana, Michigan, Ohio and Wisconsin.



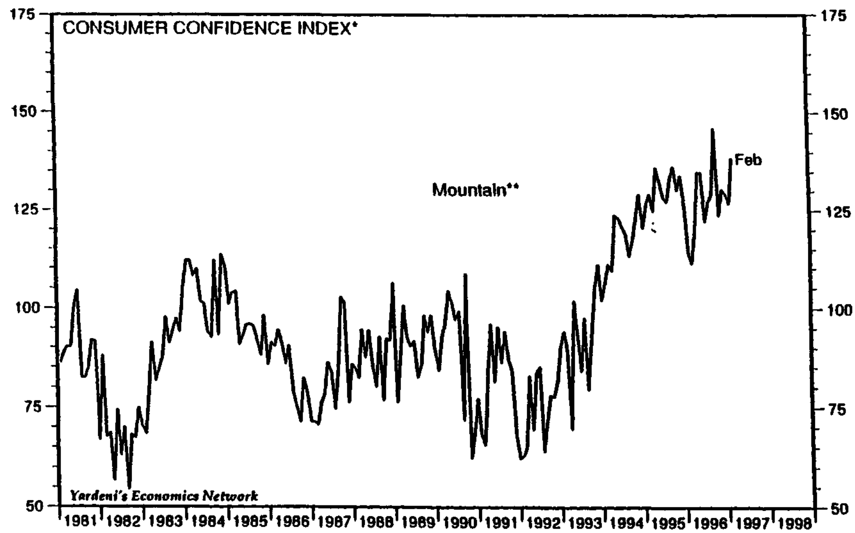

* The Conference Board
** Includes Iowa, Kansas, Minnesota, Misssouri, Nebraska, North Dakota and South Dakota.



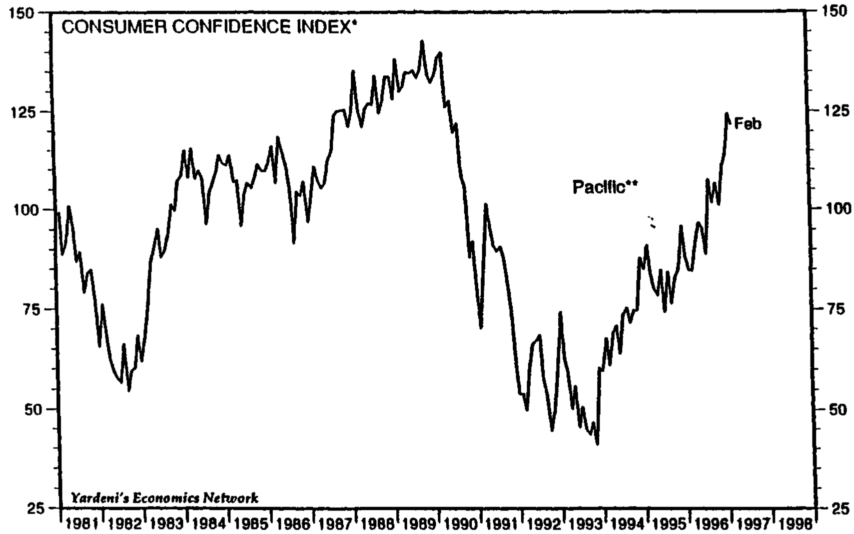

* The Conference Board
** Includes Kentucky, Tennessee, Alabama and Mississippi.




* The Conference Board
** Includes Arkansas, Louisiana, Oklahoma and Texas.




* The Conference Board
** Includes Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah and Wyoming.




* The Conference Board

** Includes Washington, Oregon, California, Arkansas and Hawaii.

## Table 2
## Cost of the Leadership Tax Proposals
## (in billions of dollars)

| | Joint Committee on Taxation | | | | Estimate for Subsequent 10 Years (2008-2017) |
|---|---|---|---|---|---|
| | First 5 Years | Second 5 Years | First 10 Years | Fiscal Year 2007 | |
| Child Tax Credit | $109.0 | $ 89.9 | $198.9 | $16.9 | $164 |
| Capital Gains | 33.1 | 96.2 | 129.3 | 22.1 | 234 |
| Estate and Gift | 18.4 | 48.2 | 66.6 | 11.7 | 127 |
| IRA | 32.6 | 80.0 | 112.6 | 19.4 | 210 |
| Higher Education | 7.1 | 10.9 | 18.0 | 2.6 | 27 |
| **Total** | **$200.5** | **$325.1** | **$525.8** | **$72.7** | **$763** |

Source: Figures for the first 10 years are from Joint Committee on Taxation (JCT), January 21, 1997. The Bob Dole Education Investment Accounts provision is included in the total for higher education. Estimates of costs for each provision in the subsequent 10-year period were made by taking the JCT estimate of each provision's average annual rate of growth from 2004 through 2007 and applying this rate of growth to the JCT estimate of the provision's cost in 2007. All figures are expressed in current dollars.