

CONDUCT OF MONETARY POLICY

Report of the Federal Reserve Board pursuant to the
Full Employment and Balanced Growth Act of 1978,
P.L. 95-523
and the State of the Economy

HEARING
BEFORE THE
SUBCOMMITTEE ON
DOMESTIC AND INTERNATIONAL MONETARY POLICY
OF THE
COMMITTEE ON BANKING AND
FINANCIAL SERVICES
HOUSE OF REPRESENTATIVES
ONE HUNDRED FOURTH CONGRESS
SECOND SESSION

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CONTENTS

	Page
Hearing held on:	
July 23, 1996	1
Appendix:	
July 23, 1996	37

WITNESSES

TUESDAY, JULY 23, 1996

Greenspan, Hon. Alan, Chairman, Board of Governors, Federal Reserve System	10
--	----

APPENDIX

Prepared statements:	
Castle, Hon. Michael N.	38
Kelly, Hon. Sue W.	40
LoBiondo, Hon. Frank A.	41
Greenspan, Hon. Alan	43

ADDITIONAL MATERIAL SUBMITTED FOR THE RECORD

Greenspan, Hon. Alan:	
"Monetary Policy Report to the Congress Pursuant to the Full Employment and Balanced Growth Act of 1978," July 18, 1996	57
Written response to questions from the subcommittee	84

CONDUCT OF MONETARY POLICY HEARING

TUESDAY, JULY 23, 1996

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON DOMESTIC AND
INTERNATIONAL MONETARY POLICY,
COMMITTEE ON BANKING AND FINANCIAL SERVICES,
Washington, DC.

The subcommittee met, pursuant to notice, at 2:00 p.m., in room 2128, Rayburn House Office Building, Hon. Michael N. Castle [chairman of the subcommittee] presiding.

Present: Chairman Castle, Representatives Royce, Lucas, Metcalf, LoBiondo, Watts of Oklahoma, Kelly, Flake, Frank, and Kennedy.

Also present: Representatives Leach, Roukema, Bachus, Hinchey, and Bentsen.

Chairman CASTLE. The subcommittee will come to order.

The subcommittee meets today to receive the semiannual report of the Board of Governors of the Federal Reserve System on the conduct of monetary policy and the state of the economy as mandated in the Full Employment and Balanced Growth Act of 1978. We welcome Chairman Leach of the full Banking Committee here as well, and there will be other Members joining us. I am sure you are familiar with that protocol as to how things work.

Chairman Greenspan, welcome back to the House Committee on Banking and Financial Services, Subcommittee on Domestic and International Monetary Policy.

With most of my colleagues, I am delighted to see your chairmanship of the Federal Reserve System Board of Governors confirmed for another term. Our Nation is indeed fortunate that men of your caliber are still willing to endure the criticism that sometimes comes with serving in a position that is so critical to our Nation's economy. I believe that you have done an excellent job as well as many of your deputies who are with you.

Having said that, I think that there are some serious questions that all of us responsible for the monetary and fiscal policy of the United States Government must address. The underlying premise of all of these questions is: Are we doing everything we can to help all working Americans?

Currently, the U.S. economy is in its 65th month of economic expansion, approximately 14 months beyond the average expansion, but still far short of the modern records. This is good news, and there is no doubt that this economy is producing excellent results and opportunities—for Shaquille O'Neill and corporate executives with generous stock options. However, many middle-class Ameri-

cans continue to feel as though they are running in place. They are concerned about downsizing, outsourcing, and a perception that the well-paying jobs that are being eliminated are not being replaced by new ones. They are concerned about whether they will be able to afford to send their kids to college or to support aging parents, or to prepare adequately for their own retirement.

I am not laying the blame for this widespread feeling of middle-class economic anxiety solely at the feet of the Federal Reserve, nor am I suggesting that the Fed can create economic prosperity for every American through changes in monetary policy. Nonetheless, we do need to discuss whether we could be doing more to help the average working American by promoting economic growth at a faster rate.

With the Federal deficit at the lowest level in years and inflation very quiet by the Fed's own analysis, why can't the Federal Reserve attempt to boost growth at a faster pace without igniting inflation? Despite some short-term problems with gasoline and food prices, we seem to be maintaining remarkable price stability. Some observers are suggesting that inflation has been squeezed out of the economy and that growth will slow in the second half of this year. If this is true, why not seek to give the economy a boost through lower rates?

Public officials of both parties are debating how to increase the economic growth in a manner that creates the broadest benefits for our citizens. In seeking to promote economic growth and opportunity for all Americans, how much of this important goal is the responsibility of the Federal Reserve System and what should be the responsibility of the Congress and the administration?

Since we last met in February, it appears that American businesses have sold their excess inventory. Can this be succeeded by increased product demand and more growth without inflation? If inflation remains quiet, should the Federal Reserve take action to allow the economy to grow at a faster rate?

As I noted, I do not mean to suggest that the Federal Reserve Board is solely responsible for the economic well-being of our citizens. I am interested in gaining your views on the progress the Congress and the President have made in reducing the deficit and the work that still needs to be done. No one can argue with the fact that Congress has made 2 years of excellent progress in bringing the discretionary spending portion of the budget under control. However, we have not dealt with the largest entitlement programs which make up over 50 percent of the Federal budget. Uncontrolled growth in these programs threatens to send the deficit sharply up again as well as jeopardize the important protections that medicare and medicaid provide for our older and low-income neighbors. This subcommittee is very interested in your current view of the deficit battle and the looming entitlement tidal wave.

As you state in your testimony, the American economy has performed well in 1996; the issue we must now face is what else needs to be done to ensure that as many of our citizens as possible can benefit from this good performance.

Chairman Greenspan, as you consider all of our questions today, I ask you to keep in mind this problem: How can the generally good economic news you are reporting and commenting on, be

translated into better jobs and a brighter future for those Americans who currently feel that they are not benefiting from the economic growth we are witnessing?

As always, we are prepared for a lively discussion. And today, we will have up to 5-minute opening statements by the Members present. In addition, some of the Members of the full committee may sit with us as well and are welcome to make remarks for the record. And with that I turn to the Ranking Democrat here, Mr. Frank.

[The prepared statement of Hon. Michael N. Castle can be found on page 38 in the appendix.]

Mr. FRANK. Thank you, Mr. Chairman.

We have a very serious issue that we have to confront, and that is a strong perception on the part of a lot of people in this country that further integration with the international economy and technological change is, in fact, a threat to them.

One of the things that people expected to happen a few years ago after the ratification and legislative acceptance of both NAFTA and GATT—people should go back to that period in 1994 when there were expectations of an expansion of that policy. Chile was going to be invited to accede to NAFTA. There were to be discussions with the European Union about a further free trade agreement. That has, of course, stalled, and we got a taste of that, some of us here and Mr. Greenspan, early in 1995, when the administration proposed aid to Mexico to deal with the currency crisis, and many of us thought that in principle that was a good thing but it bogged down here probably because there were people against it in general, but probably because there were people who felt we needed to attach some conditions that dealt precisely with that.

I think it is relevant to cite that because ultimately with the aid of the IMF, and I believe in part of the urging of the Chairman of the full committee, the administration was I believe able to go forward without congressional action, and they went forward with aid to Mexico, which by every relevant criterion was quite successful. But that probably doesn't mean that that is popular.

Pat Buchanan, for instance, was still able during the Republican Presidential campaign to evoke quite a sympathetic response when he denounced that terrible Mexico bailout, even though it has been by any measure, objective or subjective, successful. And I think that is one of the things that we have to deal with.

We have in my experience more of a class division in the U.S. today about the nature of the economy than I can ever remember. And we have people who welcome the changes, who see themselves benefiting from it. The *New York Times* had a story, I guess on Sunday, about how many people now are getting good jobs. But there are also a very large number of people who see this as threatening to them, and we can argue about this at two levels. Some of us will have different views about the equity of the situation from others. But those who are in favor of a further integration of the U.S. into the international economy, who see trade as a good thing, should understand that unless things change, we are going to have great difficulty in going there.

And I think we have to go back to a wonderful remark of John Kennedy's when he was launching the Alliance for Progress and he

alluded to Franklin Roosevelt's good neighbor policy and he said, "Franklin Roosevelt could be a good neighbor abroad because he was a good neighbor at home." Until and unless we address some of the concerns that the Chairman of the subcommittee was talking about, until we can persuade large numbers of Americans that these changes are not threats to them, we are going to find a good deal of frustration and difficulty. And I think that has to be factored in. Because we have a situation, Mr. Chairman, where you may have more power than you want, but you have got it. And I don't know how you are going to get rid of it.

The Federal Reserve, particularly recently, has been one of the agencies in the economic sphere that has had the ability to move some. And we have this dilemma, in my judgment. You are an agency which considers fighting inflation to be your central mission. I have talked to you before about concerns about equity, about other economic problems, and you have correctly said, though, those are not fundamentally your mission.

When the most effective and forceful and coherent policymaker in the Federal Government focuses to the extent that you have on inflation, I think we get an exacerbation of the problem because I think all of the other economic problems, the problem of insufficient employment, the problems of equity, all of those other problems—the problem I would add of welfare and how anybody expects us to find jobs for all of those welfare recipients at a time when we are concerned that we are creating too many jobs in the economy too quickly, they clearly are going to be the least employable people. And I don't understand how you take care of that. We have to address that.

And so one of the sets of questions I will have will be the extent to which it is feasible for the Federal Reserve to focus on those, and, if not, we in Congress have to think of how we create institutions and change things so that some of these other concerns get equal attention.

Chairman CASTLE. Thank you, Mr. Frank. Chairman Leach.

Mr. LEACH. Thank you.

I hadn't intended to make an opening statement, but Mr. Frank does suggest several themes that I think maybe ought to be laid on the table because they haven't been well expressed nationally. And I share a number of his concerns. But first, with regard to the Mexican bailout circumstance where the Mexican government has been reported as paying back about half of their loans, the U.S. taxpayer has to date earned approximately \$1 billion in interest on this circumstance. So it has been very profitable for the United States as well as stabilizing for Mexico.

The second point I think our distinguished colleague from Massachusetts has underscored is this problem of the income inequality in this country, which is probably the greatest trend that we as public policymakers ought to be concerned with. In fact, the trend toward upper income distribution of wealth has increased more in this administration than during the Reagan years.

I don't mean to hold this administration's policies accountable, but it is a statistical circumstance that is of growing concern. It has a lot of macroeconomic effects based upon the fact that it looks as if people are saving and spending at the same time. That is, saving

in mutual funds and then using plastic cards to spend. And that is a very worrisome circumstance that is developing with the high levels of consumer debt. And the fact that we may have as many as a million personal bankruptcies this year, which will set a record, and all of which gets affected by macroeconomic policy coming from the combination of Congress and the Federal Reserve. And so in that context I think a number of concerns of Mr. Frank are worthy of review at this time by this subcommittee.

Thank you, Mr. Chairman.

Chairman CASTLE. Thank you, Chairman Leach. We appreciate you being here and appreciate your comments.

We will turn now to the Ranking Member, Mr. Flake.

Mr. FLAKE. Thank you, Mr. Chairman. I would like to welcome Chairman Greenspan today for our biennial Humphrey-Hawkins hearing to discuss the Federal Reserve's conduct on monetary policy and its opinion of the current state of the economy.

Given last week's record activity in the stock market, and the persistent political commentary on our Nation's economic health, I certainly look forward to hearing Chairman Greenspan's comments.

I would like to raise a couple of issues. First, Mr. Castle, I and the rest of the subcommittee have a keen interest in the technology industry. During the past 18 months we have held a series of hearings which served to educate Congress on the reality of technology's effect on the financial services industry. In doing so, we have welcomed numerous players in technical fields and expected nothing less than a bright future for those various companies and industries. So it is disturbing to see the dramatic fall in technology stocks during the past week and to a lesser extent on yesterday.

Was this a temporary fall due to the expectations of the content of earnings report or was it a more fundamental adjustment in the market's view of technology stock?

My second concern is the issue of balancing the budget and proposals to tax cuts. Being that we are in a political season, and the fact that the Chairman does not relish commenting on the political issues currently before Congress, I don't expect that we will get a concise and clear picture with regard to what Mr. Greenspan believes is the best path to prosperity.

Nevertheless, I would like to point to Daniel Mitchell's column in today's *Wall Street Journal*. Mr. Mitchell's premise is that balancing the budget is good, all things being equal. He adds, however, that balancing the budget is no economic silver bullet. He points to 30 years of history that undermines the theory that lower deficits equal lower interest rates. Furthermore, he repeats the contention that a shift of \$30 billion to \$50 billion in the U.S. budget deficit in a world capital market of tens of trillions of dollars is not enough to cause a noticeable change in interest rates. Mr. Mitchell, by the way, works for the Heritage Foundation.

There is also the contention that lower taxes will be a beacon that our Nation follows to unprecedented economic growth, which has been stable at or around 2.25 percent. Again, this theory might have a weakness in historical precedents. Tax cut advocates are correct in pointing to growth in the 1920's, 1960's, and 1980's, however the demographics and unemployment levels have changed.

With near full employment and the introduction of women and the baby boomers to the economy during these periods, I believe that we must question whether or not our economy is capable of growing any faster. To the degree that it is, and to the extent that this growth would benefit all segments of society, I believe most in Congress would support these measures.

My fears are that these theories of economic advancement are not inclusive and whose only purpose is to pander to select constituencies to win elections this coming November. With that, Mr. Chairman, I will close. I look forward to hearing Mr. Greenspan and I will listen intently to his testimony. Thank you and thank you, Mr. Greenspan, for coming today.

Chairman CASTLE. Mr. Royce.

Mr. ROYCE. Thank you, Mr. Chairman.

I would also like to thank Chairman Greenspan for being here today with us and to a well-deserved third term as head of the Federal Reserve Board. And as always, I appreciate hearing your views on monetary policy, and more importantly, your thoughts on the fiscal policies that those of us in Congress are grappling with right now.

While the Federal Reserve continues to do its part to keep inflation down and the economy relatively healthy, Congress and the President have an equally important role in shaping the economic future of the country. As you are well aware, we in Congress have spent the last year and a half trying to bring some long overdue fiscal responsibility to the Federal Government by coming to grips with the escalating national debt. Our efforts produced the first balanced budget in over 20 years, and this was the first serious attempt to deal with a politically difficult and potentially explosive problem facing entitlement programs.

Unfortunately, as you know, the balanced budget was vetoed. Despite this setback we have no intention of giving up. The recent trustees' reports depicting the pending financial medicare and social security crisis tell us that we must continue to seek solutions that address these problems. Further, you yourself have continued to emphasize the importance of our efforts to reduce the Federal budget deficit to the long-term economic welfare of our Nation. We must address these problems now so that future generations are not left to face economic desperation brought about by our own fiscal irresponsibility, and it is my hope that you will reiterate the importance of balancing the budget again today, and I look forward to hearing your thoughts. Thank you.

Chairman CASTLE. Thank you very much.

Mr. Kennedy.

Mr. KENNEDY. Thank you very much. And I want to thank the Chairman for coming and acting so interested in all of our comments so far.

Mr. Chairman, I just would say briefly that the economy today by certain measures looks very strong. You have over 8 million new jobs created in the last 2 years; 2.5 million new businesses have been created. The deficit of the country, the annual debt, has been cut in half. The unemployment rate is down, and by some measures that would indicate that we have a robust economy.

The actions that the Federal Reserve have taken in terms of keeping interest rates relatively high in order to maintain a low inflation have been accompanied by several remarks that you have made indicating that you feel that the economy of the country is relatively strong. Although I would say that each time that I have asked you about some of the issues that Mr. Frank raised, you have always expressed some concerns about lower-income people and the continuing gap between the wealthy and the poor of this country.

I think that it is interesting to note that on this very day when you are coming before the Congress, there is in this same city another meeting that is taking place, a meeting of the major forces, some of the major forces in the Republican Party, that are talking about trying to draw up a new picture for their economic view of America. It is my understanding that there are many people in that meeting that are talking about an overall tax cut, leaving the issue of deficit reduction aside, and coming up with the same traditional notions of supply-side economics by providing a major tax cut without the appropriate or otherwise necessary cuts in programs to achieve a balanced budget. And I wonder, and I hope in your comments you might address whether or not those kinds of policies would, in fact, lead you, if we did take that action, to again having to raise interest rates in order to deal with the inflationary aspects of a major tax cut without appropriate cuts in spending at the same time, and I would look forward to your comments on that.

Thank you very much, Mr. Chairman.

Chairman CASTLE. Mr. Lucas.

Mr. LUCAS. Thank you. I believe in the interest of time that I will pass on the opportunity to make comments and wait with a great anticipation for the Chairman's comments.

Chairman CASTLE. Thank you very much, Mr. Lucas.

Does Mr. Metcalf wish to make any comments?

Mr. METCALF. Thank you, Mr. Chairman.

A solution to the BIF/SAIF problem has been most difficult for this subcommittee. If the Chairman has any advice for us regarding a solution that avoids another hit on the taxpayers, I for one will be most interested.

Chairman CASTLE. That sounds like a question, if he will make sure it is reiterated at some point.

Mr. Bentsen. Mr. Hinchey. Mr. LoBiondo.

Mr. LOBIONDO. I would like to take this opportunity to congratulate you, Mr. Chairman, for your recent confirmation to a third term. I am pleased that the Senate and the President have acted to retain you as Chairman. You have presided over such a long expansion in our economy.

While on a national basis it is true that we have seen an economic expansion for more than 5 years now, that expansion has been lagging in the mid-Atlantic region, and according to the Philadelphia Federal Reserve it is only in the last 3 years that New Jersey, Pennsylvania, and Delaware have seen significant job growth. In addition to the late start, the recovery in this region has lagged behind that of the national average. In 1995, New Jersey saw a job growth of 1.1 percent while the national average was more than 1.5

percent for this same period. I believe that we should be working to do what we can to bring that up to at least the national level.

More recently, southern New Jersey has seen some more positive indicators despite the severe weather of early 1996. For the first quarter of the year, 46 percent of the firms polled in a South Jersey business survey for the Philadelphia Federal Reserve reported higher sales and general activity at their company. Prices have continued to show only low levels of upward pressure. Even more recent data indicates increases in demand for manufactured goods and continued improvement in manufacturing conditions for the region.

I commend Chairman Greenspan for his efforts to allow the economy to expand while controlling inflation. The growth that we have seen can be attributed partly to the optimism for the budget deficit reduction. Last week's estimate by the administration of the Federal deficit for fiscal 1996 should not lead us to a false sense of optimism. This reduction from \$176 billion to \$117 billion can be attributed largely to stronger economic forecasts and higher than expected Federal income tax receipts. In fact, according to the report provided to the subcommittee by the Chairman, Federal receipts increased by 8 percent for the first 8 months of the fiscal year. This kind of deficit reduction is not the kind needed in order to foster continued economic growth.

Had this Congress not acted so decisively in the past year and a half in rolling back some of the excessive spending traditional in Washington, we would have seen dramatically higher deficits that would have been surely to the detriment of economic growth. While this subcommittee and our counterpart in the Senate continue to fulfill our oversight responsibility for the monetary policy provided by the Federal Reserve, there is very little that we can do to affect this policy. The situation is exacerbated by the current oversight structure and its focus on monetary aggregates. These aggregates do not provide a great deal of information to the subcommittee. We must look to the other information provided in the Federal Reserve's monetary policy report. In evaluating the data provided in that report, the Congress must not overlook the very significant role that it can play in affecting monetary policy through fiscal policy.

As we proceed with the remaining appropriation bills and the budget reconciliation, I would urge my colleagues to give consideration to the lower interest rates that will come with a reduced Federal deficit and the positive impact that such rates will have on the economy.

Again, Mr. Chairman, welcome before the subcommittee. I look forward to hearing your testimony as well as always your interesting answers to the questions posed.

[The prepared statement of Hon. Frank LoBiondo can be found on page 41 in the appendix.]

Chairman CASTLE. Mr. Watts.

Mrs. Kelly.

Mrs. KELLY. Thank you, Mr. Chairman.

Mr. Chairman, I request that my full remarks be placed in the record, but I do want to welcome Chairman Greenspan here today and make only one quick remark, and that is that I feel Congress

has two constituencies: The American people and those in our respective districts. If you come up to the Hudson River Valley, you would see that in my district where we used to have generally upbeat economic growth and a lot of home building, mortgage lending, and construction is down in my area. Lower interest rates would help people fulfill the American dream of owning a home. And I will submit the rest of my remarks to the record. I welcome you here. Thank you for coming.

[The prepared statement of Hon. Sue W. Kelly can be found on page 40 in the appendix.]

Chairman CASTLE. And of course any other Members' comments are welcome as part of the record if they wish to submit them.

Chairman CASTLE. Mrs. Roukema.

Mrs. ROUKEMA. Mr. Chairman, I have no comments, no introductory remarks except to welcome the Chairman. There is no one whose opinion I respect more on this subject, and I am looking forward, particularly in the wake of the erratic stock market and the questions in the technology sector, I would be interested in seeing how you connect those events. Thank you.

Chairman CASTLE. Mr. Bachus.

Mr. BACHUS. Thank you, Mr. Chairman.

Mr. Chairman, I would say that Mr. Greenspan, in your testimony, I am interested in two or three things. I just want to note them for you at this time. One is that we seem to have a real gyrations in long-term bond interest rates. I am concerned about that. How they go down to 6 percent last November and then up to above 7 percent. And what your comment on that is. I think it will be harmful to homeownership, people getting mortgages, and whether or not there is something that can be done or something done to see that those gyrations are not quite as severe.

The second concern I have, I see a lot of production figures. We are producing goods and we have good employment. But I am concerned about the ability of the consumer to buy these goods. And we have a lot of things being produced, but some of the things, flat auto sales, weak retail sales, flat bank loans, things of this nature. I am just wondering who is going to buy these goods? And do you see that coming to a close, maybe our economy weakening just because the consumer, because of high consumer debt, is not able to buy the goods that we are producing and what that means for the future?

Third, and maybe this is what you are referring to in your Senate testimony, was that you felt like the economy may slow on its own accord. I am interested in why you feel that is the case, what you were looking at in that regard. And also you made a comment over in the Senate that also we have had almost no inflation, you might see that phase of very low inflation coming to an end, and I would like to know what maybe the basis of that opinion was and what figures you will be looking at. I will close my comments with those.

Chairman CASTLE. Thank you, Mr. Bachus.

Chairman Greenspan, you have had a lot of questions posed to you in the course of all these openings.

Mr. FRANK. Mr. Chairman, Mr. Greenspan is doing a wonderful job of not making any facial expressions to affect the bond market.

Maybe you should take a break for him for facial expressions. I don't know how long he can stay absolutely immobile.

Chairman CASTLE. The last time he did this the stock market went down and in the Senate it went up.

We appreciate you being here. I am sure that you are ready to answer all of the questions. We will listen to your testimony and then the various Members will have the opportunity to ask questions for 5 minutes. This is a day in which we are voting so we could be interrupted for some period of time with votes, but we look forward to your testimony and we welcome you here.

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

Mr. GREENSPAN. Thank you very much, Mr. Chairman. I want to thank you and the other members of the subcommittee for many of the kind remarks. And I particularly appreciate this opportunity to discuss the performance of the American economy and the conduct of monetary policy.

Nineteen-ninety-six has been a good year for the American economy. By all indications, spending and production were robust in the first half of this year. Gross domestic product increased at a 2¼ percent annual rate in the first quarter, and partial data suggest a significantly stronger increase in the second quarter as the economy, as expected, accelerated out of its soft patch around the turn of the year.

Even though the American economy is using its productive resources intensively, inflation has remained quiescent. The core inflation rate measured by the consumer price index, less food and energy prices, at a 2.8 percent annual rate over the first 6 months of the year, is about one-half a percentage point slower than the same period 1 year ago. I shall be discussing in greater detail later some possible reasons for this favorable inflation experience, and offering some thoughts about how long it might last.

Looking forward, there are a number of reasons to expect demands to moderate and economic activity to settle back toward a more sustainable pace in the months ahead.

First, the bond markets have taken a turn toward restraint this year. Interest rates have risen in response to incoming data depicting an economy which was stronger than anticipated.

Second, the value of the dollar on foreign exchange markets has appreciated significantly on a trade-weighted basis against the currencies of other industrial countries over the past year or so.

Third, the support to economic growth provided by expenditures on durable goods, both household consumption and business fixed investment, is likely to wane in coming quarters.

While these are all good reasons to anticipate that economic growth will moderate some, the timing and extent of that downshift are uncertain. We have not, as yet, seen much effect of the rise in interest rates on, for example, the housing market. In many other aspects, financial market conditions remain quite supportive to domestic spending, and the economies of many foreign countries are showing signs of achieving more solid growth, which should help support our export sales. Moreover, and perhaps of most relevance, a reversal of earlier drawdowns in inventories

could potentially impart an important boost to incomes and production as we enter the second half of the year. The economy is already producing at a high level—and some early signs of pressures on resources are emerging, especially in the labor market.

There are, to be sure, legitimate questions about how much margin in resource utilization currently exists. Historically, current levels of slack measured in terms of either the unemployment rate or capacity utilization have often been associated with a gradual strengthening of price and wage pressures. Yet the recent evidence of such pressures is scant.

Have we moved into a new environment where inflation imbalances no longer threaten the stability and growth of our economy in ways they once did? The simple answer, in our judgment, is no. But the issue is not a simple one.

As we have discussed before, powerful forces have evolved in the past few years to help contain inflationary tendencies. An ever-increasing share of our Nation's work force uses the tools of new technologies. The consequent waves of improvements in production techniques have quickly altered the economic viability of individual firms and sometimes even entire industries as well as the market value of workers' skills. With such fast and changeable currents, it is not surprising that workers may be less willing to test the waters of job change. Because workers are more worried about their own job security and their marketability if forced to change jobs, they are apparently accepting smaller increases in their compensation at any given level of labor market tightness.

Moreover, a growing share of all output competes in an increasingly global marketplace, allowing fixed costs to be spread over ever-broader markets, promoting greater specialization and efficiency, and enhancing price competition.

As I indicated in February, these forces, to the extent that they are operative, exert a transitory, not permanent, effect in reducing wage and price inflation. These trends leave the level of both wages and prices lower than historic relationships would predict. But at some point greater job security will no longer be worth the further sacrifice of gains in real incomes. The growth of wages will then again be more responsive to tightness of labor markets, potentially putting pressure on profit margins and ultimately prices. Moreover, the reductions in unit costs that are a consequence of the ever-expanding global reach of many companies must ultimately be bound by the limits of geography.

Perhaps reflecting these unusual influences we have yet to see early signs in prices themselves of intensifying pressures, despite anecdotal and statistical evidence that the amount of operating slack in our economy has been at low levels by historic standards for some time. Among the encouraging indicators, industrial commodity prices have remained roughly flat and the list of reported shortages of materials has been exceptionally small. This pattern is consistent with the view that American businesses, by and large, have felt comfortable that inflation has been subdued and offers little evidence of the advanced buying and expanded commitments that would come if businesses were expecting significant price pressures in the reasonably near future.

Nonetheless, there are early indications that this episode of favorable inflation developments, especially with regard to labor markets, may be drawing to a close. The surprising strength in the employment cost index for wages and salaries in the first quarter raises the possibility that workers' willingness to surrender wage gains for job security may be lessening. Wage data since March has been difficult to read. Average hourly earnings clearly accelerated in the second quarter. However, in looking at those figures one must be mindful that they can reflect not only changes in wage rates but also shifts in the composition of employment.

And in recent months, a significant part, although not all of the pickup, has been accounted for by a tendency of employment to shift to relatively high-pay industries such as durable goods manufacturing. Whether such shifts also imply a correspondingly higher level of output per worker will determine whether unit labor costs also accelerated to impart upward pressure to price inflation.

Increases in pay, of course, are not inflationary so long as they are matched by gains in productivity. Without question, we would applaud such trends which increase standards of living. However, wage gains that increase unit costs and are eaten up by inflation help no one and ultimately place economic growth in jeopardy.

Clearly, in this environment, the Federal Reserve has had to become especially vigilant to incipient inflation pressures that could ultimately threaten the health of the expansion. The relatively good inflation performance of the past few years, as best we can judge, owes in part to transitional forces that are only temporarily dampening the wage-price inflation process.

We cannot be confident that we can ascertain when that process will end. This makes policy responses more difficult than usual because, as always, the impact of policy will be felt with a significant lag. Of course, if the economy grows so strongly as to strain available resources, transitional forces notwithstanding, history persuasively indicates that imbalances will develop that will bring the expansion to a halt.

We at the Federal Reserve would welcome fast economic growth provided it were sustainable. As I emphasized last February, we do not have firm judgments on the specific level or growth rate of the output that would engender economic strains. Instead, we respond to evidence that those strains themselves are developing. Whatever the long-term potential for sustainable growth, we believe that a necessary condition for achieving it is low inflation. As a consequence, the Federal Reserve remains committed to preventing a sustained pickup in inflation and ultimately achieving and preserving price stability.

Price stability is an appropriate and desirable goal for policy, not only because it allows financial markets and the economy to work more efficiently, but also because it most likely raises productivity and living standards in the long run. Specifically, in an inflationary environment, business managers are distracted from their basic function of building profits through prudent investment and cost control. My own observation of business practices over the years suggests that the inability to pass cost increases through to higher prices provides a powerful incentive to firms to increase profit margins through innovation and greater efficiency. This boosts produc-

tivity and ultimately standards of living over time. Holding the line on inflation, thus, does not impose a speed limit on economic growth. On the contrary, it induces the private sector to focus more on efforts that yield faster long-term economic growth.

In this context, we can readily understand why financial markets welcome sustained low inflation. Uncertainty about future inflation raises the risks associated with investing for that future. Lowering that uncertainty by keeping inflation down diminishes those risks so that all commitments concerning future income become more valuable.

What investors fear, what all Americans should fear, are inflationary instabilities. They diminish our ability to provide the wherewithal for the standard of living of the next generation and the retirement incomes of our current work force. The interests of investors as expressed in bond and stock markets do not conflict with those of average Americans. They coincide.

In order to realize the benefits of low and declining inflation, Federal Reserve policy has for some time now been designed to act preemptively, as I indicated earlier, to look beyond current data readings and base action on its assessment of where the economy is headed, and in that context I am confident that the Federal Open Market Committee would move to tighten reserve market conditions should the weight of incoming evidence persuasively suggest an oncoming intensification of inflation pressures that would jeopardize the durability of the economic expansion.

Monetary policy is, of course, only one factor shaping the macro-economic environment. I, thus, would be remiss if I did not again emphasize the critical importance to our Nation's economic welfare of continuing to reduce our Federal budget deficit. We have made significant and welcome progress on this score in recent years, but unless further legislative steps are taken, that progress will be reversed.

Inevitably, such changes will require addressing the consequences for entitlement spending of the anticipated shift in the Nation's demographics in the first few decades of the next century. Lower budget deficits are the surest and most direct way to increase national saving. Higher national saving would help to lower real interest rates, spurring spending on capital goods so as to put cutting edge technology in the hands of more American workers. With a greater volume of modern equipment at their disposal, American workers will be able to produce goods that compete even more effectively on world markets.

Mr. Chairman, our economy is now in its sixth year of economic expansion. The staying power of the expansion has owed importantly to the initial small size and rapid correction of emerging imbalances, reflected in part in the persistence of low inflation.

To be sure, the economy is not free of problems. But as we address those problems, policymakers also need to recognize the limitations of our influence and the wellspring of our success. The good performance of the American economy in the most fundamental sense rests on the actions of millions of people who have been given the scope to express themselves in free and open markets. In this, we are a model for the rest of the world, which has come to appre-

ciate the power of market economies to provide for the public's long-term welfare.

Mr. Chairman, I have excerpted from my prepared remarks and request that the full remarks be included for the record.

Chairman CASTLE. Without objection, they will be included for the record.

[The prepared statement of Hon. Alan Greenspan can be found on page 43 in the appendix.]

Chairman CASTLE. Thank you for your comments.

Let me go to one of the very last things you spoke about, which is the whole issue of the entitlement spending, which I also raised in my opening statement. I just think that somehow or another we are not stressing this point anywhere near enough in this country today and that we run a huge risk in terms of what is going to happen.

And in this election we will all be talking about reducing the deficit more than any other time in recent history, and a smaller deficit than we have had in 15 years or something of that nature, but I have seen statistics which would tell me that with—as you have indicated, the demographic changes that we are going to see, that we are going to drive the Federal deficit from today's 2 percent of domestic to 18.5 by 2030 with 50 percent of GDP going to all government costs, including State and local. And almost all of this is in the entitlement area, about which we are doing virtually nothing. Maybe we will do something in welfare reform before the year is over, but very little.

I personally don't believe this country can tolerate this. I think we are going to have to do something. I would be interested in your restatement of your views of that as a problem, the reasons to address it earlier rather than later, and I think I have asked you this question before, and I don't think I am going to get an answer to this one, any solutions that you may have, such as the privatization of social security or medical savings accounts for medicare or additional welfare reform or anything else that may be in order. I think we can no longer ignore this problem in the United States of America.

Mr. GREENSPAN. Mr. Chairman, we are doing something and what we are doing is, first, really for the first time I remember, discussing the issue. It is no longer, as I indicated over in the Senate, the third rail of American politics; the electric power has been turned off. And unless and until we describe the issue, discuss it, debate it, and get an understanding of the nature of what we are dealing with, action is premature and perhaps undesirable.

I think we are making, and have, indeed, made a considerable amount of progress since the Kerrey-Danforth Commission put forth the basic outline of the data which everyone is now increasingly agreeing to and to which you just alluded.

As the persuasiveness and the robustness of the conclusions directed at where the entitlement programs are taking us takes hold, I think we begin to martial the national consensus which is required to alter that path. It is in everybody's interest to make certain that the system does not break down, to make certain that there indeed are viable retirement funds out there for all of the

work force currently employed and those who will be coming into the work force in the years immediately ahead.

There is a general agreement at this stage that the system that now exists is not adequate to solve those problems. But unless we go through a very detailed evaluation of all the alternatives, we cannot appropriately address it. I think we are doing that now, and I think that is a major step forward.

I do think, however, that in looking at the year 2010 or 2030, it is important to recognize that if we bring the budget deficit into balance, say, by the year 2002, that gives us a platform from which to come to grips with these issues which will be far more effectively implemented than if we don't come to grips with the short-term budget problem.

So, I would not wish to argue that we have got a major problem after the turn of the century, and therefore let's not think about the short term, let's focus on the long term. We have to go one step at a time, and resolving the short-term budget issue is a fundamental first step, but there are many steps down the road to bring this issue to completion.

Chairman CASTLE. That is a thoughtful answer. I think it is a political thicket and I think it is going to take people of your intellectual caliber and others who have incredible economic backgrounds to really define the problem even further than Danforth-Kerrey and to go forward with the solutions. So we would encourage you to do so.

Because I spent so much time praising you, I didn't get all of my time on questions. I will ask one more quick question. It is a bit unstructured and built on some of the things that Chairman Leach said, but I wanted to test you on this.

The reference he made to people at the same time spending and using credit cards, creating debt and using credit cards at the same time they are saving and investing through mutual funds, people going into bankruptcy. Some of the hidden costs that people don't always recognize. Almost all of health care is hidden or at least secondary. You do it in your insurance or the medicare payments that you make. The job displacements. I see a tremendous sense of insecurity with this economy, even if people are doing relatively well now.

Just looking at the prices of certain things, I mentioned Shaquille O'Neill. The Los Angeles Lakers also doubled their lowest ticket prices at the same time. But in the period of 1984 to 1994, the price of cereal has increased by 34.8 percent; sirloin steak by 37.5 percent; the price of coffee by 40.4 percent; the cost of housing, 44.8 percent; transportation by 34.3 percent; energy by 4.6; health care by 111; college tuition by 150 percent.

I don't think that college tuition is generally factored into a lot of the CPI indexes that we see and some of the other indexes which are there. But I just think that there are a lot of different structural aspects to this economy that the average family is facing now which don't necessarily show in your generally positive economic statistics of unemployment and job growth and other aspects of that.

And are we somehow not focusing on this correctly so that we are meeting the economic needs and responsibilities of the American

family? Do somehow we have to change our thinking in terms of how we view the statistics and what it means to the average family in America today?

Mr. GREENSPAN. Mr. Chairman, I hope we are doing that. For example, the issue of college tuition is quite large in the consumer price index and, indeed, it has shown up as a major element in the overall consumption budgets of American households. My recollection is that the inflation rate there is slowing down, finally, and that it is slowing down in a lot of areas which are critical to average household budgets. But we must begin to view American households not as a single unit and not as a single group of people, but recognize there is great diversity in this country, not only geographically but by income, by wealth, by numerous other different categories so that while national economic policy tends to focus on the Nation as a whole, it is important for us to understand that when we talk about aggregates, they are made up of individual pieces and those individual pieces are persons.

And we have discussed, indeed at this table last February, we had a fairly extended discussion on the implications of the dispersing of incomes in this country and the effect of changing income inequality on the underlying structure. These lead you somewhat outside the realm of economics, but not wholly, because in one overall sense, the social sciences, so to speak, really interrelate with one another and we cannot deal with one being wholly oblivious to its impact on other aspects of American life.

So, I fully concur with the implication of your remarks, Mr. Chairman. We have to recognize, no matter where we are in government, that there is a tremendous diversity in this country, and we have to watch that diversity to make certain we don't think of the country as a single, homogeneous unit which is a statistic on a particular page.

Chairman CASTLE. Thank you, Mr. Chairman. Mr. Flake.

Mr. FLAKE. Thank you, Mr. Chairman. And as one of the statistics who has two daughters in college, thank you for the good news that the inflation rate in tuitions is leveling.

Mr. Chairman, you stated that holding the line on inflation does not impose a speed limit on economic growth. Does this mean that you think that a Fed policy which would raise the target Federal funds rate to a higher level, a rise in short-term interest rates this year, would have little or no effect on the growth rate of the economy? When you answer the question please take into account the very low growth rates that the Fed predicts for next year, 1.5 percent growth rate for gross domestic product.

Mr. GREENSPAN. Congressman, I cannot comment on prospective interest rate changes and any hypothetical things that might occur as a consequence.

I will say to you that what our basic goal is, as I have indicated in my prepared remarks, is to keep an economy over the long-run moving at a maximum sustainable growth rate. That is not easy to do. It requires looking into the future, which in itself is very treacherous, and trying to make judgments on various different policies we might implement which can affect that future. So all I can suggest to you, as I have indicated here and in the Senate last week, is that we are continually looking out into the future and our

basic goal is essentially to find that particular policy mix which has the highest probability of maintaining stable sustainable economic growth at the maximum level at which the system is capable of performing.

Mr. FLAKE. If you noted in my opening statement, I raised the concern about the fall in technology stocks during the past week. Would you care to comment on your feelings as it relates to what we attribute that to and what does it mean in the long term if it is possible to do so?

Mr. GREENSPAN. Well, that is an interesting question, Congressman, because the one thing that the technology stocks are reflecting is this extraordinary shift into a high-tech environment which has got so many crucial issues relating to the way our economy is functioning and indeed the impact on the labor market, which I was mentioning previously.

One of the characteristics of any particular company that has a very broad possible expectation of economic growth is that the price of its stock will fluctuate tremendously. You can look at some of the major old-line industrial corporations in this country and ask what their profit growth is going to be and the range will be somewhere very narrow. When you get to some of these advanced new technologies, we know a lot of these companies in 5 years will not exist. They will have just failed. They will be gone. But they may turn into a Microsoft, so the range of potential possibilities is huge.

And as the markets tend to make differing evaluations of the possibilities of those outlooks for individual stocks, these individual stocks will fluctuate tremendously as indeed they have. They have much greater volatility than all others. So what I would indicate to you is that high volatility, high fluctuations in technology stocks is oddly one of the ways in which you almost define them. They are companies with very large potential but also very high risk.

Mr. FLAKE. And that risk, in your opinion, does not suggest any type of long-term change because even though we know they are volatile, we know that they are high-risk investment instruments, the reality is they still have some impact as relates to how the market functions and the determination on how the market functions makes a difference in terms of how you and the rest of us analyze what policies are necessary to make the necessary shifts to adjust so that in your opinion, you see this as basically an aberration that is short term, related to a particular industry that has no long-term impact as it relates to the market?

Mr. GREENSPAN. Well, Congressman, as I said last week in answer to a related question, the recent instability in the stock market generally, and obviously high-tech stocks are the most unstable, is similar to what has happened historically. It is the more expected state of affairs. What has been unusual is not the current period, but the period that preceded it, because we went through an extended period with very little fluctuation. The stock market just kept moving steadily upward with very few episodes of retrenchment. That is the unusual circumstance; not what we have been observing in recent weeks or months.

Mr. FLAKE. Thank you very much. I yield back, Mr. Chairman.

Chairman CASTLE. Chairman Leach.

Mr. LEACH. Thank you.

Over time stock markets do show volatility. I am concerned with some of the more recent statistics on income inequality. One of your governors, Mr. Lindsey, has argued that over the last 3 years the percentage of American income tied to wages has gone down 6 percent and that this has enormous structural implications for middle-income people and that over the last 3 years, the top 5 percent income has gone up from 18.6 percent to over 21 percent. Neither of those statistics are enormously significant if the economy was growing terrifically. But the economy at a modest rate of growth implies that some groups of Americans are relatively not only doing less well but in actual terms are doing less well.

And so one of the clear questions is, from both a macroeconomic and then Congress perhaps is more of a microeconomic place of decisionmaking, what should government do? Or is it a worrisome phenomenon?

Mr. GREENSPAN. Oh, it is a worrisome phenomenon. It is a worrisome phenomenon in the sense that anything that divides Americans means that we are less of a coherent society. And as far as I am concerned personally as a citizen, I think that the strength of America is the fact that we view ourselves as Americans. And if there is a significant state of divisiveness which undermines that sense of belief that we are all part of one group, I think that undercuts the effectiveness of our society which affects us all. So the answer is yes; it is not something which we should readily dismiss and say it has no particular moment.

As I mentioned here last February, this, as best I can judge, is a consequence of the changing technology itself, and the apparent acceleration of the extent to which intellectual value creation has taken an ever-increasing share of domestic income, which generally means that there is an increasing education premium in the market, which may be stabilizing. There is some evidence in the last 2 or 3 years that the extraordinary rise in the gap between the earnings of college graduates and high school graduates has been slowed significantly and may have stabilized. This is the first good sign that one can find in the data to suggest that this increasing dispersion of incomes may be slowing down and hopefully coming to a halt.

Nonetheless, if as you point out, the total income of the economy in real terms grows at a fast pace, then the problem for those who are at the lower end of the distribution eases. In the period back to the late 1970's, the lower end has been losing relative to the average clearly. If the average is not going up very rapidly and you are losing relative to it, as you point out, there is a significant segment of our society whose real incomes are falling.

Mr. LEACH. I would like to make two compliments. One for your successful nomination approval. But, second, for a prenomination step that has some analogy to what you are discussing and that is the increase in the democratization of information flows at the Federal Reserve Board.

And I think that is very important. The Congress looks at it as a board with a strong Chairman. But I think information from all members at all times is something that the board should aspire to make common. I think it is a very powerful step toward democratization within a small group, but democratization nonetheless.

And your signal decision in that direction, I think, should be much applauded. Thank you.

Chairman CASTLE. Thank you, Mr. Leach.

I will turn to Mr. Frank for a question in a moment. But this will be the last person who will be able to ask questions before we have to break for one vote. And we will reconvene as rapidly as possible after that vote to continue questioning. I say to those Members who may want to go to vote at some point to be ready to ask questions as soon as we can get back.

Mr. FRANK. Thank you.

Just to follow on with the Chairman, I think that Chairman Gonzalez's efforts in the area of democratization ought to be realized.

I want to return to the welfare issue. We are dealing with this right now. We have legislation that is about to pass which assumes that virtually all people now on AFDC will be employed because the notion is that they will be thrown off after a certain point if they are unemployed.

What is the capacity of the economy to absorb them? They are, on the whole, in the less employable sector of the economy. So do you foresee—the economy is about to slow down some, you tell us. And if it does not naturally you may give it a stick. So what are the realistic chances of absorbing all of these AFDC recipients in this economy with an education premium, and so forth?

Mr. GREENSPAN. Well, Congressman, the projections that we are making imply a slowdown, but no change in the unemployment rate from where it has been in the last 18 months. So if that forecast materializes, we are at a level of unemployment which is exceptionally low for the post-World War II period.

Mr. FRANK. Right. And it includes all of those AFDC recipients on AFDC. And it would seem to me from a macro or micro standpoint, assuming you could put all of those AFDC recipients, a greater majority, to work, you would have to assume some reduction in the unemployment rate.

Mr. GREENSPAN. Either that or an expansion of the labor force, which could very readily occur, and indeed that is, in fact, what would very likely occur.

Mr. FRANK. Yes, but will they get employed?

Mr. GREENSPAN. This is the interesting question because it is an issue of increasing jobs. Many of the people to whom you refer are not in the labor force at the moment. You have to remember that we have a very dynamic labor market. We create 300,000 new jobs every week. There is a tremendous dynamism. It churns.

Mr. FRANK. And some jobs get destroyed, too. That is not net.

Mr. GREENSPAN. I am saying that is gross. The gross may be even slightly higher and we lose a significant number of jobs as well. It is fairly apparent over the decades that concerns about the inability of our economy to absorb increased people coming into the labor force have proved to be unduly pessimistic.

Mr. FRANK. They are the least employable; they are people who have had problems and who we all agree have by a system maybe been made less employable. But without any qualitative change they will be employable by the normal operation of the economy?

Mr. GREENSPAN. Let me be very specific. All the anecdotal evidence that we are picking up, plus the various measures of the

labor market, suggest significant tightness and difficulty in getting people employed not only in the skilled areas where we know it is quite difficult, but there are also significant problems in the entry level jobs. We have seen a considerable amount of concern on the part of some of the fast food operators about bringing people on board and they are having difficulty.

Mr. FRANK. But here is our dilemma. It sounds like the point at which we may be getting some of these welfare recipients into jobs is the point at which we are going to see significant inflationary pressure and tighten up some, and I think that is illustrative of the kind of dilemma that we have. It sounds like you are now describing the kind of upward pressure that would lead you to try to slow things down.

Mr. GREENSPAN. I am describing the way it has been for quite a period of time. This is not new. We have been getting reports of this nature going back over a year.

Mr. FRANK. So that is not a problem as far as you are concerned that might lead to any tightening?

Mr. GREENSPAN. The fact that we have anecdotal evidence of tightness in the labor markets per se? The answer is no.

Mr. FRANK. I will make this as a statement; my time will be expiring. You said there may be some change in the basic structural thing and here is the problem I have, is that I get the strong impression, I think many others do, is that all of the uncertainty will be—in case of doubt and the balancing of the risks, inflation will come ahead. That we are going to have to go a long way until you will be persuaded that we can do more employment. And I am much more skeptical than you that we can absorb these people on AFDC with the current level of unemployment, if 5.3 is the lowest we are ever going to get. I think the likelihood of our being able to absorb these people is quite smaller than it should be. And I think the problem is going to be exacerbated by having to draw the balance of risks.

Mr. GREENSPAN. Well, let me just say that monetary policy, as you pointed out in your earlier remarks, can only do so much. What we have to do, as we see the nature of our mandate, is to make certain we have a stable financial system and try to contribute what we can to maximum long-term sustainable growth.

But as I have indicated elsewhere and, indeed, as I mentioned at the tail end of my prepared remarks, monetary policy is only one of the particular tools that exists. There is a very significant dynamic economy out there. And the presumption that government generally has the capability of manipulating it is clearly false.

So, should there be programs to address the problems that you suggest? And I agree with you. You are raising legitimate questions which have to be addressed. But monetary policy has limits as to what it can do. And I don't think that trying to employ monetary policy to resolve all types of economic problems will work at all and indeed could very readily be counterproductive to the goals that you are trying to reach.

Mr. FRANK. My problem is if monetary policy is seen as unlimited with regard to inflation and limited with regard to everything else, we get to imbalance.

Chairman CASTLE. We have to break at this point for 10 minutes. We will stand in recess for about 10 minutes. Thank you Mr. Frank.

[Brief Recess.]

Chairman CASTLE. The subcommittee will reconvene.

In our absence, Mr. Chairman, a new phenomenon has arisen. I have been supplied with a button, "Happy Humphrey-Hawkins Day." I think it has become some sort of a national holiday.

Mr. Royce, I believe, is next.

Mr. ROYCE. Chairman Greenspan, as you know, I believe that we must solve the S&L insurance fund problem this year, and I think that the urgency to solve it is heightened by the FDIC's recent approvals of a number of saving association applications to open national banks. I know that you commented about this on the Senate side the other day and I want to make sure that we understand those comments and the ones you have made on numerous occasions in testimony before Congress and in discussions that we have had.

You made, as I recall, the point that doing nothing should not be an option for this House. And that this was one of those things Congress can really solve and that Congress should act quickly. Is this a fair description of your comments and concerns?

Mr. GREENSPAN. Yes, it is, Congressman. I said over at the Senate in response to a similar question, what I said several times, namely, that the Federal Government offers a single type of deposit insurance. It guarantees deposits but it charges two separate prices for the same product. And if the laws of economics are not to be repealed, and I don't know an instance in which they have been, this creates a tremendously unstable system. What must happen eventually is those who are paying the premium, the higher premium for thrift insurance, which is identical to the coverage of the Bank Insurance Fund, will tend to move their deposits from one fund to another, and this is, indeed, what is happening. If the FICO obligations remain unchanged on the SAIF fund, then ultimately we run into a situation where either those bonds are moved into default or some alternate action takes place.

My own impression is that the FICO bonds are interesting but not relevant to this because we have the fundamental problem which has got to be resolved, and my view is that the sooner, the better.

There are many ways to do it. As you know, I supported several bills that were presented up here. There is no easy way to do it. The people whom we are asking to take the load are innocent bystanders to the savings and loan problem, of which this is the tail end. And if you are talking about an issue of equity, there is none. Neither the thrifts who are still solvent and functioning were involved, because they obviously didn't go into default, and certainly the commercial banks are not involved. So it is an unfortunate circumstance but one which regrettably has got to be resolved as quickly as we can.

I thought that the solutions that were offered earlier this year were workable. And I trust that they or something close to them will ultimately pass this Congress.

Mr. ROYCE. In your testimony you once again emphasize the critical importance to our Nation's economic welfare of continuing to reduce our Federal budget deficit. And further, you went on to say that although we have made significant progress in this area, you said that unless further legislative steps are taken, the progress will be reversed.

Could you elaborate once again for this subcommittee on the relationship between our attempts to balance the Federal budget and the economic benefits to the economy? And on the concept that unless further legislative steps are taken, its progress will be reversed?

Mr. GREENSPAN. Well, with respect to the latter, that is merely an extension of what is currently on the books. The current programs create—given the demographics of our population structure—an opening up of the spread between benefits and receipts in many of the retirement programs which becomes progressively larger as we move into the 21st century. And since we can know with a very high degree of accuracy what our population structure will be, there is very little which I can envisage which is likely to, by some chance event, bail out the system.

Even if that were the case, it would be at the edge of being irresponsible to try to assume that something magnificent is going to happen which we cannot foresee because the probability of that has got to be exceptionally low, verging on nonexistent. So as I indicated earlier, I think that what we are doing now, namely, developing a general consensus and a dialogue about the nature of the problem, is the first and essential step in coming to grips with this issue as we move into the 21st century. And we are making some progress in that direction. So when we recognize that you cannot have the Federal Government draining all of the savings of the society, which is what will happen if we do not act, and that that will upend economic growth very quickly, then I don't see that there is an alternative here that makes any sense.

Chairman CASTLE. Thank you, Mr. Royce.

Mr. Kennedy.

Mr. KENNEDY. Thank you very much, Mr. Chairman. Again, thank you for coming, Chairman Greenspan.

I want to just come back and sort of pick up on what you just talked about, and the fact that when you say that the Federal Government can be soaking up all of our savings, obviously if we enter into a phase where we look at large-scale tax cuts without appropriate cuts in spending, would it be your presumption that you would have to take action at the Fed in order to offset the increase in the size of the Federal deficit?

Mr. GREENSPAN. Let me just say that we do not respond to the deficit per se. What we respond to is the various elements of strain which occur in the economy.

Mr. KENNEDY. Of what?

Mr. GREENSPAN. Of strain. In other words, we respond to pressures which create the first elements of an unstable economy which has got to be made right.

On some occasions budget deficits create strain; in some cases, they do not. But what we focus on is a whole series of different indications of what is likely to emerge in the future.

Mr. KENNEDY. OK. Fine. But what I am saying to you is that if you have a situation where today, as you know, in Washington there is a meeting of the Republican Party, a lot of the brains of the Republican Party, they are saying in the newspapers that they are going to advocate a new policy, and it seems like it is revisiting an old policy, which is that we begin to ignore the deficit and that we go ahead with a major program of tax reductions in order to stimulate the economy.

Mr. GREENSPAN. I am not aware that they are stating that they are ignoring the deficit.

Mr. KENNEDY. Well, what they are suggesting is that they are putting the deficit second, second to tax reductions in terms of their importance.

Mr. GREENSPAN. I don't know whether or not what they are discussing today is relevant, but I do recall that many of them who have been discussing this issue have said that they plan to introduce reductions concurrently in the level of outlays.

Mr. KENNEDY. I see. So if—are you then suggesting that it is reasonable to have a position that we can establish large-scale tax cuts with cuts in programs at the same time?

Mr. GREENSPAN. Certainly.

Mr. KENNEDY. And would you suggest that the kinds of cuts that would come in terms of program spending would have to come out of the medicare program, the medicaid program, and social security, and others?

Mr. GREENSPAN. I am not going to comment on individual programs, as I have not done so before this subcommittee.

Mr. KENNEDY. I appreciate that, Mr. Chairman, but the fact of the matter is if you look at where the Federal Government spends its money, wouldn't you say that in those three programs alone about three-quarters of the Federal budget is spent?

Mr. GREENSPAN. All I can say is that the bipartisan discussions that have been going on in the last year have identified a large number of areas for expenditure cut, and the President fairly recently has stated that in his view there are more than enough cuts to bring the budget into balance.

Mr. KENNEDY. I wasn't referring to the bipartisan cuts, which I am supporting.

Mr. GREENSPAN. I understand what you are talking about. I am merely saying that there has been a very considerable amount of discussion on both sides of the aisle in both bodies on identifying areas where cuts can be made.

Mr. KENNEDY. I understand that there are broad scale agreements where we can cut the budget and achieve a balanced budget. Where those talks have always been unhinged is when we link them to large-scale tax reductions at the same time. You have got a major party of this country that is meeting today in this city talking about large-scale tax reductions. And if you are willing to continuously jack up the interest ratings or maintain higher interest rates in order to fight inflation, if in fact there were a position taken that we were going to advocate for long-scale tax reductions without offsetting cuts in spending, would you be forced to then increase interest rates?

Mr. GREENSPAN. That depends on what happens to the economy as a consequence of that, if indeed that hypothetical event occurs. You cannot basically argue that if you are increasing the deficit, therefore you must increase interest rates. There are so many other elements in the system that have to be considered that I would not even try to address that sort of hypothetical question.

Mr. KENNEDY. I guess if I could just have an additional 10 seconds to respond, I have heard you say several times over the last few years the importance of deficit reduction, Mr. Chairman, so I am kind of surprised to hear you hedging a bit on that.

Mr. GREENSPAN. I am not hedging. The question that I was asked over at the Senate, which I answered, was do I think that tax cuts should be matched by reductions in expenditures. The answer to that was yes, because if you don't do that, you will increase the deficit with a lot of other problems associated with it.

The deficit incidentally over the long run is not solely an inflation problem. It absorbs resources that would be used in the private sector to increase productivity and growth. So even if you found a way to increase deficits without inflation, that would not be desirable.

Mr. KENNEDY. If you recall, that is how I started my question, in response to Mr. Royce's question.

Chairman CASTLE. Mr. Lucas:

Mr. GREENSPAN. We have been doing this for years. I think we ought to sell tickets.

Mr. KENNEDY. Fine with me. You find a buyer.

Mr. LUCAS. Chairman Greenspan, I appreciate your comments about the educational process that is necessary to prepare us on a number of fronts. One of your comments in your written text that I found most impressive I think that relates to the basic laws of economics, you say in one instance, "Increases in pay, of course, are not inflationary as long as they are matched by gains in productivity." And then one line down you say, "Wage gains that increase unit costs and are eaten up by inflation help no one."

Is it fair to say that if wage increases are not matched with real increases in productivity, that in fact nothing is gained in the long run?

Mr. GREENSPAN. Absolutely. That is a very important fact to remember, because I think that we are all in favor, and should be in favor, of real wage gains which increase standards of living. But wage gains, as I point out, which are eaten up by inflation, are dangerous to everybody. And as a consequence of that, we have to be careful to make certain that we do not do what we did many times, decades back—but I must admit we have not done it in recent years—because I think there is an economic understanding that it is a treadmill of no value to anybody.

So it is terribly important that we make certain that productivity increases, and history tells us eventually those productivity gains will be reflected in real wages and that is what economic growth and prosperity is all about.

Mr. LUCAS. And to touch back on that education process, and I wholeheartedly agree with you, you made various comments about what is around the corner in the way of things if we do not bring

our entitlements into a reasonable position, of course, and continue to deal in a productive way with our deficits.

But looking out in the future, should we retreat away from our commitments to balancing the budget, learning to live within our means, and if we did not reform the entitlement programs, move it in a way that will save them somewhere out in the future, is it fair to say that because the surpluses from the trust funds for social security for 60 years now have been invested in Federal securities, the surpluses from the medicare trust fund have been invested in Federal securities, that we will find ourselves out there in a double trap unable to use those traditional surpluses to help fund the deficit while at the same time having those securities cashed in to provide the resources to fund those programs, that the potential strain on down the road could be tremendous?

Mr. GREENSPAN. I agree fully with that. I think that is a very thoughtful analysis, Congressman.

Mr. LUCAS. Thank you, Mr. Chairman.

So, obviously, while we have a lot of educating to do about economics both in this institution and in this country, the challenges ahead of us are real and immediate, wouldn't you say, sir?

Thank you, Mr. Chairman. And thank you, Chairman Castle.

Chairman CASTLE. Mr. Hinchey.

Mr. HINCHEY. Thank you, Mr. Chairman.

And, Mr. Chairman, it is a pleasure to see you once again and to have an opportunity to have a conversation with you. In many respects some of the things that you said this afternoon I find very comforting. For example, you focused attention on the growing gap on incomes in our country, and the potential problems that that holds for us. You focused attention on stagnating wages and in some cases declining incomes and the problems that they indicate for our future.

In the context of the questions, some of the questions have in a way directed themselves to consequences that may cause those sorts of situations to be more extreme. Mr. Frank focused on the potential for an enormous number of people to come into the work force as a result of welfare reform. We have, as you have indicated, a fairly low, in fact quite low, rate of inflation, 5.3 percent, which itself calls into question the efficacy of the NAIRU, the natural level thesis. All of this combined with the relatively low level of profit margins for corporations and the narrowing down of those profit margins, low CPI and PPI, all of this would seem to mitigate toward perhaps a relaxing of monetary policy.

Are these factors, the ones that I have mentioned, are they of concern to you? Would you be factoring these things into the next meeting of the Open Market Committee?

Mr. GREENSPAN. Congressman, we try to look at all the various different aspects of the economy. As I tried to indicate in my prepared remarks, the major issues that we are looking at are a potential slowing in economic activity. We are in the latter stages of a fairly extended expansion and you begin to buildup household assets—almost the equivalent of inventories. When you look at the patterns of consumer durables—automobiles, equipment, and others—you begin to see fairly extended buildups of assets which mean that the need for continuous high levels of additions simmers

down and that is a major factor in reducing the underlying growth in the economic activity.

On the other hand, the other type of inventories, the inventories of goods in various business establishments is at a relatively low level, and the pressure there is on the other side. So using those as just two elements of the balance, we are watching both of those relatively closely to see how the economy evolves.

But I would not want to say that one can draw a series of circumstances and say hypothetically would that be a set of issues which would, other things equal, induce interest rates to fall and another set which would cause interest rates to rise. And I recognize that it is never that simple. We are unfortunately confronted all the time with both of these forces.

But on top of all of that, it is not what has just happened or what is happening now; it is what is going to happen in the future because monetary policy does operate with a lag. And so, we are required to try to figure out what all of these factors will be doing 6 months, 9 months, or 12 months out.

Mr. HINCHEY. In that vein, let me just ask you about a paper that was recently published, a paper called "The Opportunistic Approach to Disinflation," which in effect says that you ought to have, if I understand it that is, it seems to say that you ought to have more evidence in hand before you act, rather than acting upon anticipated factors in the economy which are less tangible. You ought to have more of the ocular proof, if you will, before you take action if this particular policy were to be put into effect.

Mr. GREENSPAN. There are many versions of this so-called opportunistic monetary policy. I, frankly, think this has gotten more press than we thought it would. We thought a couple of our senior research people were publishing a highly technical paper which we thought, unlike Primary Colors, would remain anonymous, but it didn't.

Mr. HINCHEY. Neither did Primary Colors.

Mr. GREENSPAN. I realize that. I don't know actually what the general view of a lot of my colleagues is with respect to this particular proposition or related ones because we have never discussed it as a policy which we at the Federal Open Market Committee are operating with.

What we all have is a general view that the long-term goal of monetary policy should be the sustaining of price stability as a necessary condition for attaining long-term sustainable economic growth.

And if we are to ask individuals why they voted in various different ways at various different meetings or had differing views, I suspect that we would find that there are all sorts of views in the committee on that particular issue. Indeed, the several times when the issue has come up indirectly or has been raised by several of our members, you could tell by the interaction among them that there were considerable differences.

So the one thing I would say is that that is not an official policy of the Federal Open Market Committee, though I do not deny that it is held by several of the voting members of our organization.

Chairman CASTLE. Thank you, Mr. Hinchey.

Mr. Metcalf.

Mr. METCALF. Thank you, Mr. Chairman.

Recent data indicate that the amount of paper currency, that is Federal Reserve notes, in circulation is about \$400 billion, roughly. Or something over \$1,600 per each American. And that would average out to a family of four holding about \$6,000 in paper money and I believe that is way too high. I don't believe that.

This amount—you have from time to time commented that perhaps the high proportion of this money or a certain proportion is held abroad. Do you have any recent evidence to share with us on the amount held abroad?

Mr. GREENSPAN. You are quite right, Congressman. The presumption that there is \$6,000 in currency sitting in each household immediately tells you that there is something wrong somewhere. And, indeed, when we do surveys, and when we endeavor to match the flows of currency shipped abroad and shipped back, we find that a substantial amount of our currency, well over 50 percent, is held outside the United States. And an even larger percent of the growth in the currency in recent years, as best we can judge, has gone abroad. So there is an extraordinary demand on the part of foreigners to hold American currency which is even more extraordinary when you realize that we pay no interest on that.

And I guess it says something about the stability of the American system and the purchasing power of the American dollar that that much in the way of American currency is voluntarily held by foreigners.

Mr. METCALF. Well, thank you. I didn't imagine it was that high. It is a substantial amount.

Is that any threat posed to the United States? Of course, it is obligations of the Federal—the Federal Reserve notes are obligations of the Federal. Is that a threat in any way to the United States when that much currency is held abroad or is it a plus?

Mr. GREENSPAN. It is a major plus in the sense that we make something like \$15 billion a year as a consequence of that, monies that we as the Federal Reserve make and give to the Treasury.

Let me backtrack a minute. That is our total. I would say the foreign seniorage, so to speak, is about \$10 billion.

Mr. METCALF. The total amount of Federal Reserve notes in circulation has about doubled since I last asked, which was in the mid-1980's. It was \$200 billion then and roughly \$400 billion today. As the Fed has increased the money supply over the years, each year you increase the money supply depending on various factors, has any coincided with the increase in cash in Federal Reserve notes? Are these two related or is that just sort of a consequence?

Mr. GREENSPAN. Currency in the hands of the public is one element of virtually all of the money supply measures that we have, because that legal currency is wholly substitutable for demand deposits and vice versa, and if one wants to get a sense of the purchasing power in the hands of the public, leaving aside the problem of how one exactly separates the currency held abroad, from the point of view of measuring the money supply, currency is a crucial element of it.

Mr. METCALF. Do you expect the amount of cash to continue to rise; the amount to continue to rise? Or is this just something that happened due to conditions in the last 10 years?

Mr. GREENSPAN. No, it has been rising year after year, decade after decade, in part as the population increases, as nominal dollar values of retail sales, which are major elements involved in the demand domestically for currency, have increased. But in most recent years it is this demand from foreign holders which has been a major factor in the expansion of our currency liabilities.

Mr. METCALF. Thank you.

Chairman CASTLE. Thank you, Mr. Metcalf.

Mr. Bentsen.

Mr. BENTSEN. Thank you, Mr. Chairman.

Chairman Greenspan, your report and your testimony would seem to indicate that the economy is really quite good, given the downturn in late 1995, that that didn't materialize into too much; that even with a 150 basis increase in long-term interest rates that the real estate market seems to have held up; with the drought, that food prices haven't run up that much; with weather conditions; oil prices, although they have had some pressure have not been affected overall; the CPI; and unemployment as low as it is does not appear to have created a tight labor market. And based upon your response to Mr. Frank's question, I think that you said that we are not yet at a tight labor market, if I understood that.

Mr. GREENSPAN. No, I said that the anecdotal evidence that we have had over the last year or more has indicated a fairly substantial amount of tightness in the labor market. That is something which has existed for quite a while, and is clearly reflected in the statistics.

Mr. BENTSEN. So you would say we are in a tight labor market at this point?

Mr. GREENSPAN. I would say the trouble with using the words "tight labor market," is that it has a connotation that there is a single market and it is tight. I would say that we have significant evidence of tightness in the labor market. That does not mean that the whole labor market is tight, but there are very important areas where it is difficult to get people employed, not only in fast food restaurants, but even more importantly in a lot of skilled areas where employers are having difficulty in finding people who are capable of doing the jobs they need.

Mr. BENTSEN. Would you say we are at full employment or just at full employment regionally?

Mr. GREENSPAN. I am not sure what that term means, and I say that because I have lived with it throughout my professional career and it is a very fuzzy concept. I mean, first of all, what we are talking about in the United States, as I point out implicitly, is a lot of regional labor markets—as you know, there are certain labor markets in which the unemployment rate is under 2 percent, and there are others which it is well over 6 and 7 percent. The market is a very complex, dynamic sort of affair and I have found that simple characterizations, oversimplistic ones, really don't capture what is happening.

Mr. BENTSEN. Given where the economy is today and the anecdotal evidence that you have, would it be safe to assume that perhaps the unemployment rate could go slightly lower and that the growth rate could reach the upper band of your range or slightly higher and would that then cause the Fed to take any action?

Mr. GREENSPAN. As I said in my prepared remarks, Congressman, it is not the absolute level of the unemployment rate, nor any evidence of operating rates in industry, which induces us to move one way or the other. It is evidence of the symptoms—the actual tightness of a type, and pressures of a type, which create instabilities.

Mr. BENTSEN. But heretofore you haven't seen that?

Mr. GREENSPAN. Well, we have seen some of it in the sense that as I indicated in my prepared remarks, early evidence that something may be happening. For example, I mentioned the notion that the rise in the employment cost index in the first quarter, for wages and salaries may suggest, and I emphasize the word "may," that this apparent very soft rate of increase, very low rate of increase in wages and salaries per hour may be coming to a close for reasons which I discuss in some detail in my prepared remarks.

But what we look at is not so much the measures of capacity utilization or labor market tightness, but the actual instabilities that they are supposed to create which is where the problems are.

If we get low unemployment rates and we do not see the instabilities or tight product markets which do not engender any increase in the lead times on the delivery of products, we are not under stress or not enough under stress to be concerned about it. It is the stress which we respond to, not the symptoms of the stress. They are not the proxies of the stress.

Mr. BENTSEN. So now it is symptoms and perhaps stress, but we are still in the symptoms stage?

Mr. GREENSPAN. Well, I don't want to get too concrete or too specific in that area, because that gets to the process by which we will or will not make decisions. And I don't think that I should be doing that outside the context of a meeting with my colleagues.

Mr. BENTSEN. Thank you. Thank you, Mr. Chairman.

Chairman CASTLE. Thank you. Mr. Bachus.

Mr. BACHUS. Thank you, Mr. Chairman.

Chairman Greenspan, I want to follow up on Mr. Bentsen's line of questioning and sort of throw something else in the equation. You have described this economy as one that could go either way.

Mr. GREENSPAN. That is correct.

Mr. BACHUS. And you say that very small changes could unbalance the system and move it in different directions. I see an economy in the balance. And you said over in the Senate that especially in regard to the labor markets, you saw some evidence that this good low inflation that we have had could be slipping away or let's just say that inflation could be creeping up in the labor statistics.

Mr. GREENSPAN. Well, remember that we have to be careful. We are seeing increases in wages, but we are not seeing increases in prices. And the question essentially that we are endeavoring to understand is, are we looking at productivity increases or are we looking at contractions in profit margins? Both tell us different stories.

But you are quite correct in the sense that the point I was making in the Senate is an important one—from the point of view of evaluating the economy because I think we are approaching some form of fulcrum where, as I said there, the economy can go in two significantly different ways, depending on the evolution of very small changes. And these changes are too small for us to be able

to sense them in advance. So what we are trying to do is to monitor them as closely as possible to see whether our expected slowing down of economic activity is occurring. And as I mentioned in the Senate, it is too soon to tell.

Mr. BACHUS. Let me throw this, you have talked about the ECI index and the average wage, hourly wage. You are going to be looking at those figures, you are going to get some more ECI numbers at the end of this month, and I know you are going to be looking at those. Let me throw something else in the equation: Minimum wage.

Sometimes it may not be as much of a factor, but we have legislated a minimum wage increase, at least it is over in the Senate. It comes out. It is going to be inflationary. Do you have to raise interest rates to prevent that minimum wage increase from being inflationary? I mean, it would be inflationary—you would have to compensate with it some way. Have you considered that?

Mr. GREENSPAN. Sure, we have. We have looked at a number of different factors which both add to the inflation rate and subtract from the inflation rate. And what we do is monitor all of the various different elements but only respond to a total effect.

So I would not say that we would automatically respond to, say, a government deficit per se in and of itself, nor would we respond by itself to a rise in the minimum wage or something else of that type.

However, all of those factors do combine into making the economy either inflationary or not inflationary.

Mr. BACHUS. Well, an increase in the minimum wage would be inflationary.

Mr. GREENSPAN. Well, I don't see how it can be otherwise. It is only a question of whether it is de minimis or something significant. Most of the analysts who have looked at the current one think the effect is relatively small.

Mr. BACHUS. What, in a percentage of an interest rate, what would you have to raise the interest rate—have y'all looked into that—to compensate for a rise in the—

Mr. GREENSPAN. As I indicated before, we do not focus in those terms. I don't deny that you can set up some simplistic econometric model that has the minimum wage as one variable and interest rates as another. The question is: When do you raise interest rates to offset whatever inflationary impact of the minimum wage is? It is an interesting academic exercise and it may go well in Economics 101, but it has nothing to do with the real world.

Mr. BACHUS. You mentioned wage gains eaten up by inflation really are not wage gains. And it would be a shame if we raise the minimum wage at this time with our economy sort of in the balance, if you had inflation and you raised interest rates, or either you had an increase in inflation rates. It is something that I would hope is being considered, anticipating that it may in fact become law.

Mr. GREENSPAN. We follow all aspects of wage-price structure as best we can.

Mr. BACHUS. Is it a concern to you?

Mr. GREENSPAN. I don't know how to answer that, in a sense that everything that happens is a concern, and what we have to

do is balance a whole series of different forces as we see them to make judgments about what ultimately will determine policy. But if you are asking me do we look at all of the various aspects which ultimately get into the question of whether we have an unstable inflationary economy or not, the answer is that is our job.

Mr. BACHUS. Thank you.

Chairman CASTLE. I believe everybody—Mr. Lazio, I am sorry, sir. You snuck in on me.

Mr. LAZIO. Chairman Greenspan, nice to see you again. I was reading through your statement and noticed the reference to capacity utilization and industrial capacity utilization. One of my questions is, is that becoming less of a reliable indicator with the technological changes that are taking place and its effect on inventory with respect to it being an indicator of inflationary pressures?

Mr. GREENSPAN. It is hard to say. My suspicion is that it is but I can't prove it.

What we do know is that the concept of the operating rate is not unambiguous. In a sense if you ask an auto assembler what rate they are operating at, he or she would say, well, without increasing another shift we are operating at X. Well, we could put another shift on or something of that nature, and, therefore, the capacity of manufacturing to take that as a specific part of the economy, is really not a fixed number.

The best way I look at it is that it is sort of a rubber sheet. That is, the sheet is up here. When the production levels are down here, there is no problem at all. As you move up to the rubber sheet, you feel it, but you can still move higher but the strain gets greater and greater and production problems become more extensive, lead times on deliveries begin to stretch out, commodity prices begin to move up because there are shortages. But it is not a specific number. It is a continuum that gets tighter and tighter, the higher up you go.

And what I am not clear on is whether the new technologies which have enabled different types of production processes to occur, have changed things. Whereas previously we used to have a full production schedule which required the whole production line to be moving and you were making the same sort of product, one of a kind, now we have the capabilities of having batch processes which enable, for example, profitable production of, say, 15 or 20 units whereas 20 years ago you would not get any profit until you were at 150 units.

Mr. LAZIO. In the 1950's and 1960's we saw our savings rate three times higher than it is right now and productivity at least twice, maybe three times of what it is right now. We have had this technological progress that we have particularly in the industrial sector, and measured in many different ways, including things like computers per worker relative to some of our most fierce competitors, Japan, for example. And yet, we have not seen the boost in productivity that we saw in the 1950's and 1960's.

And my question is, why do you think that is the case? And just as a follow-up from the matter of GDP growth, and again using the context of the 1950's and 1960's, relative to where we are now, are we in a lag or will we get there?

Mr. GREENSPAN. Well, first of all, when you look back at the 1950's and 1960's you have to remember that the labor force was growing quite a good deal faster than it is today. And since it is a proxy for the overall growth rate, you add labor force growth to productivity growth to get the total growth. A significant percent of the slowdown that has occurred in economic growth is attributable to this marked slowdown in labor force growth.

We have also had a slowdown in productivity growth, although it is about 50-50, as I recall, measuring where the growth shortfalls are.

The productivity growth has slowed down in large part because the saving rate is down and therefore investment is less. Nonetheless, there is some offsetting evidence that is probably an acceleration in capital productivity, meaning we are employing whatever capital we manage to build on the basis of our low saving more efficiently. And as a consequence of that, we do get a higher level of productivity than we might well have gotten in an earlier period.

Nonetheless, we are clearly going through a very unusual period where if you look at the dynamics of the economy, you would say why are we not having a much more rapid set of productivity numbers than we have? And it is either that we are spinning our wheels for a lot of this frenetic activity and going nowhere or—and this is what I expect is really the case—that the productivity acceleration is being delayed in a manner not dissimilar to the way the productivity gains from the development of the electric motor were delayed in the early part of the 20th century.

So, I think productivity is probably growing a little faster than our numbers show because our numbers are deficient. But mainly the infrastructure has not been fully rebuilt for the new high-tech computer-telecommunications age. When that happens, as indeed has happened with the electric motor in the 1920's, the national productivity figures, in my judgment, are very likely to accelerate.

Mr. LAZIO. Mr. Chairman, I know my time has run out, I would—if you would entertain a unanimous consent request for one additional question, I have one additional question.

Chairman CASTLE. Do you think you can do it in 1 minute, sir?

Mr. LAZIO. I think I can.

Yesterday Laura D'Andrea Tyson noted that homeownership rates nationally are nearing an historical high. There have been a number of suggestions as to why that may be the case, ranging from tweaking FHA criteria for down payments, to some collaborative models with players involved.

I wonder if you have an opinion as to what the most significant factor might be for us being at the lofty levels we are now in in terms of homeownership? If in fact that is—well, it seems to me it is clearly the case that interest rates are the most significant impact on homeownership levels in the last couple of years, although we are beginning to see an increase in the last few months in mortgage rates on 30-year mortgages.

Mr. GREENSPAN. I think, as Dr. Tyson said, that clearly low interest rates have engendered a fairly significant level of new housing starts for single family homes which generally is a proxy for homeownership, and clearly with the fairly slow pace of increase in the price of homes, affordability is in reasonably good shape in the

sense that at current interest rates and prices, the average American person is in a far better position to buy a home than his or her counterpart was, say, a generation ago.

Mr. LAZIO. Primarily because of interest rates?

Mr. GREENSPAN. I would say it is largely because of interest rates but also clearly affordability, meaning the relationship between a person's income and the cost of the house, is also not an insignificant issue here as well.

Mr. LAZIO. Thank you, Mr. Chairman.

Chairman CASTLE. A couple of Members, if you could bear with us, Mr. Chairman, have additional questions, including me, if we could take just a few more minutes. We will try to keep this segment to less than 5 minutes each.

I would like to ask one question about this whole inflation concept that you are dealing with. A number of observers are suggesting that the Fed will be forced to raise interest rates soon because the economy had a surprising spurt of growth in the first half of the year. If the analysts are to be believed, the second quarter growth was probably in the range of 3.5 to 4 percent in annual rate. It wasn't too long ago when growth any slower than that would have been considered unacceptable. Now we are told that the economy's so-called potential growth rate is only 2.5 percent and that higher is inflationary. Markets appear to accept this linkage as gospel with long-term interest rates rising on any sign of stronger growth because they believe that the Fed will act to slow growth.

Is it your opinion that a growing economy and rising levels of job creation are inflationary and is it really the Fed's responsibility to keep growth from rising above an arbitrarily determined potential growth rate?

Mr. GREENSPAN. As I said to this subcommittee in February, and I repeated today, it is not our job—in fact, it would be most inappropriate for us to arbitrarily slow growth on the basis of some statistical measure which is more of a proxy of the real world. We don't know what the actual growth rate is because we think there is a measurement problem here that our data are not, as best I can judge, really capturing. The changes that are occurring in the service areas of our economy are doing far better in my judgment than the data show. I think, for example, we are not capitalizing a good deal of software which if we were would add to the GDP.

There are a number of other areas which are involved in the measurement process. I wish the Bureau of Economic Analysis had more resources to get a better number. But I do think that they are producing numbers at this stage which probably underrepresent the true growth rate.

Having said that, the issue of what the growth rate is, is something which we are interested in, but to which we do not react. What we act upon are evidences of strain in the economy and the types of symptoms which create instabilities whatever the growth rate.

So, our view is that we are looking at such things as, as I have indicated before, shortages of various different types of materials, lead times on deliveries, the stretching out of overtime hours, all evidences that the economy is under strain. It is that to which we

respond, wholly independently of what the economy's growth rate is at that particular point in time.

Chairman CASTLE. Thank you, Mr. Chairman. Mr. Bentsen.

Mr. BENTSEN. Thank you, Mr. Chairman.

Mr. Greenspan, two areas in your report where you don't show a strain are in multifamily housing, where you show an increasing vacancy rate, at least on a regional basis, and some retention, and in retail commercial real estate as well. Are those significant? And combined with—this is a whole other area, other sector—but combined with the drought and the potential impact on the farm economy, are these areas where there is slack in the economy that we ought to be concerned about?

Mr. GREENSPAN. I don't think we ought to be concerned because there is also slack in certain areas of the economy as you shift from one set of resources to the other. It is true the obverse of the issue of the rising homeownership rate is that rental-type housing demand has eased off. One would expect that to be the case and that is not something that we should look at with chagrin since we consider homeownership a desirable value.

Mr. BENTSEN. And no concern for any excess speculation in real estate development in those areas?

Mr. GREENSPAN. Certainly nothing even remotely resembling what we saw, as you know, a decade ago.

It is hard to say. I have heard stories of certain regional areas where there is certain speculation in construction. That is areas where you may find that rental space is in excess, but still a lot of building is going on because they don't believe that that excess in any way is competitive with new types of stores which are going up and so far, I must say, that those who argue that seem to have turned out to be more right than wrong.

If you are asking me do I see any generalized excess in nonresidential building, no, I do not.

Mr. BENTSEN. And very quickly in the import section you talk about the Mexican economy, which is showing signs of recovery, a good first quarter. But our trade imbalance with Mexico has remained constant. Are we still seeing a growth in U.S. exports to Mexico?

Mr. GREENSPAN. After the sharp decline, I think we are seeing some signs of the Mexican—

Mr. BENTSEN. Are we back on track where we were prior to the December 1994 period?

Mr. GREENSPAN. No, not back to the levels we were.

Mr. BENTSEN. But we are moving back in that direction?

Mr. GREENSPAN. I assume that we are moving. There are indications of pick up in your area, that truck traffic going south toward the border has very materially picked up. I assume that is a measure of the fact that things are beginning to improve in a noticeable way.

Mr. BENTSEN. It is helpful to us who fully support that type of activity, versus those who say that NAFTA has been a failure. But it would appear that it is coming back.

Mr. GREENSPAN. I am being told that we may be back—in dollar nominal terms—to the levels that we were at before we went into the deep decline.

Mr. BENTSEN. But given the good job that you have done on inflation over the last several years, nominal isn't all that bad compared to where it could have been.

Mr. GREENSPAN. Thank you.

Mr. BENTSEN. Thank you, Mr. Chairman.

Chairman CASTLE. Mr. Leach.

The CHAIRMAN. No questions, Mr. Chairman.

Chairman CASTLE. Mr. Metcalf. Mr. Bachus.

Mr. BACHUS. Chairman Greenspan, I have written down the 30-year rate on bonds. It hit a 22-year low of 5.77 percent in October of 1993. It went up above 8 percent in November the next year to 8.16 percent, back under 6 percent in December of last year, and now up above 7 percent. Pretty good gyrations in the long-term of bond yields and the prices of the bonds.

I am disturbed by that. I don't know that that is a good thing for the markets. Also, knowing that we have insufficient private investment domestically and really that foreign central banks are buying a lot of our Treasury securities and that is really keeping interest rates low and we basically are becoming dependent on this foreign investment, it scares me that these gyrations may not only raise the cost of homeownership, the cost of borrowing by corporations, the cost to the government in paying off the deficit is a cycle up and down, but also there is some fear I think that has been expressed that foreign investors, it may have a negative effect on them.

As you know, and I am going through some of these things, we have got a large external deficit. We have got—the latest figure out of the Commerce Department last month, I guess for May, said that we had a deficit of \$10.9 billion and that even in light of the fact that our deficit with Japan has come down, and we have got record exports. So I don't see that ending any time. And I say all of that to say—to preface all of that as background for this question:

You have got a policy of changing your short-term interest rate targets only at the scheduled open market committee meetings. Is that wise?

Mr. GREENSPAN. No, we have chosen to do that in the recent past, but earlier we have moved quite often between meetings and indeed rarely moved at meetings. It depends on the nature of the monetary environment with which we are dealing. I would expect at some point we will alter again—I don't know when and I don't wish to indicate when, even if I did know—but there is nothing sacrosanct about moving only at meetings. We would prefer to move only at meetings in certain circumstances. And those circumstances are indeed what has prevailed for the last year and a half.

But as circumstances change we may choose to alter that. There is nothing that binds us to any particular timeframe since we have mechanisms to alter our monetary policy with virtually no lead time if we so wish.

Mr. BACHUS. I know that Germany actually makes short rate fixing—they consider that on a 2-week basis. The Fed has these open market meetings eight times a year, and so that was what my concern was, and I call that a policy, it may have been almost a practice or becoming more expected, and I am glad to hear that that

is not something that you want necessarily, if the data dictates otherwise.

Mr. GREENSPAN. Yes.

Chairman CASTLE. Thank you, Mr. Bachus. Mr. Metcalf.

Mr. METCALF. Thank you, Mr. Chairman.

Somebody said to me once, and I am just asking you to comment on this, this might be a problem. The Fed today has the power to make the decision as to how much money should be created each year. In addition, the Fed, as I understand it, has the power to create the money, whether it is the Fed or the banking system. You might like to comment on that. Is that any kind of a problem for the same entity to have the decision how much should be created and the ability to create it?

Mr. GREENSPAN. The first is a policy decision; the second is technical. And in that regard I don't envisage any difficulty in implementing both of those decisions in the future.

Mr. METCALF. And would you say it is the Fed or the banks that create the money?

Mr. GREENSPAN. It is the banks, but we, in effect through our reserve expansions or our contractions very importantly over the long run, affect the supply of money. That is, in the immediate sense, it is the banks which, by making loans, create deposits, which is the base of the money supply. But over the long run, it is we who determine what the reserve base is. And while certainly in the short-run, or even for a protracted number of quarters, you can get the money supply deviating quite significantly from what reserves would imply, over the very long-run, what the reserve base is will determine what the money supply is.

Mr. METCALF. OK.

Chairman CASTLE. Thank you, Mr. Metcalf.

And we thank you, Chairman Greenspan. You always come here very willingly and answer questions quite thoroughly, sometimes even the answers that we want. And we appreciate that. But most importantly we appreciate the very good job that you do and your staff does day in and day out, so we appreciate you being here.

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

[Whereupon, at 4:40 p.m., the hearing was adjourned.]

APPENDIX

July 23, 1996

House Committee on Banking and Financial Services

Subcommittee on Domestic and International Monetary policy

Humphrey-Hawkins Hearing with testimony from Alan Greenspan,
Chairman of the Federal Reserve Board, 2:00 p.m., July 23, 1995
Room 2128 Rayburn House Office Building

Chairman Michael N. Castle's Opening Remarks:

The Subcommittee will come to order.

The Subcommittee meets today to receive the semi-annual report of the Board of Governors of the Federal Reserve System on the conduct of monetary policy and the state of the economy, as mandated in the Full Employment and Balanced Growth Act of 1978.

Chairman Greenspan, welcome back to the House Committee on Banking and Financial Services, Subcommittee on Domestic and International Monetary Policy.

With most of my colleagues, I am delighted to see your Chairmanship of the Federal Reserve System Board of Governors confirmed for another term. Our nation is indeed fortunate that men of your caliber are still willing to endure the criticism that sometimes comes with serving in a position that is so critical to our nation's economy. I believe you have done an excellent job as Federal Reserve Chairman.

Having said that, I think there are some serious questions that all of us responsible for the monetary and fiscal policy of the U.S. Government must address. The underlying premise of all these questions is: are we doing everything we can to help all working Americans?

Currently, the US economy is in its sixty-fifth month of economic expansion, approximately fourteen months beyond the average expansion but still far short of the modern records. This is good news. And, there is no doubt that this economy is producing excellent results and opportunity for --- Shaquille O'Neill and corporate executives with generous stock options. However, many middle-class Americans continue to feel as though they are running in place. They are concerned about downsizing, outsourcing, and a perception that the well-paying jobs that are being eliminated are not being replaced by new ones. They are concerned about whether they will be able to afford to send their kids to college, or to support aging parents, or to prepare adequately for their own retirement.

I am not laying the blame for this widespread feeling of middle class economic anxiety solely at the feet of the Federal Reserve. Nor am I suggesting that the Fed can create economic prosperity for every American through changes in monetary

policy. Nevertheless, we do need to discuss whether we could be doing more to help the average working American by promoting economic growth at a faster rate.

With the federal deficit at the lowest level in years and inflation very quiet, by the Fed's own analysis, why can't the Federal Reserve attempt to boost growth at a faster pace without igniting inflation? Despite some short-term problems in gasoline and food prices, we seem to be maintaining remarkable price stability. Some observers are suggesting that inflation has been squeezed out of the economy and that growth will slow in the second half of this year. If this is true, why not seek to give the economy a boost through lower rates?

Public officials of both parties are debating how to increase economic growth in a manner that creates the broadest benefits for our citizens.

In seeking to promote economic growth and opportunity for all Americans, how much of this important goal is the responsibility of the Federal Reserve System and what should be the responsibility of the Congress and the Administration?

Since we last met in February it appears that American businesses have sold their excess inventory. Can this be succeeded by increased product demand and more growth without inflation? If inflation remains quiet, should the Federal Reserve take action to allow the economy to grow at a faster rate?

As I noted, I do not mean to suggest that the Federal Reserve Board is solely responsible for the economic well-being of our citizens. I am interested in gaining your views on the progress Congress and the President have made in reducing the deficit and the work that still needs to be done. No one can argue with the fact that Congress has made two years of excellent progress in bringing the discretionary spending portion of the budget under control. However, we have not dealt with the largest entitlement programs which make up over 50% of the Federal budget. Uncontrolled growth in these programs threatens to send the deficit sharply up again, as well as jeopardize the important protections that Medicare and Medicaid provide for our older and low-income neighbors. This Subcommittee is very interested in your current view of the deficit battle and the looming entitlement tidal wave.

As you state in your testimony, the American economy has performed well in 1996, the issue we must now face is what else needs to be done to ensure that as many of our citizens as possible can benefit from this good performance.

Chairman Greenspan, as you consider all our questions today, I ask you to keep in mind this problem. How can the generally good economic news you are reporting and commenting on, be translated into better jobs and a brighter future for those Americans who currently feel that they are not benefiting from the economic growth we are witnessing.

As always, we are prepared for a lively discussion.

SUE W. KELLY
19TH DISTRICT, NEW YORK

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Opening Statement before
the Subcommittee on Domestic and International Monetary Policy
Humphrey-Hawkins Hearing
July 23, 1996

Thank you, Mr. Chairman, I would like to welcome Chairman Greenspan to this subcommittee hearing today. I am sure that we are all very anxious to discuss the Federal Reserve's conduct of monetary policy. I will make my remarks brief so that we might have ample time for questions.

As we all know, Congress has two constituencies, the American people and those in our respective districts. I represent those in the 19th district of New York and would like to wear that hat for a moment.

Some years ago if you were to come to the beautiful Hudson Valley, you would see people building homes and a generally upbeat economic growth. Currently, however, mortgage lending and construction is down in my area and does not appear to be increasing. Lower interest rates could help those people fulfill their American dream, of owning a home, while at the same time providing much needed jobs in my area.

While lower rates may help our economy in the short run, they are not long-term answer. They can only remain low so long as the economy does not show signs of inflation.

I believe we will see lower interest rates when the deficit is under control. It is clear that Wall Street reacts positively when the deficit is reduced and that this effects other aspects of monetary and fiscal policy. Congress must continue on the road toward sound fiscal policy, not election year fixes and rhetoric, to help bring long term economic growth and expansion.

In the past, Chairman Greenspan has agreed that reducing the deficit was good policy. I would urge my colleagues to examine this and similar information that shows the necessity of acting today to rein in deficit spending, so that we can sustain long term economic growth.

Thank you, Mr. Chairman, and I yield back the balance of my time.

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Congress of the United States
House of Representatives
Washington, DC 20515-3002

Statement of Congressman Frank A. LoBiondo
Subcommittee on Domestic and International Monetary Policy
Semiannual Monetary Policy Oversight Hearing
July 23, 1996

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REGULATION AND PAPERWORK
TAX AND FINANCE

Thank you, Chairman Castle. I, too, would like to extend my welcome to Chairman Greenspan. I would also like to take this opportunity to congratulate the Chairman for his recent confirmation for a third term. He is well on his way to breaking the record of almost nineteen years set by Chairman Martin. I am pleased that the President and the Senate acted to retain the Chairman who has presided over a sixty four month long economic expansion.

While on a national basis it is true that we have seen economic expansion for more than five years now, that expansion has been lagging in the mid-Atlantic region. According to the Philadelphia Federal Reserve, it is only in the past three years that New Jersey, Pennsylvania, and Delaware have seen significant job growth. In addition to the late start, the recovery in this region has lagged behind that of the national average. In 1995, New Jersey saw job growth of one and one tenth (1.1) percent while the national average was more than one and one half (1.5) percent for the same period. I believe that we should be working to do what we can to bring that up to at least the national level.

More recently, Southern New Jersey has seen some more positive indicators despite the severe weather of early 1996. For the first quarter of the year, forty-six percent of the firms polled in the South Jersey Business Survey of the Philadelphia Federal Reserve, reported higher sales and general activity at their companies. Prices have continued to show only low levels of upward pressure. Even more recent data indicates increases in demand for manufactured goods and continued improvement in manufacturing conditions for the region.

I commend Chairman Greenspan for his efforts to allow the economy to expand while controlling inflation. The growth that we have seen can be attributed partly to the optimism for budget deficit reduction. Last week's estimate by the Administration of the federal deficit for fiscal year 1996 should not lead us into a false sense of optimism. This reduction from \$176 billion to \$117 billion can be attributed largely to stronger economic forecasts and higher than expected federal income tax receipts. In fact, according to the report provided to the Subcommittee by the Chairman, federal receipts increased eight (8) percent for the first eight months of the fiscal year. This kind of deficit reduction is not the kind needed in order to foster continued economic growth. Had this Congress not acted so decisively over the past year and a half in rolling back some of the excessive spending so traditional in Washington, we would have seen dramatically higher deficits and that would have surely been to the detriment of economic growth.

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While this Subcommittee and our counterpart in the Senate continue to fulfill our oversight responsibility for the monetary policy set by the Federal Reserve, there is very little that we can do to affect this policy. This situation is exacerbated by the current oversight structure and its focus on monetary aggregates. These aggregates do not provide a great deal of information to this Subcommittee. Given this situation, we must then look to the other information provided in the Federal Reserve's monetary policy report. In evaluating the data provided in this report, the Congress must not overlook the very significant role that it can play in affecting monetary policy through fiscal policy. As we proceed with the remaining appropriations bills and the budget reconciliation, I would urge my colleagues to give consideration to the lower interest rates that will come with a reduced federal deficit and the positive impact that such rates will have on the economy.

Again, welcome before the Subcommittee Chairman Greenspan. I look forward to hearing your testimony as well as your always interesting answers to the questions put to you. Thank you, Mr. Chairman. I yield back the balance of my time.

Statement by
Alan Greenspan
Chairman
Board of Governors of the Federal Reserve System
before the
Subcommittee on Domestic and International Monetary Policy
Committee on Banking and Financial Services
U.S. House of Representatives

July 23, 1996

Introduction

Mr. Chairman and other members of the Subcommittee, I appreciate this opportunity to discuss the performance of the U.S. economy and the conduct of monetary policy.

Review of the First Half of 1996

Nineteen-ninety-six has been a good year for the American economy. By all indications, spending and production were robust in the first half of this year. GDP increased at a 2-1/4 percent annual rate in the first quarter. Partial data suggest a significantly stronger increase in the second quarter as the economy, as expected, accelerated out of its soft patch around the turn of the year. During the second quarter, industrial production rose at an annual rate of 5-1/2 percent, and manufacturers are currently running their plant and equipment at utilization rates that are a touch above their postwar averages. About 1.4 million workers have been added to nonfarm payrolls in the first six months of the year, and the unemployment rate fell to 5.3 percent in June.

Even though the U.S. economy is using its productive resources intensively, inflation has remained quiescent. The core inflation rate, measured by the consumer price index less food and energy prices, at a 2.8 percent annual rate over the first six months of the year, is about 1/2 percentage point slower than the same period one year ago. While increases in energy prices have boosted the overall CPI inflation rate to 3.5 percent thus far in 1996, a partial reversal of the jump in petroleum product prices observed in the first half appears to be in train. I shall be discussing in greater detail later some possible reasons for this favorable inflation experience

and offering some thoughts about how long it might last.

Economic activity thus far this year has turned out to be better than many analysts expected. An important supporting factor, as I pointed out in February, was favorable conditions in financial markets in the latter part of 1995 and early 1996. Intermediate- and longer-term interest rates were low. Among the influences accounting for this were optimism about prospective budget-deficit reduction, small easings of the stance of monetary policy in the second half of 1995 and early 1996, and the possibility of a further moderation in credit demands owing to a potentially soft economy. Credit remained readily available, with banks and other lenders in financial markets generally pursuing credit opportunities aggressively. And a rising stock market reduced the cost of capital to businesses and bolstered household balance sheets.

Looking forward, there are a number of reasons to expect demands to moderate and economic activity to settle back toward a more sustainable pace in the months ahead.

First, the bond markets have taken a turn toward restraint this year as they have responded to incoming data depicting an economy that was stronger than had been anticipated. Intermediate- and longer-term interest rates have risen from 1 to 1-1/4 percentage points since January.

Second, the value of the dollar on foreign exchange markets has appreciated significantly on a trade-weighted basis against the currencies of other industrial countries over the past year or so. This appreciation importantly reflects the market

perception that the U.S. economy has been performing better than those of many of our major trading partners. The rise in the dollar helps to keep down price pressures, but it also tends to divert domestic demand toward imported goods and damp exports some.

Third, the support to economic growth provided by expenditures on durable goods, both for household consumption and business fixed investment, is likely to wane in coming quarters. Consumer spending in the past few years has been boosted as households have made up for the purchases of big-ticket items that they had deferred during the recession and the early, weaker phase of the recovery. Five years after the business-cycle trough, however, we should expect that this pent-up demand has been largely exhausted. Moreover, many households have built up sizable debt burdens in recent years, and coping with debt repayments could hold down their spending. The business sector has been adding considerably to capacity; opportunities to invest profitably in new capital should be increasing less rapidly as final demand slows some.

While these are all good reasons to anticipate that economic growth will moderate some, the timing and extent of that downshift are uncertain. We have not, as yet, seen much effect of the rise in interest rates on, for example, the housing market. In many other aspects, financial market conditions remain quite supportive to domestic spending, and the economies of many foreign countries are showing signs of achieving more solid growth, which should help support our export sales. Moreover, and perhaps of most relevance, a desire to build inventories could add

significantly to production in the near term. Data available for 1996 through May show that inventories were reduced relative to sales and are now fairly lean in many important industries. Although the use of just-in-time inventory and production systems encourages purchasing managers to keep stocks lean, any evidence that deliveries of previously ordered goods are being delayed for extended periods would quickly alert companies to the need for higher safety stocks. Indeed, indications of some mounting delivery delays in June do raise warning flags in this regard. The reversal of earlier draw-downs in inventories, of course, could potentially impart an important boost to incomes and production as we enter the second half of the year. The economy is already producing at a high level--and some early signs of pressures on resources are emerging, especially in the labor market.

The Recent Behavior of Inflation

There are, to be sure, legitimate questions about how much margin in resource utilization currently exists. Historically, current levels of slack, measured in terms of either the unemployment rate or capacity utilization, have often been associated with a gradual strengthening of price and wage pressures. Yet, the recent evidence of such pressures is scant. I have already noted the lack of a distinct trend in the growth rate of the so-called core CPI. Increases in more comprehensive, and perhaps more representative, chain-weighted measures of consumer prices, based on the national income and product accounts, actually have continued to edge lower. The same is true of a still broader measure of price change, the chain-weighted price index for gross domestic purchases, which covers both consumers and businesses.

Although nominal wage rates have accelerated recently, the rate of increase has been lagging significantly behind that predicted on the basis of historical relationships with unemployment and past inflation. And domestic profit margins have held up far later into this economic expansion than is the norm.

Have we moved into a new environment where inflation imbalances no longer threaten the stability and growth of our economy in ways they once did? The simple answer, in our judgment, is no. But the issue is not a simple one.

As we have discussed before, powerful forces have evolved in the past few years to help contain inflationary tendencies. An ever-increasing share of our nation's workforce uses the tools of new technologies. Microchips embodied in physical capital make it work more efficiently, and sophisticated software adds to intellectual capital. The consequent waves of improvements in production techniques have quickly altered the economic viability of individual firms and sometimes even entire industries, as well as the market value of workers' skills. With such fast and changeable currents, it is not surprising that workers may be less willing to test the waters of job change. Indeed, voluntary job leaving to seek other employment appears to be quite subdued despite evidence of a tight labor market. Because workers are more worried about their own job security and their marketability if forced to change jobs, they are apparently accepting smaller increases in their compensation at any given level of labor market tightness. Moreover, a growing share of all output competes in an increasingly global marketplace, allowing fixed costs to be spread over ever broader markets, promoting

greater specialization and efficiency, and enhancing price competition.

As I indicated in February, these forces, to the extent that they are operative, exert a transitory, not permanent, effect in reducing wage and price inflation. These trends leave the *level* of both wages and prices lower than historical relationships would predict. But, at some point, greater job security will no longer be worth the further sacrifice of gains in real wages. The growth of wages will then again be more responsive to tightness of labor markets, potentially putting pressure on profit margins and ultimately prices. Moreover, the reductions in unit costs that are a consequence of the ever expanding global reach of many companies must ultimately be bound by the limits of geography. To be sure, production and sales will continue to be diversified across geographic areas, but the world can only figuratively shrink so far. At some point, possibly well into the future, increasing returns from ever-greater globalization must also ebb.

Perhaps reflecting these unusual influences, we have yet to see early signs in prices themselves of intensifying pressures, despite anecdotal and statistical evidence that the amount of operating slack in our economy has been at low levels by historic standards for some time. Among the encouraging indicators, industrial commodity prices have remained roughly flat and the list of reported shortages of materials has been exceptionally small. This pattern is consistent with the view that American businesses, by and large, have felt comfortable that inflation has been subdued and offers little evidence of the advance buying and expanded commitments that would come if businesses were expecting significant price pressures in the reasonably near future.

Nonetheless, there are early indications that this episode of favorable inflation developments, especially with regard to labor markets, may be drawing to a close. The surprising strength in the employment cost index for wages and salaries in the first quarter raises the possibility that workers' willingness to surrender wage gains for job security may be lessening. Wage data since March have been somewhat difficult to read. Average hourly earnings clearly accelerated in the second quarter. However, in looking at those figures, one must be mindful that they can reflect not only changes in wage rates but also shifts in the composition of employment. And in recent months, a significant part, although not all of the pickup, has been accounted for by a tendency for employment to shift to relatively high-pay industries, such as durable goods manufacturing. Whether such shifts also imply a correspondingly higher level of output per worker will determine whether unit labor costs also accelerated to impart upward pressures to price inflation. Increases in pay, of course, are not inflationary so long as they are matched by gains in productivity. Without question, we would applaud such trends, which increase standards of living. However, wage gains that increase unit costs and are eaten up by inflation help no one, and ultimately place economic growth in jeopardy.

Clearly, in this environment, the Federal Reserve has had to become especially vigilant to incipient inflation pressures that could ultimately threaten the health of the expansion. The relatively good inflation performance of the past few years, as best we can judge, owes in part to transitional forces that are only temporarily

damping the wage-price inflation process. We cannot be confident that we can ascertain when that process will come to an end. This makes policy responses more difficult than usual, because, as always, the impact of policy will be felt with a significant lag. Of course, if the economy grows so strongly as to strain available resources, transitional forces notwithstanding, history persuasively indicates that imbalances will develop that will bring the expansion to a halt.

The FOMC's Outlook for the Remainder of 1996 and 1997

The forecasts of the governors of the Federal Reserve Board and presidents of the Federal Reserve Banks for economic performance over the remainder of this year and the next reflect the view that sustainable economic growth is likely in store. The growth rate of real GDP is most commonly seen as between 2-1/2 and 2-3/4 percent over the four quarters of 1996 and 1-3/4 to 2-1/4 percent in 1997. Given the strong performance of real GDP in the last two quarters, this outcome implies slower growth in the second half of this year. Nonetheless, for the remainder of this year and the next in these projections, the unemployment rate remains in the range of the past 1-1/2 years. Inflation, as measured by the four-quarter percent change in the consumer price index, is expected to be 3 to 3-1/4 percent in 1996. The governors and bank presidents, however, view the prospects for inflation to be more favorable going forward. The expected reversal of some of the recent run-up in energy prices would contribute to that result, but policy makers' forecasts also reflect their determination to hold the line on inflation. The central tendency of their inflation forecasts for 1997 is 2-3/4 to 3 percent, returning to the range from 1991 to 1995.

The Pursuit of Price Stability

We at the Federal Reserve would welcome faster economic growth, provided that it were sustainable. As I emphasized last February, we do not have firm judgments on the specific level or growth rate of output that would engender economic strains. Instead, we respond to evidence that those strains themselves are developing. Whatever the long-run potential for sustainable growth, we believe that a necessary condition for achieving it is low inflation. As a consequence, the Federal Reserve remains committed to preventing a sustained pickup in inflation and ultimately achieving and preserving price stability.

Price stability is an appropriate and desirable goal for policy, not only because it allows financial markets and the economy to work most efficiently, but also because it most likely raises productivity and living standards in the long run. Specifically, in an inflationary environment, business managers are distracted from their basic function of building profits through prudent investment and cost control. My own observation of business practices over the years suggests that the inability to pass cost increases through to higher prices provides a powerful incentive to firms to increase profit margins through innovation and greater efficiency, which boosts productivity and ultimately standards of living over time. Holding the line on inflation, thus, does not impose a speed limit on economic growth. On the contrary, it induces the private sector to focus more on efforts that yield faster long-term economic growth.

In this context, we can readily understand why financial markets welcome sustained low inflation. Uncertainty about future inflation raises the risks associated with investing for that future. Lowering that uncertainty by keeping inflation down diminishes those risks, so that all commitments concerning future income become more valuable. During periods of low inflation, stock and bond prices tend to reflect the higher valuation that comes from harnessing our physical plant more efficiently to provide improved opportunities in the future, including higher wages and profits. What investors fear, what all Americans should fear, are inflationary instabilities. They diminish our ability to provide the wherewithal for the standards of living of the next generation and the retirement incomes of our current work force. The interests of investors as expressed in bond and stock markets do not conflict with those of average Americans--they coincide.

In order to realize the benefits of low and declining inflation, Federal Reserve policy has, for some time now, been designed to act preemptively--as I indicated earlier--to look beyond current data readings and base action on its assessment of where the economy is headed. Policy restraint initiated in February 1994 followed from the judgment that unchanged policy would encourage subsequent inflationary imbalances that would ultimately cut short the economic expansion. The three easing steps in the past year were instituted when we anticipated that inflationary imbalances would be less threatening and that lower rates would be compatible with promoting sustainable economic expansion. Similarly, I am confident that the Federal Open Market Committee would move to tighten reserve market conditions

should the weight of incoming evidence persuasively suggest an oncoming intensification of inflation pressures that would jeopardize the durability of the economic expansion.

The Ranges for the Debt and Monetary Aggregates

The Committee selected provisional ranges for the monetary aggregates in 1997 that once again encompass the growth rates associated with conditions of approximate price stability, provided that these aggregates act in accord with their historical relationships with nominal income and interest rates. These ranges are identical to those endorsed for 1996--1 to 5 percent for M2 and 2 to 6 percent for M3. The Committee reaffirmed its range of 3 to 7 percent for the debt of the domestic nonfinancial sectors for this year and chose the same range provisionally for next year. The Committee's expectations for inflation and nominal GDP expansion in 1996 and 1997 suggest growth of the monetary aggregates at the upper ends of their benchmark ranges as a distinct possibility this year and next, though debt should be in the middle portion of its range.

The experience of the first part of the 1990s--when money growth diverged from historical relationships with income and interest rates--severely set back most analysts' confidence in the usefulness of M2. Recently, there have been tentative signs that the historical relationship linking the velocity of M2--or the ratio of nominal GDP to the money stock--to the cost of holding M2 assets has reasserted itself. For now, though, the Committee is satisfied with watching these developments carefully, waiting for more compelling evidence that M2 has some

predictive content in forecasting current and prospective spending. Such evidence, however, at best will only accumulate gradually over time.

Budgetary Policy

Monetary policy is, of course, only one factor shaping the macroeconomic environment. I thus would be remiss if I did not again emphasize the critical importance to our nation's economic welfare of continuing to reduce our federal budget deficit. We have made significant and welcome progress on this score in recent years. But unless further legislative steps are taken, that progress will be reversed. Inevitably, such changes will require addressing the consequences for entitlement spending of the anticipated shift in the nation's demographics in the first few decades of the next century. Lower budget deficits are the surest and most direct way to increase national saving. Higher national saving would help to lower real interest rates, spurring spending on capital goods so as to put cutting-edge technology in the hands of more American workers. With a greater volume of modern equipment at their disposal, American workers will be able to produce goods that compete even more effectively on world markets.

The rally in capital markets last year that trimmed as much as two percentage points from longer-term Treasury yields was almost surely, in part, a response to the developing positive dialogue on deficit reduction. While the backup in intermediate- and longer-term market interest rates this year has mostly reflected the unexpected vigor of economic activity, market participants must also have been struck by the dying out of serious discussions that might lead to a bipartisan agreement to

eliminate the budget deficit over time.

Conclusion

Mr. Chairman, our economy is now in its sixth year of economic expansion. The staying power of the expansion has owed importantly to the initial small size and rapid correction of emerging imbalances, reflected in part in the persistence of low inflation.

To be sure, the economy is not free of problems. But as we address those problems, policy makers also need to recognize the limitations of our influence and the wellspring of our success. The good performance of the American economy in the most fundamental sense rests on the actions of millions of people, who have been given the scope to express themselves in free and open markets. In this, we are a model for the rest of the world, which has come to appreciate the power of market economies to provide for the public's long-term welfare.

For use at 10:00 a.m., E.D.T.
Thursday
July 18, 1996

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

July 18, 1996

Letter of Transmittal

BOARD OF GOVERNORS OF THE
FEDERAL RESERVE SYSTEM
Washington, D.C., July 18, 1996

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,

A handwritten signature in black ink, appearing to read "Alan Greenspan", with a stylized flourish at the end.

Alan Greenspan, Chairman

Table of Contents

	<i>Page</i>
Section 1: Monetary Policy and the Economic Outlook	1
Section 2: Economic and Financial Developments in 1996	6

Section 1: Monetary Policy and the Economic Outlook

The U.S. economy performed well in the first half of 1996. In early February, when the Federal Reserve prepared its last report on monetary policy, there was some concern about the strength and durability of the current economic expansion: The economy was operating at a relatively high level of resource utilization, but it was not exhibiting a great deal of forward momentum. As the year has unfolded, however, economic activity has proven quite robust. After rising only fractionally in the fourth quarter of 1995, real gross domestic product posted a solid gain over the first half of 1996, providing a considerable lift to job growth. Looking ahead, the members of the Federal Open Market Committee (FOMC) anticipate that economic activity will grow more moderately, on average, in coming quarters and that the unemployment rate will remain around the level it has averaged over the past year and a half.

Although overall consumer price inflation was boosted by higher energy prices during the first half of the year, the underlying trend of prices still appears to have been well contained. Over the past twelve months, the consumer price index excluding food and energy items has risen $2\frac{3}{4}$ percent—near the lower end of the narrow range that has prevailed since early 1994. Moreover, the deflator for personal consumption expenditures on items other than food and energy derived from data reported in the national income and product accounts has continued to show a slowing trend.

The combination of brisk growth and favorable underlying inflation so far this year has, of course, been welcome. Nonetheless, mounting pressures on resources are apparent in some segments of the economy—most notably in the labor market—and these pressures must be monitored closely. Allowing inflationary forces to intensify would ultimately disrupt the growth process. The Federal Reserve recognizes that its contribution to promoting the optimal performance of the economy involves containing the rate of inflation and, over time, moving toward price stability.

Monetary Policy, Financial Markets, and the Economy over the First Half of 1996

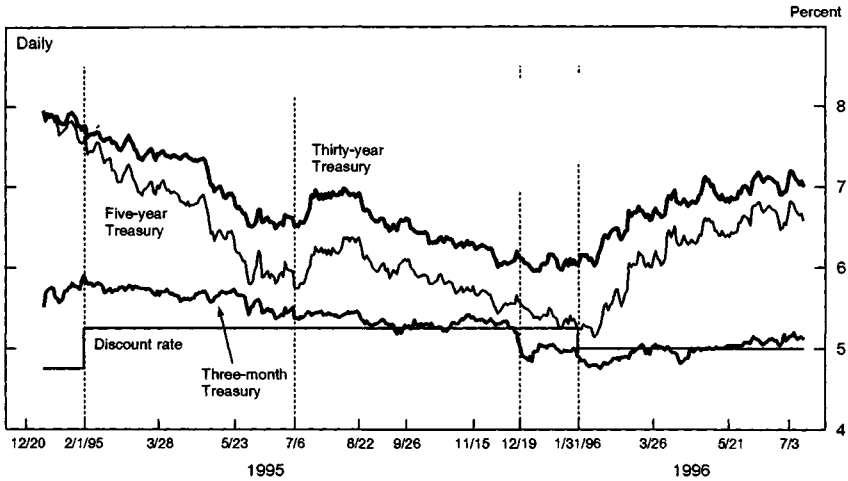
Information available around the turn of the year suggested that the economy had downshifted after posting a strong gain in the third quarter of 1995. The growth of final demand appeared to have slowed,

reflecting importantly a deceleration of consumer spending. In addition, hesitant growth abroad and a strengthening in the foreign exchange value of the dollar relative to the levels prevailing at mid-1995 were seen as limiting the prospects for further growth in exports. The slowdown in the growth of final demand had given rise to inventory buildups in some industries; in turn, the production cutbacks undertaken in response to those buildups were having a further damping effect on economic activity. Meanwhile, data on prices and wages suggested that inflation performance continued to be fairly satisfactory—indeed, better than many members of the FOMC had expected as of midyear 1995. To keep the stance of monetary policy from becoming effectively more restrictive owing to the slowdown in inflation in the second half of last year, and to promote sustainable growth, the Committee eased the stance of policy in December 1995 and again at the end of January 1996, bringing the federal funds rate down a half percentage point in total, to $5\frac{1}{4}$ percent.

Most participants in financial markets were unsurprised by these policy adjustments, given the economic backdrop. Moreover, they anticipated that there would be scope for additional easing steps in the coming months. Thus, between mid-December and the end of January, interest rates on Treasury securities generally moved lower, especially at short and intermediate maturities, and stock price indexes edged higher on balance. The dollar strengthened slightly on net against the currencies of the other G-10 countries, reflecting in part disappointing news about the pace of activity in Europe and consequently larger declines in interest rates there than in the United States.

The underlying trends in the economy early in the year were obscured to a degree by extraordinarily adverse weather that affected a significant part of the country. Through the course of the next few months, however, it became increasingly clear that the economy had regained vitality. Consumer spending perked up after a lackluster holiday season, and was only temporarily depressed by the severe winter. Business demand for equipment proved quite strong, as did housing demand. The strengthening in sales facilitated businesses' efforts to control their inventories, and as that situation improved, industrial production rebounded smartly. Overall employment growth was brisk, and by June the unemployment rate reached its lowest level in six years.

The Discount Rate and Selected Market Interest Rates



Note. Dotted vertical lines indicate days on which the Committee announced a monetary policy action. The ticks on the horizontal axis indicate days on which the Committee held scheduled meetings. The last observations are for July 16, 1996.

Inflation during the first half of the year was generally well behaved. Energy prices surged, mainly in response to a runup in the world price of oil, and bad news about grain crops raised the prospect of higher food prices down the road. However, price inflation for consumer items other than food and energy held steady or moved a bit lower. Labor costs presented a mixed picture. The increase in total hourly compensation over the first three months of the year, as measured by the employment cost index, was in line with its recent moderate trend. However, within total compensation, the wage and salary component of the ECI surged in the first quarter, and further signals of wage acceleration came from a more rapid increase in average hourly earnings in the second quarter.

Against the backdrop of stronger activity but subdued inflation trends, the Federal Reserve made no adjustments to its policy stance after January. With economic activity more clearly on the upswing, however, and prospects for a breakthrough on the federal budget seeming to fade, intermediate- and long-term interest rates reversed course in February and trended up over subsequent months. Since the end of December, the yield on the 30-year Treasury bond has increased about 1 percentage point, on net, while the yield on the 5-year note has risen about $1\frac{1}{4}$ percentage points over the same period. The rate on three-

month bills has edged up only slightly. Despite the backup in bond yields, major stock-price indexes rose considerably further through the first half of the year; most of those gains were erased in late June and the first half of July, however, as company reports raised questions about the pace of earnings growth. The rise in bond yields has boosted the dollar in foreign exchange markets; since mid-April, the dollar has generally traded against an average of the currencies of the other major industrial countries about 4 percent above its level at the end of December.

During the first half of the year, credit remained easily available to most household and business applicants. Interest-rate spreads on private debt over Treasury securities remained narrow. In response to the recent increase in delinquencies on credit-card accounts, many banks have tightened their standards for approval of new accounts, but this appears to have only partially reversed a marked relaxation of such standards earlier this decade, and banks overall remain aggressive in the pursuit of new borrowers, especially business clients. The debt of all domestic nonfinancial sectors combined expanded at about a $4\frac{3}{4}$ percent annual pace, placing this aggregate near the middle of its monitoring range. M2 and M3 are currently near the 5 and 6 percent upper boundaries of their respective growth ranges, in line with the

Economic Projections for 1996 and 1997

	Federal Reserve Governors and Reserve Bank Presidents		Administration
	Range	Central Tendency	
1996			
<i>Percent change, fourth quarter to fourth quarter¹</i>			
Nominal GDP	4¾ to 5¾	5 to 5½	5.0
Real GDP	2½ to 3	2½ to 2¾	2.6
Consumer price index²	3 to 3¼	3 to 3¼	3.2
<i>Average level in the fourth quarter, percent</i>			
Civilian unemployment rate	5¼ to 5¾	About 5½	5.6
1997			
<i>Percent change, fourth quarter to fourth quarter¹</i>			
Nominal GDP	4 to 5½	4¼ to 5	5.1
Real GDP	1½ to 2½	1¾ to 2¼	2.3
Consumer price index²	2½ to 3¼	2¾ to 3	2.8
<i>Average level in the fourth quarter, percent</i>			
Civilian unemployment rate	5½ to 6	5½ to 5¾	5.7

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

2. All urban consumers.

FOMC's expectation as of last February. In contrast to the experience of the early 1990s, growth in the monetary aggregates relative to nominal GDP has been broadly in line with historical relationships, given the structure of interest rates.

Economic Projections for 1996 and 1997

As noted previously, the members of the Board of Governors and the Reserve Bank presidents, all of whom participate in the deliberations of the Federal Open Market Committee, generally think it likely that economic activity will return to a moderate growth path in the second half of 1996 and in 1997 after the larger gains in the first half of this year. For 1996 as a whole, this would result in an increase in real gross domestic product in the range of 2½ to 2¾ percent, somewhat above the forecasts in the February report

on monetary policy. For 1997, the central tendency of the forecasts spans a range of 1¾ to 2¼ percent. The civilian unemployment rate, which averaged around 5½ percent in the second quarter of 1996, is expected to stay near this level through the end of this year and perhaps to edge higher during 1997.

Economic activity clearly retains considerable momentum. The trend in final demand is positive, and inventories appear to be well aligned with the current pace of sales—perhaps even a bit lean. Accordingly, the members of the FOMC recognize the possibility that growth could remain elevated a while, with the potential for putting greater pressure on resources. Nonetheless, most members think that some slowing from the rapid growth pace recorded, on average, in the first half is the most likely outcome. Housing construction and other interest-

Ranges for Growth of Monetary and Debt Aggregates

Percent

Aggregate	1995	1996	Provisional for 1997
M2	1 to 5	1 to 5	1 to 5
M3	2 to 6	2 to 6	2 to 6
Debt¹	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.

1. Monitoring range for debt of domestic nonfinancial sectors.

sensitive activity should be restrained to some degree by the rise in long-term interest rates over the past several months. And, although some of the lagging economies abroad are expected to perform better this year, there are still concerns about the solidity of that acceleration and the associated lift to U.S. exports. In addition, growth in real business fixed investment appears to be tapering off, although spending will likely remain buoyant, owing to the rapid rate of product innovation and dramatic price declines in the computer area. Consumer spending is also expected to grow less rapidly in coming quarters. Household wealth has been boosted substantially by the runup in stock prices over the past year and a half, but, for many households, debt burdens have risen significantly in recent years and may represent a constraint on purchases of big-ticket items.

Most members of the FOMC expect the rise in the consumer price index over the four quarters of 1996 to be in the range of 3 to 3¼ percent, about ¼ percentage point higher than they predicted last winter. The projected increase in the CPI is also somewhat larger than that recorded in 1995. However, that stepup would mainly reflect developments in the food and energy sectors, which are likely to add to overall inflation in 1996 after having damped it in 1995. Apart from these volatile sectors, inflation has remained in check so far this year despite high levels of resource utilization and reports that tightness in some parts of the labor market is placing upward pressure on wages. Assuming no further adverse shocks to food and energy prices, and in the context of the Federal Reserve's intent to keep trend inflation well contained, the Committee believes that overall CPI inflation should recede. Accordingly, the central tendency of the FOMC's forecasts shows CPI inflation dropping back to the range of 2¼ to 3 percent in 1997.

The Committee's inflation projections incorporate the technical improvements the Bureau of Labor Statistics is making to the CPI in 1996 and 1997; they are expected to shave a little from inflation in both years. The Committee also recognizes that the remaining biases in the CPI are non-negligible and may not be stable over time. Thus, it will continue to monitor a variety of alternative measures of price change as it attempts to gauge progress toward the long-run goal of price stability.

The Administration has just released its midyear update to its economic and budgetary projections. Its forecasts for real growth and inflation in 1996 and 1997 are broadly in line with the central tendencies of the forecasts of Federal Reserve policymakers.

Money and Debt Ranges for 1996 and 1997

At its meeting earlier this month, the Committee reaffirmed the ranges for 1996 growth of money and debt that it had established in February: 1 percent to 5 percent for M2, 2 percent to 6 percent for M3, and 3 percent to 7 percent for the debt of the domestic nonfinancial sectors. In addition, the Committee set provisional growth ranges for 1997 at the same levels.

In setting the ranges for M2 and M3, the Committee intended to communicate its expectation as to the growth of these monetary aggregates that would result under conditions of approximate price stability, assuming that the aggregates exhibit the same trends relative to nominal spending that prevailed for many years until the early 1990s and that seem to have reemerged after an intervening period of marked deviation. Based on that reemergence and on Committee members' expectations for the growth of nominal GDP in 1996 and 1997, the Committee

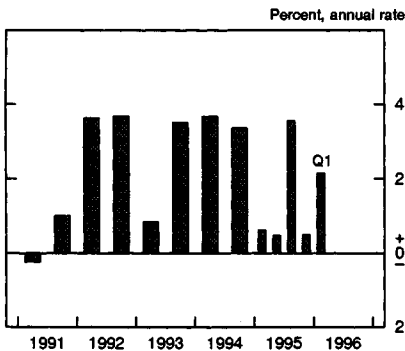
anticipates that both M2 and M3 will probably finish near the upper boundaries of their respective ranges each year. The Committee expects the debt of the domestic nonfinancial sectors to remain near the middle of its monitoring range in 1996 and 1997. In light of the rapid pace of technological change and

innovation still occurring in the financial sector—and the attending uncertainty about the future behavior of the aggregates—the Committee will continue to rely on a wide range of other information in determining its policy stance.

Section 2: Economic and Financial Developments in 1996

Economic activity has increased substantially thus far this year. Real gross domestic product grew at an annual rate of about 2¼ percent in the first quarter of 1996, and the available data point to a much larger increase in the second quarter. The increases in activity have been facilitated by generally supportive financial conditions: Although long-term interest rates have risen considerably on net since early 1996, intermediaries have continued to supply credit to most borrowers on favorable terms, and interest-rate spreads on corporate securities over Treasury securities have remained narrow. In the foreign exchange markets, the dollar has appreciated on average against the currencies of the other major industrial countries.

Change in Real GDP

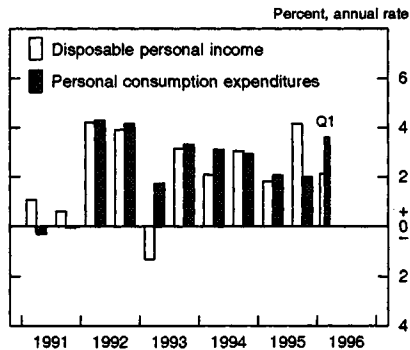


Economic Developments

The Household Sector

After a sluggish performance in late 1995, spending by households has picked up noticeably this year. Consumer expenditures increased about 3½ percent at an annual rate in real terms in the first quarter and appear to have posted another sizable gain in the second quarter. In addition, according to indexes such as those compiled by the Survey Research Center at the University of Michigan and the Conference Board, consumer sentiment has generally been relatively upbeat. In the real estate market, sales of new single-family dwellings have posted an average level well above that of last year, encouraging builders to boost housing starts.

Change in Real Income and Consumption



Outlays for durable goods have continued to be the strongest component of spending, extending the long-standing uptrend in the share of durables in total real consumption. Declining relative prices and the availability of innovative products have continued to lift demand for home electronic equipment and software products. In addition, sales of light motor vehicles, bolstered by relatively generous incentives and perhaps by the cash freed up by the surge in mortgage refinancings last winter, averaged a healthy 15 million unit annual rate in the first half of 1996.

After a lackluster performance in 1995, real outlays for nondurable goods have also risen this year; the average level of these expenditures in April and May was nearly 3 percent at an annual rate above that recorded in the fourth quarter. Meanwhile, spending on services has remained on a moderate uptrend, with short-run variations reflecting the effects of weather on household energy use.

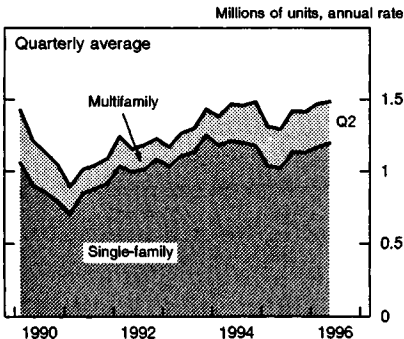
Consumer spending has been supported by brisk gains in wage and salary income associated with the better pace of hiring this year. However, other components of before-tax income, taken together, have risen less rapidly than they did in 1995, and gains in after-tax income were restrained by larger-than-usual tax bills (final payments less refunds) this spring. Accordingly, the level of the personal saving rate in May was somewhat below that recorded in late 1995, although fragmentary data suggest that saving rose sharply in June. In any event, taking a longer perspective, spending and income have grown at roughly similar rates over the past few years, and the

saving rate has generally fluctuated in a fairly narrow band between 4 percent and 5 percent since 1993—a low level historically.

The recent developments in financial markets may have had an important influence on the spending decisions of individual households. In particular, households holding large stock portfolios have enjoyed sizable increases in wealth over the past year and a half, which may be inducing them to consume greater fractions of their incomes than they would otherwise. At the same time, a growing number of households are apparently finding it difficult to meet their debt-service obligations, judging from the appreciable rise in delinquency rates on consumer loans in recent years. In addition, it is possible that job insecurity and longer-run concerns about retirement income have caused many households to raise their targets for asset accumulation. However, the relative stability of the saving rate over the past few years suggests that the net effect of these factors on overall consumption—at least to date—has been limited.

Residential construction has, on the whole, been robust this year. Private housing starts averaged nearly 1.5 million units at an annual rate through June, a pace appreciably above that in 1995. In addition, the volume of shipments of mobile homes ("manufactured housing"), which has doubled over the past five years, now stands around 350,000 units at an annual rate, the highest level since 1974.

Private Housing Starts



In the single-family sector, starts and sales of new homes were surprisingly firm in the face of severe weather in early 1996, and they moved still higher in the second quarter. Moreover, the regular survey of

the National Association of Homebuilders continued to indicate solid demand through early July, and the Mortgage Bankers Association reported that loan applications for home purchases remained brisk through midyear.

Relative to the lows reached in early 1996, the rate on 30-year conventional fixed-rate home mortgages has risen nearly 1½ percentage points and has been fluctuating around 8¼ percent in recent weeks. However, a number of factors seem to have cushioned the effects of these higher mortgage rates. In particular, rates on adjustable-rate mortgages have risen only about half as much as have those on 30-year fixed-rate loans. Also, house prices have firmed somewhat, which may have raised confidence in the investment value of residential real estate and thus contributed to the recent rise in the homeownership rate, which is now at its highest level since the early 1980s. Probably more important in this regard, however, is the trend in the affordability of housing. One simple measure of affordability is the monthly mortgage payment on a new home having a given set of attributes, divided by average monthly household income. Despite the increase in mortgage rates this year, this measure suggests that the cash-flow burden of homeownership is still only modestly above the lows of the past thirty years.

Construction of multifamily housing averaged about 300,000 units at an annual rate in the first half of 1996, a rate somewhat above that in 1995 but a fairly low one historically. Market conditions vary geographically, but the rental vacancy rate for the nation as a whole seems to have tilted back up, after generally trending down between mid-1993 and mid-1995. Also, the absorption rate, which measures the percentage of apartments that are rented within three months of their completion, edged back down in 1995 after several years of increases.

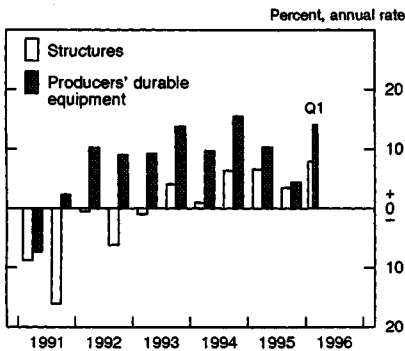
The Business Sector

Developments in the business sector were quite favorable in the first half of 1996. After decelerating in 1995, real business fixed investment rose at a 12½ percent annual rate in the first quarter of 1996, with sizable advances for both equipment and structures. And, although real investment appears to have decelerated again in the second quarter, it probably posted an appreciable gain. Over the past four years, real investment has grown around 8 percent per year, on average, and now stands at a level that implies quite substantial growth in the capital stock. The updating of capital and the increase in capital per

worker are key to lifting productivity growth and living standards.

Outlays for producers' durable equipment rose at an annual rate of about 14 percent in real terms in the first quarter, after a 7½ percent rise over the course of 1995. As has been true throughout the expansion, much of the first-quarter growth was in real outlays for computers and other information-processing equipment; such investment received particular impetus from extensive price-cutting in virtually all segments of the computer market and from a push to acquire the state-of-the-art equipment needed to take full advantage of popular new software and opportunities for information transfer. However, incoming orders data and recent anecdotal reports suggest that the growth in real computer outlays may be slowing. Meanwhile, demand for other types of capital equipment, which had softened in 1995, firmed somewhat in the first quarter.

Change in Real Business Fixed Investment



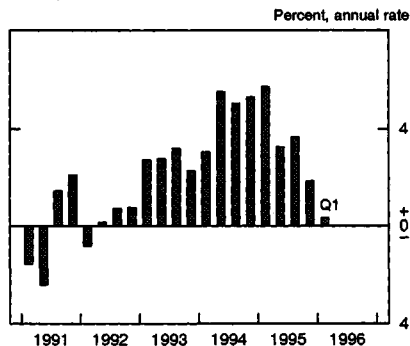
In the nonresidential construction area, real investment continued to expand in the first quarter. However, the monthly data suggest that outlays softened in the second quarter, an occurrence that is consistent with the downturn in contracts—a forward-looking indicator of construction outlays—since late 1995.

Trends within the construction sector have been divergent. In the office sector, the modest recovery that seemed to be under way appears to have waned even though vacancy rates have continued to fall and transactions prices have continued to rise. Outlays dropped noticeably in the fourth quarter of 1995 and the first quarter of 1996, and preliminary data suggest that they remained at a fairly low level in the

second quarter. In contrast, spending for commercial structures other than office buildings, which has been rising briskly since 1992, continued to advance through the first quarter—although further gains may be limited by an emerging excess of retail space in some parts of the country and the recent leveling out of transactions prices. Elsewhere, outlays for industrial construction, which had moved up over 1994 and the first half of 1995, have been nearly flat over the past few quarters, while construction of hotels and motels, which account for less than 10 percent of structures outlays, has boomed.

Investment in nonfarm business inventories slowed dramatically in the fourth quarter of 1995 after running at a fairly rapid pace over much of last year, and it nearly ceased in the first quarter of 1996 as motor vehicle stocks plummeted. Automotive stocks had risen appreciably over the second half of 1995, and some reduction was in train even before a March strike at General Motors curbed production; with the strike, dealer stocks were drawn down sharply. In addition, although firms outside motor vehicles apparently made considerable progress in rectifying inventory imbalances in late 1995, many continued to restrain production in response to continued weak orders in early 1996; producers of household durables and textiles are notable examples.

Change in Real Nonfarm Business Inventories

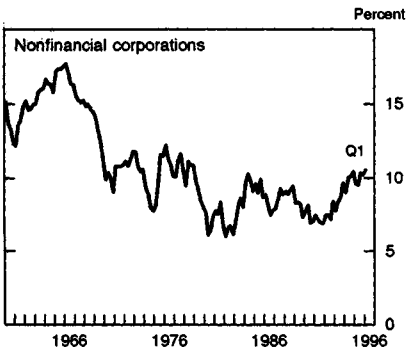


Inventory investment evidently rebounded in the second quarter, mainly because motor vehicle stocks stabilized as sales and production returned to rough balance. Outside of motor vehicles, stocks accumulated moderately, on balance, in April and May. As of May, inventory-sales ratios for all major

sectors were noticeably below their levels in late 1995; the decline in the ratio for retailers was especially steep.

Economic profits of all U.S. corporations continued to surge in the first quarter, extending the steep climb that began in the early 1990s. The strength in profits in recent quarters has been attributable in large part to robust earnings growth at domestic financial institutions and a rebound in profits at foreign subsidiaries of U.S. corporations. In the domestic nonfinancial corporate sector, the profit share—pre-tax profits divided by the sector's GDP—has been hovering around 10 percent since mid-1994, after having risen appreciably over the preceding few years; its current level is similar to the levels attained in the mid-1980s but well below the highs of the 1960s and 1970s. About half of the increase in the sector's profit share since the early 1990s has reflected a reduction in net interest expenses.

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.

The Government Sector

Although the nation continues to grapple with the prospect of growing federal budget deficits in the years ahead, the incoming news on the budget for fiscal 1996 has been extremely favorable. The deficit in the unified budget over the first eight months of the fiscal year—the period from October to May—was only \$109 billion, \$27 billion less than during the comparable period of fiscal 1995. The improvement in the deficit primarily reflected exceptionally rapid growth in receipts; outlays continued to rise at about

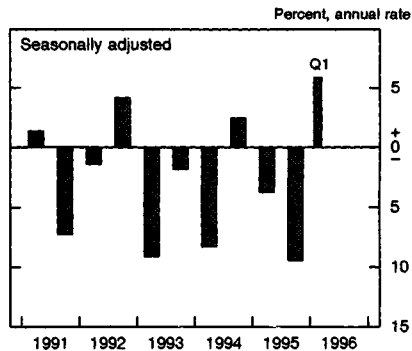
the same pace as had been recorded, on average, over the preceding four years. If present trends continue, the fiscal 1996 deficit, when measured as a percentage of nominal GDP, will be the smallest since 1979.

Federal receipts in the first eight months of fiscal 1996 were 8 percent higher than in the same period a year earlier; the rise was considerably greater than that of nominal GDP. Boosted by the upswing in business profits, corporate taxes have been increasing at double-digit rates since fiscal 1993, and that path has extended into fiscal 1996. Individual income taxes have also risen sharply this year; little information is available on the factors behind the surge in individual payments, but it may have resulted, at least in part, from capital gains realizations associated with the strong performance in financial markets last year.

In total, federal outlays in the first eight months of fiscal 1996 were 4 percent higher than during the corresponding period of fiscal 1995. Outlay growth was damped by the reductions in discretionary domestic spending implied by this year's appropriations legislation. However, expenditures for "mandatory" programs continued to rise rapidly, and net outlays for deposit insurance were less negative than in 1995 (i.e., insurance premiums and the proceeds from net sales of thrift assets declined). In addition, net interest payments increased moderately, reflecting the growth in the stock of outstanding federal debt.

Federal expenditures on consumption and investment—the part of federal spending included directly in GDP—increased at an annual rate of about 6 percent in real terms in the first quarter of 1996 after declining about 13 percent in the fourth quarter

Change in Real Federal Expenditures on Consumption and Investment

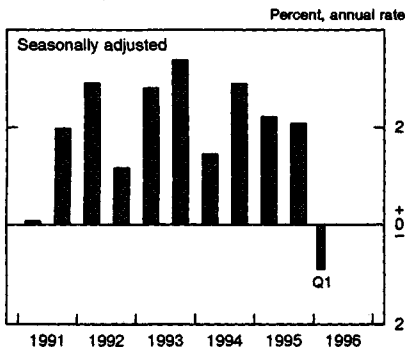


of 1995. In part, real spending rose in the first quarter because the government shutdowns that occurred during the budget crisis depressed real spending less in the first quarter than in the fourth. Even so, given the enacted appropriations, the first-quarter increase was almost surely a transitory spike.

The fiscal position of states and localities has been relatively stable in the aggregate over the past few years. As measured in the national income and product accounts, the surplus (net of social insurance funds) in the sector's operating accounts has fluctuated in the range of \$30 billion to \$40 billion (annual rate) since the beginning of 1994; it stood around the middle of that range in the first quarter. On the whole, these governments are in considerably better shape than they were in the early 1990s. Even so, the sector remains under pressure to balance rising demand for services—especially in education, corrections, and health care—against the public desire for tax relief.

Real expenditures on consumption and gross investment—the part of state and local spending included directly in GDP—declined somewhat in the first quarter of 1996. However, the decrease reflected primarily the effects of the unusually adverse winter weather, and spending appears to have rebounded in the second quarter. State and local employment posted a respectable gain, on net, over the first six months of the year. In addition, outlays for construction rose about 3½ percent in real terms over the year ending in the first quarter, reflecting higher spending on highways and schools; monthly construction data through May suggest that spending rose substantially in the second quarter.

Change in Real State and Local Expenditures on Consumption and Investment

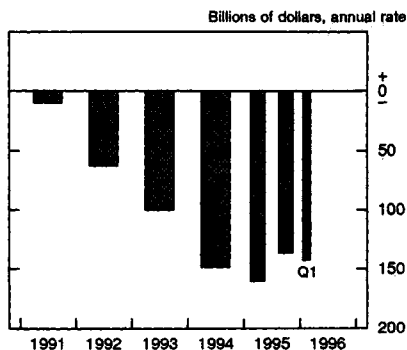


Receipts of state and local governments rose about 4 percent in nominal terms over the year ending in the first quarter, about matching the rise in nominal GDP. The sector's own-source general receipts, which comprise income, corporate, and indirect business taxes, rose about 1 percentage point faster, with solid gains in all major components. Federal grants have changed little, on net, over the past four quarters.

The External Sector

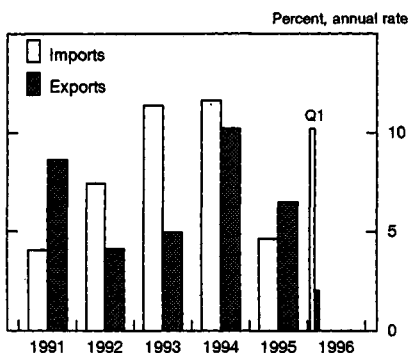
The nominal trade deficit in goods and services widened from its low fourth-quarter level of \$78 billion at an annual rate to \$97 billion in the first quarter of 1996, slightly less than the deficit of \$105 billion for 1995 as a whole. The current account deficit stood at \$142 billion (annual rate) in the first quarter, about the same as the figure for 1995 as a whole. In April, the trade deficit increased from the average level for the first quarter.

U.S. Current Account



After expanding very slowly during the second half of 1995, the quantity of U.S. imports of goods and services rose about 10 percent at an annual rate in the first quarter, and preliminary data for April show another sizable increase. The rebound in imports largely reflected the strengthening of U.S. economic activity. In addition, non-oil import prices have declined somewhat since last fall, after having risen sharply in late 1994 and early 1995. A turnaround in imported automotive vehicles, consumer goods, and non-oil industrial supplies, following more than six months of declines, accounted for most of the increase in imports during the first four months of 1996.

Change in Real Imports and Exports of Goods and Services



The quantity of U.S. exports of goods and services expanded at a 2 percent annual rate during the first quarter; it also appears to have expanded at about this pace in April. The somewhat subdued pace of export growth so far this year reflects in part a bunching of shipments, particularly of machinery, that resulted in an unusually strong increase in exports in the fourth quarter of last year.

Trends in economic activity have varied across the major foreign industrial countries so far in 1996. In Japan, economic recovery appears to have taken hold, although the underlying pace of real GDP growth is clearly less than the nearly 13 percent annual rate reported for the first quarter; the first-quarter growth rate was boosted in part by a temporary surge in government spending and measurement practices associated with the leap year.¹ In Canada, growth remained subdued in the first quarter as real GDP rose only 1¼ percent at an annual rate despite much stronger growth in domestic demand; indicators for the second quarter suggest some strengthening.

Economic performance so far this year in Europe has been mixed. In Germany, real GDP declined another 1½ percent at an annual rate in the first quarter, largely because severe weather caused a substantial contraction in construction spending; preliminary data suggest that construction activity rebounded in the second quarter with the return to more normal weather. In contrast, French real GDP

1. Although the statistical agencies in many countries take the number of working days in the quarter into account when seasonally adjusting data, the statistical agencies in Japan, France, and Italy among the G-10 countries do not make working-day adjustments.

expanded nearly 5 percent at an annual rate in the first quarter, supported by a very sizable rebound in consumption as well as leap-year effects; strikes during the fourth quarter of last year depressed economic activity and contributed to a decline in private consumption spending. Indicators for the second quarter suggest that output growth moderated from its first-quarter pace. In the United Kingdom, real GDP grew at an annual rate of 1½ percent during the first quarter, somewhat more slowly than during the second half of 1995. On the policy front, most European countries are seeking to rein in their fiscal deficits during 1996 and 1997, in part to comply with the criterion in the Maastricht Treaty that countries participating in the third stage of the European Monetary Union, now scheduled to begin on January 1, 1999, not have excessive fiscal deficits. As a reference value, the treaty specifies that deficits greater than 3 percent of a country's GDP are excessive, but it also provides scope for accepting deficits above that level in some circumstances.

In Mexico, robust growth of real GDP in the first quarter extended the recovery in economic activity that began in the second half of 1995. Through June, the Mexican trade balance remained roughly stable at the level reached toward the end of last year, after having improved markedly over the course of 1995. Argentina also appears to be emerging from the steep declines in output experienced during the first half of 1995, while Chile continues to enjoy steady growth. Activity in Brazil has begun to expand again in recent months, following a sharp contraction in mid-1995.

Economic growth in our major Asian trading partners (other than Japan) appears to have picked up again this year after slowing noticeably during the second half of 1995 from the extremely rapid rates recorded in 1994 and the first half of 1995. The recent pickup in activity was associated with an easing of monetary policy in some of these countries in the second half of last year and the early part of this year. In China, output appears to have expanded during the first quarter at around the 10 percent annual rate recorded in 1995, with a pickup in consumption spending compensating for weaker growth in the external sector.

Consumer price inflation generally stayed low in the major foreign industrial countries and declined or remained moderate elsewhere. In Japan, prices in the second quarter, on average, were slightly above their year-earlier levels because of the effects of yen depreciation on import prices; this upturn followed a year of deflation. In western Germany, inflation slowed

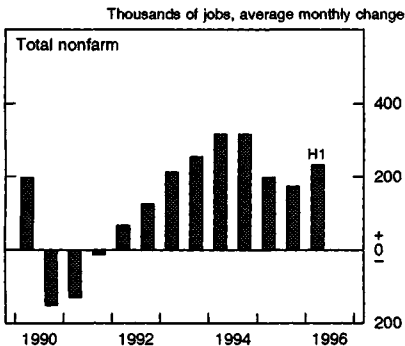
through June to only about 1¼ percent. Inflation in Italy remained higher than in the other major foreign industrial countries but slowed to below 4 percent through June. In Canada, inflation also moved down further this year, to about 1½ percent in May.

Inflation trends in Latin America have been mixed. In Mexico, the twelve-month change in consumer prices diminished to about 32 percent in June, compared with a reading of 52 percent for the twelve months ending in December 1995. Consumer price inflation has also declined further in Brazil and remained low in Argentina. In contrast, prices have picked up in Venezuela in response to the depreciation of its currency associated with the adoption of a program of macroeconomic stabilization. In Asia, inflation has decreased so far in 1996 in China and remained moderate to low elsewhere.

Labor Market Developments

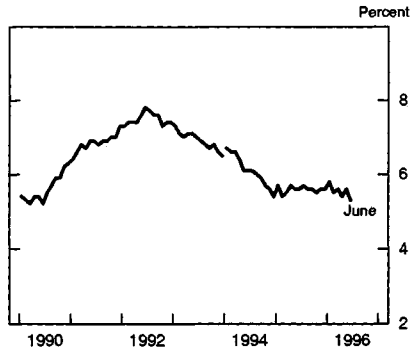
Labor demand was strong over the first half of 1996. Growth in nonfarm payroll employment exhibited considerable month-to-month variability but averaged a hefty 235,000 per month. In addition, the civilian unemployment rate remained low, holding in the narrow range around 5½ percent that has prevailed since late 1994.

Net Change in Payroll Employment



Employment gains were fairly broadly based over the first half of the year. The services sector, which now accounts for nearly 30 percent of nonfarm employment, continued to be a mainstay of job growth, showing increases of nearly 120,000 per month, on average, over the first half. Within ser-

Civilian Unemployment Rate



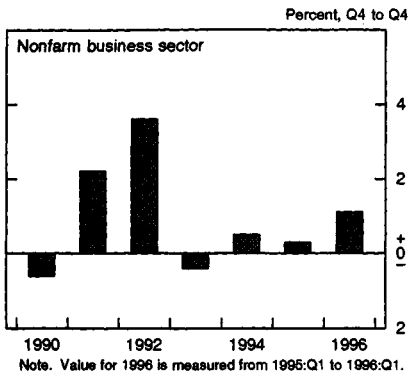
Note: The break in data at January 1994 marks the introduction of a redesigned survey; data from that point on are not directly comparable with the data of earlier periods.

vices, growth in employment in business services remained rapid, with large gains at computer and data processing firms as well as at temporary help agencies, and employment in health services trended up further. In addition, construction payrolls rose a brisk 30,000 per month, on average—an annual rate of about 7 percent. Elsewhere, payrolls at wholesale and retail trade establishments continued to increase at about the same pace as that in 1995, and employment in the finance, insurance, and real estate category picked up after having been nearly flat over 1994 and 1995.

Developments in manufacturing were uneven but showed some improvement in the second quarter. As 1996 started, firms were still adjusting employment to the slower path of output that had been evident since early 1995, and payrolls—especially at firms producing nondurable goods—were reduced further. In the past three months, manufacturing employment has held fairly steady, buoyed by the pickup in industrial activity, and the average factory workweek, which had contracted appreciably in 1995, trended up through June.

For the nonfarm business sector as a whole, productivity rose at an annual rate of about 2 percent in the first quarter of 1996, echoing the acceleration in output. However, productivity had posted an outright decline in the fourth quarter of 1995; all told, productivity rose about 1 percent over the year ending in the first quarter of 1996, in line with the average pace this decade. In the manufacturing sector, productivity rose 4¼ percent over the past

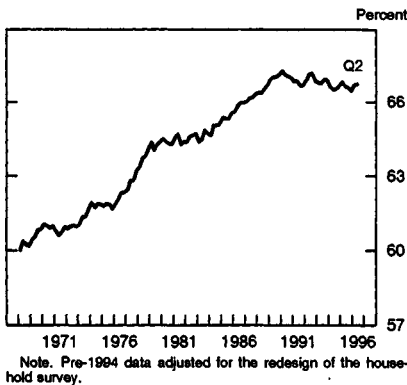
Change in Output per Hour



year, although the reported increase was probably overstated because firms in this sector have been relying increasingly on workers supplied by temporary help firms, who are counted as service industry employees rather than as manufacturing employees in the establishment survey of the Bureau of Labor Statistics.

Labor force participation has remained sluggish this year. The participation rate, which measures the percentage of the working-age population that is either employed or looking for work, did retrace the dip that occurred in late 1995. But, taking a longer perspective, the overall participation rate (adjusted

Labor Force Participation Rate



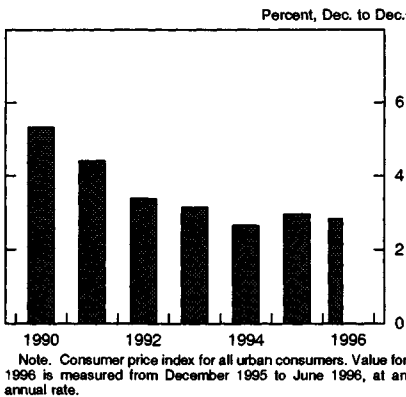
for the redesign of the household survey in 1994) has changed little, on net, since 1989, after rising fairly steadily from the mid-1960s to the late 1980s. The flattening reflects mainly a marked deceleration in women's participation, owing both to a leveling off in the percentage of women who are in the labor force for at least part of a given year and slower growth in the average number of weeks they spend in the labor force that year. Moreover, with the average number of weeks these women spend in the labor force having risen to a level only slightly below the average for men, a significant rebound in participation does not seem very likely over the near term. The sluggishness in participation tends to restrain the growth of potential output unless it is offset by a better productivity performance or by faster growth in the working-age population—neither of which has yet been in evidence.

Despite the tightness in labor markets in recent quarters, the broad trends in hourly compensation appear to have held fairly steady. The employment cost index for private industry—a measure that includes wages and benefits—rose at an annual rate of about 3 percent over both the first three months of 1996 and over the twelve months ending in March; the ECI had also increased about 3 percent over the twelve months ending in March 1995. Compensation growth has continued to be damped by a marked deceleration in employer-paid benefits—especially payments for medical insurance, which have been restrained by the slowing in medical care costs, the switch in insurance arrangements from traditional indemnity plans to HMOs and other managed care plans, and changes in the provisions of health plans (including greater sharing of health care costs by employees). On the whole, wages also seem to have been held in check, although the most recent data may be hinting at some acceleration. Notably, the wage and salary component of the ECI rose sharply in the first quarter; although the data are volatile and the first-quarter figure likely overstates current wage trends, the twelve-month change in the series moved up to 3¼ percent, nearly ½ percentage point larger than the increases in the preceding two years. Separate data on average hourly earnings of production or nonsupervisory workers also show a recent acceleration in wages; the twelve-month change in this series moved up to about 3½ percent in June.

Price Developments

The underlying trend of prices has remained favorable this year—notably, the CPI excluding food and

Change in Consumer Prices Excluding Food and Energy



energy rose at an annual rate of $2\frac{3}{4}$ percent over the first six months of the year, near the lower end of the narrow range than has been evident since early 1994. Developments in food and energy markets boosted overall inflation, however, and the total CPI rose at an annual rate of $3\frac{1}{2}$ percent over the first half; this pattern was the reverse of that seen in 1995, when a small drop in energy prices, combined with only a modest increase in food prices, held the rise in the total CPI to just $2\frac{1}{2}$ percent. Meanwhile, the producer price index for finished goods rose

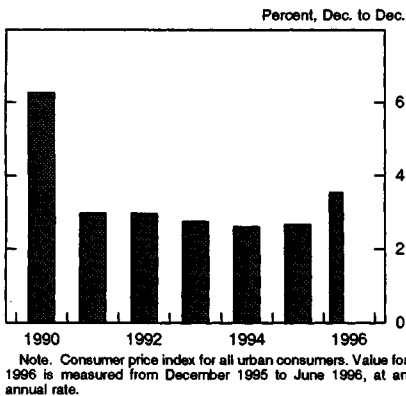
about $2\frac{3}{4}$ percent over the twelve months ending in June; excluding food and energy, the PPI rose $1\frac{1}{2}$ percent, a bit less than over the preceding year.

Consumer energy prices picked up around the turn of the year and rose at an annual rate of about 12 percent, on net, over the first six months of 1996. With crude oil stocks drained by strong worldwide demand for heating oil and weather-related supply disruptions in the North Sea and elsewhere, the spot price of West Texas intermediate (WTI) soared from around \$18 per barrel, on average, in the second half of 1995 to a high of around \$25 per barrel in mid-April; the WTI price has since retraced much of that runup. Reflecting the surge in crude oil prices, retail prices of refined petroleum products rose sharply through May, on balance. However, they fell markedly in June, and private surveys of gasoline prices imply a further decrease in early July.

Retail food prices rose at an annual rate of about 4 percent over the first six months of 1996, somewhat above the pace of the preceding few years. At the farm level, prices of grains and other commodities rose to exceptionally high levels as adverse crop conditions in some parts of the country exacerbated an already tight stock situation. For some foods—notably, dairy products, cereals and bakery products, poultry, and pork—the pass-through tends to occur relatively rapidly, and retail prices of such items have already risen appreciably. Beef prices fell through May as producers sold off herds in response to higher feed costs and poor range conditions; they turned around in June and will likely rise further over the next several quarters as the sell-off of breeding stock will eventually lead to tighter supplies.

Price increases for consumer goods other than food and energy slowed to 1 percent at an annual rate over the first half of 1996, after averaging about $1\frac{1}{2}$ percent per year over the preceding three years. Increases in goods prices have been restrained in part by the uptrend in the dollar since mid-1995, which has helped to damp import prices. In addition, with the operating rate in the manufacturing sector having fallen to about its long-term average, pressure from the materials side has been limited. Indeed, the PPI for intermediate materials (excluding food and energy) actually fell a bit over the past twelve months, after having risen $7\frac{1}{2}$ percent over the preceding year. Looking ahead, however, the latest report from the National Association of Purchasing Managers suggests that vendor performance deteriorated markedly in June, a development that

Change in Consumer Prices



could portend some firming of prices of materials and supplies over the near term.

Prices of non-energy services rose $3\frac{3}{4}$ percent at an annual rate over the first half, about the same as the rise over 1995 as a whole. Airfares accelerated significantly in the first half. However, shelter costs increased less rapidly than they had in 1995, and prices of medical care continued to decelerate; over the six months ending in June, the CPI for medical care services rose at an annual rate of only about $3\frac{1}{4}$ percent, roughly 1 percentage point below the 1995 pace. Moreover, there is some evidence that the CPI may be understating the recent slowing in medical care inflation, in part because it does not fully capture the discounts negotiated between medical providers and insurers, including managed care plans. The price measure used to deflate consumer expenditures on medical care in the NIPA better reflects such factors; it rose less than 2 percent over the year ending in the first quarter of 1996, after having risen $4\frac{1}{2}$ percent over the preceding year.

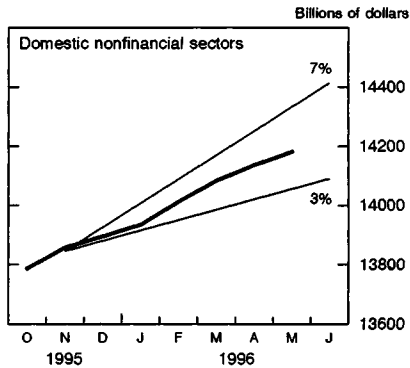
Judging from the various surveys of consumers and forecasters, expectations of near-term CPI inflation deteriorated slightly in the first half of 1996. Notably, although both the University of Michigan and the Conference Board had reported a noticeable drop in their one-year-ahead measures in the second half of 1995, that improvement was not sustained in 1996; the recent monthly readings have bounced around, but the June results from both surveys were similar to those recorded, on average, in the first half of 1995. In contrast, longer-run inflation expectations, which have presumably been less affected by the recent news in food and energy markets, have held fairly steady. Smoothing through the monthly data, the University of Michigan's measure of expected CPI inflation over the next five to ten years has not changed much since late 1994, and the survey of professional forecasters conducted by the Federal Reserve Bank of Philadelphia during the second quarter of 1996 produced the same expectation for the ensuing ten years as that in the survey taken in the fourth quarter of 1995.

Financial Developments

Credit

Financial conditions in the first half of 1996 supported the pickup in the growth of spending. For the most part, lenders continued to pursue credit applicants aggressively as reflected, for example, in nar-

Debt: Annual Range and Actual Level



row spreads of interest rates on corporate securities over those on Treasury securities. The debt of domestic nonfinancial sectors increased about $4\frac{3}{4}$ percent at an annual rate from the fourth quarter of 1995 through May of this year, a bit more slowly than last year but still sufficient to place the level of this aggregate in the middle of its monitoring range for 1996.

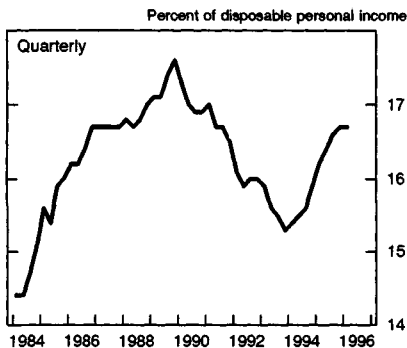
The Government Sector. Federal debt outstanding increased about 4 percent at an annual rate over the first half of 1996, a shade below the average rate of increase last year. The impasse over the debt ceiling disrupted the timing and size of some Treasury auctions but did not alter the longer-term trajectory of federal debt.

The pattern of net borrowing by state and local governments in the last several years has been heavily influenced by their efforts to retire debt issued at relatively high interest rates in the mid-1980s. They have pursued these efforts through a strategy of advance refunding: In the early 1990s, when bond yields were seen as especially favorable, state and local governments issued new debt, even before call provisions on the older bonds could be exercised, and placed the proceeds in escrow accounts. As it became possible to do so, the issuing governments began calling the older debt, using the contents of the escrow accounts to complete the transactions. Reflecting these retirements, the amount of state and local government debt outstanding declined about 4 percent per year in 1994 and 1995. This process is still in train but evidently on a smaller scale; available information suggests that state and local government debt outstanding declined only marginally during the first half of this year.

The Household Sector. The pace of borrowing by households appears to have moderated somewhat from the elevated rates of 1994 and 1995, but it remains substantial. In particular, consumer credit expanded at a 9½ percent annual rate from the fourth quarter of 1995 through May of this year, down from 14½ percent over the four quarters of 1995. Mortgage debt actually expanded somewhat more rapidly during the first quarter than in 1995 (7¾ percent at an annual rate versus 6½ percent), and available indicators suggest that growth during the second quarter dropped back only to about last year's pace. The recent backup in mortgage rates, which only began in February, has had little effect on borrowing thus far, and might even have increased it temporarily by accelerating transactions.

The rapid growth in household debt during the past few years has resulted in a sizable increase in the estimated ratio of scheduled payments of principal and interest to disposable personal income. This measure of debt-servicing burden has trended up over the past two years, and as of the first quarter of 1996, was approaching—but still short of—the levels attained toward the end of the last business cycle expansion.

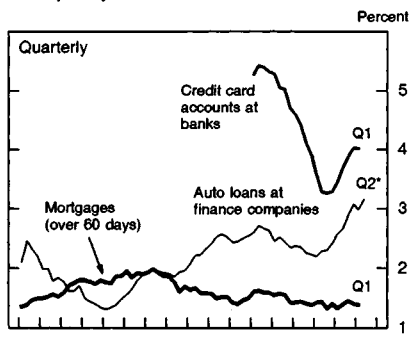
Household Debt Service Burden



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

Several other recent indicators suggest that some households are experiencing financial strains. For example, the Consolidated Report of Condition and Income shows that the delinquency rate on credit-card receivables at commercial banks has increased significantly in recent quarters, retracing about one-third of the improvement that took place during the

Delinquency Rates on Household Loans



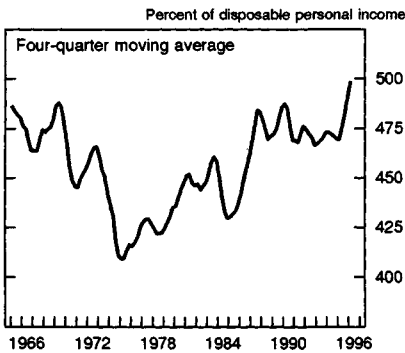
*The last data point is an average of the delinquency rates for April and May 1996.

first few years of the current economic expansion. The delinquency rate on auto loans at the finance companies affiliated with the major manufacturers moved up sharply beginning about two years ago, and since late last year has hovered around historically high levels. Anecdotal evidence suggests that the rise in both credit-card and auto-loan delinquency rates reflects a strategy to liberalize lending standards as part of an overall marketing effort. The auto loan delinquency rate has also been boosted a bit by the increased prevalence of leasing. Lease customers tend to be better credit risks than the average conventional borrower, and the shift toward leasing has had the effect of skimming the more financially secure car buyers and thus degrading somewhat the remaining pool of people financing their purchases through conventional loan contracts.

The personal bankruptcy rate also surged to a new high this year. The extent to which this development reflects mounting financial difficulties of households is clouded, however, by changes in federal law (effective at the start of 1995) that may have increased the attractiveness of bankruptcy by increasing the value of assets that can be protected from liquidation in bankruptcy proceedings. The "cost" of bankruptcy to households also has been effectively lowered by the greater willingness of lenders to extend credit to riskier borrowers—even those with a previous bankruptcy on their records.

Other indicators are less suggestive of a deterioration in the financial condition of households. For example, the delinquency rate for mortgage loans sixty days or more past due at all lenders is near its

Household Net Worth



lowest level in two decades, while the rate on closed-end consumer loans—despite having moved up over the past eighteen months—remains low by historical standards. Moreover, the aggregate balance sheet of the household sector clearly is in very good shape; owing in large part to the surge in equity prices over the past year and a half, the ratio of household net worth to disposable personal income moved up into record territory recently.

Apparently in response to the recent runup in delinquency and charge-off rates on consumer loans, banks have selectively tightened their standards for consumer lending. These actions reversed steps taken earlier in the decade, when many card issuers increased the growth of their credit card receivables by offering accounts to customers who previously would have been denied credit. The belief was that more sophisticated credit scoring techniques would control risks adequately, but it appears that some “adverse selection” occurred and that the uptick in delinquencies has been larger than at least some banks had planned. About 20 percent of the respondents in the Federal Reserve’s most recent survey of senior loan officers reported having tightened standards for approving applications for credit cards, and 10 percent reported tightening standards for other consumer loans. Notwithstanding the recent tightening of standards, supply conditions for loans from banks to consumers still appear accommodative.

The Business Sector. The debt of nonfinancial businesses also appears to have expanded somewhat less rapidly during the first half of 1996 than it did last year. In part, the moderation in borrowing can be

traced to the behavior of the financing gap for incorporated nonfinancial enterprises—the excess of their capital expenditures (including inventory investment) over their internally generated funds. During 1995, this gap narrowed quite substantially, reflecting strong profits and a marked reduction in inventory investment. Available indications are that the gap has remained small this year.

External funding for business spending has been in plentiful supply thus far this year. One piece of evidence on this point is that interest-rate spreads on investment-grade bonds have edged down slightly since the beginning of the year. Additionally, spreads on high-yield bonds have declined markedly, and are as low as they have been in at least a decade. Also, supply conditions for loans from banks to businesses continue to look quite favorable. According to the Federal Reserve’s most recent survey of bank lending officers, standards for approval of commercial and industrial loans were about unchanged from January to May of this year, and terms on such loans were eased on net. Surveys by the National Federation of Independent Business indicate that small businesses have not faced difficulty getting credit, and stories abound of new small-business lending programs of banks.

Gross offerings of long-term bonds by nonfinancial corporations have been running about in line with last year’s pace. However, the mix of issuers has shifted somewhat, reflecting the changing structure of rates. Late last year and early this year, investment-grade corporations were issuing a hefty volume of bonds in order to pay down commercial paper and to refinance existing long-term debt. As the rates on investment-grade bonds increased this year, issuance of such debt dropped off. Rates on high-yield bonds moved up less, however, and issuers of those bonds continued to offer new debt at a rapid pace.

Gross issuance of equity shares by nonfinancial corporations has been exceedingly strong this year. Indeed, total offerings in each of the three months of the second quarter set successive monthly records. This activity has been fueled by initial public offerings and other equity issuance by relatively young companies. Share retirements by nonfinancial corporations have also been very heavy. Announced stock buybacks by such firms in both the first and second quarters ran at \$28 billion per quarter—the fastest pace since the late 1980s. On net, available information suggests that nonfinancial corporations retired even more equity during the first half of 1996 than they had in 1995.

Share retirements and merger activity have generated much less issuance of debt recently than they did in the 1980s. Recent share repurchases have been undertaken mostly by companies seeking to return the excess cash on their balance sheets to stockholders. And recent mergers and acquisitions have mainly been accomplished through stock swaps between companies in similar lines of business, rather than the leveraged transactions commonplace in the 1980s. In line with the limited extent of debt financing, the mergers executed thus far in 1996 have resulted in little net change in bond ratings—again in marked contrast to the experience of the 1980s.

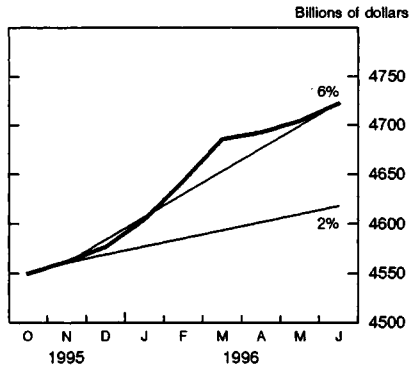
Depository Intermediation. The growth of credit provided by depository institutions slowed sharply in the fourth quarter of last year and first quarter of this year, and commercial bank credit—a component of total depository credit for which more recent data are available—slowed further in the second quarter. The share of thrift institutions in total depository credit has continued to decline in recent quarters. This long-standing trend may have been given additional impetus last summer by the opening up of a differential between the premium rates paid by banks and thrifts for their deposit insurance; this differential has reduced the cost of funds for banks relative to the cost of funds for thrift institutions.

The reduction and subsequent elimination of the deposit insurance premium for financially sound banks probably played a role in shifting bank funding toward deposits. During the first half of 1996, banks increased their deposit liabilities more rapidly than their nondeposit liabilities—a contrast from the preceding few years when banks relied disproportionately for their funding on nondeposit sources, including borrowing from their foreign offices.

The Monetary Aggregates

The increased reliance on deposit sources of funding by banks has helped support the growth of the broad money aggregates of late. Between the fourth quarter of last year and June of this year, M3 expanded at an annual rate of about 6 percent, putting it at the upper boundary of its annual growth cone. As in 1995, the growth in M3 this year was led by those components not included in M2. In aggregate, these components increased about 11 percent at an annual rate between the fourth quarter of last year and June of this year, only moderately below the 1995 average pace of 14½ percent. Institution-only money-

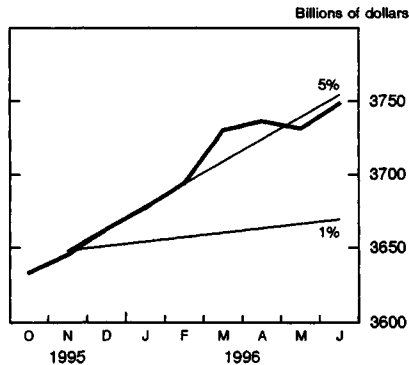
M3: Annual Range and Actual Level



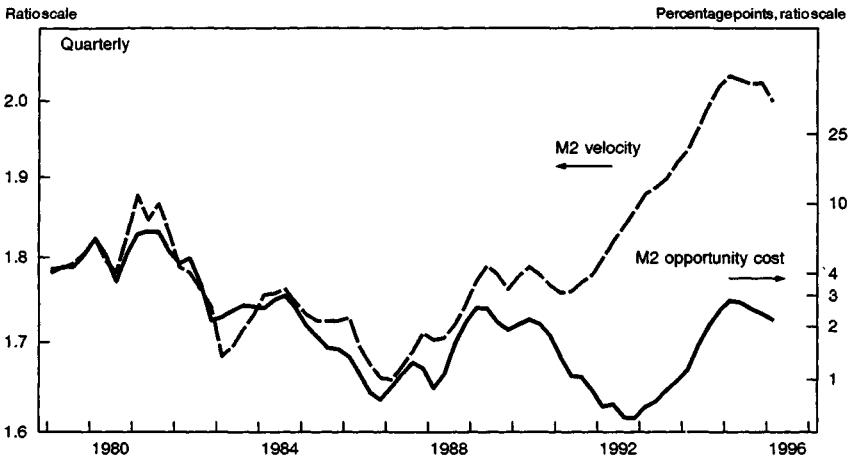
market mutual funds increased about 18 percent at an annual rate over this period. This component of the money stock increased especially rapidly during the first three months of the year. Often, the yields on these funds lag changes in short-term market interest rates, making them particularly attractive investments when short-term market rates are declining, as they were around the turn of the year when the Federal Reserve eased policy.

M2 increased 4¼ percent at an annual rate between the fourth quarter of 1995 and June of this year, leaving it near the upper boundary of its growth range. For many years before the early 1990s, the velocity of M2 (defined as the ratio of nominal GDP to M2) moved roughly in tandem with the opportunity cost of

M2: Annual Range and Actual Level



M2 Velocity and the Opportunity Cost of Holding M2



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

holding M2—that is, the interest earnings forgone by holding M2 assets rather than market instruments such as Treasury bills. This relationship implied that M2 tended to move in proportion to nominal GDP, except as it was influenced by changes in the opportunity cost of holding it. When the opportunity cost rose, owners of M2 tended to economize on their holdings, driving up the velocity of M2.

Beginning around the early 1990s, however, this historical relationship began to break down. Indeed, in 1991 and 1992, the velocity of M2 rose sharply even as the opportunity cost of holding M2 declined. A number of reasons for this development have been adduced, including the unusually steeply sloped yield curve and very low level of short-term interest rates, which helped to attract the public out of liquid balances and into more readily available long-term mutual funds; the credit crunch at banks and the resolution of troubled thrifts, which reduced the aggressiveness with which these institutions sought retail deposits; and household balance-sheet restructuring, which entailed in part repayment of loans out of liquid money balances. The divergent movement of the velocity of M2 and its opportunity cost continued until the end of 1992. More recently, the variables have once again been moving essentially in parallel. In light of the rapid ongoing pace of innovation and technological change in financial ser-

vices, however, it is impossible to know whether the new parallel movement of velocity and the opportunity cost will persist into the future.

M1 declined about 1¼ percent at an annual rate during the first half of 1996, just as it had done over the four quarters of 1995. The recent sluggish behavior of M1 reflects the ongoing spread of so-called sweep programs, under which idle reservable deposits are “swept” into money-market-deposit accounts (MMDAs). (An appendix provides additional information on sweep accounts.) Estimates based on initial amounts swept suggest that M1 would have expanded at about a 7 percent annual rate during the first half of 1996 in the absence of these programs. Another factor contributing to the recent weakness in M1 has been the growth of currency, which has been sluggish by the standards of the early 1990s. Foreign demand for currency apparently has tailed off somewhat. In large part, the slackening in net foreign demand owes to substantial reflows from Argentina and Mexico, where earlier worst-case fears about the stability of the financial system have not been realized. Reflows from Western Europe and Asia have also been significant, but net shipments to the former Soviet Union remain sizable. On the whole, demand for the new \$100 bill has been substantial, but this has not had any detectable effect on the stock of currency outstanding.

The sluggish growth of currency has held down expansion of the monetary base to only about 2 percent at an annual rate thus far this year. The other restraint on the growth of the base has been the turnaround in the behavior of required reserves. After surging at double-digit rates in 1992 and 1993, required reserves have been on a downward trend, and at an increasing rate. Thus far this year, required reserves have contracted about 7½ percent at an annual rate. The emergence of this trend is perhaps the most direct consequence of the spread of sweep programs. Absent such programs, required reserves probably would have increased about 10 percent over the same period, owing to strong growth in demand deposits. Continued spread of sweep programs could affect the federal funds market, perhaps leading to greater volatility like that experienced in early 1991 following the elimination of reserve requirements on non-transactions deposits. Thus far, such instabilities have not been realized, but the Federal Reserve is monitoring the situation carefully.

Interest Rates, Equity Prices, and Exchange Rates

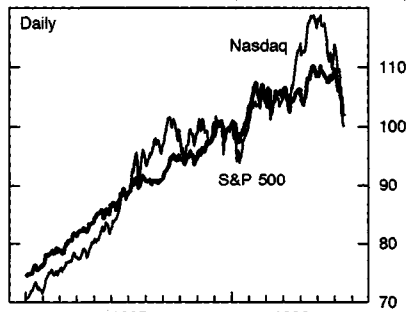
Interest Rates. Interest rates on Treasury securities rose over the first half of 1996, with the most pronounced increases occurring for intermediate-term securities. Between the end of December 1995 and the middle of July, the rate on three-month bills increased somewhat less than ¼ percentage point, the rate on 5-year notes rose about 1¼ percentage points, and the rate on 30-year bonds rose about 1 percent point. Despite these increases, nominal Treasury

rates overall continued to be relatively low by the standards of the past twenty years.

The spread between interest rates on investment-grade private bonds and those on comparable-maturity Treasury securities remained narrow during the first half of the year. In particular, the average spread on Baa-rated industrial bonds over 30-year Treasury bonds continued to fluctuate near where it has been for the last several years and well below the levels typical of the 1980s. The spread on investment-grade utility bonds continued to drift upward, but this appeared to reflect the market's increasing perception that some firms in that industry might become riskier as a result of deregulation and new competitive pressures. The rate spread on high-yield bonds over the comparable Treasury notes narrowed sharply, reversing the upward drift of 1995, and returning this measure to the low end of its range over the last decade. The continuing low level of spreads on most investment-grade securities, as well as the marked decline of the spread on high-yield securities, appeared to reflect in part market participants' increasing confidence in the durability of the economic expansion and consequent optimism about the creditworthiness of corporate borrowers.

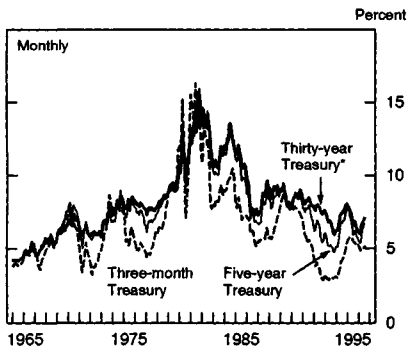
Major Stock Price Indexes

Index (December 29, 1995=100)



Note. Last observations are for July 16, 1996.

Selected Treasury Rates



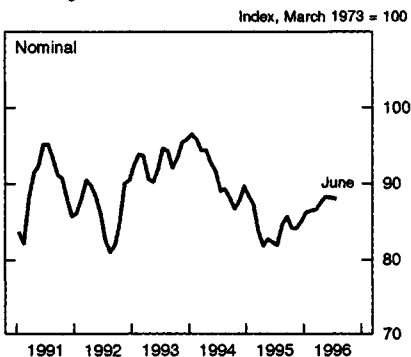
*The twenty-year Treasury bond rate is shown until the first issuance of the thirty-year Treasury bond in February 1977.

Equity Prices. Share prices have fallen in recent weeks, most notably those of "high-tech" companies whose ability to maintain steep earnings trajectories has come into question. On net, though, broad indexes of equity prices have held steady or moved up slightly since the end of 1995. As of July 16, the S&P 500 composite index of stock prices

had increased 2 percent thus far this year, while the NASDAQ had returned to its beginning-of-year level. Even this performance has been impressive, given that it occurred in the face of appreciable upward movement in long-term interest rates.

Exchange Rates. Since mid-April, the weighted average value of the dollar in terms of the other G-10 currencies has generally been about 4 percent above its level at the end of December, although the dollar has moved down somewhat in mid-July. When compared with an index of currencies from a somewhat broader group of U.S. trading partners, the dollar has appreciated 3 percent since December after adjustment for changes in relative consumer prices. The dollar has risen on balance about 4 percent in terms of the German mark and about 6 percent in terms of the Japanese yen.

Exchange Value of the U.S. Dollar



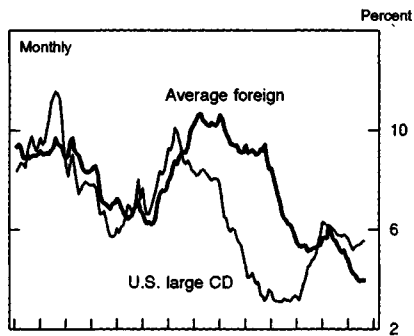
Note. In terms of the currencies of the other G-10 countries. Weights are based on 1972-76 global trade of each of the ten countries.

The dollar has been supported by perceptions of a disparity in the performance of the U.S. economy relative to that of many of our major trading partners and the resulting expectations for the course of relative interest rates. Specifically, while data suggesting robust growth in the United States caused interest rates to rise, questions remained about the strength of expansions in a number of other industrial countries, particularly in Europe. Average long-term (ten-year) interest rates in the other G-10 countries have risen only slightly, about 20 basis points, since the end of December. With U.S. rates rising substantially more than that, the appreciation of the dollar over this period is consistent with the shift in

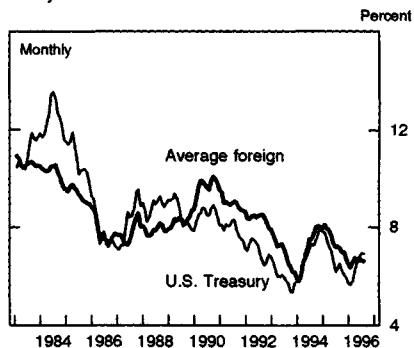
the long-term interest differential in favor of the dollar. In addition, the dollar was lifted to an extent against the yen by data early in the year showing that the Japanese external surpluses were narrowing.

Despite a weak output performance, long-term interest rates in Germany have risen about 50 basis points, with much of that increase coming during the first quarter. Long-term interest rates have actually

U.S. and Foreign Interest Rates Three-month



Ten-year



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.

fallen since the end of last year in some European countries, such as France and Italy, where political and economic policy uncertainties have been reduced. In Japan, long-term interest rates have risen about 30 basis points, on balance. Short-term market interest rates abroad are generally lower than they were at

the end of last year. German short-term market rates are down nearly 50 basis points while rates in France are down more than 100 basis points and those in the United Kingdom are down 70 basis points. Official lending rates have been reduced by the central banks in Germany, France, the United Kingdom, and several other European countries in 1996. In Japan, short-term market interest rates remain near the historically low levels reached during the second half of 1995 as the Bank of Japan's official rates have been unchanged. Stock markets in the foreign G-10 countries have risen 3 to 15 percent since the end of December, except in the United Kingdom, where stock prices, on balance, are about unchanged.

The Mexican peso traded during the first half of 1996 in a range somewhat stronger than that which prevailed at the end of 1995. Mexican 28-day treasury bill (cetes) rates have declined from nearly 50 percent in December to around 30 percent as the rate of inflation has fallen. The economic positions of Mexican households and firms have improved since early 1995, but problems in the financial system remain, as evidenced by increasing non-performing loans at banks. Stock prices have risen, on balance, about 5 percent in peso terms since December, buoyed by the interest rate declines and evidence of recovery in the Mexican economy.

The pace at which private foreigners acquired U.S. assets increased markedly in the first quarter.

Although private net purchases of U.S. Treasury securities were small, there were large increases in the private holdings of U.S. government agency bonds and U.S. corporate bonds, as U.S. corporations issued heavily in the Eurobond market. In addition, direct investment capital inflows surged to almost \$30 billion in the first quarter, reflecting a pickup in foreign acquisitions of U.S. firms. Together, these gross inflows totaled nearly \$80 billion, roughly twice the U.S. current account deficit for the quarter. U.S. net purchases of foreign stocks and bonds were also sizable in the first quarter, with net purchases of foreign stocks from Japan particularly large. U.S. direct investment abroad slowed somewhat between the fourth quarter of 1995 and the first quarter of 1996, but remained near the record pace for all of last year. In April and May, private foreign interest in U.S. securities continued to be strong while U.S. investor interest in foreign stocks cooled somewhat from the strong first-quarter pace.

Foreign official holdings in the United States increased about \$52 billion in the first quarter of 1996, after a record \$110 billion rise in 1995. These increases reflected both intervention to support the foreign exchange value of the dollar by certain industrial countries and substantial reserve accumulation by several developing countries. Data for April and May indicated continued increases in official holdings in the United States, but on a much more modest scale.

Appendix: Sweeps of Retail Transaction Deposits

In January 1994, depository institutions began implementing sweep programs for retail customers.² In such programs, balances in household transaction accounts (typically NOW accounts, but also some demand deposits, both of which are included in M1) are swept into savings deposits, which are part of the non-M1 portion of M2. Such sweeps shift deposits from reservable (transactions) accounts to nonreservable (savings) accounts without impairing depositors' ability to access the funds for transactions purposes. Depositories have an incentive to establish these programs because reserves held at the Federal Reserve earn no interest. Retail sweep programs reduce reported reserves, the monetary base, and M1. They have no effect on M2, since both transactions and savings accounts are in M2.

Retail sweep programs have been established either as daily sweeps or as weekend sweeps. Under a daily sweep, a depositor's transaction balances above a target level are shifted each night into a special savings account created for the purpose. If debits threaten to reduce the remaining transaction account balances below zero, enough funds are transferred back from the savings account to reestablish the target level of transaction balances. Because only six transfers are allowed out of a savings account within a statement month, on the sixth transfer, the entire savings balance is returned to the transaction account. Alternatively, in a weekend sweep program, all affected transaction account balances are swept into the special purpose savings account over the weekend, and then returned on Monday. Some "weekend sweep" programs undertake sweeps on certain holidays as well.

No information is available on the current amounts of transaction balances that are being swept into savings accounts. The Federal Reserve has obtained data from depositories only on the initial amounts swept on the date each program was established. The table below, which is updated and made available to the public on an ongoing basis, shows that the initial amounts swept under programs implemented through May 1996 have cumulated to \$98 billion. With a marginal reserve requirement of 10 percent on most of these balances, the cumulative reduction of required reserves attributable to the initial amounts swept has been nearly \$10 billion.

2. Sweep accounts for business customers of banks became widespread in the mid-1970s. They involve sweeps of demand deposits into RPs or other money market instruments whose minimum sizes are too large to accommodate households.

Sweeps of Transaction Deposits into Savings Accounts*

Billions of dollars

	Monthly averages of initial amounts	Cumulative total
1994		
January	5.3	5.3
February	2.2	7.5
March	0.0	7.5
April	0.0	7.5
May	0.0	7.5
June	0.0	7.5
July	0.0	7.5
August	0.0	7.5
September	1.5	9.0
October	0.6	9.6
November	0.3	9.9
December	0.0	9.9
1995		
January	0.0	9.9
February	0.0	9.9
March	0.0	9.9
April	0.0	9.9
May	5.0	14.9
June	7.3	22.2
July	0.6	22.8
August	4.6	27.4
September	5.9	33.3
October	7.7	41.0
November	4.3	45.3
December	9.2	54.5
1996		
January	13.7	68.2
February	7.0	75.2
March	6.4	81.6
April	7.8	89.4
May	8.4	97.8

*Figures are the estimated total of transaction account balances initially swept into savings accounts owing to the introduction of new sweep programs. Monthly totals are averages of daily data.

Regular monthly updates of initial amounts swept may be obtained by email by sending an email address along with a phone number to sweeps_frb@frb.gov. Those without access to email may request data by calling (202) 872-7577.

Growth of Money and Debt
Percent

Period		M1	M2	M3	Domestic nonfinancial debt
<i>Annual¹</i>					
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	9.8
1983		10.3	11.8	9.5	11.9
1984		5.4	8.1	10.8	14.6
1985		12.0	8.6	7.7	14.4
1986		15.5	9.2	9.0	13.3
1987		6.3	4.2	5.9	10.0
1988		4.3	5.7	6.3	8.8
1989		0.6	5.2	4.0	7.9
1990		4.1	4.1	1.8	6.8
1991		7.9	3.1	1.2	4.6
1992		14.3	1.8	0.6	4.7
1993		10.5	1.4	1.0	5.2
1994		2.4	0.6	1.6	5.2
1995		-1.8	4.0	5.9	5.6
<i>Quarterly (annual rate)³</i>					
1995	Q1	-0.1	1.0	4.5	5.4
	Q2	-0.5	3.8	6.3	7.1
	Q3	-1.5	6.9	7.9	4.9
	Q4	-5.1	4.1	4.5	4.7
1996	Q1	-2.7	5.9	7.2	4.7
	Q2	-0.5	4.1	5.3	n.a.

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.

Chairman Greenspan subsequently submitted the following in response to written questions from the House Banking Subcommittee on Domestic and International Monetary Policy in connection with the July 23, 1996, hearing on the Federal Reserve's Monetary Policy Report to Congress:

FEDERAL RESERVE

Q.1. It would appear that efforts to repeal the Glass-Steagall act, the 1930s-era legislation that separates the commercial banking and securities industries, is at an end for this Congress. Does this put new pressure on the Fed to continue to relax Glass-Steagall restrictions by regulation? Is it likely the Fed will soon increase the percentage of revenues that banks are allowed to earn from securities trading and underwriting? Why/why not?

A.1. On July 31, 1996, the Board announced that it was seeking comment on three modifications to its orders permitting so-called section 20 subsidiaries of bank holding companies to underwrite and deal in securities. The Board is proposing to: (1) increase the amount of revenue that a section 20 subsidiary may derive from underwriting and dealing in securities from 10 percent to 25 percent of its total revenue; (2) amend or eliminate three of the prudential limitations, or firewalls, imposed on the operations of the section 20 subsidiaries; and (3) clarify, in an accounting change to the revenue limit, that the Board will not consider interest income earned on securities that a member bank could hold for its own account toward a section 20 subsidiary's revenue limit.

I should note that the Board exercises its responsibilities under the Glass-Steagall Act and the Bank Holding Company Act consistent with its interpretation of those statutes and safety and soundness. Although the Board has at times deferred certain amendments while Congress was considering legislation that would supersede or moot the Board's contemplated action, the Board's proposals are not intended to be, and should not be considered, a substitute for legislative action in this important area.

Q.2. Recently, Alan Blinder, former vice chairman of the Federal Reserve Board, stated that the Fed should have two boards, one to make monetary policy and another to handle regulatory issues. He also said that a single chairman should preside over both boards. What are the positive and negative aspects of this new plan?

A.2. I do not believe that two separate central bank boards would be in the best interests of our nation. I have often observed that there are significant interactions between monetary and supervisory policies that argue for combining some responsibilities for both areas in a single institution.

For example, awareness of the evolving macroeconomic situation and the economic sources of banking difficulties, which is a byproduct of participation in monetary policymaking, can help improve supervisory decisionmaking. Similarly, the information gained from frequent supervisory interaction with banking organizations can provide valuable insights into current financial developments that can affect macroeconomic performance. A good example of when these interrelationships were important at the Federal Reserve occurred in the early 1990s, when a "credit crunch" in our nation's banking system was hobbling the economy and called for adjustments to the stance of monetary policy as well as to regulatory and supervisory policies.

Interactions between monetary and supervisory processes are particularly noteworthy in financial crisis situations, which often involve decisions about discount window loans. During such periods, lending through the discount window is a powerful tool employed by central banks to prevent difficulties at particular banks from spreading through the entire financial system. Management of the situation typically requires rapid marshalling and close coordination of available information resources and staff expertise regarding the troubled institution as well as other institutions and markets, including bank funding markets, that could potentially be affected. Such a process is conducted most efficiently and effectively within a central bank that has ongoing responsibilities for supervisory as well as monetary policy.

Q.3. Mr. Chairman, recent reports appear to suggest some administrative and perhaps managerial deficiencies at the Fed. Questions have been raised about the Fed's air transport service, an allegedly dramatic increase in the System's administrative costs, and in the quality of the management of the Los Angeles branch of the Reserve Bank of San Francisco. How do you respond to these criticisms?

A.3. Interdistrict Transportation System. Earlier this year, Representative Gonzalez issued a report on the administration of ITS. The report asserts that the Federal Reserve may have violated the Monetary Control Act to the extent that it does not fully recover the costs of ITS through revenue attributable to its use. The GAO and the courts reviewed this issue in the mid-1980s and concluded that such cost recovery was not required by the Act.

No integrated company in the private sector (such as one that provides check collection services) prices individual segments of its operation to achieve a uniform rate of return. Optimum profitability, i.e., minimum consolidated costs, is enhanced through transfer pricing flexibility. Even aside from the imprecisions associated with allocating fixed costs, it would not make sense for us to separately recover the costs of each input to a service, such as transportation, data processing, or labor, as implied by the report.

Rather, all of the costs the Reserve Banks incur in providing check services to depository institutions, including ITS costs (which represent less than 5 percent of the costs of our check service), are recovered through fees for their various check products.

Representative Gonzalez' report also alleges that certain contracting practices used by the Boston Reserve Bank in managing ITS were improper and wasteful. Administration of ITS requires Federal Reserve management to make numerous, rapid, and complex business decisions every day, constantly balancing efforts to improve service, reduce float, and control operating costs. In hindsight, there are likely some decisions that should have been made differently. But from a broad perspective, ITS has been managed effectively in our judgment.

Los Angeles Cash Reporting Errors. I would like to put in context the errors made by the Los Angeles Branch of the Federal Reserve Bank of San Francisco in reporting certain statistical cash information to the Federal Reserve Board. First, these reports are used for informational purposes only. No taxpayer money has been lost. No key decision-making has been compromised. The errors have not affected the usefulness of the information derived from the Federal Reserve's financial statements, nor have they affected the Federal Reserve's calculation of the money supply, its conduct of monetary policy, or the amount of shipments of currency and coin to or from the Branch.

Second, although there were reports of mistakes amounting to \$178 million, the errors changed the Branch's reported production volume by less than one percent. If the mistakes had not been discovered, at worst there would have been slight errors in forecasting future currency demand, which could have caused a slight increase to the Federal Reserve's order to the Treasury to print new currency. The cost of this higher currency print order would have been offset, however, by a lower print order in the following year.

Third, the Los Angeles Branch had identified the problems internally and was in the process of resolving them before Representative Gonzalez began his inquiry. The Los Angeles Branch is working diligently to ensure that all of the data used to prepare the cash statistical reports transmitted to the Board are accurate.

Increase in Administrative Costs. You also questioned the alleged "dramatic increase" in the System's administrative costs. I suspect that this perception is based on comments made by the GAO in its recent report on Federal Reserve operations. In its report, the GAO compared the increase in Federal Reserve operating costs during the 1988 to 1994 period with the increase in total federal discretionary outlays during this period, which was dominated by the major post-cold war retrenchment in defense. Such

a comparison is clearly inappropriate. The GAO also noted, however, that the increase in Federal Reserve operating costs was slightly less than the 51 percent increase in federal discretionary non-defense spending, which has been subject to increasing Congressional restraint in recent years. Unfortunately, this comparison did not receive the same visibility as the comparison with total federal outlays. The Federal Reserve effectively contained its cost despite a significant expansion in its mandated responsibilities and expanded resources required to monitor and contain the financial market turmoil of that period.

Q.4. The Economist magazine recently suggested that, while the Fed appears both open and accountable, restructuring and "reorganization" of the Federal Reserve System--created in 1913--is long overdue. In particular, the magazine suggested redistributing the 12 regional federal reserve banks to more rationally reflect the distribution of economic power in America today. How would you respond?

A.4. We acknowledge that, if the Federal Reserve System were established today, it is likely that Reserve Bank district boundaries and office locations would be different than what currently exists. Clearly, population distribution and centers of economic activity have shifted substantially since the beginning of this century. Nonetheless, the Federal Reserve has been able to fulfill its monetary policy, supervision and regulation, and financial services responsibilities very effectively and efficiently with its current structure and has the flexibility to shift resources across districts as necessary. For example, staff in the Atlanta Federal Reserve district has increased substantially over the years, reflecting the growing economic importance of the Southeast region. While Atlanta staff constituted 3.6 percent of total Reserve Bank staff in 1920; it represents 9.7 percent of total Reserve Bank staff today.

With respect to the Federal Reserve's monetary policy responsibilities, the boards of directors of the 12 Reserve Banks and their 25 Branches provide valuable regional input to our development of national monetary policy. These directors can be drawn from anywhere in the district or branch territory and we have found that they provide comprehensive information about their respective geographic areas.

Similarly, we do not believe that the Federal Reserve's structure has impeded the effectiveness of our banking supervision and regulation function. Under the Federal Reserve Act, responsibility for this function is centralized at the Board. While we have delegated much of the day-to-day responsibility in this area to the Reserve Banks, we manage this function in such a way as to ensure that there is close coordination among the Reserve Banks and the Board; this coordination is essential given the broad geographic scope of many of the banks and holding companies that we regulate. For example, we coordinate examinations of banking organizations that operate in multiple

districts and reallocate supervisory staff across districts when needed to achieve an efficient allocation of resources.

In the case of financial services, the Federal Reserve has been adapting to the changing distribution of population and economic and financial activity. For some types of services, geographic boundaries have become less important. For example, most of our electronic payment services (e.g., Fedwire and ACH) are now consolidated in data centers operated on behalf of all Reserve Banks.

For other services, where geography remains important, we have shifted resources where appropriate. In our check service, we augmented our Head Office and Branch locations with Regional Check Processing Centers (RCPCs) in the 1970s and continue to change over time the Reserve Bank locations that provide this service to ensure that the check service is provided in a cost-effective and high-quality manner. Similarly, the Reserve Banks have augmented their cash processing locations with off-site coin terminals and a cash depot in Puerto Rico. In addition, the Federal Reserve has shifted the boundaries of the geographic territories served by some Reserve Bank offices for financial services in order to provide these services more effectively. Board and Reserve Bank staff are currently reviewing the infrastructure in which we provide check and cash services to determine whether further changes are warranted.

We recognize that review of the Federal Reserve's infrastructure as banking structure, technology, and payment services evolve is necessary on an ongoing basis and we are committed to undertaking such reviews. At this time, we do not believe that the current structure of the Federal Reserve constrains us from managing our responsibilities in a highly efficient and effective manner.

Q.5. In May the Treasury Department announced that it would soon issue bonds that are indexed to inflation, an idea long championed by many economists and tried successfully in other countries. As I understand it, these inflation-indexed bonds would make it easier for people to save and cut the government's cost of borrowing. Does the Fed support indexing? Why/why not?

A.5. The Federal Reserve supports the Treasury Department's decision to issue indexed bonds because such securities could reduce somewhat the cost of financing the national debt. Compared with standard debt instruments, such securities would offer to investors greater certainty regarding real returns. Part of the return on standard debt securities is a premium for bearing inflation risk. Because indexed securities can reduce the uncertainty regarding the effects of inflation on real returns, investors should be willing to accept a lower (real) return on indexed debt relative to the expected real return on standard debt. This drop in the premium for inflation uncertainty would represent a

reduction in the cost of financing the national debt--the most important consideration in managing the debt. In addition, in its monetary policy, over time the Federal Reserve would be able to use the new market-based indicators of inflation expectations and real interest rates that would be made possible by the issuance of indexed debt.

Q.6. I also understand that by comparing the real yields on indexed bonds to the nominal yields on conventional bonds, economists can better estimate the bond market's expectations of inflation. What features of these bonds--such as their maturities and the ability of traders to "strip" the bonds of the coupon payments--would provide the Fed with the best gauge of inflation?

A.6. In structuring indexed bonds, the Treasury will need to consult closely with investors--both individual and institutional--to determine which features are likely to be in strongest demand and are therefore likely to produce the lowest interest rates. The Treasury has indicated that maturities of either ten or thirty years will be offered initially; other maturities will eventually be offered. It seems appropriate to begin with the longer maturities, as investors concerned about inflation generally have long investment horizons. From the point of view of monetary policy, the longer maturities would be of considerable interest, as they would help reveal information about long-term inflation expectations, which are important considerations in monetary policy formulation. The Treasury's recent decision to permit the bonds to be stripped implies that shorter maturities will be available to investors even if the Treasury does not offer them directly.

I should note that, while indexed debt is likely to be quite useful, it will not provide perfect readings on inflation expectations and real interest rates. The interest rates on such securities will continue to incorporate premiums of unknown size for various factors. For example, some premium for inflation uncertainty is likely to remain, as indexed securities will not be able completely to eliminate effects of inflation for all investors in such debt. In addition, interest rates on indexed debt will likely incorporate some liquidity premium, the size of which will depend on the transactions costs incurred in trading these securities. The Federal Reserve will also need to be mindful that the rates on inflation-indexed bonds will be keyed to expected changes in the particular price measure used for indexing; none of the available measures is a perfect representation of the actual movements in the general price level. Nonetheless, indexed debt would provide improved information on inflation expectations and real rates. The primary reason for issuing indexed debt, however, is the potential for reducing real federal interest costs.

Q.7. Federal Reserve Bank letter rulings have permitted retail "sweeps" accounts, lowering reserve requirements for banks using this technique. An unintended

consequence was M1 falling after steady rises since 1959. The federal funds rate may now have less impact on reserves than vault cash and banks' volatile clearing needs. Yet another unintended consequence of counting ATM stock as vault cash is to raise the cost of supplying ATM machines. Is there any sentiment at the Fed to revisit these letter rulings?

A.7. The Federal Reserve is closely monitoring the effects of retail sweep accounts. The decline in measured M1 was not unanticipated, as the drop in NOW accounts associated with sweep activity directly reduces M1. (M2 and M3 are not affected by these programs, as the funds are swept into deposits that are included in these broader measures.) The increased cost of stocking ATM machines is a consequence of the fact that sweep programs allow some banks to meet their remaining reserve requirement completely with existing levels of vault cash. Because any additional holdings of vault cash cannot be counted toward their reserve requirement, their holdings of cash at the margin constitute a greater expense than they did previously. Consequently, such banks may charge ATM operators more for stocking ATMs than they did previously (and those charges may be passed on to users).

The Federal Reserve's primary concern regarding sweep accounts is that their spread could at some point adversely affect the functioning of reserve markets. The reduction in required reserves associated with sweep accounts implies that banks' demands for reserves could eventually come to be dominated by their daily clearing needs, which can fluctuate widely and are difficult to predict. The lower level of required reserve balances means that banks will be less able to arbitrage fluctuations in the federal funds rate, and as a consequence the rate could become more volatile. Such an increase in volatility occurred briefly in early 1991 following a reduction in required reserve ratios by the Federal Reserve. However, greater fluctuations in money market rates have not been in evidence to date as a consequence of sweep accounts. Required reserve balances may simply have not yet declined sufficiently to prompt increased volatility. In addition, banks' ability to operate with lower levels of required reserves appears to have improved. The Federal Reserve is studying possible adaptations in its operating procedures that could be implemented should sweep accounts eventually lead to excessive volatility in the money markets.

At this point, the Federal Reserve does not intend to reconsider its rulings to date on retail sweep accounts. The Federal Reserve will, however, continue to consider the appropriateness of the current structure of reserve requirements and whether legislative changes to the framework for reserve requirements might need to be proposed.

INTERNATIONAL FINANCIAL ISSUES

Q.1. Economists have spent well over a year now dissecting the causes and policy lessons of the Mexican peso crisis. Should the warning signals given by traditional vulnerability indicators--such as the size of the current account deficit and the stock of hard currency reserves--be complemented by other indicators of financial vulnerability such as monetary and debt imbalances?

-- Are countries with macroeconomic imbalances and also committed to fixed exchange rates more vulnerable to financial instability than those with a flexible exchange rate regime?

A.1. It is important to look at a full range of data, not just the traditional indicators, when assessing the near-term and longer-term sustainability of a country's financial situation. Indeed, a main focus of international official efforts in the wake of the Mexican crisis has been to improve the quantity, quality, and timeliness of data available to the official sector and private sector creditors. The IMF is putting the finishing touches on data publication standards that its members will be adopting over time; private sector groups also have been active in this area.

Information on macroeconomic imbalances is particularly important when a country is pursuing a policy centered on a fixed exchange rate. In such instances, domestic imbalances can lead to an erosion of the resources ordinarily available for servicing external obligations. For example, an inflationary monetary policy can make the pegged value of the exchange rate inappropriate; market participants, recognizing the unsustainable situation, take speculative positions against the currency; the authorities then stave off the "speculative attack" by drawing down the country's foreign exchange reserves, but this action weakens the country's ability to service its external debt and ultimately encourages a general withdrawal of financial support. If the process is allowed to persist, the result is often a crisis. But if there is a quick (and appropriate) domestic policy adjustment--in this example, a monetary policy tightening--the process can be stabilizing. Thus, the earlier that creditors learn of the imbalances the more likely that market discipline will elicit the necessary fundamental domestic adjustments before a country's external problems reach crisis proportions.

There is another sense in which countries with fixed exchange rate regimes can be more vulnerable. Market conditions can put pressure on exchange rates and other relative prices even when a country's underlying policies are sound. If a country makes a fixed exchange rate the centerpiece of its policy program and stakes the credibility of that program on its commitment to maintaining a fixed exchange rate, the country runs the risk of undermining its entire policy program when and if it is forced to adjust its

exchange rate in the face of international economic shocks and other forces that have little or nothing to do with the country's domestic economic policies.

Q.2. The G-7 countries, together with the IMF and World Bank, have recently taken steps to strengthen the capacity of the international financial system to deal with the volatility that has accompanied the development of global markets. Will these steps toward enhanced crisis prevention and crisis management properly balance concerns over moral hazard with systemic risk? Will they help ensure that the U.S. is no longer the lender of last resort?

A.2. There are essentially three major areas in which the major industrial countries and multilateral official institutions such as the IMF and the World Bank have taken steps to strengthen the capacity of the international financial system to deal with instability. First, an emphasis has been placed on preventive measures, including development of data standards that should help the official sector and private sector creditors to assess the financial soundness of borrowing countries and thereby should serve in effect as an "early warning system." Second, steps have been taken to expedite IMF procedures, in certain circumstances, in order that official financial resources can be deployed in a speedy manner when necessary; an effort to increase the resources available to the Fund to meet extraordinary needs is also well underway and is expected to be successfully completed. Third, an extensive study by a G-10 working party has been made of the alternatives to using public funds when a major sovereign liquidity crisis does occur, and several promising approaches are being explored in follow-up work.

Throughout all of these endeavors, the trade-off between moral hazard risk and systemic risk has been a key concern. Striking the right balance between these two risks is difficult, particularly in light of the fact that early in a crisis it is not possible to determine with confidence whether the crisis is likely to develop into a full-blown "systemic threat" and that it is often dangerous to take a "wait and see" attitude. Nevertheless, the emphasis on prevention and the official search for additional alternatives to large-scale official financial support packages can be expected to diminish the moral hazard problem, while the efforts to streamline IMF procedures and bolster IMF financial resources (under certain circumstances) can be expected to improve the ability of the official sector to respond, when necessary, in a timely and adequate manner to crises that do indeed represent significant systemic threats.

The enhancement of multilateral financial resources available for addressing crises should also reduce the likelihood that the United States will need in the future to serve as the principal provider of official financial support during a crisis with systemic implications. Moreover, the efforts to establish preventive measures and to broaden the range of practical alternatives to large-scale official financial support packages should

reduce the overall need for official funds whether from multilateral institutions or from individual countries.

Q.3. I understand there have been signs of increased cooperation between Asian central banks in dealing with volatile foreign exchange markets. In addition, I also understand there have been proposals for the creation of a regional organization in Asia similar to the Bank for International Settlements.

-- What is the genesis of these developments and which Asian central banks count among the participants? Is regional monetary cooperation being led by the Bank of Japan? The Hong Kong Monetary Authority? What is the Fed's assessment of and role in, if any, these developments?

A.3. Efforts to develop closer ties among Asian central banks have been ongoing for a number of years. At the initiative of the Bank of Japan, a grouping of 11 Asian/Pacific central banks/monetary authorities (Australia, China, Hong Kong, Indonesia, Japan, Korea, Malaysia, New Zealand, the Philippines, Singapore, and Thailand) in 1991 formed the Executive Meeting of East Asian and Pacific central banks (EMEAP) to foster regional cooperation.

The 1994-1995 Mexican crisis and its aftershocks have served as a catalyst to some of the Asian/Pacific monetary authorities to develop closer channels of cooperation. In November 1995, a subgroup of EMEAP central banks (Australia, Hong Kong, Indonesia, Malaysia, and Thailand) announced their participation in a series of bilateral arrangements that can provide immediate liquidity to a country that is experiencing pressure on its currency. The Philippines subsequently decided to participate in bilateral arrangements with these countries.

These bilateral arrangements involve standard repurchase agreements, in which one of the countries could acquire liquid reserves from the other in exchange for collateral in the form of U.S. government securities, with an agreement to repurchase the securities at a fixed price at a specified future date.

On April 25, 1996, the Bank of Japan announced that it would participate in similar arrangements in yen with these countries.

There are some central bankers from the Asian/Pacific region who favor establishing a more formal institutional structure to foster regional central bank cooperation, modeled after the Bank for International Settlements. Views in the region on creating a new institution differ, in part, depending on whether such an institution is seen merely as a forum for central bank discussion or possibly as a vehicle for central

bank cooperation or as a full-scale international financial institution. At the most recent EMEAP meeting in July, the member central banks agreed to enhance the functions of their regional organization by forming working groups on financial market developments and on central banking operations and a study group on banking supervision. At the July meeting, the central banks agreed that it was premature to set up an Asian version of the Bank for International Settlements.

The Federal Reserve has played no role in any of these arrangements. However, the Federal Reserve is interested in developments in enhanced central bank cooperation in Asia. It is prepared to consider a closer working relationship with the central banks of the region, particularly with regard to such key central bank concerns as banking supervision and payment systems issues.

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