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FEDERAL RESERVE BOARD'S SEMI-ANNUAL MONETARY POLICY REPORT TO CONGRESS

Thursday, July 20, 1989

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON DOMESTIC MONETARY POLICY,
COMMITTEE ON BANKING, FINANCE AND URBAN AFFAIRS,
Washington, DC.

The subcommittee met at 10:05 a.m., pursuant to notice, in room 2128, Rayburn House Office Building, Hon. Stephen L. Neal, (chairman of the subcommittee) presiding.

Present: Chairman Neal, Representatives Barnard, Gonzalez, Hoagland, McCollum, Leach, and Bunning.

Also present: Kaptur, Wylie, Hiler, Roth, and McCandless.

Chairman NEAL. Let me call the subcommittee to order at this time.

This morning I am pleased to welcome the distinguished Chairman of the Federal Reserve Board who will present the Board's Semi-annual Monetary Policy Report to Congress.

At our last monetary policy hearing, in February, Chairman Greenspan confirmed his support for zero inflation as the dominant objective of monetary policy. I strongly share his commitment to zero inflation. No other economic attainment could be as beneficial to the American people. Zero inflation is the necessary prerequisite for low interest rates. It provides the optimal environment for sustaining high employment and real growth, for encouraging savings and promoting investment, and for enhancing productivity. It provides the only firm ground on which businesses and investors can plan for the long term, secure against the risks of excessive price volatility. It minimizes the occurrence and moderates the severity of recessions. It enables the economy to provide the American people with the highest standard of living attainable by virtue of our natural resources, technological skills and hard work.

We should never forget that lowering inflation to zero with the resultant low interest rates is the best possible policy for the working people, middle- and low-income people of America. By definition these are the people that must borrow and therefore will benefit from low interest rates. These are the folks least able to deal with the uncertainties caused by inflation.

Almost no one denies that zero inflation will bring these benefits in some abstract, long run. The problem has always been to make zero inflation an operational objective, attainable in real time. Characterizing a policy goal as long run usually implies that the outcome would be desirable, if it ever happens, but we really don't want to make hard policy choices here and now to ensure that it is eventually achieved.

Chairman Greenspan made it clear that he regarded zero inflation as a serious objective, to be attained by policies actually taken with that goal in mind, and to be reached within a relatively short period of time—5 years at most and preferably sooner. That was a very welcome statement, one of the most definitive and positive statements ever to come out of these semi-annual hearings on monetary policy.

We all know, however, that statements and rhetoric are the easy part of policy-making. Monetary policy is reflected in numbers and not words. Whatever monetary officials may say, what they actually do is reflected in the numbers that count—numbers on the money supply, on interest rates and, with a lag, numbers on inflation. In judging monetary policy we should pay more attention to the numbers and less attention to the words.

That is no easy task, since the numbers must be interpreted. Their impact on the economy is often ambiguous, and may not become clear for some time. Nonetheless, the primary focus should always be on the numbers: the numbers that measure inflation, and the numbers that indicate, however ambiguously, whether policy is moving toward zero inflation, or away from it.

Judging policy by the numbers, it seems to me clear that the Federal Open Market Committee has indeed been acting consistently to reinforce Chairman Greenspan's rhetorical commitment to zero inflation. To be sure, the inflation numbers are still too high, and will probably remain high for some time yet, though the very latest reports are encouraging. We cannot, however, judge policy solely on the basis of the latest inflation numbers. Monetary policy operates on inflation with a substantial lag, perhaps as long as 2 years. Judged by virtually all the numbers generally taken to indicate the direction of policy, monetary policy has been consistently tight through most of this year—a continuation of the tightening of 1988. A dramatic example is the behavior of M2. As revealed on the chart on the wall, the path of M2 through the first half of the year is well below the Fed's target ranges.

[The chart with information on M2, can be found in the appendix.]

This tightening will likely restrain inflation and, sooner or later, begin moving it toward zero. The Fed's own so-called "P Star,"—an indicator of future inflationary pressures based on the behavior of M2—signals a future decline in inflation, though the timing and extent remain uncertain.

So I want to congratulate Chairman Greenspan this morning for delivering a policy that promises to back up his words. I am fully aware that some analysts and forecasters think policy has been so tight it will cause a serious economic slowdown, perhaps even a recession. We do see concrete signs of slowdown underway. I am not going to try to judge whether the Fed has tightened a little too much, not quite enough, or just right. I applaud the general direction, given the serious inflationary pressures that were arising, and the overwhelming importance we must attach to the ultimate objective of zero inflation. We should never forget that we can not avoid recession by inflating, we just postpone it.

If the economy turns very weak, the Fed will have some running room for moderate easing, without compromising progress toward zero inflation over the next 5 years. I only urge, once again, that the Fed keep that paramount goal in sight, whatever short-run turbulence the economy may experience in the near term. Zero inflation, the low interest rates, low unemployment, increased savings, investment and productivity, maximum sustainable growth and improved living standards that will accompany it is an outstanding goal that we all can share and be proud of, and I certainly commend Chairman Greenspan for his dedication to fighting inflation.

I want to welcome the Chairman this morning. I would first like to yield to our distinguished ranking minority Member, Mr. McCollum, for his comments.

Mr. McCollum. Thank you very much, Mr. Chairman, and I, too, want to welcome Chairman Greenspan this morning. It's certainly good to see you back with us, and we are looking forward very much to hearing from you on your report on the state of the affairs down in your shop.

I guess I am always reminded when you appear that despite the emphasis that is always focused on this particular set of hearings because of the Open Market Committee's actions and the monetary policy concerns we all have, that the Federal Reserve does a great deal more than this particular function, and yet the attention obviously is there because what you do with regard to influencing the course of our country's economy in terms of inflation and in terms of steadiness and in terms of avoiding recessions where possible is of paramount concern to the business community and to the welfare of Americans as a whole.

So this morning I think that it's interesting to have your testimony in light of the fact that it seems as though the economists in general and the market projectors as well always breathe in and out heavily on every little movement that is made in the Open Market Committee whenever they guess it or whenever they figure it out.

Yet the important thing is what you point out in your testimony, not only this time, but you've done it with us before, is where we are going over a longer period of time. It seems to me that the past few months, while they may have appeared a little rocky at time, have so far in this year at least proven, as Mr. Neal has indicated, that the wisdom is there in your efforts and in the tremendous amount of time and effort consumed by the members of the Board and Policy Committee.

I think your efforts at a so-called soft landing and a smooth sail through these times when inflation looked like it could get out of hand so far this year appear to be working, and I do want to commend not only yourself, but of course all the members of the Board and the Open Market Committee for so far agilely doing extremely well and doing better than your critics would have anticipated, and that often is the case. Critics like to be out front, you know.

The second thing though that concerns me that Mr. Neal didn't mention, and I hope you will comment on this morning beyond the issue of where we are going as you see it now, is the question of this trade deficit figure. It was a blip perhaps, or was it more significant?

As we begin to reign in inflation here and the dollar value has fluctuated abroad, are we going to go back into trouble on the trade balance and will that be a major factor, or was this an aberration in the last few days when the report came out for the measurement of the current period?

I know these are tough questions to balance, but I would be very curious in particular as to your thinking with regard to that as well as to the overall questions that you'll normally answer on the state of the economy and inflation and so on.

Again thank you for coming. We appreciate it very much.

I yield back.

Chairman NEAL. Mr. Barnard.

Mr. BARNARD. No.

Chairman NEAL. Let me recognize our distinguished ranking Member of the full committee, Mr. Wylie.

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

May I also welcome you, Chairman Greenspan, and I, too, am looking forward very much to your report this morning.

I would observe that the Federal Reserve is now facing a very challenging situation as I observe it. Inflation this year has been higher than we would like, but at the same time economic growth seems to be slowing down some. But these recent developments have taken place against the backdrop of a tremendous successful U.S. economy in the last several years, and the economic expansion is now well into it's seventh year. Employment gains have been impressive, and underlying inflation tendencies have not picked up as much in the last few years.

The Fed, as Mr. McCollum suggested, gets discredited when the economy is bad. So I will at least give some of the credit to the Fed for the strong economic performance over the past few months. I believe you and your colleagues ought to be commended generally for artfully conducting monetary policy, and that you have done an admirable job under what appeared to be very difficult circumstances earlier in the year.

The recent easing of monetary policy that you engineered demonstrated the need for flexibility to policy-making and you have enunciated that policy in the past and it has proved to be appropriate in the face of very changing conditions.

So your recent actions and the positive reactions lead me to be optimistic about the economic expansion in the future, and we look forward to your assessment of the current situation and any thoughts you have for the future.

Thank you very much, Mr. Chairman.

Chairman NEAL. Mr. Hoagland.

Mr. HOAGLAND. I have no opening statement, Mr. Chairman.

Chairman NEAL. Mr. Roth.

Mr. ROTH. I just have a short opening comment. I welcome Chairman Greenspan's optimism. When I read his statements I think we share a lot of that optimism. The last time you were here we had a lot of gloom and doom saying that the roof is going to cave in. Yet our economy keeps on roaring down the track like a Japanese bullet train. This economy is strong and it's going to remain strong.

But I am concerned about a couple of things. I think all the Members on this panel, Chairman Greenspan, serve on the conference on the S&L bill that is working its way through the House, and when I consider that problem, I get nervous about what could happen. Is this the only black hole we are going to see, or are we going to see other black holes like this.

So I think this hearing today is far more than a routine semiannual update, Mr. Chairman. I think the current reports all indicate that we are entering a new stage in this economic cycle and we should be concerned about an economic slowdown, unemployment and the trade deficit and the like.

I am particularly concerned about the debt burden. The debt problem we're facing in America today is really our Achilles' heel, and I would like to have your views on that. I hope the S&L problem is the only black hole that we are facing. I hope that with farm credit, mortgage guarantees, and small business loans, we don't face similar problems.

So, Mr. Chairman, you come before us at a critical juncture, and while I feel that this economy can remain strong, I think that we have to take a good assessment of the risks we face so that we take the right steps for the economy to remain stronger into the future.

Thank you, Mr. Chairman.

Chairman NEAL. Are there others who would like to make opening comments?

[No response.]

If not, I would like to welcome the distinguished Federal Reserve Board Chairman. We will put your entire report and statement into the record, Mr. Chairman. Please proceed as you will.

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

Mr. GREENSPAN. Thank you very much.

Mr. Chairman and Members of the committee, I appreciate this opportunity to appear before you in connection with the Federal Reserve's semiannual Monetary Policy Report to the Congress. In my prepared remarks today I will adhere closely to the matter at hand, that is, monetary policy and the state of the Nation's economy.

Over the course of this year, the contours of the broad economic setting have changed. As a consequence, the stance of monetary policy also has shifted somewhat, although the fundamental objective of our policy has not. That objective remains to maximize sustainable economic growth which in turn requires the achievement of price stability over time.

At our report to the Congress in February of this year I characterized the economy as strong with the risks on the side of a further intensifying of price pressures.

In view of the dimensions of the inflation threat, the Federal Reserve tightened policy further early this year. Additional reserve restraint was applied through open market operations, and the discount rate was raised ½ a percentage point. The determination to resist any pickup in inflation also motivated the decision of the

Federal Open Market Committee at its February meeting to lower the ranges for money and credit growth for 1989.

Reflecting the economy's apparent strength and the tighter stance of policy, interest rates rose during the first quarter. Short-term market rates increased around 1 percentage point over the quarter leaving them up more than 3 points from a year earlier, but long-term rates held relatively steady.

By the beginning of the second quarter, the outlook for spending and prices was becoming more mixed. Scattered indications of an emerging softening in economic activity began to appear, prompting market interest rates to pull back. Rates continued to fall as a variety of factors pointed to some lessening of price pressures in the period ahead. In particular, money growth weakened further, the underlying trend in inflation appeared to be less severe than markets had feared, the dollar continued to climb and domestic demand slackened. Against this background, the Federal Reserve eased reserve conditions, first in early June and again in early July. By mid-July, most short-term market rates had fallen to a bit below their year-end levels, and long-term interest rates were down as much as a full point, to their lowest levels in more than 2 years.

Economic activity apparently grew in the first half of this year at a rate somewhat below that of potential GNP. This stands in sharp contrast to the performance of the preceding 2 years during which growth proceeded at a pace that placed increasing pressures on labor and capital resources.

Prices did accelerate in the first 6 months of this year, but most of the increase may be transitory, related to supply conditions in food and petroleum markets. After a gradual pickup over the preceding 2 years, price inflation outside of food and energy held near its 1988 pace.

The strength of the potential inflationary pressures in 1988 and into 1989 was, of course, the motive for the progressive tightening of policy that the Federal Reserve undertook over that period. And the outlook for some reduction in these pressures owes in part to that policy restraint. The associated rise in market interest rates, beginning early last year, opened up wide "opportunity" costs of holding money assets and resulted in a sharp slowing of money growth.

In addition to the effect of interest rates, several special factors played a role in slowing money growth and boosting velocity—that is, the ratio of nominal GNP to money. Probably the most important of these was the unexpectedly large size of personal tax liabilities in April. Many individuals evidently were surprised by the size of their liabilities, and drew down their money balances below normal levels to make the required payments.

The difficulties of the thrift industry also may have affected M2 growth. Late last year, as public attention increasingly focused on the financial condition of the industry and its insurance fund, FSLIC-insured institutions began to lose deposits at a significant rate. While most of the funds apparently were redeposited within M2 at commercial banks or money funds, this factor likely also had some dampening effect on that aggregate.

More recently, growth of the broader monetary aggregates has picked up markedly. The restraint imposed by the earlier rise in market interest rates is fading, and households appear to be rebuilding their tax depleted balances. As of May, M2 had risen at just a 1 percent rate from its fourth-quarter base, but the 6¾ percent rate of growth in June lifted the year-to-date increase to around a 2 percent rate, still somewhat below its 3 to 7 percent annual target cone. M3 rose at a 3½ rate through June, at the lower end of its range. The latest data on these aggregates suggests that relatively rapid expansion has continued into July.

Looking ahead at the remainder of 1989 and into 1990, recent developments suggest that the balance of risks may have shifted somewhat away from greater inflation. Even so, inflation remains high—clearly above our objective. Any inflation that persists will hinder the economy's ability to perform at peak efficiency and create jobs. Consequently, monetary policy will need to continue to focus on laying the groundwork for gradual progress toward price stability. Such an outcome need not imply a marked downturn in the economy, and policy will have to be alert to any emerging indications of a cumulative weakening of activity. However, progress on inflation and optimum growth over time also require that our productive resources not be under such pressures that their prices continue to rise without abating. In light of historical patterns of labor and capital growth and productivity, this progress very likely will be associated with a more moderate, and hence sustainable, expansion in demand than we experienced in 1987 and 1988.

At its meeting earlier this month, the Federal Open Market Committee determined that a combination of continued economic growth and reduced pressures on prices would be promoted by growth of money and debt in 1989 within the annual ranges that were set in February. Moreover, it tentatively decided to maintain these same ranges through 1990.

The specified ranges, both for this year and next, retain the 4 percentage-point width first instituted for the broader aggregates in 1988. Considerable uncertainties about the behavior of money and credit remain, and the greater breadth allows for a range of paths for these aggregates as financial and economic developments may warrant. In view of the apparent variability, particularly over the short run, in relationships between the monetary aggregates and the economy, policy will continue to be carried out with attention to a wide range of economic and financial indicators. The complex nature of the economy and the chance of false signals demand that we cast our net broadly—gathering information on prices, real activity, financial and foreign exchange markets, and related data.

Although M2 remains below its 1989 target cone, the decline in interest rates in recent months, along with the continued growth of income, should provide support for that aggregate over the rest of this year, helping to lift it into the lower part of its target range. We also expect M3 to strengthen from its rate of growth over the first half of the year moving up into the middle of its target range by year-end.

Growth of money and debt within the 1989 ranges is expected to be consistent with nominal GNP rising this year at a pace not too far from last year's increase, according to the projections of the FOMC members and other presidents of Reserve Banks. These projections, however, incorporate somewhat more inflation and less real growth than we experienced in 1988. The central tendency of the projections of 2 to 2½ percent real GNP growth over the four quarters of this year implies continued moderate economic growth throughout the year. For the year as a whole, these projections anticipate that growth is likely to be strongest in the investment and export sectors of the economy, with expansion of consumer expenditures and Government purchases rather subdued.

A sectoral pattern of growth such as this would in fact serve the Nation's longer-term needs by contributing to a better external balance. Fundamentally, improvement in our international payments position requires productivity-enhancing investment and a higher national savings rate. In this regard the Federal Government can play a significant positive role by reducing the budget deficit.

The outlook for inflation this year, as reflected in the central tendency of the projections expressed at the FOMC meeting, is for a 5 to 5½ percent increase in the consumer price index. A figure in this range would represent the highest annual inflation rate in the United States since 1981. This is source of concern to the Federal Reserve. Yet this rate is below that experienced in the first 6 months. This implies a considerable slowing over the remainder of the year, reflecting earlier monetary policy restraint and a perspective moderation in food and energy prices.

Federal Reserve policy is focused on laying the groundwork for more definite progress in reducing inflation pressures in 1990, while continuing support for the economic expansion. The ranges provisionally established for growth of money and debt next year are consistent with these intentions.

Thus, although the 1990 ranges do not represent another step in the gradual, multi-year lowering of the ranges, the Federal Reserve's intent to make further progress against inflation remains intact. Uncertainties about the outlook suggested a pause in the process of reducing the ranges; however, the Committee recognizes that our goal of price stability will require additional downward adjustments in these ranges over time. Of course, as we draw closer to 1990, the economic and financial conditions prevailing will become clearer, allowing us to approach our decisions on the ranges with more confidence. Hence, the current ranges for money and credit growth in 1990 should be viewed as very preliminary.

The economic projections for 1990 made by the Governors and the Reserve Bank presidents center in a range of 1½ to 2 percent real GNP growth and 4½ to 5 percent inflation for next year. Naturally, as I have already noted, there are considerable uncertainties surrounding forecasts for 1990.

The Federal Reserve is committed to doing its utmost to ensure prosperity and rising standards of living over the long run. Given the powers and responsibilities of the central bank, that means most importantly maintaining confidence in our currency by maintaining its purchasing power.

The principal role of monetary policy is to provide a stable backdrop against which economic decisions can be made. A stable, predictable price environment is essential to ensure that resources can be put to their best use and ample investment for the future can be made.

In the long run, the link between money and prices is unassailable. That link is central to the mission of the Federal Reserve, for it reminds us that without the acquiescence of the central bank, inflation cannot take root. Ultimately, the monetary authorities must face the responsibility for lasting price trends. While oil price shocks, droughts, higher taxes or new Government regulations may boost broad price indexes at one time or another, sustained inflation requires at least the forbearance of the central bank. Moreover, as many nations have learned, inflation can be corrosive. As it accelerates, the signals of the market system lose their value, financial assets lose their worth, and economic progress becomes impossible.

Thankfully, this bleak scenario is not one that we in the United States are confronting. We do, however, face a difficult balancing act. The economy has prospered in recent years; the economic expansion has proven exceptionally durable, employment has surpassed all but the most optimistic expectations, and the underlying inflation rate after coming down quickly in the early 1980's, has accelerated only modestly. But now signs of softness in the economy have shown up.

Accordingly, it is prudent for the Federal Reserve to recognize the risk that such softness conceivably could cumulate and deepen, resulting in a substantial downturn in activity. We also recognize, however, that a degree of slack in labor and product markets will ease the inflationary pressures that have built up. So our policy, under current circumstances, is not oriented toward avoiding a slow-down in demand, for a slowing from the unsustainable rates of 1987 and 1988 is probably unavoidable. Rather what we seek to avoid is an unnecessary and destructive recession.

The balance that we must strike is to support moderate growth of demand in the near term, while concurrently progressing toward our longer-term goal of a stable price level. Admittedly, the balance we are seeking is a delicate one. I wish I could say that the business cycle has been repealed. But some day, some event will end the extraordinary string of economic advances that has prevailed since late 1982. For example, an inadvertent, excess accumulation of inventories or an external supply shock could lead to a significant retrenchment in economic activity.

Moreover, I cannot rule out a policy mistake as a trigger for a downturn. We at the Federal Reserve, for example, might fail to restrain a speculative surge in the economy or fail to recognize that we were holding reserves too tight for too long. Given the lags in the effects of policy, forecasts inevitably are involved and thus errors inevitably arise. Our job is to keep such errors to an absolute minimum. An efficient policy is one that doesn't lose its bearings, that hones in on price stability over time, but that copes with and makes allowances for any unforeseen weakness in economic activity. It is such a policy that the Federal Reserve will endeavor to pursue.

Thank you, Mr. Chairman.

[The prepared statement of Alan Greenspan can be found in the appendix.]

Chairman Neal. Thank you, Mr. Chairman. On the first page of your statement you assert that maximizing sustainable economic growth requires the achievement of price stability over time. It seems to me that this is a very important point. I think it underscores the need to achieve zero inflation. Would you elaborate on that point. Why is zero inflation a prerequisite for maximizing sustainable economic growth?

Mr. GREENSPAN. Mr. Chairman, I think we have observed over the years, and very specifically during the 1970's, that the most destabilizing force that we can engender in our economy is price inflation. Indeed, I think we can find most of the fluctuations that occurred in economic activity resulting directly or indirectly from the inflation pressures which emerged at that time.

Conversely, the period of the 1950's and especially the first half of the 1960's prior to the onset of the Vietnam War was a period of price and economic stability, and I think it was not an accident. I think it's built into the nature of the type of economy which prevails in this country and in the Western World, and it clearly signals to us that if we seek to achieve maximum long-term economic growth, the lowest potential unemployment rate and the maximum use of resources, both capital and labor, in this country, if we choose to do that as a goal, then zero inflation should be a key element in trying to create a base for such a benevolent environment.

Chairman NEAL. Thank you.

Mr. Chairman, your projected target ranges for 1990 for M2 were not lowered, as you testified, but were kept the same as this year by 3 percent to 7 percent. I presume this is just a pause in your progressive lowering of M2 target ranges. Isn't it true that to attain and maintain zero inflation we will need M2 growth at a much lower level, at around the rate of real growth in the economy of say 2½ to 3 percent compared to the midpoint of the ranges for this year and next year, which is 5 percent? Doesn't your research on "P Star" indicate that in the long run M2 should grow no faster than the real economy grows in order to attain zero inflation?

Mr. GREENSPAN. That is certainly correct, Mr. Chairman, and indeed our evaluation of the interrelationships between money supply, the economy and prices does suggest, as you indicate, that over the longer run a zero inflation rate would be consistent with M2 annual growth of approximately 2½ to 3 percent.

As I stipulated in my opening remarks, we recognize that the 1990 preliminary targets are only a pause, and that in order to pursue a goal of zero inflation over the longrun, implicit in such a goal is a further lowering of our target range.

Chairman NEAL. Thank you, sir. I want to underscore what you said a minute ago. It seems to me so important for us as a country to understand clearly the enormous economic benefits that flow from zero inflation. Zero inflation provides the opportunity for maximum employment, for maximum savings, for maximum productivity, for the lowest possible interest rates, for our being the most competitive we can possibly be in international trade. The benefits that flow from zero inflation are enormous. I think that we should not miss any opportunity to point them out and, hopefully, get a good broad consensus that we ought to move our economy toward zero inflation and keep it there from now on.

Let me yield at this time to Mr. McCollum.

Mr. MCCOLLUM. Thank you, Mr. Chairman.

Chairman Greenspan, listening to your testimony this morning, do I correctly interpret it as saying to us that you were generally pleased with the producer price index and the consumer price index this past week and that we would read into what you're saying that you would anticipate, hopefully at least, that that trend will continue this fall?

Mr. GREENSPAN. Well, we certainly found both indexes gratifying and in line with the general expectation that inflation pressures are easing. It's clearly premature with 1 month's data to say that in fact the inflation pressures are behind us. Obviously they are not, but it's certainly helpful to find one's basic view of the overall environment essentially underscored by data of that sort.

Mr. McCOLLUM. In the same week we had a somewhat disturbing 1-month trade deficit report. How do you read that in light of all of this?

Mr. GREENSPAN. Well, I think it's clear that we had a very dramatic decline in our trade deficit in the early part of 1988, and it has drifted up somewhat, but still a slight downward drift is clearly perceivable over the last 1 or 1½ years.

I do think that exports still have a way to go, and perhaps a significant way to go on the upside for the United States. We still do, incidentally, have, despite the easing of the order patterns of recent months, export orders in excess of exports, in effect implying that the unfilled orders are rising and the trend is still in tact on the export side. I think that we don't fully yet know how far that will carry, but so far the numbers do look encouraging.

The gradual slowing in underlying inflation pressures probably still has not yet impacted on imports as much as it is likely to do, and so I still think that there is a downward trend perceivable in our trade deficit in the period ahead.

Mr. McCOLLUM. In your statement you've stated a number of different ways, but on page 8 you said "Monetary policy will need to continue to focus on laying the groundwork for gradual progress toward price stability," which all of us of course concur in.

You follow that by making the statement "Such an outcome need not imply a marked downturn in the economy, and policy will have to be alert to any emerging indications of a cumulative weakening of activity."

What would those indications be of a cumulative weakening?

Mr. GREENSPAN. Well, first of all, let me just follow up a bit on the trade outlook.

Mr. McCOLLUM. Certainly.

Mr. GREENSPAN. We have to be a little careful in analyzing these numbers of being overly concerned with an individual month's data. I mean, it is quite possible for these trends to go off for a month or for several months and then reassert themselves. It's a highly unstable statistical series, and I don't want to try to give you a forecast other than the long-term drift because it is quite possible that the trend in the trade data could be quite stable for a while and go up and then go down. But I do think that we still have a way to go on the down side so far as the trends are basically concerned.

Not only will we be looking carefully at those data with respect to the emerging forces, but basically what we are looking at is the balance of the way the economy is moving forward—whether or not we see slight inventory backup occurring, whether we see a significant and unexpected deterioration in new orders, for example—anything which suggests that what has been a slow pace and has yet not shown any really significant signs of cumulative downturn.

What we would be looking for is evidence that the moderate, slowed pace begins to accelerate on the downside. We do not see that at this moment. It is sluggish, but not cumulative. There is some very mild backing up of inventories, but nothing near what is usually a precondition for economic downturns.

One thing which I might say would concern me is an acceleration of inflation. Should that occur, I think that would, in and of itself, create the type of structural imbalances which could tilt us down.

I must say to you I don't see that at the moment, but obviously when the economy is running slow, one has to keep that in mind, as I commented in my opening remarks.

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

Thank you, Chairman Neal.

Chairman Neal. Thank you, sir. Let me say to my colleagues, that it is my intention to stick with the 5-minute rule so everyone will have an opportunity to speak. We will have time for as many rounds as Members who wish to speak.

Mr. Barnard.

Mr. Barnard. Thank you, Mr. Chairman.

Welcome, Mr. Greenspan, to our mid-year evaluation of the economy.

In an earlier week's edition of the Economist Magazine they outlined what the growth rates and inflation rates would be for the 12 OCED countries, and they seemed to be somewhat in line with your projections as far as growth and inflation is concerned.

But they do indicate that they feel like the attitude of the public or businesses is going to be that more is going to have to be done than the Fed anticipates doing to stimulate this growth, and I don't envy you the job of trying to anticipate growth and prices and employment to the degree that we are trying to get down to zero inflation.

Of course I don't guess you expect that the reaction to your decisions are going to be wholeheartedly accepted, but do you think that there is going to be a demand to, in view of the projection, a greater demand to reduce interest rates?

Mr. Greenspan. It's difficult for me to make that judgment, Mr. Barnard. The reason I say that is clearly interest rates are down quite significantly. We have had a fairly dramatic decline, and especially in long-term interest rates, which have gone down over a percentage point in the most recent period. The Treasury bill rate is down well over a percentage point, and the whole rate structure is coming down, including mortgage rates.

At this particular stage I would think that the effects of that are beginning to emerge clearly in the various different types of markets, and while obviously, other things equal, lower real interest rates are always better than higher real interest rates, I do think what we have to be very careful about is acting in a manner which reflates the economy very quickly by flooding the market with reserves, which, in turn, may bring short-term rates down. In fact, I can guarantee it will bring short-term rates down, but it will not bring long-term rates down.

Mr. BARNARD. A further question I have is while we have seen inflation increase from 3½ percent to its present since 1988, and what you're saying is it is really unreasonable and unworkable to see that inflation be reduced that fast over the next 2 years?

Mr. GREENSPAN. Well, I think that the path we are on now probably is as good a path as one could be on, granted all of the other problems that we have in the world, in the economy, and the various different types of imbalances. I think it's much too premature to say that we will succeed in diffusing the inflationary pressures in a manner which basically will create the type of environment which the chairman has been discussing. That obviously is where we are heading. It's a longer-term goal and it's not something which I think one can rush.

In other words, if you try to rush it one way or the other, either side, you probably dislodge the economy from its path.

Mr. BARNARD. Mr. Greenspan, I was impressed with what you said on page 16. It says here that "I wish I could say that the business cycle has been repealed, but some day some event will end the extraordinary string of economic advances that has prevailed since late 1982."

Now that combined with the fact that our best weapon, the Government's best weapon to fight inflation is its credibility, as I understand it.

Now this brings me to this question. Couldn't that event be the fact that we continue not to be able to balance the budget and the fact that we are facing problems like the savings and loan bailout, cleanup of nuclear waste and other tremendous costly matters, couldn't that be the event that would put us into what you might could say is an unnecessary and destructive recession?

Mr. GREENSPAN. Well, clearly there are a number of things that could do it, and one would be a disillusionment in the financial markets with the progress that is being made on deficit reduction, and that could conceivably drive long-term interest rates higher, which would tilt us over.

I must say, however, that usually Murphy's Law works such that anything that can go wrong does go wrong, and I must say so far as the Federal budget is concerned, it hasn't been working. The deficit has been coming down and things have been better than I would have forecast. I think that the Congress and the administration should sort of grab that event and use it as a vehicle which could very readily bring the problem of the budget deficit down to insignificant dimensions.

Mr. BARNARD. Well, let me just say in closing, because my time has expired, as we face this very controversial decision as to whether or not the savings and loan bailout will be on budget or off budget, that decision could very well trigger the fact that Gramm-Rudman in the future will not be as important to us as it has been in the past, and when that dike is first cracked, we may then find that we are off and running toward a different circumstance.

I'm pleased with what we've done in bring the deficit down to what it is, but I think that some very interesting decisions are looming right now that would disturb that Gramm-Rudman would continue to be our goal.

Mr. GREENSPAN. Well, I must say, Congressman, that despite the fact that Gramm-Rudman is scarcely the type of fiscal vehicle which, as I have said to others, I would consider ideal as an example in a course in Public Finance 101, it really does look to me as the crucial structure which the Congress and the administration can work with to bring the deficit down, and anything which undercuts Gramm-Rudman, in my view, is clearly detrimental that process.

One of the reasons why I, in fact, very early on before this committee, supported the administration's recommendations with respect to financing was that I considered that its recommendation created less of a threat to the Gramm-Rudman process than alternate means of financing, and specifically the many which suggested to do it on-budget with an exemption. It's the exemption issue, not the on-budget issue which is the crucial question.

Mr. BARNARD. Thank you, sir.

Chairman NEAL. Mr. Wylie.

Mr. WYLIE. Mr. Chairman, I want to follow up on that question. I thought that might be extraneous to your report this morning, and I do appreciate the very rosy report which you have made as far as the state of our economy.

But one of the issues which is about to hang us up on the savings and loan bill perhaps, I'm not sure, is the issue of on budget/off budget financing. You mentioned on page 6 that "As public attention increasingly focused on the financial condition of the industry and its insurance fund, institutions began to lose deposits at a significant rate," and then you point out that our national savings rate is not high enough and we need to do something to enhance it.

So I think we need to restore confidence quickly in the savings and loans and in the depository institutions system.

You also point out that some of the disintermediation from the savings and loans went into banks and money market funds. So it in effect was counted as savings.

But where I'm coming from is this. I agree with you, well I took it from you partly that the psychological effect of waiving Gramm-Rudman at this time might have a bad impact on the state of our economy and on our trading partners who think we are serious about reducing the deficit, and I think we need to be serious about reducing the deficit.

One plan calls for $50 billion of Ref Corp bonds, which would be off budget. Another plan calls for $50 billion of Treasury borrowing, which would be on budget, and I hope it's appropriate as a part of monetary policy discussions here to ask you this question.

What if we put $25 billion off budget for the next 2 fiscal years, and then for fiscal year 1991 we would put the other $25 billion on budget, the point being that we might be able to save a little bit of money, but also we would not have to waive Gramm-Rudman for fiscal year 1989 or fiscal year 1990.

Mr. GREENSPAN. Well that's the first time I've heard that suggestion, Mr. Wylie. Let me just say with respect to saving money, as I have also indicated earlier, that really shouldn't be a part of the decision. I don't consider the issue of the spread between off-budget and on-budget to be the crucial question so far as financing is concerned because the actual up-front costs to fund that difference is just something over $1 billion which, in my judgment, is a small insurance premium to be paid for the purposes of doing it off-budget.

I think the crucial question at this particular stage really gets to the issue of which of the two vehicles essentially would undercut Gramm-Rudman most, and that is not an easy call. I mean neither one has zero damage, and both clearly have a negative effect.

I would not want to comment on your particular suggestion, because I frankly would want to give it a good deal more thought.

Mr. WYLIE. I was going to suggest that you might prefer not to comment just now, but please give it some thought. It's an attempt on my part to come up with some compromise because I don't want us to be at loggerheads over this issue. I think we need to get the whole issue of the savings and loan crisis behind us before the August recess and, as I have pointed out on many occasions, we are losing $10 to $20 million every day we don't solve that problem. It seemed to me as if it might be a compromise which would give us an out, and I use the word "out" advisedly.

Mr. Barnard also pointed out that you have a very rosy report here this morning, and we appreciate it.

On page 16 you said "Moreover, I cannot rule out a policy mistake as a trigger for a downturn," and some observers are concerned about the economy moving into a recession, as I pointed out, and others are worried about inflation picking up further. You say that you think there will be a soft landing and that most members of the FOMC are expecting a soft landing.

But I think I might have detected during your answer to a question from Chairman Neal that the Federal Reserve is probably not going to consider bringing down interest rates very much in the immediate future, and when I say that, that's not related I don't suppose to the statement that you made that you can't rule out a policy mistake as a trigger for a downturn.

Mr. GREENSPAN. Well, all I can say to you, Mr. Wylie, is this morning I'm going out of my way to avoid implying one way or the other what the Federal Open Market Committee is going to do, and the only way you could get such an impression I would suspect is through inadvertence on my part.

Mr. WYLIE. You don't anticipate any mistakes.

Thank you very much, Mr. Chairman.

Chairman NEAL. Mr. Hoagland.

Mr. HOAGLAND. Let me defer to the chairman of the full committee, if I might, Mr. Chairman, because he is so busy with the savings and loan work right now.

Mr. GONZALEZ. No, no, go ahead, Mr. Hoagland. We have time. Go ahead, please. Follow the regular order.

Mr. HOAGLAND. No, please go ahead.

Mr. GONZALEZ. I really appreciate it. [Laughter.]

Well, that should remove any doubt about the all-powerfulness of a chairman.

I thank you very much, Mr. Hoagland.

Actually I apologize for coming in late, but as we all have, we have our district obligations.

I wanted to welcome the Chairman.

Mr. GREENSPAN. Thank you. I was hoping that you would be spending your time elsewhere where you have been doing so much good, Mr. Chairman.

Mr. GONZALEZ. Well, I'm not a party to the detailed processes at this point. We have delegated that with the knowledge that some of the issues are not staff level decisions, but we are trying to iron out to point where we can come in and have one final session and dispose of the matter on hand. But I'm not party to the daily work. We delegated it, both the Senate as well as the House.

Mr. GREENSPAN. Let me just say I wish you well because I think it is a very tough job that you are engaged in.

Mr. GONZALEZ. Well, it's complicated.

Mr. GREENSPAN. That I understand.

Mr. GONZALEZ. I think a lot of headway has been made and continues to be made, and we'll have a happy resolution, maybe not as soon as some of us want it, but pretty quick. But thank you very much for your good wishes.

I just wanted to say that I had to meet with the new Commanding General at the most historic Air Force Base in the United States, Kelly Air Force Base, which is in the my district and has been all along, and that's the only reason I wasn't here at the outset.

I think some of the newer Members here may not realize why we are here. We are here because of the Humphrey-Hawkins Full Employment and Balanced Growth Act of 1978, which I was one of the co-sponsoring authors. The public reporting requirement stipulated in the Act have two important purposes.

Of course I always welcome the Chairman, and particularly this one that I think at a very critical junction in our national development is a very pragmatic captain at the helm of the Nation's monetary ship.

The reason for these semiannual hearings was a result of many years of effort because the Congress believed that economic policy making should be better coordinated between the Federal Reserve Board and the rest of the Federal Government. Essentially that was the major objective.

Second, the reporting requirements of the act provide the public with a rare glimpse of the Federal Reserve's intentions regarding the future course of economic activity.

The fact that you're here today, Mr. Chairman, is a result of the Congress' insistence that the Federal Reserve lay its cards on the table and be more open about its intentions. It was not long ago that the release of meaningful monetary policy data was measured in terms of years and not months or weeks.

While Congress had made progress in requiring the timely release of monetary policy data, I believe more needs to be done. For example, this hearing is being broadcast live to millions of viewers, and yet none of us know the results of the most recent Federal Open Market Committee meeting held several weeks ago.

In fact, the Federal Reserve will not release the official results of that meeting until after its next meeting, which is a lag of 6 weeks.

We live in the most open republic in the world, but our central bank, arguable the single most powerful economic agent within our society, has determined that the public should not have access to the results of its policy actions for 6 weeks. I believe there is no justification for this information lag. The President of the United States would not get away with releasing such critically important information 6 weeks after the fact.

The Federal Reserve should take the initiative and alter this needlessly secretive approach to policymaking. The results of the FOMC meeting should be released the same day the meetings are held. The public has a right to all this information in a timely fashion.

This hearing is being held at a time when the outlook for the economy is mixed. Economists are split as to whether or not the Federal Reserve has gone too far in its quest to cool off economic activity in order to keep inflation in check.

The unexpected rise in the exchange value of the dollar has dramatically increased our merchandise trade deficit which jumped 23 percent in May. While the trade news was disappointing, yesterday's inflation news was unexpectedly good. Consumer prices registered their smallest increase in more than a year as the June CPI rose only $\frac{2}{10}$ths of 1 percent. The favorable inflation news should provide the impetus for the Federal Reserve to further loosen its stranglehold on economic activity.

At this time, in my opinion, the overriding goal of the Federal Reserve should be to concentrate on keeping unemployment at its recent low levels. Inflation may distort the value of economic aggregates, but unemployment degrades the value of human existence.

Again, I say we are very fortunate though at this time to have such a person as you, at the helm Mr. Chairman. As you know, I thoroughly respect you, and I have expressed these views before. Mindful that progress has been made over the course of years but it wasn't until the 1970's that we even had such a thing as the Humphrey-Hawkins Act.

But I want to thank you very much for the great work you're doing.

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

Mr. GONZALEZ. As we have said before, we will do everything we can to be creative and constructive in our criticism.

Thank you, Mr. Chairman, and thank you again, Peter. I deeply appreciate it.

Chairman NEAL. Mr. Roth.

Mr. ROTH. Thank you, Mr. Chairman.

I appreciate you allowing me to ask these questions because I am not on their panel. So I appreciate your allowing me to join the panel this morning.

I'll be very brief. I just need a favor, Mr. Chairman, and two pieces of advice, and then I'll be finished.

The Fed is not only our central bank, but it's also the principal regulator of our banks. With the experience that all of us here on this panel have gone through with the savings and loan, we don't want to go through anything like it again. When everything is said and done, the General Accounting Office now tells us it's going to cost $284 billion. That's $1,000 for every person in this room and every American. I checked my billfold this morning and I don't even have $10 in it. So $1,000 is going to mean a lot I think to every person in the United States.

In 1987 we had more than 180 bank failures in this country, and last year nearly 200 bank failures, and the GAO has told us, Mr. Chairman, that in every single case they studied these bank failures were categorized by bad management to a great degree. GAO requests independent audits of the banks in this country. So in this S&L Bill we have a provision for an independent audit.

Mr. Chairman, the favor I would like to ask is that you join us in promoting that good concept.

Mr. Greenspan. Well, I'm not sure about the specific amendment involved. My recollection is that we have not been enthusiastic about any forms of duplication that would be involved, and we don't want to load the smaller banks with unnecessary audits, but we certainly agree with your general thrust, namely, that in the context of keeping unnecessary audits off the agenda, that there is certainly a crucial requirement on all of our parts to make certain that individual banks are thoroughly looked at and that the reports that they make are correct.

Mr. Roth. Well, thank you, Mr. Chairman. I appreciate that vote of confidence because in this legislation we have taken care of your concern because any bank with less than $150 million in assets would be subject to an FDIC special rule, largely exempting them.

GAO also found that 800 banks, for example, had no audits at all in 1987. I think it's very unfair for the American taxpayer to have to stand behind these banks when these banks aren't even required to have an independent annual audit.

We have 13 banks, Mr. Chairman, in this country that have $1 billion in assets and they do not have audits. I think that's very unfair. So I appreciate your, as I interpret it, endorsement. Thank you.

The advice I would have from you is regarding the $284 billion bill. A dead rat has been pulled here to Capitol Hill by the S&L industry. How can we balance a budget with that type of a bill now facing the Congress?

Mr. Greenspan. Well first of all, let's remember that the vast proportion of that number is interest payments, and that the actual true underlying cost of the savings and loan losses, if you take the $40 billion obligated prior to this most recent endeavor which is estimated to cost some $50 billion is something still probably under $100 billion, and that's not exactly a small number.

But the point at issue here is that the $284 billion is essentially the $50 billion with the interest that is involved, and I think it's important to distinguish between true costs and costs which are financed. In other words, if we were to finance all of the S&L costs through direct taxes in a one-shot tax on the American people, then the total cost would have been the $40 billion plus the $50 billion, which is the current request. There would be no interest. So that the difference between the $50 and whatever figure one uses, depending on how many years of interest you put on, is the interest cost, and it's not directly, as far as I see, related to the hole that we have to fill in the S&L cost. It's the fact that we're borrowing the money to do it is what is generating that cost.

Mr. Roth. But still in the final analysis it's still going to cost the $284 billion.

Mr. Greenspan. Oh, sure. In the end that's quite correct.

Mr. Roth. You're a person that looks into the future and looks at what is taking place in our financial markets. How about farm credit for example? Are we going to be faced with any problems in that area?

Mr. Greenspan. Well, fortunately, the problems in farm credit have very clearly eased. That is, we were having some very significant delinquencies in the farm credit area, and these have come down quite appreciably.

I trust that with the farm real estate values now beginning to rise again, and hopefully the crops coming back to normal yields, that the financial state of the farm community will stabilize and that we will not be looking at anything remotely resembling the type problem we ended up with with the S&Ls.

Mr. Roth. Well, I certainly hope, Mr. Chairman, that you are correct. I have just been handed a note that my time is up, but I appreciate your indulgence in answering the questions.

Thank you, Mr. Chairman.

Chairman Neal. Chairman Gonzalez raised a question and I believe it would be accurate to say that Chairman Gonzalez recommended the immediate release of the decisions made by the Open Market Committee as opposed to releasing it with a delay following the next meeting. Would you like to comment on that?

Mr. Greenspan. Yes. First of all, let me just say that when we make definitive judgments with respect to monetary policy, it is reported immediately. When we change the discount rate, it is reported immediately. When in the past reserve requirements changed, it was reported immediately.

The reason why we choose not to publish our minutes until they are replaced at a subsequent time is that the form of the decisions that are made at the FOMC meeting are a variety of contingencies. By that I mean, as those of you who have read these minutes know, what we basically agree on is that if "A" happens, we will do "B", and if "C" happens, we will do "D", and in a sense what we are doing is not saying we are going to do something very specifically at that particular time, but rather it is a series of contingent actions.

Our concern is that if we were to publish that at the point at which the FOMC set forth the various options, the markets would behave on the basis, or react to our expected contingencies, without the actual events occurring, and we think that is probably more destabilizing than the markets reacting to specific actions taken by the Federal Reserve.

Now what happens when we actually move, Mr. Chairman, is that the markets know it pretty quickly, and in fact we try to communicate to the markets that we have changed policy. And I just say that there is scarcely a difference between the actions we take in which policy is actually changed and the markets' knowledge of that. The difference is almost negligible.

So I say to you that the reason that we don't publish our minutes is a technical problem in the way we function with respect to open market policy.

My own judgment is that we would not be conveying anything new to the markets as to what we're actually doing, but merely just conveying a whole series of what we might do under various different types of contingencies, and I think that's probably more destabilizing to the markets than the way we behave now. Frankly, I think that the procedure which we have is essentially the best so far as tactical month-by-month actions are concerned.

I think tactically we do convey every action we take fully and completely to the market, and obviously the very broadest policy issues are those which we present here in our semiannual meeting, which are our target ranges, and we report them at the point at which those initiations are made.

So I would say that our general purpose is basically in fact to make our actions immediately available to the public because that works most effectively.

It's only because of this very specific contingency question, which is caused by the fact that we cannot meet every day and make decisions every day, that we endeavor to delay the minutes, but do publish them as soon as those minutes become supplemented by a new set of minutes, which occurs approximately every 6 to 7 weeks.

Chairman NEAL. Mr. Hoagland.

Mr. GREENSPAN. I must say, Mr. Chairman, I will be glad, and in fact I would like to go into this in considerable detail and try to explain specifically to you why it is in order to try to make it clear why we think that is superior, and hopefully we would get your judgments as well as a consequence of that type of a discussion.

Mr. GONZALEZ. Now you're talking to this Chairman. Well, I appreciate that very much, Mr. Chairman, and we will get together.

Mr. GREENSPAN. Good.

Mr. HOAGLAND. I know I have told you this story before, Mr. Chairman, but I think it bears repeating. Last January when you first testified before the Banking Committee when Chairman Gonzalez was presiding, you made a couple of remarks that resulted in the market going up 28 or 30 points, and I got a call from my mother that night about how pleased she was. I promised her and my father that whenever I had a chance I would give you a chance to make some comments that might make the market go up. [Laughter.]

I wonder if there is anything you would like to say in that connection today? [Laughter.]

Mr. BARNARD. That gentleman had better get out of the door because there would be a stampede. [Laughter.]

Mr. GREENSPAN. Mr. Hoagland, I am most appreciative of your invitation, and I trust I may be able to decline, if you don't mind, and express my apologies to your mother. [Laughter.]

Mr. HOAGLAND. Well, I will ask you again in 6 months. [Laughter.]

Let me ask you first, Mr. Chairman, after more than a year now of progressive tightening, while you have recently eased monetary policy slightly, and I wonder if this represents a beginning of a trend that is likely to last for a number of months as was the case with the tightening, or are you attempting a fine-tuning maneuver that you may soon reverse?

Mr. GREENSPAN. It's very difficult for me to answer that particular question because we don't know the answer.

The basic thrust of policy is essentially to diffuse the inflation pressures in a manner which does not tilt the economy over into a severe recession. It's much too soon to make a judgment as to what the consequences of our actions late last year or even earlier this year and most recently are.

There are lags in the implementation of monetary policy and its impact and, as I indicated in my prepared remarks, inevitably every monetary policy action presupposes a forecast, and a forecast can be wrong. In fact, if we are right two times out of three, that's a fairly good record. But because you're wrong on occasion, it is not desirable to do too many wiggles because what you then do is to set up a set of potential imbalances in the system which would induce much greater volatility in the market.

So what is wrong basically with so-called fine-tuning is that we can't. That does not mean that we don't endeavor to make adjustments along the way because that is appropriate, but we do it in the context of how confident we are about certain aspects of the economy's future, and at this particular stage, it's fairly clear that we've got a fairly complex situation with which we're dealing, and we tend, I think, to be cautious, and rightfully so.

Mr. HOAGLAND. So when you begin heading in a direction then you're likely to continue in that direction.

Mr. GREENSPAN. Well, actually it's hard to answer that question because events may emerge which make that an inappropriate action. It's very difficult to project monetary policy because what you're essentially trying to do is to project forecasts, in other words, you're forecasting forecasts, and that gets, I think, pretty difficult to handle.

I could give you a long series of potential alternative policy paths which the Federal Reserve could pursue, but I'm not sure that is very helpful because I frankly don't know on which ultimately we will find ourselves.

Mr. HOAGLAND. Let me get you on a different subject briefly. Do you have regular meetings with the President to discuss economic and monetary policy matters to try and develop a coherent strategy to keep the economy on a strong course, or do the contacts take place only on an ad hoc basis, and I'm wondering——

Mr. GREENSPAN. You're talking with the President?

Mr. HOAGLAND. Yes, sir, with the President or with members of his staff.

Mr. GREENSPAN. Well, I have periodic meetings with the President in the so-called quadrate configuration, meaning with the Chairman of the Council of Economic Advisers, the Secretary of the Treasury and the Director of the Office of Management and Budget and myself. That's the so-called quadrate.

We don't have scheduled meetings, but we have them periodically. I meet with all of these people one-on-one frankly quite often—often several times a week and sometimes several times a day—and I do on occasion run into the President and we will chat.

So I feel that there is no lack of appropriate coordination. I mean there is, remember, only one American Government, and there is only one American economic policy, and while we are independent of the administration, that does not mean that we would have a policy which we consider to be at variance with the national policy.

What we try to do is coordinate as best we can in the context of what the Treasury and the President are doing, and that's one of the reasons that we have these periodic meetings, which I would say are more than adequate discussion with the other major policymakers within the administration.

Mr. HOAGLAND. Well, my time is up, Mr. Chairman, and thank you for yours today.

Chairman NEAL. Mr. Leach.

Mr. LEACH. Thank you, Mr. Chairman.

First, let me compliment you on a remarkable statement. I think it's very modest in indicating that the Federal Reserve might make mistakes once in a while and very genteel in saying that the business cycle has not been repealed and that some unkown event might change the direction of the economy.

And genteel I would say to the gentleman from Georgia because the clear message was that some day we might have a change in the political cycle and a Democrat might get elected President. I can understand that this great expansion we've had underway for 8 or 9 years might decline.

Let me just turn briefly, I meant that with some facetiousness, Mr. Barnard——

Mr. BARNARD. We never know, Mr. Leach, with you.

Mr. LEACH. Fair enough [Laughter.]

But it strikes me that even though you've made a definitive statement, you don't want to be inadvertent about making a view known on the direction of policy. You have made a very substantial shift in philosophical attitude in this statement compared to the last one you've given. Your last statement was very tough on short-term concerns for inflation. This statement maintains a firm long-term concern for inflation, but has put forth a very clear signal that short-term accommodation with money supply growth is appropriate.

You pointed out in June that we had a 6¾ percent growth in M2, and that rapid rate is continuing in July. It strikes me that this represents a very significant shift in Federal Reserve policy. Is that valid or not?

Mr. GREENSPAN. I would say that the words that are in my opening statement were chosen very carefully.

Mr. LEACH. Well I appreciate that. Now there has been some indication about rosy forecasts. It strikes me that the economic projections of the Governors and the presidents of the banks are not that rosy, but instead, they indicate stagnation. One and a half percent to 2 percent real GNP growth next year, and 4½ to 5 percent inflation doesn't strike me as a standard that we should be ecstatic about, with the exception that there may be in these kinds of turbulent times something reassuring about stagnancy.

But in the long term are those the kinds of numbers that the Federal Reserve Board is aiming at, or are those on the low side of economic growth and on the high side of inflation?

Mr. GREENSPAN. I would say, one, they were on the low side of economic growth and the high side of inflation.

Mr. LEACH. Fair enough.

Finally, let me just ask one question relating to the value of the dollar. As you know, it has appreciated somewhat. We're back at about the February 1987 levels at a point where Secretary Baker played such a crucial role in precipitating a downward valuation of the dollar relative to some other currencies.

Is your view that the basic kinds of structural personal and Government relations are such that this is where the value of the dollar is going to be pegged, or do you look for it to be lowered or increased in the near future?

Mr. GREENSPAN. Well, I think, as has been stated in the various communiques of the G7 Finance Ministers and Governors, that fundamentally we all perceive that stable exchange rates are better than unstable exchange rates. The way that can be achieved over the longer run is bringing domestic inflation down. In other words, if all of the G7 had very low inflation rates, then, inevitably, exchange rates, bilateral exchange rates amongst the G7 would tend to stabilize.

We don't, however, tend to try to override market forces that we perceive as being fundamental, and there has been no judgment within the G7 to so-called peg the rate, which is implicit in any sort of a fixed rate exchange. But we do overwhelmingly value the issue of stability of exchange rates, and most of the focus is to try to make those rates as stable as we can.

The essential focus over the last year or so has been to do that, and in large measure I would say that we have succeeded. Certainly there has been a considerable amount of cooperation, coordination and considerable efforts jointly and bilaterally, and I must say I'm satisfied with the process.

Mr. LEACH. I appreciate that. I've got a note that my time has expired.

But I would just like to express my appreciation for the flexibility that I think you've indicated in the Federal Reserve policy. I don't know if you were hinting that maybe a mistake in too much tightening had occurred, but clearly a little bit of easing at this time appears to be warranted and the Federal Reserve Board appears to be moving in that direction.

Thank you.

Chairman NEAL. Ms. Kaptur.

Ms. KAPTUR. Mr. Chairman, as you know, I'm not a Member of this subcommittee, but I appreciate the opportunity to attend. Would I be stepping on another Member's rights if I asked a question?

Chairman NEAL. No, we have been going from side to side.

Ms. KAPTUR. All right, Mr. Chairman. I'll make it very brief.

I just want to welcome Chairman Greenspan and thank him for his courtesy to Members of this Committee always and the members of his staff as well.

I just wanted to ask you in the context of the world economy how good is a real growth of 2 percent per year in GNP in view of our trade competitors, some of the growth rates that we see around the world and our productivity? Could you put it in a global context for us, please.

Mr. GREENSPAN. Well, it's clear that when we have international imbalances, meaning we have large current account deficits and our trading partners have large surpluses, if we wish to bring those down, then clearly our domestic demand should rise at a slower pace and, hence, absorb fewer imports than they. In other words, what we want to do is to set up a situation in which their growth and demand is faster than ours so that our exports would rise relative to our imports in a way which would close the gap.

So what we are looking at is a somewhat slower rate of growth in the United States than abroad, and while clearly that's not something which we would like to perceive as permanent by any means, in the short run it does have advantages in bringing the international imbalance down.

Ms. KAPTUR. But the recent trade figures suggest that whatever is supposed to take hold hasn't taken hold yet, don't they?

Mr. GREENSPAN. Well, no, that's not quite right. I think that, as I indicated earlier, the trend in our trade deficit is down, but I do believe there have been and will continue to be pauses. In other words, we come down and we pause, we go down and we pause some more. I think that process is a very jagged one, and I think that if we continuously focus on any individual month or any short-term series of months, I think that's probably not a good enough set of information to track the trend.

Ms. KAPTUR. I thank the gentleman, and yield back the remainder of my time.

Chairman NEAL. Mr. Bunning.

Mr. BUNNING. Thank you, Mr. Chairman.

Welcome, Chairman Greenspan.

I would like to touch on something you said in your statement, particularly in lieu of the fact that the Ways and Means Committee is now about to bring a new tax increase of approximately $50 to $60 billion under consideration presently, and approximately $30 to $35 billion in new spending.

Is this the type of catastrophic occurrence that you are speaking about in your statement? I don't believe they read the President's lips too well during the campaign, no new taxes, and the current Ways and Means Committee has under consideration approximately $50 to $60 billion dollars in new tax revenues.

I don't believe that the Federal Reserve and the policy of the Federal Reserve has taken that into consideration.

Mr. GREENSPAN. Well, Congressman, I think that we read the newspapers and we do have other reports as to what is happening, and we try basically to take into consideration pretty much everything that is going to affect markets because it clearly affects what it is we do and the economy as a whole.

The types of adjustments that I was talking about in my prepared remarks mean supply shocks, for example, macro-global effects like the huge increase in oil prices which were very debilitating to the American economy. There is a long potential list of disasters that could emerge, and I'm just not prepared at this stage to put them into the record.

Mr. BUNNING. Well, all right. Let's follow that up a little bit. The fact of the matter is that you have with your policies and with the other members of the Open Market Committee have been able to restrain our inflation at 5.9 at the max this year, or a little over 6 percent, and how we seem to be trending down.

Do you look for a loosening of interests to continue that trending down, or is the policy of the Federal Reserve going to be maintained at the current level? In other words, the handle that you have on the economy presently seems to be a very effective method. Are you going to loosen or do you project loosening in the future?

Mr. GREENSPAN. Well, Congressman, as I indicated, we eased in early June and early July, and we are under continuous discussions with respect to policy. I can't forecast what it is we will do because it will depend on a events as they emerge.

Mr. BUNNING. What I'm trying to get at is our commercial bankers seem to be reluctant to follow your lead, and the commercial banks seem to be reluctant to lower their prime interest rate even though the Fed has lowered and——

Mr. GREENSPAN. They have lowered it once.

Mr. BUNNING. Yes, and one other or two major banks have lowered it another ¼ of 1 percent or ½ percent, but I'm looking at an overall picture in the next 6 months. Can we look for a continuing lowering or softening of the long- and short-term interest rates?

Mr. GREENSPAN. I can't answer that because I don't have the authority to answer in the sense that I don't have in front of me the Federal Open Market Committee instructions of the next 6 months. But I will say to you that what it is that we will be doing is essentially to monitor very closely what is going on in the economy and in the financial markets and craft our monetary policy essentially to meet what our longer-term goal is, namely, to maintain maximum potential economic growth and, as I indicated very early on, that presupposes continuous restraint on inflationary pressures. The combination of that and how we will emerge in particular is something which I really can't forecast.

Mr. BUNNING. How much impact do you believe that a sequestration might have on our economy?

Mr. GREENSPAN. You mean in a negative sense or in a positive sense?

Mr. BUNNING. Negative.

Mr. GREENSPAN. It depends on the size of the sequestration. I'm not of a view that sequestration necessarily has a negative economic impact because clearly if the budget deficit is not coming down because agreements cannot be reached, while I would not argue that sequestration is something which I find particularly desirable, the alternative of doing nothing is worse. I would conclude under those conditions that if we were forced into sequestration, which I certainly hope we are not, it basically means that we are not bringing the deficit down in a manner which is appropriate to balancing this economy, and sequestration, as bad a tool as it is, is better than doing nothing.

Mr. BUNNING. Thank you. My time has expired. I appreciate you coming before our subcommittee. Thank you.

Mr. GREENSPAN. Thank you very much.

Chairman NEAL. Mr. Chairman, I would like to return briefly to the question of the coordination of policy between the Fed and the administration. I believe that it depends on what you mean by the word coordination as to whether it is a good idea or not. It seemed to me if the word means to harmonize in some way, in other words, to have the policies, fiscal and monetary policies heading down precisely the same path, that that could often be quite disastrous and not a goal to be desired.

Mr. GREENSPAN. You mean if we're both wrong.

Chairman NEAL. Yes, that is exactly right. It seemed to me if you look back over at the 1980's, they provide a good example. You could fairly characterize fiscal policy as having been very loose, and it was only a relatively tight monetary policy, it seems to me, that saved this country from an absolute disaster. If we had coordinated in the sense that a lot of people use that word—or harmonized those policies—our economy would look more like that of Argentina, Brazil, or Mexico. Monetary policy would not have followed the rather sensible course that we have come to eventually. Thus I hope that was not what you meant when you said you thought it was a good idea to coordinate.

Mr. GREENSPAN. I do think it's a good idea to coordinate. That does not necessarily mean that you come to an agreement. Inevitably we have to coordinate. For example, we are the fiscal agent of the Treasury and we do a great number of things which are required to be done in the monetary sphere for them.

But what we do try to do is to tell them what it is we are doing, how we view the outlook and what consequences we think that has, and we do comment on all other aspects of policy and endeavor to make certain that if there are disagreements, that it is not merely because we failed to communicate the reasons for our particular positions.

Fortunately, at this stage in the near 2 years that I have been at the Federal Reserve I have not found myself in the position where I considered that administration policy was moving in a dramatically different direction than I thought the implications of Federal Reserve policy was.

Chairman NEAL. I assume you in no way mean to imply that you would yield any Fed policy-making decisions to the administration.

Mr. GREENSPAN. That is correct. We are independent and behave in that manner, hopefully.

Chairman NEAL. I don't think we have a difference of opinion here. There is a bill floating around that has language to the effect of having the Fed and the administration coordinate policy. I think what the authors of the bill mean by that is something that I believe would be damaging to the economy. I think what they have in mind is that if the fiscal side is on an expansive course, then I think they would like to see the Fed fall in line and pursue expansive policies also. It is in that sense that it seemed to me that it would be a terrible mistake for any kind of coordination.

Mr. GREENSPAN. I would certainly agree with that. I must say to you, Mr. Chairman, that the general philosophy of this administration with respect to fiscal and monetary affairs I find myself comfortable with.

Chairman NEAL. Well, I find that interesting, but that is not the question I asked however. It seems to me it is important, as I said in my opening statement, for us as a subcommittee to independently look at the numbers regarding inflation and other economic indicators that show where we are heading. It is a responsibility that we have and should take seriously. It seems to me that we would have the same responsibility when looking at fiscal policy. That is to say, if we have people from the administration saying that their goal is to balance the budget, but in practice the result of the policy that is followed is to triple the national debt in 8 years, then there is clearly a little difference between the rhetoric and the outcome.

It is the outcome—the numbers—that I am interested in. Thus, if the Fed's policy during the 1980's had been expansive, as fiscal policy clearly was, it seems to me we would have experienced a great disaster.

Mr. GREENSPAN. I couldn't agree with you more, Mr. Chairman.

Chairman NEAL. Thank you, Mr. Chairman. My time has expired. Mr. Barnard.

Mr. BARNARD. Mr. Chairman, at this time when we are going through a period of reduced economic growth, and hopefully that we will further reduce inflation, aren't we experiencing a pretty high rate of production capacity, the utilization of production capacity?

Mr. GREENSPAN. Yes, we are, Mr. Barnard.

Mr. BARNARD. So if we continue then to slow the economy, or if the economy continues to slow and interest rates slow, then all of the sudden we start to—well, if we start to have good economic growth, more demand, and here we are right now with a high production capacity, wouldn't that fuel the fires for larger increases in inflation?

Mr. GREENSPAN. Yes, it would, Mr. Barnard. In other words, if the economy would unexpectedly turn at this stage and begin to accelerate, we clearly would have difficulties on that score. I don't expect that to happen, but clearly it is not something with a zero probability.

Mr. BARNARD. Sometimes we sort of feel like those who sort of preach the possibility of a significant recession, and I don't mean a big depression, but a real dip that we're off base, and I know that's what you all are trying to prevent, but it is a delicate balancing mechanism, isn't it?

Mr. GREENSPAN. It certainly is.

Mr. BARNARD. You've got a hard job.

Did you attend the meeting in Europe with the G7?

Mr. GREENSPAN. No, I did not. I don't believe that Federal Reserve Chairmen have ever been in those meetings.

Mr. BARNARD. The reason I was going to ask is because it's still a lot of interest to some of us, the progress that Mr. Delora is making in Europe with his organization of his 12 European countries and the so-called Economic Community-1992. I think even at the last meeting they decided to go forth with the possibility of a European currency.

How do you see that affecting some decisions in this country at this point?

Mr. GREENSPAN. I don't think it's anything immediate. I mean clearly the very first issue, the first stage of the report, the so-called Delors report, is further integration of the European monetary system, and that is not going to have any material impact on American monetary policy.

Clearly we audit the EMS on a daily basis, and we are quite aware of the various pressures that are emerging between and among the various members of the EMS, and to a certain extent it does affect our policies in the context of the G7, especially on the issue of intervention.

But I see no really major impact on the United States. In fact, I would probably see no detrimental impact even were they to go to the next stage and that is a European central bank, or even finally to a single currency.

Obviously, some of our policies would be different tactically from the way we implement them at this particular stage, but I don't consider that it serves as a major alteration of the international monetary system in a manner which fundamentally affects us and our actions.

Mr. BARNARD. What about other factors though, what about trade, or maybe even the competition of international banks, how do you see that?

Mr. GREENSPAN. Well, we did have some concern early on when the preliminary version of the so-called Second Banking Directive was issued, and it at least suggested a the form of reciprocity by which their banking regulations and ours would interface that would create some problems for American banks.

That has turned out not to be the case at least up to now. Significant revisions have occurred, or more exactly, clarifications have occurred which suggests that American banks will not do poorly as the EC develops.

Mr. BARNARD. My time has expired, Mr. Chairman. Again, and I've been pondering how I'm going to ask this next question. It's a very simple question. But in view of Mr. Heller's resignation, would you like to comment whether or not the members of the Board of Governors are adequately paid or underpaid or should their salaries be increased?

Mr. GREENSPAN. Do you mean would I like to answer that question? [Laughter.]

Mr. BARNARD. I think in view of the situation——

Mr. GREENSPAN. Let me say this, that I think that I would pretty much subscribe to my predecessor's remarks before the Congress relevant to the Commission that he headed.

My concern is that we at the Federal Reserve should not become, at least the Board of Governors, a group of Governors who are either independently wealthy when they emerge on the scene, such as myself and a few others and hence the salary is not a relevant consideration, or those who have to struggle with their finances—those who have children in school and have to finance a number of things. Despite the fact that it appears to be a very high salary, and unquestionably is a very large salary relative to the average American family income, it has turned out in too many cases to require Federal Reserve Governors to leave because they could not afford to stay, and I think that does not serve the national interest.

While I scarcely feel comfortable lobbying for salary increases, my own concern is not so much with the few of us who don't need a salary increase, and I certainly do not, I am concerned about the future of the System because I know some of the members do struggle, and I am very much aggrieved to see Dr. Heller leave, and not because he wanted to, but because he was in a financial bind.

Mr. BARNARD. Thank you.

Chairman NEAL. Mr. Chairman, I think you are absolutely correct. It just seems absurd to me that here we are trying to find the very best people for these jobs—jobs making among the most important decisions that are made on behalf of the American people that affect every aspect of our economic lives—yet we pay them less than a mid-level officer in a big corporation or the head of a small company. It does not make sense. Somehow we must come to the understanding that these top-level jobs in our Government, including the Fed, are critically important to the future of this country.

Every time a subject like this comes up I think of Paul Volker. Chairman Volker I think saved this country from disaster. He should have been Man of the Year many times over, and he should have gotten a Nobel Prize for practical economics,

Mr. GREENSPAN. I agree with that.

Chairman NEAL. He literally did so much for this country. Coming from the Federal Reserve Bank in New York he took a salary cut of about half, as I recall, to be Chairman of the Federal Reserve Board, and he could have made many times as much money in the private sector. It is ridiculous.

Mr. BARNARD. Would the chairman yield?

Chairman NEAL. Yes, I yield.

Mr. BARNARD. Let me say I don't apologize for bringing up this subject. The fact is I brought it up, and I certainly want to associate myself with the comments of my chairman, because I think it's something that needs to be discussed, and I think the American people and the Government should realize, and I appreciate your comments this morning.

I didn't intend to embarrass you, but I really think that it's a subject that we need to take under serious consideration.

Chairman NEAL. I quite agree.

Mr. McCollum.

Mr. McCOLLUM. Thank you. I tend to agree with both of the gentlemen, and yet it's sort of one of those inflation factors I guess that's out there. We really do need to increase some of the salaries at executive levels around here.

I just happened to have the occasion to have the new Secretary of Health and Human Services before a group yesterday in which he was discussing once again the problems of the lack of being able to hire the professionals at NIH to do the studies there, and it goes on and on and on. So it's not surprising that we have this problem at the Fed, too.

I would like to bring the subject over to just one or two quick concluding thoughts and ask you about them if I could, Mr. Greenspan.

In an early week issue or two of the Wall Street Journal Gary Shilling wrote a column that you may have seen that's entitled "What If We Are Not In For A Soft Landing," and it's one of many that have been out there recently worry about this or worrying about that.

He says, "With weakness in spending, inventories have been climbing in relation to sales in normal pre-recession fashion. True inventories aren't yet thought to be out of hand, but they never are until the recession is underway and stocks in manufacturers' and retailers' hands soar as sales fall faster than production can be cut." And essentially he goes on to warn the business community about their inventory problem.

Is he correct in that? I don't expect you to have read the article.

Mr. GREENSPAN. I think I glanced through it. No, I think that's basically correct in the sense that we have to be careful when one looks at inventory data to understand that what seems to be very low levels of inventories when purchasing managers are desirous of continuously building them because they perceive of expanding business and production all of the sudden seem excessive if demand turns around.

It is true, however, that the absolute level of inventories is not particularly excessive. On the contrary, they appear to be in somewhat the subnormal area, but there is no question that if, all of the sudden, we had a rapid slowing of demand, inventories would be perceived of at that point as being excessive, and we would have downward pressure occurring on the economy as people endeavored to liquidate what they perceived of as excess stocks.

Mr. MCCOLLUM. So businesses are prudent to be observant of this.

Mr. GREENSPAN. I think they have been. I think having said all of that with respect to concern about backing up and the effects, the levels of inventory are not particularly worrisome.

Mr. MCCOLLUM. I would also like to take this occasion to put something in perspective that I think you and I agree on, but so often when people watch or listen and hear you testify or anyone who is in your position, Mr. Volker and others in the past, they do not appreciate the subtleties of the policies of the Open Market Committee and how you carry out the decisions that you make, and just for the purposes of clarification, I believe I am correct that in recent times most of the activities have been in the area of if you want to affect the economy of using either Federal funds rate or the tightening or loosening of the monetary reserves through your selling activities or purchasing activities.

Yet the public things of the discount rate as a big deal, and occasionally you do exercise that function, but I'm impressed when you said in your testimony today that you had actually loosened a little bit in June and July. They didn't see a discount rate change, and a lot of them seem to think that that's what it is.

Could you elaborate, and I mean I think I'm right about this, but we always think we're talking sometimes to economists or the business community, and yet people who watch this at home are not always in tune with this sort of thing and they think I think of the discount rate.

Mr. GREENSPAN. Yes. That's a very good point, Congressman. I think that what is useful to point out is that where we have an effect is basically by altering our balance sheet, that is the consolidated balance sheet of the 12 Federal Reserve Banks. And as we alter that balance sheet, no matter what it is we do, whether we buy or sell securities or a number of other things, we affect the reserve balances of the commercial banks and others.

The extent to which the demand for reserves varies relative to the supply, which we create, will affect the Federal funds rate because the Federal funds rate is by definition the price which banks pay or exchange with each other to obtain reserve balances.

To the extent that we squeeze down the availability of reserves, obviously we will tend, other things equal, to move the Federal funds rate up, and to the extent that we add reserves to the system, we will tend to move the Federal funds rate down. That will tend to impact a number of other short-term interest rates, the Treasury bill rate and obviously all of the various different CD rates and the like to some extent or another, although our effect on long-term rates is basically through a different channel.

Mr. McCollum. You don't even need to get to the discount rates with that.

Mr. Greenspan. What I was about to say is that the discount rate does not enter in the calculation, except as something which we generally use to emphasize a significant change in economic policy. In other words, what we will tend to do is to move the discount rate and engage in complementary policy with respect to reserve balances.

But the discount rate in and of itself does not affect the level of reserves, and need not affect the Federal funds rate or any other interest rates. It is far more of a symbolic announcement of Federal Reserve policy than the Federal funds rate.

Mr. McCollum. In other words, if you need a punctuation mark and the message isn't getting through, then the discount rate is the vehicle for doing that.

Mr. Greenspan. That's correct. It is often used, and has been used historically as, as you would put it, an exclamation point.

Mr. McCollum. Sometimes you don't need to do that and sometimes your movements occur regardless of that.

Mr. Greenspan. That's correct.

Mr. McCollum. So the public does not need to focus on it perhaps as much as they have.

Mr. Greenspan. Not only that, but sometimes it is not desirable. Sometimes we don't want to be as emphatic, we want to be more gradual, and the discount rate does not lend itself to a gradualist approach.

Mr. McCollum. Well I thank you for that perspective because again I think we often overlook up here sitting on this committee how much this is observed by people who just are not students of this.

In fact, one of the great problems I've thought since I have been ranking Member on this subcommittee has been the absence of working knowledge by most Americans of the system of the Federal Reserve and it's very helpful, in my judgment, to have that explanation. I thank you and I think the indulgence of the Chairman. We really appreciate your coming down today.

Mr. Greenspan. Thank you very much, Congressman.

Chairman Neal. Mr. Hoagland.

Mr. HOAGLAND. I would like to ask you a couple of questions, Mr. Chairman, about this goal of zero inflation if I might. The Chairman referred to it in his opening statement.

Let me ask you, first of all, what is zero inflation? What do you actually mean by that? Do you mean literally zero, or do you mean something close to zero?

Mr. GREENSPAN. Well, I think when you talk about zero inflation you mean literally zero. But for practical purposes, you get the full economic effects of zero inflation if the inflation rate plus or minus is not something which business decision-makers take into consideration when they make the economic decisions.

What we are trying to do is to remove the expectation of price instability or price change from economic decision-making and thereby reduce risk, and by reducing risk, you lower real interest rates and you make for a far more stable economic environment, high productivity and higher standards of living and significantly improved job creation.

Mr. HOAGLAND. Now historically looking back at the Eisenhower years and before and since, what is that level that you have to reach so that business leaders are not concerned about inflation?

Mr. GREENSPAN. Looking back in history, my recollection is that when the consumer price index was say 1½ percent, and had been that way for quite a while, it was probably indistinguishable at that point from zero as far as economic effects were concerned.

But I do think that when you're aiming at an inflation rate over the longer run, you can't count on anything other than zero as working, and clearly zero is probably better than 1½ percent in any event if you can implement it. But it is not the case that an actual zero number has got some magic characteristic to it because, as you are acutely aware, very few people can tell you what the actual inflation rate is. If you took a survey out there, you would be surprised how far off the answers were that you got.

Mr. HOAGLAND. They would be in favor of repealing the Fourth Amendment probably, too.

What other desirable economic goals, however, are inconsistent with that?

Mr. GREENSPAN. Inconsistent?

Mr. HOAGLAND. Yes, inconsistent. I mean, for instance, is the unemployment rate?

Mr. GREENSPAN. No. I would say that over the long run a necessary condition for minimum unemployment is negligible inflation, or more exactly, inflation which does not create risk premiums in the system. So I consider there is no trade off between inflation and unemployment. I think the long-term goals are symmetrical.

Mr. HOAGLAND. Are there any other long-term goals that are inconsistent with that, or is it totally positive?

Mr. GREENSPAN. Well, it depends. If you are a commodity speculator, I would say you would not be satisfied with that because that probably would be mean the volume of hedging and speculative business would go down. But if one is looking at the average American, the status of our society and the stability of our economy, I would be hard pressed to find anything which says that inflation is a good thing.

Mr. HOAGLAND. So it's an absolute sincere goal as far as the Fed is concerned. I mean it's not something you're putting out for consumption by the financial markets, but something that you genuinely believe in or genuinely——

Mr. GREENSPAN. There is another question, which is in the process of getting there, you essentially are tending effectively to move the time preference of political decision-making from the short run to the longer run, and that's not always easy to do. I mean it is not easy to implement a zero inflation rate in a democratic society.

It is one of the extraordinary characteristics of our society that we have been able to have low inflation as a politically desirable goal.

I recall in the 1970's that as soon as the inflation rate got above a certain number, it was a highly corrosive political event, and I think that is very fortunate in our society because it has enabled us, that is, we the central bank, to move in a direction where zero inflation is a value to be achieved.

Mr. HOAGLAND. Well, let me ask you about a similar issue in terms of political desirability. Back in Nebraska next to drugs the deficit is clearly what's on people's minds the most, and I wonder how comfortable you are with a long-term strategy that we're trying to implement here in terms of deficit reduction?

Mr. GREENSPAN. Well, the Gramm-Rudman targets I find quite desirable. One of the reasons why I have been strongly supportive of the Gramm-Rudman process and very concerned about exemptions and any variations from it is that I think if we allow that path toward negligible Federal budget deficit to be in any way altered, I think we will pay a cost eventually.

Mr. HOAGLAND. Now do you think that can be done with cuts alone? I mean do you think we can gore ourselves out of it in the next couple of years?

Mr. GREENSPAN. Do you mean on the expenditure side alone?

Mr. HOAGLAND. On the expenditure side.

Mr. GREENSPAN. If you ask me technically, certainly. It's a political question. It's not an economic question.

Mr. HOAGLAND. Thank you, Mr. Chairman.

Chairman NEAL. Mr. Bunning.

Mr. BUNNING. Thank you, Mr. Chairman.

I just want to follow up on Mr. Hoagland. Early this year we had a budget agreement between the administration and the Congress that, in my opinion, was really a budget agreement only in words and not really in substance, and there were a lot of things in the budget agreement that really avoided meeting the Gramm-Rudman-Hollings goal, particularly when you look at what was included in the budget, the Social Security Trust Fund, the Highway Trust Fund and the Airport Trust Fund as an offset to some of the figures on the budgetary area.

How much input would the Federal Reserve have in making that budget agreement, or did OMB and Treasury and the leadership both on the Democratic and Republican side? Did the Federal Reserve have some input in that budget agreement?

Mr. GREENSPAN. Not specifically, Mr. Bunning. It is certainly the case that I was kept informed of what was going on, and indicated our priorities, but I was not directly involved in making those types of political choices, which frankly I thought would probably not have been appropriate in any event.

Mr. BUNNING. Does it concern you as the central banker that the things that are in the agreement were not really of substance other than the fact that we were going to get under a set number that Gramm-Rudman said we must get under or we would have sequestration?

Mr. GREENSPAN. I think that it is inevitable in the Gramm-Rudman process that part of it will be a sham. So long as that proportion of it is kept to a minimum, I find the real net changes to be where it's important. I mean we have always had that problem.

My view of Gramm-Rudman is to always expect that by the way we set it up, somebody is going to try to play the books in one way or another. I take that as a given, and I don't think it's all that relevant an issue so long as there are real substantive changes that are going on which are adequate to bring the path of the budget deficit down.

I think that one of the reasons why I feel myself, academically I might say, uncomfortable with Gramm-Rudman and the reason why I would not consider it in Public Finance 101 as being an ideal vehicle is exactly because it is set up in a manner in which fun and games are involved in the process.

But when you cut through all of that, it has been an extraordinarily helpful vehicle, and in fact the only vehicle of which I am aware that has enabled us to find a means to bring the budget deficit down. I think it would be a great tragedy if that process were lost somewhere along the line.

I do agree that the fiscal 1990 process had some aspects to it which clearly were not really fundamental reductions, but there is no way that I can see that the fiscal 1991 agreement can be reached without real basic reductions occurring in the deficit. There is a limit to what can be done even in this process in the bookkeeping of Gramm-Rudman.

Mr. BUNNING. In the creative accounting and the movement of pay days and the things that allow those numbers to be met under the 1990 Gramm-Rudman are not as important as the message you're saying?

Mr. GREENSPAN. No, it's not the message. It's the real cuts that evolve as a consequence. There were $2.7 billion switches and pay dates and a variety of other things, but after you've done all that, it's still real, and it's the real which I think is what is important and why it is crucial that that process continue.

I recognize and I don't look appreciatively at some of the Gramm-Rudman processes that have occurred since the initiation of that bill, but I think it is a mistake to look at that and say it is flawed and therefore let's get rid of it. On the contrary, I would say despite all of that, it has been a major contribution and I think will continue to be in getting our budget deficit down.

Mr. BUNNING. Thank you, Mr. Chairman.

Chairman NEAL. Mr. Barnard.

Mr. BARNARD. One more question, Mr. Chairman.

Mr. Chairman, one of what I would say is one of the sleeper issues for the U.S. banks in the European Community's proposed Second Directive is Japan. While the reciprocity issue may have been resolved to the satisfaction of U.S. banks, the Second Directive can be used as a lever to liberalize the Japanese financial services industry. Up until now the Japanese have been waiting for us to liberalize.

If their hand is forced by the European Community and they feel compelled to adopt a universal bank structure, given the capitalization of the Japanese banks recently, wouldn't that pose serious competitive problems for even our largest banks?

Mr. GREENSPAN. I think it's too soon draw any conclusions as to precisely how our bank relationships with the EC are going to emerge.

I had a very constructive meeting with Sir Leon Brittan a couple of months ago who is in fact the senior officer involved in the EC process, and I must admit I found his responses to my concerns, which reflected American banks' concerns, quite encouraging.

So I'm not at all, I must say to you, basically concerned about how the process will emerge.

Mr. BARNARD. But the attractiveness of the Japanese banks as far as increasing their capital is concerned, isn't that going to have an effect on the ability of our banks to raise money?

Mr. GREENSPAN. It won't affect our ability to raise money. I mean it's certainly the case that their low cost of capital will enable them to raise money in the end easier than we raise money in dollars, but the fact that they have a lower cost of capital does not affect us.

Remember, they are competing in a worldwide market, not only for bank capital, but for worldwide capital as we are, and the amount of aggregate bank capital, if one wants to put it that way, in the total scheme of things is very small. Most of the competition that American banks have are not against the Japanese banks for capital, but by American corporations or the U.S. Government. That's where the central competition occurs.

I think there is no evidence that the ability of the Japanese banks to raise capital easier than for our banks to raise it inhibits our banks from raising funds.

Mr. BARNARD. Thank you.

Chairman NEAL. Mr. Chairman, thank you very much for joining us this morning. Keep up the good fight.

Mr. GREENSPAN. Thank you very much.

Chairman NEAL. The subcommittee stands adjourned.

[Whereupon, at 12:30 p.m., the hearing adjourned, subject to the call of the Chair.]

MONETARY POLICY AND THE STATE OF THE ECONOMY

Wednesday, August 2, 1989

House of Representatives,
Subcommittee on Domestic Monetary Policy
Committee on Banking, Finance and Urban Affairs,
Washington, DC.

The subcommittee met, pursuant to call, at 10 a.m., in room 2128, Rayburn House Office Building, Hon. Stephen L. Neal [chairman of the subcommittee] presiding.

Present: Chairman Neal, Representative Bunning.

Chairman Neal. We call the hearing to order at this time. Today we are very fortunate to have before us a panel of prominent economists and forecasters who have been asked to testify on monetary policy and the state of the economy. Their testimony will help the subcommittee evaluate the Federal Reserve's July 20 report on monetary policy. At that hearing—at which Chairman Greenspan presented a report—I carried on at some length and tried to make the point concerning what I think are the enormous benefits that our economy would gain by following a policy to achieve zero inflation over a reasonably short period of time and to then maintain a policy to keep inflation at zero.

Our witnesses are Mr. Jason Benderly, co-director of Economic Research for Goldman Sachs, Mr. Albert DePrince, chief economist, Marine Midland Bank, and Mr. Mickey Levy, chief economist, First Fidelity Bancorporation, Philadelphia. Gentlemen, welcome, thank you very much for coming this morning. We will put your entire statements in the record and if you would summarize it would give us a little more time for discussion. If it is all right with you, we will proceed in the order in which I read your names. Is there any objection to that? Are there any opening statements?

Mr. Bunning. Mr. Chairman, I have no statement. I will be happy to hear what these gentlemen have to say.

Chairman Neal. At this time we will hear from Mr. Jason Benderly.

STATEMENT OF JASON BENDERLY, CO-DIRECTOR OF ECONOMIC RESEARCH, GOLDMAN SACHS ECONOMIC RESEARCH GROUP

Mr. Benderly. Mr. Chairman and Members of the subcommittee, thank you for the opportunity to appear before you today to present my assessment of the current economic outlook and environment and the conduct of monetary policy.

To start with, our general forecast for the U.S. economy is that real GNP growth will slow further in the second half of 1989, to about 1 percent growth, down from what was slightly over a 1.5 percent rate during the first half of the year.

Inflation as measured by the Consumers Price Index, we think will slow sharply during the second half from the first half's 6 percent pace. This is mainly because of a reversal in energy prices, not because the underlying trend of cost is likely to decelerate significantly so soon. We think that something like a 4 or 4.5 rate of CPI inflation for the second half of the year is most likely.

For 1990 we think economic growth will pick up a little from 1989's pace but probably to not much above something like a 2 percent rate. On the inflation front, if energy and food prices remain stable, which is a risky assumption to make, we expect a Consumer Price Index inflation of about 4.5 percent. The fact that inflation in 1990 is likely to be up a little from what we think it will be during the second half of 1989 is a little deceiving because the underlying trend of inflation will be improving some, we think, as 1990 unfolds. All in all, this assessment is not too different from the Federal Reserve's projections presented to you by Chairman Greenspan. We appear to be slightly more optimistic about economic growth and inflation for 1990 but not by a large amount.

The sources of the economic slowdown in the economy during the first half of 1989 certainly included the effects of tighter monetary policy but other factors were at work as well. They included rising inflation squeezing consumer purchasing power, satiated demand for housing and consumer durable goods; more subdued net export growth since mid 1988, and a slowdown in the pace of inventory acceleration.

But whatever is the right list of factors or the appropriate important assign to each of these in terms of what caused the slowdown in the first half of the year, this slowdown has lasted long enough by this time to set in motion a perpetuation of slower growth through the second half of 1989 into 1990. This operates via the so-called multiplier effect. These refer to the second round effects that are set in motion once a change in economic movement has occurred.

One very important element of this process is becoming quite visible now, a sharp slowdown in personal income growth. This is because the building blocks of the key wage and salary component for personal income growth, employment, the average work week and hourly earnings, are not providing the wherewithal for rapid growth in pay checks.

As a result, sluggish consumer spending and a slow growth economy are likely to persist until some positive force enters the picture. An additional element that should keep growth slow into 1990 is that capital spending plans are apt to be pared back as corporations find their projections for sales turn out to be too optimistic and their assessment of capacity shortages turn out to be too pessimistic.

The main prop to the economy should continue to be net export growth, albeit at a lessened pace. U.S. goods are still competitive in world markets so long as the dollar does not rise on a sustained basis. And demands abroad should continue growing more rapidly than in the United States thus providing more lift to exports than imports.

With very visible and widespread signs of economic weaknesses unfolding in recent months, the warning flag of recession has been raised by an increasing number of economists. While the risk of recession should certainly not be ruled out, we think opposite reaction to the slowdown seems more appropriate, that is, the first half weakening of the economy was precisely the antidote required to prevent a recession from developing later.

Most forecasts that early anticipated a recession developing sometime in 1989 or 1990 had as an essential ingredient an overheating economy with intensifying inflation pressures in early 1989. This has clearly not occurred. Economic weaknesses have quickly steamed upward pressures on inflation, particularly from the manufacturing sector of the economy.

Even wages have stopped accelerating with the rate of change seemingly stuck at something like a 4 percent annual rate.

The economic halting of an inflation build up is the key to preventing a recession. Historical episodes of sluggish economic growth, and there are some in the post-war period, have culminated in recession because of the negative consequences of inflation. These consequences include an erosion of consumer purchasing power, sharply declining consumer confidence, speculating and destablilizing inventory building and aggressive monetary tightening.

There are four benefits from the quick containment of inflation in 1989 that currently reduce the odds of recession. First, the slowing price inflation will ease the squeeze on real wages that hurt the average consumer during the first half of the year.

Second, consumer confidence should remain at a relatively high level, thus avoiding a major consumer retrenchment. Historically, inflation concerns have been the key factor or undermining confidence prior to a recession.

Third, an absence of inflation fears also means an absence of motive for firms to speculate on their inventory holdings. As a result, the manufacturing sector seems to be quickly paring schedules rather than building up potential destablilizing inventory excesses.

Four, and most important, a quick easing of inflationary pressures has given the Fed more leeway to ease policy rather than continuing to clamp down on a weakening economy. In this regard, the current situation is turning out to be much more like two sluggish growth episodes in the post-war period that did not turn into recession, 1967 and 1986 than the four sluggish growth episodes that were followed by recession, 1967, 1969, 1973 and 1979.

In sort with the Fed's focus shifting from fighting inflation to warding off too much economic weakness, and with consumers and businesses already being cautious rather than speculating on profits to be made from higher inflation, the excesses that lead to recession should not develop. Unfortunately, there is simply no hard evidence at this time that recession forces are not accumulating. In fact the consumer slowdown in the first half of 1989 is of the same magnitude that preceded recessions in the post-war period.

In general there are very few signs of the imbalances that normally lead to recession, and the downturn in the key housing sector of the economy has been extremely modest compared to the housing collapses that preceded most recessions.

If recession is the key, what are the prospects? We think they are quite good. We have the recent purchasing managers survey which suggests that downward pressure on industrial commodity prices is building. Vendor performance specifically, which reflects the percent of companies reporting slower deliveries, has dropped below the critical 50 percent level in the past 3 months.

This is the first time this happened since early 1985. Vendor performance is the single most reliable indicator of commodity price trends. Furthermore, an index representing the percent of purchasing agents reporting higher prices has fallen to the lowest level since 1986. This decline in vendor performance, together with the generally soft tone of the manufacturing sector, suggest that some easing of general inflation on the commodity side of the equation is in store unless offset by more sharply rising wages.

This in turn seems unlikely if the economy is as weak as now seems likely for the second half of 1989.

The inflation statistics themselves are clearly showing an easing of pressures in the pipeline. Industrial commodity prices have on average fallen slightly over the past 6 months. Some prices, copper and aluminum, this is, have fallen very sharply.

Reflecting this weakness, prices of fabricated manufactured products, as measured by the PPI for intermediate materials, are rising much more slowly in recent months than they were in the prior 1½ years. In the finished goods level, prices are reflecting prior increases in costs and as a result are still rising at a 4.5 to 5.0 percent rate.

But this is the tail of the inflation process and so long as pressures are diminishing these prices will increase more slowly. A wave of declining industrial commodity inflation has replaced the prior wave of sharply rising commodity prices.

On the labor cost side, wage inflation appears to have stalled out at about a 4 percent annual rate. There has been a sharp pick up in the unit labor cost increases which is the result of declining productivity which historically has always accompanied a slowdown in economic growth.

In the past most of this increase in unit labor costs has tended to squeeze profit margins rather than being passed through into larger price increases. The current weakness in corporate earnings reflects this tendency. Once economic growth stabilizes for several quarters, even if at a very low level, productivity should resume growing at its trend 1 percent rate. Unit labor cost increases should moderated and we should see something like a trend of 4 to 4.5 percent unit labor cost growth.

Even if inflation appears to be under some semblance of control now, its next step will be very uncertain. This brings me to the subject of soft landings. A soft landing ought to include both nonrecessionary growth and a sustained reduction of inflation pressures. By this definite situation there have been no soft landings in the post-war period. Recessions have at times been avoided, but only at the expense of rising inflation pressures. Inflation has been brought down but only at the cost of recession.

This has led many analysts to conclude that the economy is too fragile and inflation too stubborn for soft landings to be possible. I think, however, that a more optimistic conclusion about this issue can be reached once the behavior of monetary policy is taken into account in assessing the historical failures at achieving the soft landing.

A soft landing or non-recessionary subduing of inflation has in fact never been attempted in the post-war period, hence its possibility has not been tested. History does not suggest that the economy must inevitably fall off the runway to recession or renewed inflation if the Federal Reserve behaves differently today than it has in the past under similar circumstances. For purposes of explaining this interpretation of history, six episodes of a year or so of sluggish economic growth can be identified since the 1950's, none of which were soft landings. For four of these this is obvious because they culminated in the recession of 1958, 1970, 1974, and 1980.

For the remaining two episodes of sluggish growth, 1967 and 1986, no recession followed, but they still were not soft landing because strong economic growth brought about a pick up of inflation pressures that then had to be contained.

In their early states each of these six episodes replicates the conditions that have unfolded over the first 1½ years or so. First, a strong economy with rising inflation pressures and tightening monetary policy, then a shift from rapid to sluggish economic growth.

The key point in this analysis is that in not one of the six episodes did the Federal Reserve pursue a moderate course after the onset of sluggish growth. This is not necessarily a criticism of policy during these periods because under extreme circumstances an extreme policy stance can be justified. Such was certainly the case in 1979 when aggressive tightening was called for because of extraordinary inflation pressures. But, nonetheless, an aggressively active change in policy was the norm for these years of sluggish growth.

A moderate change in the direction of policy and interest rates has never been tried during periods of sluggish growth and therefore the soft landing waters have not really been tested. Some of the facts from these episodes are shown in a series of charts attached to my written statement.

These depict the average behavior of several economic and financial variables for the four sluggish growth periods that turned into recession on the one hand and the two that were followed by an economic rebound on the other. The current behavior for each of these variables was also shown for comparison. The similarities and differences among the six can be summarized as follows: first, the economy, and interest rates behaved similarly in the year preceding sluggish growth. Growth was strong, utilization rates were rising, inflation pressures intensifying, and the Federal Reserve was tightening.

Second, in the ensuing year or so of sluggish growth the behavior of inflation was the key difference between the four episodes that culminated in recession and the two that did not. All six were marked by a similar pace of very sluggish growth, but in the recession episodes, inflation pressures continued to build, while in the other two inflation pressures eased and wage increases remained under control.

Third and most importantly, the continued build up of inflation pressures contributed to an aggressive further tightening of credit conditions in the recession episodes, whereas credit conditions eases significantly in the two non-recession episodes. Up to the onset of sluggish growth, interest raters were rising in all instances and the yield curve became relatively flat. After the onset of sluggish growth the differences between the recession episodes and the non-recession episodes were very dramatic.

Short term interest rates were either up an additional 200 to 300 basis points, then followed by recession or down by 200 to 300 basis points and then followed by an economic rebound. This difference is reflected in the yield curve which either further inverted when short rates rose or returned to a positive slope when they fell. It either turned into recession or was followed by a resumption of strong growth and rising inflation pressures depending on the behavior of inflation and the latitude this presented to the Fed once sluggish growth began.

It was not the conditions that brought about the sluggish growth that led to the next step in the economy. For the most part, current conditions are tracking these non-recession episodes. There are two conclusions about the current situation that we can draw from this admittedly oversimplified analysis.

First, it is too soon to gauge whether a soft landing of any duration will take place. A gradual further easing of monetary policy rather than a sharp further reduction of short term interest rates would, in our view, increase the chances of sustainable growth and lower inflation.

Second, there is probably more leeway involved in the setting of policy than the phrase "fine-tuning" suggests there is. There is a lot of room between the historical precedents of up 300 basis points in short rates or down 300 basis points that contributed to the soft landing failures of the past. A gradual easing of rates would not follow.

Chairman Greenspan's testimony before Congress both directly and indirectly suggests such a restrained course. Directly from his stated targets for monetary policy and indirectly from the Fed's projection of subdued economic growth in 1990.

If an aggressive further easing of policy were being contemplated, faster growth for 1990 would likely be projected. In addition the slow growth in inflation assumed for 1990 by the Federal Reserve Board, 4.5 to 5 percent, suggests a strong motive for easing policy gradually rather than aggressively.

We think if the Federal Reserve reduces interest rates from where they current are rather than aggressively easing as they have in the past, we think the extremes of recession can be avoided.

[The prepared statement of Mr. Benderly can be found in the appendix:]

Chairman Neal. Thank you.

Mr. DePrince, we will hear from you at this time.

STATEMENT OF ALBERT DePRINCE, CHIEF ECONOMIST, MARINE MIDLAND BANK

Mr. DePRINCE. Thank you. It is a pleasure to be here today to share with you my views on the state of the U.S. economy and the conduct of monetary policy.

Presently a "consensus" which thinks the economy has beaten the inflation cycle and is about to land softly is gathering momentum. That view has been a key factor behind the recent interest rate plunge. Financial markets have, in turn, gone beyond the "consensus". They are now positioned for far lower short-term rates later this year, intimating that severe economic weakness may be ahead.

My own views differ sharply from that sentiment. First, I believe the economy is stronger than either the consensus or the financial markets' views, though admittedly operating on a slower growth plane than last year. Second, inflation, while likely to be lower than the first half's pace, is faster that last year's rate. More importantly, this year's slower growth plane will not neutralize persistent pressures for a gradual acceleration in the inflation rate.

Third, the economy is far short of a recession at this point, though a reversal of the inflation cycle will eventually require the therapeutic effect of an economic downturn. On this score, the FOMC's grudging response to the sharp fall in market rates runs a risk of precipitating that downturn now, though we put a low likelihood on that, since the FOMC is likely to continue to ease its policy stance.

Nest, the monetary aggregates provide an inadequate yardstick of monetary conditions; as such, they should not be used in setting the course of monetary policy. Finally, the FOMC gets good marks for the speed with which it adapted to changing economic conditions. Because of that, the FOMC has successfully contained the speed with which inflation accelerated as the economy neared full utilization of its resources.

Eventually, however, short-term containment will come into conflict with the FOMC's long-term objective of near-zero inflation. When it does, tensions (the product of either FOMC or market-based actions) will mount to bring the short-term inflation rate into closer harmony with the long-term objective of near-zero inflation. Slow growth will not harmonize the short- and long-term inflation objectives. As past history shows, only a recession can bring the inflation rate down. Thus, the FOMC will some day have no choice but to accept the blame for the end of this expansion.

Recent economic guideposts in perspective. May's weak economic performance was summed up in the month's 1.2 percent drop in the index of leading indicators. Moreover, early data for June is not much better.

Even so, we must be careful not to overreact to the weak indicators. While the economy has slowed from its 1988 pace, the chances of it slipping into a recession may not be as high as some notables think.

First, the weakness in the leading indicators so far this year has led to a media infatuation with the supposed link between three successive declines in the leading indicators and the onset of a recession. However, the lead time is actually far longer—usually nine to 12 months.

Second, the recent slowdown in employment growth, while welcomed by most, may be the result of forces other than the FOMC's tight monetary policy. In particular, with the economy functioning at full employment, subsequent employment gains must be linked more closely to increases in the working-age population than in this expansions earlier years.

Thus, it would be hard or impossible to continue to secure 250,000 to 350,000 gains in payroll employment given the monthly additions to the working age population, regardless of the FOMC's policy stance. Gains of around 150,000 per month are the most that population growth can support.

Next, the consumer is not as depressed as the auto sales data intimates. Its slowdown from 3.5 percent last year to a 2.0 percent gain over the first half of this year was party the result of a surprising and questionable drop in nondurable goods spending which will likely be eliminated with this month's benchmark revisions.

Imbalances normally associated with recessions are presently absent.

Finally, M2's weak, 1.6 percent, growth between 4Q1988 and 2Q1989 might have incorrectly led some to conclude that the FOMC could be forcing the economy over the brink of a recession. To us, M2's weakness reflects the deposit pricing strategy, particularly for saving deposits and MMDAs, of banks and thrifts, not the effect of FOMC policy on credit demands.

Long-term rates are probably near their low point for 1989, though some prominent forecasters see still lower long-term yields in the months ahead. At this point, the 30-year bond yield is close to the level prevailing in 1986—a time when observed inflation was depressed thanks to the collapse in energy prices, the effects of the dollar's long appreciation on tradeable goods, and the beneficial effects of sharp productivity gains in the manufacturing sector.

The bigger potential for rate declines lies among short-term rates. If the economy is as weak as some argue, the chances are good for far lower short-term rates even if long-term rates show little further decline. A 30-year bond yield of 8.00 percent is quite consistent with short-term rates of 6.50 percent to 7.00 percent, e.g., for Fed funds, 3-month CDs or 3-month Eurodollars—though so far it appears that the economy is lacking the conditions needed to produce the rate outcome.

Our view of inflation rests heavily on trends in the growth of unit labor costs. These are defined as the difference between the growth in hourly compensation and productivity. Next, the gap between inflation and unit labor costs is viewed as a national, macroeconomic, proxy for profit margins, while the growth in GNP is considered a national proxy for volume.

Together, inflation unit labor costs and GNP growth from the basic determination of corporate profits. If unit labor cost rise relative to inflation, profits are squeezed. Eventually, if unit labor cost growth cannot be curtailed, the narrowed national margin will trigger faster inflation. The reverse also holds. A drop in unit labor cost growth will eventually feed through to slower broad-based inflation.

Commodity prices do not figure prominently in our formation of inflation forecasts. First, there is far from a strong relation between basic commodity price movements and broad-based inflation.

Second and more importantly, labor costs are the major expense faced by U.S. enterprises—particularly in the ever more important service sector. As a result, labor costs will dominate the broad-based inflation cycle over time.

To begin, 3Q1989 will post a slower rate of inflation than 2Q1989's energy-swollen results. In fact, CPI inflation will likely dip beneath 5.0 percent this quarter, after pushing towards a 7.0 percent rate last quarter. Only a short time ago, inflation was expected to be above the 5.0 percent rate for the second half.

In addition to less virulent inflation this quarter, the interactions between saving, both personal and corporate, the public-sector deficit, foreign capital inflows and investment will likely provide from for marginally lower rates in the second half for any given rate of inflation.

CPI inflation is expected to average 4.8 percent for the second half. While a welcomed relief from the first half's blistering 6.1 percent pace, the second half projection is still faster than the 4.4 percent seen during the 1987 to 1988 span. Behind that acceleration stands a slight increase in inflation of services less energy from 4.9 percent last year to 5.2 percent for the first half to 5.4 percent for the second half. Inflation for goods less food and energy also shows a slight pick-up.

A mild acceleration in unit labor cost growth stands behind our expected inflation pick-up. After 2.6 percent increases between 1984 and 1987, unit labor costs advanced 3.6 percent last year and a 5.0 percent hike is anticipated this year. Next year, unit labor cost are expected to climb to 6.2 percent.

As compensation gains accelerate in the advanced stage of an expansion, pressure on unit labor costs is intensified due to slower productivity gains.

Nonfarm productivity growth of 1.6 percent during the 1984 to 1987 span gave way to a 0.9 percent rise last year. This year, only a 0.7 percent advance is seen, with next year's improvement probably slipping to a dismal 0.3 percent.

Prospects for interest rates. Once markets realize that inflation is in the 4.5 percent to 5.0 percent range, the fall in rates will end. In fact, we are likely at that point for long-term yields now. Unless a recession is at hand, yields beneath 8.00 percent for the 30-year bond is extremely unlikely.

The baseline forecast sees the economy bouncing against capacity ceilings in the remainder of this year and next year, even though GNP growth is expected to be slower than in the earlier years of the expansion.

Thus, pressure on wages and productivity, and hence prices, will persist and will eventually manifest itself in higher interest rates.

The risk: even lower rates before the cycle bottoms. Interest rates moved down at an astonishing pace since their March peak. Admittedly, the upswing since November 1988, when the Treasury yield curve began to invert, may have been excessive when positioned against the background or core inflation rate. Nonetheless, rates have systematically moved through each downward revision of our interest rate outlook for the last two months. Moreover, short-term markets are positioned for still lower short-term rates.

The average yield for the four 1990 contracts is around 7.90 percent. Based on the futures market, there is the implicit assumption that the Federal funds could be 7.75 percent for most of next year.

Admittedly, the futures market is not more accurate in its prediction of things to come than other forecasting techniques. Nonetheless, it does serve to illustrate the scope of the potential rate decline for which markets are positioned.

Because of the sheer size of that potential drop, it seems prudent to establish an alternative regime which captures lower short-term rates during 3Q1989.

An important point should be noted here. While the near-term state of the economy may cloud the rate outlook in the months ahead, we feel confident that rates at the end of 1990 will be higher than at the end of 1989. Any debate could revolve around the probably year-end rate level and the pace of the 1990 rise.

In retrospect, two forces combined to help keep the inflation rate within bounds: external shocks and a process we call rolling readjustment.

Three external shocks benefited the U.S. inflation rate since the last recession's trough. The first was the persistent appreciation of the dollar from its 3Q1980 low point until its 1Q1985 peak. The second shock was the early 1986 collapse in oil prices. The third shock was the October 1987 stock market crash.

The second effect, rolling radjustment, depends upon the rapid reaction of financial markets to early warning signs of inflation. In it, the fact reaction is seen choking off budding excesses before they can become entrenched. Once those excesses are stopped, the process relies upon an equally fast financial market response which lowers interest rates before the stress of high rates triggers a recession.

However, so far in this expansion, rolling radjustment did not reverse the inflation cycle. Rather, it simply kept inflation within bounds—no mean feat when viewed against the 1970s. In fact, rolling readjustment is probably at least party responsible for the remarkable length of this expansion and the surprising "low" inflation rate given current capacity limits.

Some may see our concept of rolling readjustment as a close proxy for the term soft landing. However, there is a big difference. Soft landing proponents seem to think that slow growth can keep the inflation rate within bounds indefinitely. Rolling readjustment, in contrast, simply generates a succession of temporary reprieves from an inevitable outcome: progressively faster inflation.

The outlook for 1990 is based upon an important thread woven throughout this testimony. Namely, the inflation cycle cannot be reversed without a recession. It can be held within bounds by the dual forces of fast responding capital markets and properly reactive monetary policy. But as the economy approaches full employment, inflation will rise. Low points in undulating inflation subcycles, the product of rolling readjustment, should not be confused with victory over the primary inflation cycle, particularly if each sub-cycle brings the primary inflation cycle to an ever higher background rate. Failure to recognize this will lead to a repeat of past mistakes; now however, financial markets will have a punishing effect on the unwary.

Against that background, we feel that an economic downturn is lurking at some point in the future.

Changes in the financial services industry and the aggregates. Our own view of the aggregates steps away from econometric models. Instead of relying upon statistical research, we feel that identifiable changes in the financial services industry invalidates the role of the monetary aggregates as a yardstick of monetary tension or stimulus.

Fist, deregulation of retail, personal, deposit rates in the early 1980s altered the relationship between trends in bank deposits and monetary policy. Second, the adoption of an investment banking mentality by the larger banks has also played a role. Third, while often ignored in discussions, more stringent capital requirements are influencing the aggregates, particularly since 4Q1988. Fourth, it is becoming ever easier for credit users to avoid banks in satisfying their needs. Fifth, and finally, the definition of money has once again changed. Several years ago, in an attempt to capture the evolution of financial innovations, money market mutual funds were added to the definition of M2 and M3.

In particular, the committee "seeks monetary and financial conditions that foster price stability, promote growth in output on a sustainable basis, and contribute to an improved pattern of international transactions."

The aulaitative objectives are not officially translated into quantitative or numerical objectives. Nonetheless, some sense of the numerical objectives can be gleaned from official statements and formal testimony. First, the clearest view seems to be on the lonrun inflation objective. Here, the popular term used by the Federal Reserve is noninflationary growth—a term that seems to be roughly equivalent to zero, or near-zero, long-run inflation, though admittedly, the term zero inflation has not been used in policy statements.

In fact, however, the FOMC pursues its strategic objectives within a context of short-run conditions. These conditions also determine what I call the FOMC's tactical objectives. These objectives bridge, in turn, the long-run objectives and the FOMC's day-to-day actions, i.e., the "degree of reserve restraint" the FOMC creates in money markets. The tactical objectives have two parts: one, the priority attached to the FOMC's short-run objectives and, two, the balance of the directive issued to the manager of its open market activities.

The priority of the short-run objectives vary depending on prevailing economic conditions. Presently they are ranked as inflation, economic growth, the monetary aggregates and financial market conditions. A good amount of judgment goes into the deliberations which sets the directive's balance.

The expansion has had two big surprises: its length and the persistent failure of inflation to shoot upward. The FOMC's adaptive policy stance has been an element of that outcome. Nonetheless, it is equally clear that the low point of the current inflation cycle was early 1986.

Since then, the trend has been admittedly upward; however, its movement has been systematically beneath expectations. In retrospect, at least three factors account for that. First, fast adaptation by foreign producers to the dollar's 1985 to 1987 drop had kept global competition a potent force. Second, monetary policy, as measured by the level of real interest rates compared with the 1970s, remained taut. Third, markets have responded exceptionally fast to any hint of accelerating inflation.

However, in reviewing the FOMC's record, it is important to keep in mind a functional difference between it short- and long-term objectives for inflation. In the short-run, the FOMC seeks to contain inflation. However, it is important to recognize what that term means in practice; namely, limiting its inevitable acceleration as the expansion matures. On this score, the FOMC has been very successful; inflation's accelerations has been systematically beneath expectations.

The process eventually puts short-term trends in fundamental conflict with the long-term objective of zero or near-zero inflation, and at some point, the two must be brought into harmony. To end the acceleration, even a "contained" acceleration, history shows a recession plays a critically important role.

Success in containing inflation and sustaining growth has created the illusion in some quarters that the business cycle may be a thing of the past. There seems to be a notion that monetary policy can be fine tuned to choke off inflation without a recession—a dangerous and incorrect assumption. If widely believed, economic participants, whether in the product or labor markets, will be less cautious.

Such a development would reduce the efficiency of rolling readjustment and possibly set the stage for more serious economic problems, namely inflation, in the quarters or years ahead.

As noted earlier, with tighter capacity came faster compensation gains, weaker productivity gains and a notch-up in the inflation rate. It is a mistake to think that fine-tuning monetary policy can reverse the pressures as the economy bumps against capacity limits. Rolling readjustment can extend the life of the expansion, but not indefinitely. Effects of each rate swing will become less biting on the underlying inflation cycle, and the pauses in inflation's upward march will become shorter. Eventually, a recession will be triggered to reverse the inflation cycle. When the recession materializes, the FOMC will need to accept at least part of the blame.

[The prepared statement of Mr. DePrince can be found in the appendix:]

Chairman NEAL. Mr. Levy, we have a vote on the House floor. That vote is on the journal and is a non-controversial. We can cast our votes quickly and return so we will not have to interrupt your testimony.

[Recess.]

Chairman NEAL. We call the subcommittee back to order. Mr. Levy, we would like to hear from you at this time.

STATEMENT OF MICKEY LEVY, CHIEF ECONOMIST, FIRST FIDELITY BANCORPORATION, PHILADELPHIA

Mr. LEVY. Mr. Chairman, I am pleased to present my views on the outlook for the economy, inflation and the crucial role monetary policy plays in the economy, particularly at this juncture of the cycle.

I would like to summarize my views with five points. First, my outlook for economic performance is substantially more pessimistic than the Fed's, the administration's or the CBO's. I forecast less than 1 percent GNP growth through year-end 1990, with a better than even chance of recession.

Second, inflation is plateauing now, it will come down in 1990, and by the end of 1991 it will be approximately 3 percent. Third, with this economic forecast, I project Federal budget deficits to be substantially higher than the official forecasts of the CBO or the administration, virtually eliminating any chance of achieving Gramm-Rudman deficit targets in 1991.

Fourth, the Federal Reserve under Chairman Greenspan properly recognizes that low inflation is a necessary condition for sustained maximum economic growth, and in recent testimony has reaffirmed price stability as its fundamental objective. Contrary to the common misperception, there is not a tradeoff between anti-inflation efforts and long-run economic growth; they are complements.

Fifth, I would like to make three suggestions: a) immediately end the year-long trend of declining bank reserves and real (inflation-adjusted) money balances, b) continue to pursue the Federal Reserve's low inflation objectives even as the economy weakens. The anticipated economic weakness is a transition cost of eliminating earlier excesses and reducing inflation, and c) the Fed must avoid a dramatic shift to overly expansive monetary policy when economic growth falls below its desired range. Such policy would arrest the disinflationary process and create a fragile economic environment for the early 1990's.

There are really two sources of my pessimistic outlook for real economic activity.. One is my expectation of sharply slower export growth. The second is an anticipated sharp slowdown in domestic demand in response to the Fed's tight monetary policy. In January, I assigned a 50 percent probability of recession. The reason I mention this is to emphasize that monetary policy is very, very important in my forecast, and it affects the economy and inflation with a lag.

Since January, my only change has been to increase my probability of recession as the Fed has tightened further. Some of the details of economic weakness both in consumption and industrial production have already been identified in the earlier testimonies.

Particularly, yesterday, the Purchasing Managers Index was below 50 percent for the third consecutive month. Its declines below 50 percent suggest that an increasing majority of purchasing managers are experiencing declining activity.

Keeping in mind monetary policy works with a lag, economic performance will continue to weaken in response to the Fed's tightness. Presently, no factors point toward a reacceleration in economic growth. With regard to monetary policy, on a year-over-year basis reserves have been declining at their fastest rate since April 1960 (see chart 3 of my written testimony). In addition, chart 4 illustrates two other measures of monetary polcy that have been very helpful to me in forecasting shifts in economic growth. On a year-over-year basis, real M2 has been declining for the first time since the recessions of the early 1980's. Coincident with that trend, the spread between the yield on the 30-year bond and the Federal funds rate has inverted for the first time since 1981.

As the chart illustrates, every time these two monetary indicators have moved dramatically in the same direction, they have always provided an accurate forecast of shifts in economic performance. I might note that the subcommittee on Monetary Policy has circulated a similar chart showing how much real M2 influences the real economy.

Insofar as monetary policy works with a lag, the Fed's recent tightness virtually guarantees economic weakness.

In contrast, most monetary policymakers and financial market participants focus on the Federal funds rate as an indicator of monetary policy. However, the funds rate can be a very poor and misleading target for monetary policy because it reflects demand measures associated with the economy as well as effective changes in Fed policy.

As an example, from February 1989 until June, the Federal Reserve pegged the funds rate between 9¾ percent and 9⅞ percent, and implied that it was leaving policy "unchanged". But, in fact, the economy was slowing sharply, and the Fed had to drain reserves to keep the funds rate from falling, effectively tightening monetary policy further.

The decline in the funds rate since June has been widely interpreted as a monetary easing. This is an incorrect perception. If the Federal Reserve merely allows the funds rate to recede to reflect subsiding demand pressures associated with the economy, that does not constitute a monetary easing. There is no stimulus being provided to the economy. Accordingly, I see a better than even chance of recession. What if the Fed becomes extraordinarily concerned about the impact of a recession on S&Ls, LBO debt, LDO debt, budget deficits and it "throws in the towel" and eases monetary policy dramatically? That will not prevent a recession since monetary policy works with a lag, although it could mitigate the severity of a downturn.

My optimist outlook for declining inflation stems from the Fed's restrictive monetary policy and the lagged impact of slower nominal and real GNP growth on unit labor costs. As Chairman Greenspan stated before this committee in February, "Inflation cannot persist without supporting expansion in money and credit; conversely, price stability requires a moderate growth in money.

Generally, the underlying rate of inflation approaches the extent to which nominal GNP (product demand) growth exceeds the Nation's long-run capacity to grow. In the late 1970's and in 1987–1988, the Fed's earlier rapid money growth led to accelerating nominal GNP growth that generated inflation. If the average firm experiences sharp increases in product demand, it tends to grant higher wages not matched by productivity gains because the stronger product demand enables them to pass on those costs into higher prices and maintain profit margins. The result is higher inflation..

The disinflationary process is initiated by a monetary tightening which generates slower product demand (nominal GNP) growth. Because wages have momentum and productivity slumps, unit labor costs continue to rise temporarily. But with weaker product demand, businesses find it more difficult to pass on the higher operating costs into higher prices, and the profit margins get squeezed. That has happened the last 6 months, so far in 1989, corporate operating profits have receded sharply. Eventually, the profit squeeze restrains the wage inflation. My empirical work shows that unit labor costs tend to react to nominal and real GNP with about a four quarter lag. It suggests that unit labor costs and the core rate of inflation are plateauing, based on what has already happened to economic growth. Inflation should recede next year based on actual and expected nominal and real growth. By year-end 1990, unit labor cost increases will be 3½ percent, and they should fall further in 1991.

Consistent with this forecast of sharply slower economic growth and eventual lower inflation, I project significant declines in interest rates. The Federal Reserve can influence the timing of interest rate fluctuations, but in the long run, interest rates always reflect economic and inflation fundamentals. Just as interest rates rose in 1987 and 1988 to reflect strong economic performance and higher inflation, rates will fall back to reflect the economic weakness and eventually decline in inflation.

By year-end 1990, the funds rate will be down to at least 6¾ percent, and long-term rates will fall, but not as much.

In my written testimony, I discuss the implications of my economic forecast for the Federal budget deficit. I will not go into detail now, except to say if the economy slumps or even is as weak as 1 percent growth, deficits will not decline. There will be virtually no chance of achieving the Gramm-Rudman-Hollings (GRH) deficit target in 1991, and there is a very, very high probability that the GRH sequestration process will be suspended by fiscal year 1991.

This would not be bothersome. My real concern is that right now, there is no debate whatsoever in Congress or in the administration regarding what is an appropriate fiscal policy during and emerging from recession. Merely rebenching the GRH targets and pushing out this artificial schedule for reducing deficits does not constitute meaningful fiscal policy reform.

Regarding monetary policy, the Federal Reserve, under Chairman Greenspan, properly recognizes that its ultimate objective is sustained long-run economic growth and that the Fed's major contribution to this goal is a monetary policy that generates zero inflation.

To quote Chairman Greenspan, "Price stability—indeed, even preventing inflation from accelerating, requires that aggregate demand be in line with potential aggregate supply. In the long run, that balance depends critically on monetary policy."

I fully agree with and support these objectives. Unfortunately, the Fed has not always followed a monetary policy consistent with these stated objectives, and bank reserves and money growth have swung widely from rapid growth to declines and then back again. This has generated erratic swings in domestic spending growth and subsequently, inflation.

Every recent recession has been precipitated by high and/or rising inflation and the Fed's belated and then heavyhanded monetary tightening in an effort to subdue inflation. And in response to recession, the Fed has swung to overly-expansive monetary policy, reinitiating a roller-coster pattern of inflation and economic performance.

What are the sources of these monetary policy mistakes? In the past, such swings in money growth and economic performance have stemmed from the tendency of the Federal Reserve to either alter its desired economic outcomes or the policy instruments used to achieve these goals. Patterns that the Fed has occasionally fallen into fall into five categories:

First, a general tendency to target short-term interest rates rather than to keep money growth within official target bands.

Second, an attempt to fine tune the real economy by focusing on the funds rate.

Third, the frequent and apparently failure to take account of the lags between shifts in monetary policy and the impacts on the real economy and inflation. A recent example occurred in the first half of 1989. If the Fed truly believed that monetary policy works, it would not have tightened further by draining reserves and steepining declines in real money balances.

Fourth, the Fed has occasionally attempted to adjust monetary policy to achieve desired mix of fiscal and monetary policy.

Fifth, the Fed has had a general willingness to adjust monetary policy to achieve the Treasury's misplaced U.S. dollar management objectives.

The Fed's typical efforts to fine tune have involved altering its Federal funds rate target in response to recently released economic and inflation conditions. In fact, evidence suggests that the Fed occasionally waits until a particular economic release (that is, the employment number) before it adjusts policy. Since monetary policy works with a lag, responding to current events cannot do anything to effect current economic and inflation conditions, but efforts to fine tune, however well intended, may compound previous mistakes and generate large swings in reserves, money growth, and domestic spending.

Attempts to manage the dollar have been the primary source of undesirable wild swings in monetary policy in the last 5 years. The Federal Reserve and the Treasury must learn a simple rule, that it is impossible for a single policy instrument, such as monetary policy, to achieve two desired outcomes. That is, achieving a desired range for the U.S. dollar by adjusting monetary policy cannot be accomplished without sacrificing the objectives of desired domestic spending and inflation.

In my written testimony, I discuss the highly publicized Federal Reserve staff study on inflation, commonly referred to as the P-Star study. One way to consider the study is as an effort by the Federal Reserve to investigate or develop a monetary policy framework that would avoid previous mistakes that have led to accelerating inflation. I might note that the Federal Reserve staff study was initiated by Chairman Greenspan and it develops an equation for the equilibrium price level. As a modified quantity theory, P-Star involves potentially useful characteristics as a policy guideline, particularly by focusing on M-2 and normal GNP growth rather than real economic variables.

On the other hand, it does not preclude the traditional Fed practice of fine tuning. Without going into detail, despite the potential pitfalls of the P-Star model, such efforts to develop a monetary policy framework consistent with the Fed's long-run objectives are constructive and should be encouraged.

Concerning the current context of monetary policy, the Fed has been very tight by any measure since 1988, and I support the Fed's pursuit of low inflation. However, we are now at a critical juncture and I would like to make the following recommendations:

First, the Federal Reserve must take the immediate steps to prevent further declines in bank reserves and real monetary balances. One might ask, how much does the Fed need to lower the fund rate to accomplish this recommendation? I don't know. Focusing on the funds rate as a policy variable, which reflects demand pressures associated with the economy, is a very misleading indicator.

Bank reserves have declined at 3.7 percent over the last year. Clearly, preventing reserves from declining requires a decline in the funds rate. Many observers and policymakers may associate any decline as a monetary easing and a backing-off in the Fed's fight against inflation. This is a misperception that has led to major policy mistakes in the past.

Subsiding demand pressures associated with economic weakness presently are lowering the equilibrium level of the funds rate consistent with any desired reserve and money growth targets. Targeting the funds rate, while only paying lip service to trends in reserves and money, could inadvertently trigger an economic downturn.

My second recommendation is that when economic growth falls below the Fed's desired range—1½ to 2 percent GNP growth from fourth quarter 1989 to fourth quarter 1990—the Fed must avoid its typical mistake of overreacting and swinging monetary policy toward excessive expansiveness. We must consider a period of sluggish activity as a transition cost of earlier excesses in money growth and domestic spending growth.

Clearly, the Fed's tight policy is designed to slow nominal growth. This policy has an immediate impact on financial markets, and then affects real economic activity with a brief lag. With a longer lag, inflation declines.

The Fed's recent restrictiveness is now affecting real economic growth, but not yet inflation. If the Fed responds to extremely weak economic growth by excessive easing, as it has in the past, current economic conditions would not be altered. However, it would interrupt the disinflationary process and establish an undesirable high floor for the underlying rate of inflation. This would create a fragile environment for economic growth in the 1990's and perhaps sacrifice the Fed's hard-won credibility.

The direction of monetary policy is particularly important now, because it will determine not only the extent and duration of the economic weakness, but it will have a profound impact on how much inflation is reduced and the economic environment in the early 1990's. Sustained maximum long-term economic growth requires a prudent course of monetary policy that suppresses inflation. Your committee and Congress should encourage the Federal Reserve to continue to pursue these long-run objectives.

Thank you.

[The prepared statement of Mr. Levy can be found in the appendix:]

Chairman NEAL. Thank you.

Before I ask any questions, would any of you like to comment on any of the testimony given by any other of your colleagues?

Mr. LEVY. I would like to make two comments on Mr. DePrince's testimony. One is that I believed that he referred to M2 as "useless".

In the early 1980's, there was a clear shift in M2 velocity in response to financial deregulation and the shift to lower inflationary expectations and interest rates. However, since then, empirical evidence shows that M2 velocity has stabilized. The chart distributed by your subcommittee and chart 4 of my written testimony suggest that M2 is an important economic predictor and should not be neglected.

Second, he referred to the dollar and Black Monday as exogenous shocks. It is important to point out that interest rates and the U.S. dollar are jointly determined as endogenous variables. They are not falling out of the sky. They are not exogenous.

Black Monday was not an exogenous shock. Considering the dollar as exogenous involves a macroeconomic framework that can generate policy mistakes.

Chairman NEAL. As I heard Mr. DePrince, he was suggesting that Congress might want to review the requirement under Humphrey-Hawkins that the Fed set some targets. My own thinking has shifted on this subject. I want the Fed to produce a desired effect and I do not care how they do it. I have my own ideas how they can do it. I do not think they can do it without decreasing money growth, but I want to see zero inflation over a reasonable period of time. I do not want to get bogged down in arguments about the proper level for M2 growth or the Federal Funds Rate or any other statistics.

Mr. DePrince, you made a comment, as I recall, that you expect the longer term rates to stay at current levels. Mr. Levy, I think you anticipate a significant drop. Can you put a number on it?

Mr. LEVY. I put a number on the Fed funds rate at 6¾ percent by the end of 1990. The yield on the long-bond depends crucially on the dollar and the speed of monetary easing, both of which influence the term structure of interest rates. I expect continued declines in long- and short-term rates to reflect week economic performance and lower inflation.

Chairman NEAL. As a direct result of inflation. What would you say, Mr. DePrince?

Mr. DEPRINCE. The two views are probably consistent but they are separated by about a year. The shorter term interest rates a year from now—at the point of time in which you have the economic decline Mr. Levy talks about, you will have lower short-term interest rates. The move will take in short term rates which is a reflection of how the yield curve rate moves over the cycle.

The current rates and the absence of the imminent economic downturn is I think about as low as they can go, given a background rate of inflation something in the order of 4½ to 5 percent inflation.

Now, if markets are beginning to discount a 3 percent inflation rate, as Mr. Levy has suggested in his forecast, then there is considerable room for the longer term interest rates to move downward. It hinges on the view of the individual forecasters on the state of the economy as well as inflation within the general movement of economic activity.

I think what is different is that his economic decline, possible decline, is today. Mine is beginning a year from now with the effects on the interest rates during the first half of 1991.

I wanted to make my detailed 1991 forecast and superimpose it on Mickey's, and it will probably be identical. It is a question of timing.

Chairman NEAL. Mr. Benderly?

Mr. BENDERLY. I think I am somewhere in between the view that too much economic weakness has already been created and the view that economic weakness or downturn will start a year from now.

I tried to emphasize that the buildup in inflation pressures was stopped soon enough to prevent destabilizing forces that tended in the past to lead to recession, and that as a result extremes can be avoided at least for now. If that is correct and we are neither in recession nor still building up inflation pressures, I think that long-term interest rates have mostly but probably not completely reflected the kind of weakness in growth, but still growth that we would anticipate.

I don't know whether rates would get down into the 7 or 7½ range, long-term Government rates, or stay between 7½ and 8, but generally speaking I would say the 7½ to 8 percent range is what we would expect to prevail for the next 1½ years or so.

Chairman NEAL. Mr. Benderly, on page 2 of your testimony you list "four benefits from a quick containment of inflation that reduce the odds of recession." Would you extend that analysis to a generalization about the relationship between inflation and recession? For instance, would you agree with Mr. Levy that there is not a tradeoff between anti-inflation efforts and long-run economic growth, that they are in fact complements?

Mr. BENDERLY. Certainly over the long run, I think economic growth is maximized when you have a minimum of inflation. So I think over the long run there is no question but that they are complements, not substitutes.

But on a cyclical basis, I think that if not all, most of the recessions that have occurred in the United States have occurred because of the direct and indirect costs of inflation. Now they are trying to stop it in terms of very aggressive monetary tightening or because of the direct effect on consumer confidence or because of the direct effect on declining purchasing power and so forth and so on.

So over the short run, I think inflation and the buildup of inflation pressures is the primary reason that we have recession over the long run. You have to contain inflation pressures or you simply cannot maximize growth.

Chairman NEAL. Let me run something by all three of you and see if you agree.

It seems to me that we should commit ourselves to three macroeconomic policies in this country. I would not want to try to pinpoint the timing precisely, but generally speaking, say over the next 5 years and quicker, if possible. First, we would bring inflation to zero; second, we bring Federal spending to no more than 20 percent GNP; and third bring our budget into balance. If we then keep those as the guidelines for a healthy economy for essentially now on, it would seem to me that we would maximize the opportunity for interest rates to be at their lowest possible levels. We would maximize the opportunity for maximum sustainable economic growth or maximize the opportunities for sustainable maximum employment. That would generate the highest levels of savings possibly, and we would increase the likelihood of our being as productive as possible as a country. The benefits there would improve our standard of living to the best level that we could expect, and we would meet our maximum level of competitiveness in the international arena. We would create the most dynamic, healthiest economy imaginable maybe in the history of the world. What would you say about that?

Mr. BENDERLY. In principle, I think that statement is true. I am not sure about the specific numbers. I don't know if you need zero inflation and spending at 20 percent of the GNP and the Federal budget in absolute balance. There may be a small positive rate of inflation or a higher or lower rate of Government spending and some small deficit that would be equally consistent with all of the goals which you stated. I don't think anyone would disagree with some kind of statement like that.

The problem is the cost of getting from here to there. I think to the extent that there is a great deal of inertia to the inflation process, I think there is a cost of getting to zero or 1 or 2 percent inflation. It is difficult to achieve that. I don't think anyone disagrees with those as goals.

I think it is a matter of how much cost are we willing to pay over what time period to get there.

Chairman NEAL. Would you say that the costs would be worth it in getting from here to there over the next 5 years?

Mr. BENDERLY. Yes. I don't know whether it is at 3, 4, 5, or 6 percent inflation where you begin to build again the inflation expectations like we had in the 1970's, but somewhere in there you begin to build up in a self-sustaining nature to inflation.

To the extent we began to move up to 5 percent inflation again in the past year, I would say that is in the risky area and that it will pay in the long run to try to move down from that near 5 percent rate to something substantially lower. Again, I don't know whether in 5 years zero ought to be the goal or 2 ought to be the goal, but something well out of this danger zone.

Chairman NEAL. Mr. Levy.

Mr. LEVY. I agree with you that zero inflation is consistent with maximum sustainable economic growth. With regard to the Federal budget, I think we need to qualify your call for a balanced budget with Federal spending 20 percent of GNP. Presently, Federal spending is about 23 percent of GNP and taxes are a little over 19 percent of GNP. Accordingly, your framework would require a tax increase and spending cuts.

The key point about the economic effects of fiscal policy is not the level or change of deficit per se, but instead the level and mix of Federal spending; that is, the allocation of the Nation's resources. The impact on the economy of imposing a balanced budget depends crucially on the way in which it is achieved. Even if we had a balanced budget now, the mix of spending suggests that our national resources are being allocated toward consumption-oriented activities rather than investment oriented activities that increase the Nation's long-run capacity to grow.

We must be careful about how deficits are eliminated. Attempts to reduce the budget deficit by increasing taxes on capital would suppress investment and long-run potential economic growth, reduce U.S. competitiveness internationally, and lower the dollar, all of which would move you further away from your long-run objective. We should move toward a balanced budget by cutting Federal spending, particularly for nonmeans-tested entitlement programs.

With regard to the cost of achieving these long-run objectives, I argue that the cost of not adopting the appropriate policies to achieve them is higher than failing to do so. That is why in my written testimony I state that monetary policy is now at a critical juncture.

If the Fed shifts toward overly expansive monetary policy in response to economic weakness, the disinflation process is halted, and we have the same debate in the early 1990's when the underlying rate is stuck at 4½ percent.

Certainly, the costs of not following your prescription are very, very high. The real problem is that in the past the Fed has talked about long-term objectives, but then it gets sucked into the short run and starts to manage the dollar, or respond to yesterday's retail sales number, which results in a monetary policy that is inconsistent with its long-term objectives.

Presently, the Fed must continue to pursue its long-term objectives, recognizing that a economic slowdown or maybe a mild recession is a necessary consequence of its previous excesses.

Mr. Benderly mentioned that there is an inertia or a bias in inflation. I would say the Federal Reserve, through its actions and credibility, creates that inertia. Presently, the Fed is on the verge of breaking that inertia, and I encourage it to do so.

Chairman NEAL. What is your impression of how the Fed views this now?

Mr. LEVY. I think there is as much difference of opinion among the current voting FOMC members as there is among most private economists, perhaps more. Written statements by different FOMC members express various focuses and concerns: one is concerned about employment in the Midwest, another focuses on commodity prices, and still others focus on certain real economic variables on the yield curve. Recently, a coalition of these "strange bedfellows" have advocated lower interest rates, but a consistent long-run framework seems to be missing. I doubt if many FOMC members would take your long-term objectives and say "that is what I want to achieve", and stick to a monetary policy consistent with those goals.

The Fed still has the tendency to lean against the wind. When economic conditions deviate from desired short-term ranges, the Fed tends to forget about lags between monetary policy and economic activity, and monetary policies deviate from long-run objectives, at a highcost.

Chairman NEAL. We have also been concerned about the kind of comments that the Fed Governors and others have made in support of the administration's ideas on maintaining a particular value for the dollar. It doesn't seem to me that that is a reasonable objective of monetary policy at all. Mr. DePrince?

Mr. DEPRINCE. I would like to add a bit of urgency at least to the first item, the rate of inflation. I think when you look at the U.S. rate of inflation, there may be some debate as to where it will be a year from now but it is now apparently around 4½ percent.

The German inflation, the European inflation, excluding the English, prior to the rise in oil prices is up in the order of about 1½ percent as are the Japanese.

One of the gyrations we see in the fluctuations of the dollar has stemmed from the fact of trying to balance a different inflation rate here versus our major trading partners.

We see the same thing in the United Kingdom, which stayed out of the MS and has its own problems in 1992 in terms of its role in the European Community and how the pound stacks up against the European currencies. It has an effect on inflation.

The gyrating United States and English inflation compared with European, feeding through to the exchange rates, has a simultaneous effect, as Mr. Levy pointed out, in my view, of exchange rates being an external factor. Part of the movement in stabilizing has to do with stabilizing inflation. When they are at near zero, we have no choice but to try to get there.

In the longer term, the trends in population growth today are not what they were in the 1970's and late 1960's. In my view, some of the inflation we saw in the 1970's and late 1980's was, in retrospect, needed to drive down the growth in real wages and drive down the growth in productivity in order to absorb the growth in productivity.

We have not an excess of growth in employment, but we have a shortage of growth. High productivity gains become critical, and that is critical to high growth in wages and low growth in inflation.

In the 1990's, with low population growth, we have no choice but to drive inflation down to encourage growth in productivity. Otherwise, I think we are well on the verge of becoming a second-rate economic power. The short-term view, which is necessary for global stabilization, but the long-term view is that it is necessary to have the United States maintain itself as a strong economic power but we have to get on with the business of increasing productivity in the manufacturing and service sector.

The way to do that is by the capacity-generating items Mr. Levy mentioned in order to enhance the productivity of the economy.

In terms of the budget deficit, I think we have to be very careful not to shoot ourselves in the foot. I think what we tend to do a lot of times is ignore the combination of the Federal budget deficit and the State and local surplus.

While it might be laudatory to aim toward a zero Federal budget deficit, when a combined public-sector borrowing requirement basis will put the economy into a severe surplus when you add in the State and local government, if these are considered part of the total budget, then the Federal budget puts us into a severe surplus.

I offered suggestions in a paper I gave to a Canadian meeting for a different formula, which I will be delighted to send down to you, but I think a zero deficit budget is too severe. We probably should aim for something in the order of an $80 billion deficit to probably bring the two into rough balance.

I think you have to approach that balanced budget point of view on a broader basis. Otherwise, the extent of the fiscal restraint will be too severe.

Chairman NEAL. I really would like to see your paper on that subject.

Mr. DEPRINCE. Thank you. I will send it to you.

[The information referred to above can be found in the appendix:]

Chairman NEAL. We are not going to overshoot anytime soon, I don't think.

Mr. Benderly, Mr. DePrince, you probably recall that Mr. Levy was a bit critical of the Fed funds rate—the Fed focus on the Fed funds rate as a cause of serious mistakes in monetary policy. What would you say about that?

Mr. DEPRINCE. When you approach a monetary policy and the instrument of monetary policy, whether it is interest rates or monetary aggregates, I think it is important to distinguish today's economy from the economy of the 1970's. Today, everything above M1, before you get to M3, is virtually excluded from reserve requirements. So the capacity to alter the growth in M2 by altering the growth in reserves for high-powered money is limited to the effect on M1 or M3 but not on M2. Very little of M2 is subject to reserves.

Add to that the fact that the interest rate ceilings' automatic stops have been removed from the economy. One ends up controlling M2, not by controlling reserves. You end up controlling M2. If you believe in the equation of exchange or MV equals PT, you end up controlling it by interest rates.

But part of the view that I have toward the monetary aggregate stems from the fact that in a deregulated environment without the automatic stops, the relative pricing by commercial banks determine the growth in M2. Money market deposit accounts were yielding 6½ to 7 percent when CDs were yielding in the order of 10 to 10½ percent.

When you look at the growth in M2 between the fourth and second quarter of this year, there was a massive liquidation of money market deposit accounts and savings accounts, some of which migrated to longer dated CDs but some which left the banking system entirely. So there is a lot of movement up, down, around and sideways.

It is not clear juggling reserves does it. Money market conditions can be defined by borrowings or the Fed funds rate. One is the mirror of the other. The Federal Reserve in the short run is using the rate as a barometer, but I believe Mr. Levy is correct that monetary policy operates with a lag. It is probably shorter than it was in the 1970's, but there is still a lag in monetary policy. Once things are put in motion, it is probably hard to reverse them.

I don't think at this point we are in a position where the economy is teetering on the brink of recession, but on the type of environment we are in today, I think the only thing the Federal Reserve has to look at are, in my judgment, interest rates.

This was a subject of debate I think even within the FOMC. Vice Chairman Johnson has said we ought to look at commodity price exchange rates in the shape of the yield curve. Governor Angell has another idea. It is as if they are trying to get a Gramm-Rudman target.

In one section of my paper, I point out it is largely a case of judgment. It is looking at a variative indicator to reach a consensus, and they do reach a consensus because there is a directive issued. It is issued in the direction of Fed funds rate.

I think that is the proper directive because the vague and erratic movements are taking place in M2 as a result of financial changes.

Mr. BENDERLY. I think at times, particularly in the 1970's when there was an ongoing inflation that began in the late 1960's, there was an excess of focus on the Fed funds rate and that mistakes were made because of that focus.

But I think that in today's financial market environment, that there are too many problems with any single measure of monetary policy to focus on any single measure over the short run and that it does take an eclectic collection of indicators to conduct monetary policy, including some broader measure of money growth, including short-term interest rates, including the yield curves and perhaps including some of the more timely and sensitive indicators of economic performance such as some of the figures that come out of the Burgess survey.

I think they are struggling about that now. I think because there is not much agreement across the members in the Federal Reserve, that they are watching the other.

Mr. LEVY. There is convincing evidence that large changes in bank reserves have been entirely coincident with changes in real M2 in the 1980's, as well as the 1970's and 1960's (see charts 3 and 4 of my written testimony). These charts illustrate that each recent recession was preceded by sharply slower growth of bank reserves and declining real M2. I am baffled by economists and policymakers who ignore these relationships.

The inversion of the yield spread suggests that financial market participants agree with my forecast that the decline in reserves and real M2 could be damaging to the economy and the Fed should focus on it.

I would like to provide a couple of examples of how focusing on the funds rate has led to policy mistakes in the past. The best recent example occurred in 1978–1979 when, for a period of time, Federal Reserve Chairman Miller targeted the funds rate below the rate of inflation. Pegging the funds rate artificially low, as the economy accelerated, generated tremendous increases in liquidity, which generated double-digit nominal GNP growth and soaring inflation.

Earlier this expansion, economic growth boomed from late 1982 to mid-1984. The funds rate rose dramatically, from 8½ to 11½ percent, to reflect the economic strength.

Beginning in mid-1984 to the end of 1986, the funds rate fell from 11½ percent to below 8 percent before the decline in oil prices in 1986. That decline in the funds rate was not a Fed easing that stimulated economic growth.

Analogously, the rise in the funds rate in 1987 and the first half of 1988 was not restrictive and did not dampen economic growth, rather it reflected the strong economic performance.

This year, from February until early June, the Fed kept the funds rate at 9¾ percent to 9⅞ percent. This represented a further monetary tightening, since pegging the funds rate required draining reserves and reducing money supply.

Most of the recent decline in the funds rate from 9¾ percent to 9 percent reflects subsiding demand pressures. The decline will not stimulate the economy.

But while the funds rate reflects short-term economics as well as Fed actions, it is difficult for any economist or the Federal Reserve to identify what portion of a change in the funds rate is due to Fed policy and what portion is due to demand pressures.

Accordingly, the Fed should look at the broader monetary aggregates that have a bettr linkage with economic activity.

Chairman NEAL. What do you think they are doing?

Mr. LEVY. Right now?

Chairman NEAL. Yes.

Mr. LEVY. Right now the Fed is revising downward its forecast of real economic activity and it is lowering the funds rate, hoping to avoid a recession. In practice, the Fed lowers the funds rate 25 basis points and then looks at the most recent economic release. If the release portrays economic weakness, the Fed lowers rates some more.

A few members of the board are starting to recognize the fact that reserves and real money balances are declining, which could push the economy into recession. I applaud the Fed for its disinflationary stance. But what concerns me is that every time in the 1980's when real growth has fallen below the Fed's central tendency forecast range, the Fed has tended to shift dramatically toward overly expansive monetary policy.

The true test of the Fed has not yet occurred; It will occur when the economy slumps. Then we see if the Fed really sticks to its disinflationary policy or whether it gives into internal procedures or mounting pressures from the administration and the Congress to shift priorities.

Chairman NEAL. M2 has been under their target range since late January of this year. Based on what you are talking about, what would be the right path?

Mr. LEVY. I would like to see M2 grow at approximately 4 to 5 percent for the next couple of years, which would generate nominal

GNP growth down in the 4 to 5 percent range. This would bring the underlying rate of inflation down to 2 percent. Subsequently, the Fed should ratchet the target down further to achieve zero inflation.

I might note that the Fed's targets for money growth, whether M1 or M1A in the early 1980's or M2 now, were never binding monetary target variables economic growth or inflation deviating substantially from the Fed's short-run forecast ranges.

Chairman NEAL. It ought to be easy to find out and know how they will react by just watching M2, don't you think?

Mr. LEVY. I would look at several measures, particularly bank reserves and real M1 and real M2. When they are all pointing in the same direction, like they are presently, then heed the message.

Chairman NEAL. Using your own logic here, you recommend that M2 growth, for example, move higher along with the other aggregates and the other elements of taking control. You are not going to know, are you, whether the Fed was responding to administration pressure or worrying about recession, or whether they are following a sensible long-range course.

Mr. LEVY. I think we will know when we see a turnaround in bank reserves. That will determine the general trend in real money growth. Importantly, we are at the critical juncture when in the past the Fed has abandoned its money targets because it becomes overly concerned about current economic conditions. Presently, there is a long list of concerns if the economy does go into recession. I think we will see increased pressure from the administration and the Congress to shift dramatically toward monetary stimulus.

The true test of the Fed is not whether there is a mild recession, but whether it continues to follow a disinflationary environment which creates a healthy environment for sustained economic growth in the 1990's.

Chairman NEAL. Mr. DePrince, your forecast for 1990 shows a sharp drop in real growth from 2.9 percent this year to minus .1 percent next year, combined with a sharp rise in inflation from 4.7 percent this year to 5.7 percent next year for the GNP deflator. That seems contrary to the normal expectation, it seems to me, that is that a recession will bring inflation down. In simple terms, how would you support this kind of forecast? I wonder if the other witnesses would like to comment after you have.

Mr. DEPRINCE. It goes back to the issue of banks. As the pressures build in the labor markets, things are not reversed instantaneously, so compensation gains will continue at an above-trend rate even as the economy is faltering. These adjustments do not take place simultaneously.

Simultaneously, as economic growth falters, productivity falters more so. Unit labor costs remain a problem even in a declining economy. It is usually not until the early stages of expansion when you have growth at 7 or 8 percent and productivity at 7 to 8 percent that you have the rapid drop in unit labor costs with the rapid drop of inflation.

So it is the lags in the process that lead to relatively high inflation next year even though the economy in the second half of the year is in an economic downturn.

I think it is important to keep in mind that wherever the point of an economic recession may take place, its effect on inflation, however high inflation may be at the time it takes place, will not be instantaneous. The big effect, in my judgment, on inflation will take place as the next expansion gets under way.

It has to do with the same type of lags in the business sector that Mr. Levy spoke of in terms of the lags in monetary policy from a policy point of view.

Mr. BENDERLY. I have two points, one specific and one more general.

I think a focus on the unit labor cost increases that tends to come about because productivity slumps when growth is slowing puts too much emphasis on the effect of that productivity slump because the historical norm is for 70 or 80 percent or so of such a slump in productivity and such a slump in rise of unit labor costs that goes in with that. it goes into increased profits, it is not inflation. Unit labor costs rise more rapidly than inflation when growth is slowing.

Second and more generally, I think that the economy has already faltered. We have had 1.6 percent GNP in the first half of the year. I think most signs say the growth will be slower in the third quarter of 1989. I think that there are signs that the cyclical pressures on inflation have begun to ease, particularly within the manufacturing sector.

Manufacturing pricing itself is easing whether pressured at the raw material stage, the intermediate stage, it doesn't look like it has yet come through to the finished goods stage, but I think that is a matter of a few months.

Even on the wage side, there has been a stabilizing of wage gains at something like 2½ percent in the manufacturing sector and something like 4 percent for the economy as a whole. There has been no pick-up in that pace of wage gain since the third quarter of 1988, almost a year ago.

So I think that process, which involves some lags in systems, the building up of inflation pressures, is under way already. It is not going to have to occur in 1990.

Mr. LEVY. I agree with Mr. Benderly that there are lags. Real and nominal GNP growth have already started to slow down. With a fourth-quarter lag, according to my estimates, unit labor costs will roll over and come down.

Let's consider again that mythical firm whose product demands mirror nominal GNP growth. If you owned the firm, your initial concerns would be in nominal not real, terms. If revenue growth began to decelerate while your unit labor costs continued to rise, thus squeezing your profit margins, your initial reaction may be that the slowdown in product demand is temporary. Accordingly, you may grant higher wages. This may explain some of the momentum in wages.

After about four quarters, according to my estimates, businesses profit margins are squeezed sufficiently to constrain wage increases, and inflation declines.

I might note that too often inflation and corporate profits are analyzed separately. In reality, they are intertwined. In first quarter 1989, economic profits, that is corporate profits adjusted for inflation of inventories and the difference between economic and tax depreciation, declined sharply. Second-quarter data are not yet available, but I expect further weakness. This squeeze on profits is crucial to the trend in unit labor cost increases. The tight monetary policy and slower nominal GNP growth require that if unit labor cost increases roll over, given what the Fed has done, then something else are not slowed, corporate profits will decline more..

Chairman NEAL. Let me thank you very much.

Mr. Levy, you mentioned another study. I would like to see it. In fact, I would like to see anything each of you are doing on any of this. We are constantly trying to follow it, make some sense of it. We certainly do appreciate your coming this morning to help us with it. We welcome your thoughts at any time. Thank you again.

The subcommittee is adjourned, subject to the call of the Chair.

[Whereupon, at 12:25 p.m., the hearing adjourned, subject to the call of the Chair.]

APPENDIX

July 20, 1989

1989 MONETARY POLICY OBJECTIVES

Testimony of Alan Greenspan, Chairman
Board of Governors of the Federal Reserve System
July 20, 1989

Testimony of Alan Greenspan Chairman, Federal Reserve Board

Mr. Chairman and Members of the Committee: I appreciate this opportunity to appear before you in connection with the Federal Reserve's semiannual Monetary Policy Report to Congress. In my prepared remarks today I will adhere closely to the matter at hand—that is, monetary policy and the state of the nation's economy.

Economic and Monetary Developments Thus Far in 1989

Over the course of this year, the contours of the broad economic setting have changed. As a consequence, the stance of monetary policy also has shifted somewhat, although the fundamental objective of our policy has not. That objective remains to maximize sustainable economic growth, which in turn requires the achievement of price stability over time.

Early in the year, the Federal Reserve continued on the path toward increased restraint upon which it had embarked in the spring of 1988. At the time of our report to Congress in February of this year, I characterized the economy as strong, with the risks on the side of a further intensifying of price pressures. Labor markets had been tightening noticeably, heightening concerns that inflationary pressures might be building. Moreover, increases in food and crude oil prices were raising the major inflation indexes.

In view of the dimensions of the inflation threat, the Federal Reserve tightened policy further early this year. Additional reserve restraint was applied through open market operations, and the discount rate was raised ½ percentage point. The determination to resist any pickup in inflation also motivated the decision of the Federal Open Market Committee at its February meeting to lower the ranges for money and credit growth for 1989. This marked the third consecutive year in which the target ranges were reduced, and it underscored our commitment to achieving price stability over time.

Reflecting the economy's apparent strength and the tighter stance of policy, interest rates rose during the first quarter. Short-term market rates increased around 1 percentage point over the quarter, leaving them up more than 3 points from a year earlier, but long-term rates held relatively steady. The year-long rise in short-term rates had a marked impact on growth of the monetary aggregates, restraining the demand for money as funds flowed instead into higher-yielding market instruments.

By the beginning of the second quarter, the outlook for spending and prices was becoming more mixed. Scattered indications of an emerging softening in economic activity began to appear, prompting market interest rates to pull back. Rates continued to fall as a variety of factors pointed to some lessening of price pressures in the period ahead. In particular, money growth weakened further, the underlying trend in inflation appeared to be less severe than markets had feared, the dollar continued to climb, and domestic demand slackened. Against this background, the Federal Reserve eased reserve conditions, first in early June and again in early July. By mid-July, most short-term market rates had fallen to a bit below their year-end levels, and long-term interest rates were down as much as a full point, to their lowest levels in more than two years.

Economic activity apparently grew in the first half of this year at a rate somewhat below that of potential GNP. This stands in sharp contrast to the performance of the preceding two years during which growth proceeded at a pace that placed increasing pressures on labor and capital resources. Job creation has remained the hallmark of the current expansion, however. Even with the more moderate pace of economic growth in the first half of this year, nearly 1½ million new jobs were added to payrolls. And this occurred apparently without triggering an acceleration in wages.

Prices did accelerate in the first six months of this year, but most of the increase may be transitory, related to supply conditions in food and petroleum markets. After a gradual pickup over the preceding two years, price inflation outside of food and energy held near its 1988 pace.

Excluding food and energy is one traditional way of estimating the "underlying" rate of inflation. Although there is some logic in abstracting from these prices, which are quite volatile and can be dominated over the short run by supply disturbances, this approach is incomplete. An alternate picture of near-term price-setting behavior can be gleaned by examining the components of prices, that is, the cost pressures facing firms and the behavior of their profits. Such an analysis reveals that, in manufacturing, much of the pickup in inflation thus far in 1989 is accounted for by higher unit energy and labor costs. The runup in world crude oil prices, which reflected a series of production accidents this spring as well as a degree of output restraint on the part of some OPEC oil producers, is the main reason for the increase in energy costs.

In contrast, movements in hourly compensation appear to have been quite moderate in the first half of this year, and the acceleration in unit labor costs largely reflected slower growth in productivity. Such a deceleration in productivity is typical as the pace of economic activity slows. But, given the relatively high levels of resource utilization, it also is possible that firms were forced to draw on less skilled workers than was the case earlier in the expansion. A significant moderation in the unit cost of imported materials, likely reflecting the higher value of the dollar on foreign exchange markets, provided a notable offset to these cost pressures. On balance, it appears that firms have continued to experience upward pressures on costs. The intensity of these pressures as related to energy inputs may well diminish in coming months, but it remains to be seen how other elements of the cost structure will evolve.

This approach, while helpful in understanding the interaction of prices and costs, does not tell us how an inflation cycle begins or why it may persist. Short-run inflation impulses can originate from a variety of sources, on both the demand and the supply sides of the economy. But over longer periods of time, inflation cannot persist without at least passive support from the monetary authorities.

The strength of the inflation pressures in 1988 and into 1989 was, of course, the motive for the progressive tightening of policy that the Federal Reserve undertook over that period. And the outlook for some reduction in these pressures owes in part to that policy restraint. The associated rise in market interest rates, beginning early last year, opened up wide "opportunity" costs of holding money assets and resulted in a sharp slowing of money growth. This was especially the case for liquid deposits, whose rates were adjusted upward only very sluggishly, providing depositors with strong incentives to economize on balances.

In addition to the effect of interest rates, several special factors played a role in slowing money growth and boosting velocity—that is, the ratio of nominal GNP to money. Probably the most important of these was the unexpectedly large size of personal tax liabilities in April. Many individuals evidently were surprised by the size of their liabilities, and drew down their money balances below normal levels to make the required payments. As the IRS cashed those checks, M2 registered outright declines.

The difficulties of the thrift industry also may have affected M2 growth. Late last year, as public attention increasingly focused on the financial condition of the industry and its insurance fund, FSLIC-insured institutions began to lose deposits at a significant rate. These deposit withdrawals were particularly strong in the first quarter of this year, and while most of the funds apparently were repositioned within M2—at commercial banks or money funds—this factor likely also had some damping effect on that aggregate.

More recently, growth of the broader monetary aggregates has picked up markedly. The restraint imposed by the earlier rise in market interest rates is fading, and households appear to be rebuilding their tax-depleted balances. As of May, M2 had risen at just a 1 percent rate from its fourth-quarter base, but the 6¾ percent rate of growth in June lifted the year-to-date increase to around a 2 percent rate, still somewhat below its 3 to 7 percent annual target cone. M3 rose at a 3½ percent rate through June, at the lower end of its range. The latest data on these aggregates suggest that relatively rapid expansion has continued into July.

M1, which is the most interest-sensitive of the monetary aggregates, declined at a 3½ percent rate through June. The unusual drop in M1 stemmed from sizable declines in NOW accounts and demand deposits. NOW accounts were reduced both by the large personal tax payments this spring and by the high level of interest rates, which drew savings-type balances instead toward market instruments or other types of accounts whose offering rates adjusted upward more quickly. The decline in demand deposits was related in part to a reduction in balances that businesses are required to hold to compensate their banks for various services; for a set amount of services, higher market rates translate into lower required balances.

Monetary Policy and the Economy into 1990

Looking ahead at the remainder of 1989 and into 1990, recent developments suggest that the balance of risks may have shifted somewhat away from greater inflation. Even so, inflation remains high—clearly above our objective. Any inflation that persists will hinder the economy's ability to perform at peak efficiency and to create jobs. Consequently, monetary policy will need to continue to focus on laying the groundwork for gradual progress toward price stability. Such an outcome need not imply a marked downturn in the economy, and policy will have to be alert to any emerging indications of a cumulative weakening of activity. However, progress on inflation and optimum growth over time also require that our productive resources not be under such pressures that their prices continue to rise without abating. In light of historical patterns of labor and capital growth and productivity, this progress very likely will be associated with a more moderate, and hence sustainable, expansion in demand than we experienced in 1987 and 1988.

At its meeting earlier this month, the Federal Open Market Committee determined that a combination of continued economic growth and reduced pressures on prices would be promoted by growth of money and debt in 1989 within the annual ranges that were set in February. Moreover, it tentatively decided to maintain these same ranges through 1990.

The specified ranges, both for this year and next, retain the 4-percentage-point width first instituted for the broader aggregates in 1988. Considerable uncertainties about the behavior of money and credit remain, and the greater breadth allows for a range of paths for these aggregates as financial and economic developments may warrant. Uncertainties about the link between the narrow transactions aggregate, M1, and the economy have, if anything, increased, and the Committee once again did not specify a range for this aggregate.

In view of the apparent variability, particularly over the short run, in the relationships between the monetary aggregates and the economy, policy will continue to be carried out with attention to a wide range of economic and financial indicators. The complex nature of the economy and the chance of false signals demand that we cast our net broadly—gathering information on prices, real activity, financial and foreign exchange markets, and related data.

While the monetary aggregates may not be preeminent on this list, they always receive careful consideration in our policy decisions. This is especially true when they exhibit unusual strength or weakness relative to past patterns and relative to our announced ranges. Thus, the very sluggish growth in M2 for the year to date was an important influence in the decision to ease policy in June and again in July. Velocity may vary considerably over a few quarters, but the provision of liquidity, as measured by one or another of the monetary aggregates, is an important factor in the performance of the economy over the shorter run and over the long run broadly determines the rate of price increase.

Although M2 currently remains below its 1989 target cone, it has picked up substantially. The decline in interest rates in recent months, along with the continued growth of income, should provide support for that aggregate over the rest of the year, helping to lift it into the lower part of its target range. Growth in M2 likely will be augmented by a cessation of the special influences I noted earlier that depressed it in the first half of the year. In particular, we expect households to continue to rebuild their money balances after the tax-related drawdowns in April and May. Also, deposit withdrawals from thrift institutions have subsided, and enactment of legislation that restores full confidence in the industry would bode well for deposit flows into FSLIC-insured institutions.

Further steps in the resolution of the thrift industry difficulties also have implications for M3. With deposits flowing in again, thrifts will not have to rely so heavily on the Federal Home Loan Banks for their funding as they did earlier this year. Partly as a result, we expect M3 to strengthen from its rate of growth over the first half of the year, moving up into the middle of its target range by year-end.

Our outlook for debt growth foresees little change from the pace of the first two quarters. The broad credit measure that we monitor, the debt of domestic nonfinancial sectors, has grown at about an 8 percent rate this year, near the midpoint of its 6½ to 10½ percent range. We have little reason to expect its growth through the end of the year to be very different, implying some slowing from the pace of 1988. Nevertheless, the expansion of debt is likely to exceed nominal GNP growth again this year.

Growth of money and debt within the 1989 ranges is expected to be consistent with nominal GNP rising this year at a pace not too far from last year's increase, according to the projections of FOMC members and other presidents of Reserve Banks. These projections, however, incorporate somewhat more inflation and less real growth than we experienced in 1988. The central tendency of the projections of 2 to 2½ percent real GNP growth over the four quarters of this year implies continued moderate economic growth throughout the year. For the year as a whole, these projections anticipate that growth is likely to be strongest in the investment and export sectors of the economy, with expansion of consumer expenditures and government purchases rather subdued.

A sectoral pattern of growth such as this would in fact serve the nation's longer-term needs by contributing to a better external balance. Fundamentally, improvement in our international payments position requires productivity-enhancing investment and a higher national saving rate. In this regard the federal government can play a significant, positive role by reducing the budget deficit.

The outlook for inflation this year, as reflected in the central tendency of the projections expressed at the FOMC meeting, is for a 5 to 5½ percent increase in the consumer price index. A figure in this range would represent the highest annual inflation rate in the United States since 1981; this is a source of concern to the Federal Reserve. Yet this rate is below that experienced in the first six months. This implies a considerable slowing over the remainder of the year, reflecting earlier monetary policy restraint and a prospective moderation in food and energy prices.

Federal Reserve policy is focused on laying the groundwork for more definite progress in reducing inflation pressures in 1990, while continuing support for the economic expansion. The ranges provisionally established for growth of money and debt next year are consistent with these intentions. They allow for a noticeable pickup in money growth from that likely to prevail this year, should that be appropriate. If pressures on prices and in financial markets are less intense than in recent years, velocity would not be expected to continue to increase, and faster money growth, perhaps in the top half of the range, would be needed for a time to support economic growth. Conversely, if price pressures prove intractable, the ranges are low enough to permit the needed degree of monetary restraint.

Thus, although the 1990 ranges do not represent another step in the gradual, multiyear lowering of ranges, the Federal Reserve's intent to make further progress against inflation remains intact. Uncertainties about the outlook suggested a pause in the process of reducing the ranges; however, the Committee recognizes that our goal of price stability will require additional downward adjustments in these ranges over time. Of course, as we draw closer to 1990, the economic and financial conditions prevailing will become clearer, allowing us to approach our decisions on the ranges with more confidence. Hence, the current ranges for money and credit growth in 1990 should be viewed as very preliminary.

The economic projections for 1990 made by the governors and Reserve Bank presidents center in a range of 1½ to 2 percent real GNP growth and 4½ to 5 percent inflation for next year. Naturally, as I've already noted, there are considerable uncertainties surrounding forecasts for 1990. In particular, developments in the external sector will depend in part on economic activity abroad, as well as on the efforts of U.S. firms to become more competitive in world markets. Domestically, performance will be affected by a large number of influences, including importantly the budget deficit.

Monetary Policy in Perspective

The Federal Reserve is committed to doing its utmost to ensure prosperity and rising standards of living over the long run. Given the powers and responsibilities of the central bank, that means most importantly maintaining confidence in our currency by maintaining its purchasing power. The principal role of monetary policy is to provide a stable backdrop against which economic decisions can be made. A stable, predictable price environment is essential to ensure that resources can be put to their best use and ample investment for the future can be made.

In the long run, the link between money and prices is unassailable. That link is central to the mission of the Federal Reserve, for it reminds us that without the acquiesence of the central bank, inflation cannot take root. Ultimately, the monetary authorities must face the responsibility for lasting price trends. While oil price shocks, droughts, higher taxes, or new government regulations may boost broad price indexes at one time or another, sustained inflation requires at least the forbearance of the central bank. Moreover, as many nations have learned, inflation can be corrosive. As it accelerates, the signals of the market system lose their value, financial assets lose their worth, and economic progress becomes impossible.

Thankfully, this bleak scenario is not one that we in the United States are confronting. We do, however, face a difficult balancing act. The economy has prospered in recent years: the economic expansion has proven exceptionally durable, employment has surpassed all but the most optimistic expectations, and the underlying inflation rate, after coming down quickly in the early 1980s, has accelerated only modestly. But now signs of softness in the economy have shown up.

Accordingly, it is prudent for the Federal Reserve to recognize the risk that such softness conceivably could cumulate and deepen, resulting in a substantial downturn in activity. We also recognize, however, that a degree of slack in labor and product markets will ease the inflationary pressures that have built up. So our policy, under current circumstances, is not oriented toward avoiding a slowdown in demand, for a slowing from the unsustainable rates of 1987 and 1988 is probably unavoidable. Rather what we seek to avoid is an unnecessary and destructive recession.

The balance that we must strike is to support moderate growth of demand in the near term, while concurrently progressing toward our longer-run goal of a stable price level. Admittedly, the balance we are seeking is a delicate one. I wish I could say that the business cycle has been repealed. But some day, some event will end the extraordinary string of economic advances that has prevailed since late 1982. For example, an inadvertent, excess accumulation of inventories or an external supply shock could lead to a significant retrenchment in economic activity.

Moreover, I cannot rule out a policy mistake as the trigger for a downturn. We at the Federal Reserve might fail to restrain a speculative surge in the economy or fail to recognize that we were holding reserves too tight for too long. Given the lags in the effects of policy, forecasts inevitably are involved and thus errors inevitably arise. Our job is to keep such errors to an absolute minimum. An efficient policy is one that doesn't lose its bearings, that homes in on price stability over time, but that copes with and makes allowances for any unforeseen weakness in economic activity. It is such a policy that the Federal Reserve will endeavor to pursue.

Board of Governors of the Federal Reserve System

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

July 20, 1989

Letter of Transmittal

BOARD OF GOVERNORS OF THE
FEDERAL RESERVE SYSTEM
Washington, D.C., July 20, 1989

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

The Board of Governors is pleased to submit its Monetary Policy Report to the Congress pursuant to the Full Employment and Balanced Growth Act of 1978.

Sincerely,
Alan Greenspan, Chairman

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Section 1: Monetary Policy and the Economic Outlook for 1989 and 1990

As 1989 began, a reduction in inflationary pressures appeared essential if the ongoing economic expansion was to be sustained. Monetary policy during 1988 had been directed toward reducing the risks of an escalation of inflation and inflation expectations, but at the time of the Board's report to the Congress in February of this year, success in that effort seemed far from assured.

Indeed, among the data reported in the early part of 1989 were very large increases in the producer and consumer price indexes, reflecting not only the effects of run-ups in oil and agricultural commodity prices, but also broader inflationary developments, including unfavorable trends in unit labor costs over the preceding year. Under the circumstances, with pressures on productive resources still intense, monetary policy was tightened further. Reserve availability was curtailed through open market operations, and the discount rate was raised ½ percentage point in late February. In response to these policy actions, and to expectations that additional tightening moves might be needed, market interest rates climbed throughout the first quarter, and money growth was subdued.

Over the course of the second quarter, a number of indicators suggested the emergence of conditions that were more conducive to a future easing of inflationary pressures. Growth of the monetary aggregates weakened further, with M2 running noticeably below its target range for the year. Aggregate demand for goods and services moderated, reducing somewhat the strains on productive resources, especially in the industrial sector of the economy. The dollar exhibited considerable strength on the foreign exchange markets, portending a direct reduction in price pressures and slower growth in demands on domestic production capacity. Although the unemployment rate remained essentially unchanged in the neighborhood of 5¼ percent—the lowest level since the early 1970s—trends in wages and total compensation showed little, if any, further step-up, reflecting at least in part an awareness among workers and management of the need to contain costs in a highly competitive world economy. Meanwhile, prices of actively traded industrial commodities leveled out, enhancing the prospects of a broader slackening in the pace of inflation.

In this environment, interest rates turned down during the spring, as financial market participants responded not only to the better outlook for inflation but also in anticipation of an easing of monetary restraint by the Federal Reserve. The System began to provide reserves slightly more generously through open market operations at the beginning of June, and took an additional small easing step in early July. This helped bring about a further decline in market rates of interest, which by mid-July generally had more than retraced the increases that had occurred earlier in the year. Most short-term interest rates were down about ½ percentage point from their December levels, while long-term rates had fallen as much as 1 percentage point on balance.

Monetary Objectives for 1989 and 1990

In February, the Federal Open Market Committee specified a range for M2 growth in 1989 that was a full percentage point below that of 1988 and ranges for M3 and debt that were ½ percentage point below those of the prior year. This was the third consecutive year in which the ranges had been lowered. At the same time, the Committee recognized that, in light of the continuing uncertainty regarding the shorter-term relation between monetary growth and changes in income and spending, a variety of indicators of inflation pressures and economic activity as well as the behavior of the aggregates would have to be considered in determining policy.

In February, the Committee had anticipated relatively slow money growth over the first half of the year, because of the effects of the firming of policy through late 1988 and into 1989. In addition to the influence of the higher interest rates on desired holdings of money, however, several special factors—including the difficulties of the thrift industry and a drawdown of liquid assets to meet unusually large individual tax payments—appear to have further reduced money balances in the first half. These factors contributed to a substantial rise in velocity, the ratio of nominal GNP to the stock of money.

By June, money growth had picked up. Nonetheless, M2 ended the quarter just 2 percent at an annual rate above the fourth quarter of last year, compared with its 3 to 7 percent annual growth range. In June, M3 was at the lower end of its 3½ to 7½ percent annual range. The rate of expansion of domestic nonfinancial sector debt also slowed in the first half of this year compared with 1988, though by less than the monetary aggregates; debt has grown about 8 percent so far this year, near the middle of its 6½ to 10½ percent monitoring range.

At its meeting earlier this month, the Committee agreed to retain the current ranges for growth of money

Ranges of Growth for Monetary and Credit Aggregates

Percent change, fourth quarter to fourth quarter	1988	1989	Provisional for 1990
M2	4 to 8	3 to 7	3 to 7
M3	4 to 8	3½ to 7½	3½ to 7½
Debt	7 to 11	6½ to 10½	6½ to 10½

and debt in 1989. The Committee anticipates that by the fourth quarter all three aggregates will be well within those ranges. The more rapid growth in M2 and M3 already evident since mid-May is expected to extend through the second half. The recent declines in short-term market interest rates have made M2 holdings more attractive, tending to offset the restraining effects on M2 of previous interest rate increases. With M2 expansion likely also to be boosted by a further replenishing of liquid balances depleted by tax payments, this aggregate is expected to grow a little faster than nominal GNP in the second half, bringing it into the lower portion of its annual growth range. The faster growth of M2 should show through at least in part to a quickening in M3 growth over the second half of the year, so that this aggregate would move into the middle part of its range. Domestic nonfinancial debt is likely to remain in the middle portion of its range through year-end.

For 1990, the Committee provisionally decided to use, for all three aggregates, the same growth ranges in force for 1989. The Committee recognized that the economic and financial outlook over the next year and a half is uncertain; in particular, it is unclear at this juncture whether the velocities of M2 and M3 are more likely to trend higher or lower next year. Although the Committee's initial assessment is that growth of money and credit through 1990 within the bounds of the reduced ranges of this year likely would foster the slower inflation and sustained real economic expansion that it is seeking, it will reevaluate the ranges next February in light of the unfolding economic and financial situation. The outlook for spending, prices, and financial markets in 1990 should have clarified somewhat by then, as should the influence on monetary expansion of the ongoing resolution of thrift industry problems. For the long term, the Committee recognized that ultimate attainment of price stability will require that the ranges for money and credit growth be reduced further in future years.

Economic Projections for 1989 and 1990

Voting members of the Committee and other Reserve Bank presidents believe that the monetary ranges specified are consistent with some progress in reducing inflation, which likely will be associated in the near term with continuation of a slower pace of economic growth. The central tendency of the forecasts is for increases in real GNP of 2 to 2½ percent in 1989 and of 1½ to 2 percent in 1990.

The expected easing of pressures on resources should contribute to a damping of inflation in 1990, although the Board members and Bank presidents also are anticipating some near-term relief from the special problems that boosted prices in the first half of this year. Larger crops later this year should result in more favorable behavior of food prices, and the recent peaking of crude oil prices suggests the likelihood of some softening in consumer energy prices. Thus, retail inflation should be considerably slower over the remainder of this year, and the central tendency of CPI forecasts for 1989 as a whole is 5 to 5½ percent—compared with the more than 6 percent rate observed through May. The forecasts for the CPI in 1990 center on 4½ to 5 percent.

The Administration's economic forecast, presented in connection with its mid-session update of the budget outlook, does not differ greatly from the projections of the FOMC members. Nominal GNP is near the upper ends of the FOMC central-tendency ranges for 1989 and 1990, but with a more favorable mix of real output versus inflation, especially in 1990. There appears to be no basic inconsistency between the policy objectives of the Federal Reserve and the economic forecast of the Administration; indeed, the Administration has indicated that it shares the view that the maintenance of anti-inflationary monetary policy is a precondition for healthy economic expansion.

In an environment of relatively slow overall growth, such as is expected by the FOMC members, some

Economic Projections for 1989 and 1990

	FOMC Members and Other FRB Presidents		Administration
	Range	Central Tendency	
1989			
Percent change, fourth quarter to fourth quarter			
Nominal GNP	5 to 7¾	6 to 7	7.1
Real GNP	1½ to 2¾	2 to 2½	2.7
Consumer price index	4½ to 5¾	5 to 5½	4.9[1]
Average level in the fourth quarter, percent			
Civilian unemployment rate	5 to 6	Around 5½	5.3[2]
1990			
Percent change, fourth quarter to fourth quarter			
Nominal GNP	4¼ to 7½	5½ to 6¾	6.8
Real GNP	1 to 2½	1½ to 2	2.6
Consumer price index	3 to 5¾	4½ to 5	4.1[1]
Average level in the fourth quarter, percent			
Civilian unemployment rate	5 to 6½	5½ to 6	5.4[2]

1. CPI-W. FOMC forecasts are for CPI-U.
2. Percent of total labor force, including armed forces residing in the United States.

industries and regions are likely to experience setbacks, but major imbalances that could threaten the continuation of the economic expansion are not anticipated. In the household sector, growth of consumer purchases has been sluggish and may remain so for a while. Residential construction activity should pick up some in coming months, in response to the recent decline of mortgage rates, although an overhang of supply in some locales could damp the recovery. Surveys of business plans suggest that capital spending will post further gains over the remainder of 1989, but some moderation from first-half growth rates is to be expected in light of declining levels of capacity use and the recent weakening in corporate profits. Spending on equipment is likely to continue to be buoyed by the desire to modernize industrial facilities, so as to enhance efficiency and meet intense competition here and abroad.

The external sector represents an area of considerable uncertainty in the economic outlook for the next year and a half. Real net exports of goods and services increased earlier this year, but improvements may be more difficult to achieve in the period ahead as the effects of past depreciation of the dollar wear off and are offset by those associated with the more recent appreciation. In addition, the path of exports will depend importantly on economic growth abroad, which may slow as a result of policy actions taken by some of our major trading partners to offset mounting inflationary pressures. Ultimately, achievement of the adjustment needed in the external sector will depend not only on governmental policies that foster macroeconomic stability, but also on the determination of U.S. firms to meet foreign competition through application of stringent cost controls and intensified marketing efforts abroad.

A key ingredient in maintaining a healthy pace of economic expansion is further progress in reducing the federal budget deficit. Since 1983, the deficit has fallen relative to GNP from more than 6 percent to around

3 percent, but it remains large by historical standards. Taking the actions required to meet the Gramm–Rudman–Hollings targets on schedule will foster confidence in the U.S. economy, particularly among financial market participants. At the same time, reduced demands by the federal government for credit will free up the available supply to interest-sensitive private sectors, such as housing and business investment. The Committee thus views as highly encouraging the commitments expressed by the Congress and the Administration to begin soon to address the problems of meeting the fiscal 1991 budget target.

Section 2: The Performance of the Economy during the First Half of 1989

After two years of rapid expansion, economic activity decelerated substantially in the first half of 1989. Even at this more moderate pace of growth, however, job creation was considerable—nearly 1½ million between December and June—and the civilian unemployment rate, fluctuating around 5¼ percent, remained in the lowest range since the early 1970s.

Inflation rose in the first half of 1989, but most of the increase appears to have resulted from transitory events. In particular, energy prices increased sharply, as the rise in crude oil prices between November 1988 and May 1989 was passed through, and food prices surged as the agriculture sector continued to experience adverse supply developments. Outside food and energy, the rate of inflation has, on average, remained at about its 1988 pace, even in the face of relatively high levels of resource utilization.

This apparent stability of underlying price trends is attributable in part to the appreciation of the dollar on exchange markets. So far in 1989, prices of imported goods other than oil have been virtually flat on average, restraining increases in the prices of domestically produced items. In addition, despite the tightest labor markets in some time, wage trends have been fairly stable, helping to limit the acceleration in unit labor costs during a period in which productivity has weakened.

The External Sector

Developments in foreign exchange markets have played an important role in shaping events in the domestic economy in recent years. After depreciating over most of the period from 1985 to late 1987, the foreign exchange value of the dollar in terms of other G-10 currencies changed little, on net, in 1988, as a decline in the final few months reversed much of the increase that had occurred earlier in the year. In December the dollar began to rebound, and it rose substantially through mid-June before dropping back somewhat. The appreciation of the dollar through the first half of 1989 was frequently met by concerted intervention sales of dollars by U.S. and foreign monetary authorities.

During December, and in the first quarter of this year, the dollar rose in response to perceptions of a relative tightening of U.S. monetary policy. Reports of somewhat higher rates of inflation and news about the strength of the economy contributed to expectations that Federal Reserve policy would be tightened still further. There was a brief pause in the dollar's rise after the Group of Seven finance ministers and central bank governors stated in April that a further rise in the dollar that undermined the adjustment process would be counterproductive.

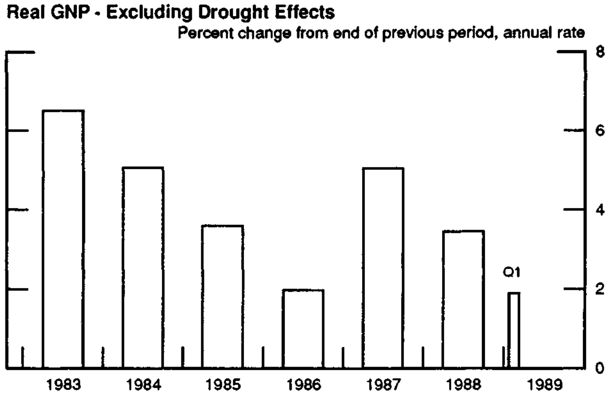
In May and early June, the dollar appreciated significantly on balance, even though interest rates on nondollar assets rose relative to those on dollar-denominated instruments. Sentiment in favor of the dollar was, perhaps, partly a response to concerns about political events abroad, but the data on the U.S. trade balance, which were better than expected, also may have played a role. For a while, the dollar's rise appeared to be associated with expectations of capital gains on U.S. stocks and bonds. Since mid-June, the dollar has retraced much of its second-quarter rise, under the influence of increasing interest rates abroad, declines in dollar rates, and some easing of demands for dollar assets after the initial response to political uncertainties in certain other countries.

Measured in terms of a trade-weighted average of the other G-10 currencies, the dollar is about 8 percent higher than in December 1988 and about 12 percent higher than in December 1987. After adjustment for changes in relative price levels, the appreciation of the dollar has been larger, because U.S. inflation has remained above the average for the other G-10 countries. Meanwhile, the currencies of South Korea and Taiwan have risen moderately against the dollar so far in 1989.

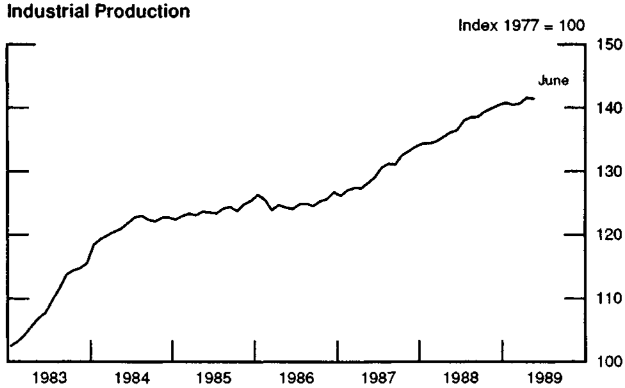
In most of the other industrial countries, economic growth has been strong. The resulting very high rates of capacity utilization and the diminishing slack in labor markets, together with higher world oil prices and special factors, have spurred an appreciable pickup in inflation abroad in recent quarters. Policymakers in many foreign industrial countries have responded by raising official interest rates. Growth of the newly industrializing economies in Asia has slowed recently, though the rates remain relatively high. In contrast, developing countries that are burdened with large external debts have continued to struggle to achieve sustained economic growth.

The U.S. merchandise trade deficit in the first quarter was $110 billion at a seasonally adjusted annual rate, significantly better than the figure for the fourth quarter and that for 1988 as a whole. In the first two months of the second quarter, the trade deficit was essentially unchanged from the first-quarter pace.

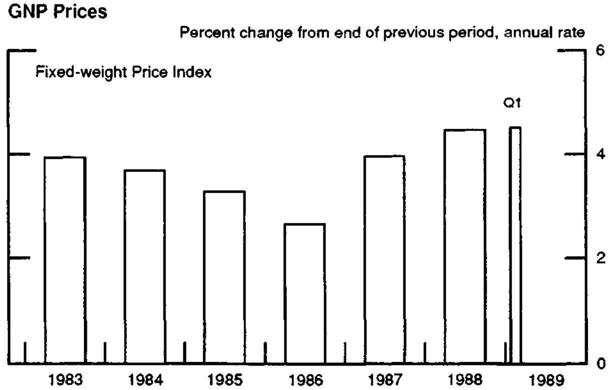
Real GNP - Excluding Drought Effects



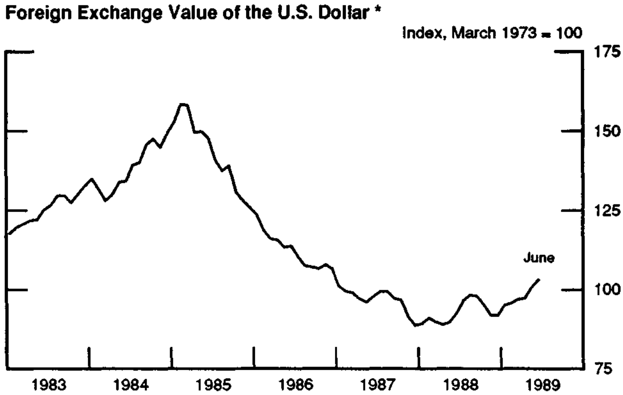
Industrial Production



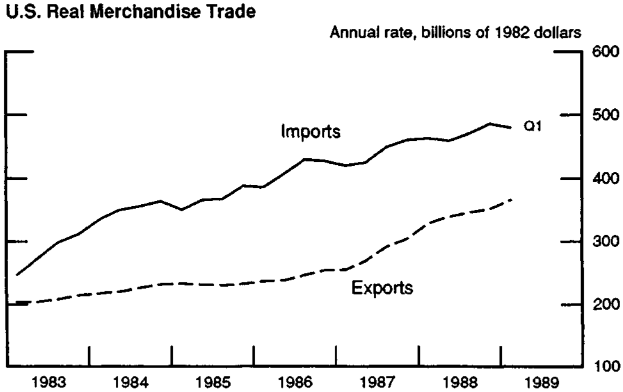
GNP Prices



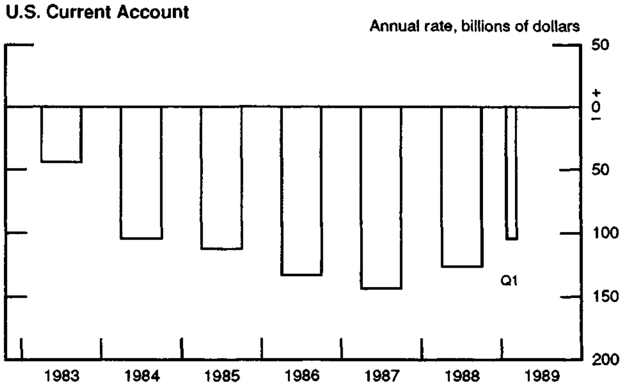
Foreign Exchange Value of the U.S. Dollar *



U.S. Real Merchandise Trade



U.S. Current Account



* Index of weighted average foreign exchange value of U.S. dollar in terms of currencies of other G-10 countries plus Switzerland. Weights are 1972-76 global trade of each of the 10 countries.

Exports have continued to expand this year, although not so rapidly as in 1988. Export gains have been broadly based, with notable increases for agricultural goods, industrial supplies, capital goods, and consumer goods. Meanwhile, imports have increased moderately; in fact, average imports of products other than petroleum in April and May were less than 1 percent above their fourth-quarter rate. Notable decreases were recorded in imports of consumer goods and automotive products. So far in 1989, the value of oil imports has risen sharply, as higher prices for petroleum and petroleum products were accompanied by a small increase in physical volume. The further improvement in the U.S. trade balance in the first five months of this year reflects a number of factors, most importantly the strength of economic activity abroad, the slower growth of U.S. activity, the continuing, if diminished, benefit for U.S. price competitiveness from the depreciation of the dollar through the end of 1987, and the restraint that the recent rise in the dollar placed on prices of non-oil imports.

The current account deficit widened in the first quarter to $123 billion. The increase from the fourth-quarter rate was more than accounted for by capital losses on assets denominated in foreign currencies resulting from the dollar's appreciation. Setting aside those losses, the current account balance in the first quarter showed a deficit of $108 billion, an improvement of about $22 billion from the previous quarter. Nearly all of this improvement resulted from the narrowing of the trade deficit. Preliminary information on capital transactions in the early months of 1989 suggests an increase in net private foreign purchases of U.S. Treasury securities and corporate bonds and substantial foreign direct investment in the United States.

The improvement in real net exports accounted for nearly half of the overall rise in the GNP during the first quarter, more than reversing its negative contribution in the fourth quarter. The contribution to GNP growth in the second quarter probably was negligible, however, as real net exports may have begun to be depressed by the loss in U.S. price competitiveness associated with the cumulative rise in the dollar since the end of 1987.

The Household Sector

Much of the slowing in overall economic growth in the first half of 1989 reflected a deceleration in consumer spending. The slump in demand was fairly broad, encompassing a variety of durable and nondurable goods. Despite the widespread availability of special financing deals and other incentives, sales of motor vehicles in the first half were about 6 percent below the pace of 1988 as a whole. A weakening in purchases of furniture and appliances likely was related in part to the drop in home sales.

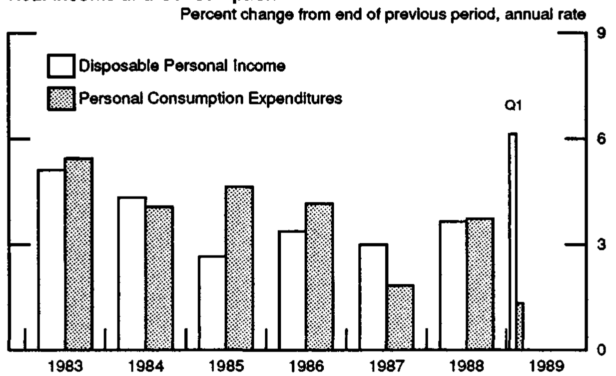
Consumption slowed against a backdrop of strong income growth in the early part of the year, although weaker income growth was evident in the spring. Personal income gains in the first quarter were accentuated by the national income accountants' assumption that the income of farm proprietors would return to normal levels over the year, after the drought-induced reductions in 1988. With hiring down in the spring, increases in wages and salaries softened noticeably, showing virtually no growth in real terms. Also, growth of the nonwage components of personal income was weaker on balance in the second quarter.

The personal saving rate has been on a distinct upswing since reaching a forty-year low in mid-1987. Several explanations have been propounded for the recent rise, among them the lower level of household net worth relative to income since the stock market break of 1987, higher costs of consumer credit (especially in aftertax terms, because of the phase-down of interest deductibility), and concerns about a potential softening of the economy. Whatever the cause, households appear to have adopted a more cautious spending stance, though it also should be noted that the personal saving rate has remained below the norms of the 1960s and 1970s.

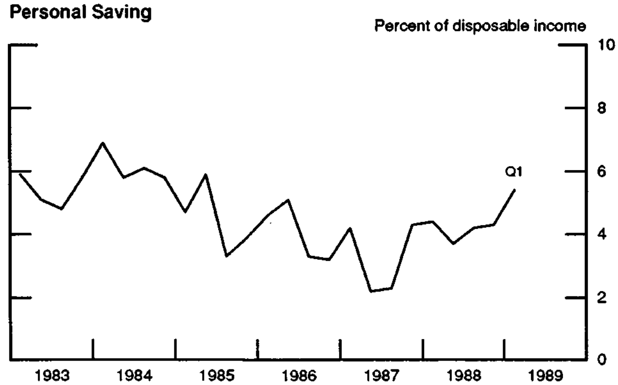
Residential construction declined over the first half in response to the rise in interest rates and to earlier overbuilding in some markets. The more recent drop in rates, which began in May, likely will be reflected in some improvement in construction over the summer and fall. Total housing starts, at an average annual rate of 1.44 million units through May, were down 3¼ percent from their 1988 pace.

Starts in the single-family sector averaged about 1 million units at an annual rate between March and May, a period relatively free from the weather-related distortions that affected construction in January and February. Interest rates on fixed-rate mortgages rose above 11 percent for the first time since 1985, with part of the rise attributable to investor concerns about sizable future liquidations of mortgage assets by troubled thrift institutions. Also, rates on adjustable-rate mortgages rose nearly a full percentage point during the early months of 1989, as discounting of initial interest rates on ARMs was reduced. In recent years, relatively low initial terms on ARMs led an increasing number of households to favor this instrument for home purchases. Since their highs in the spring, interest rates on ARMs have fallen more than ½ of a percentage point,

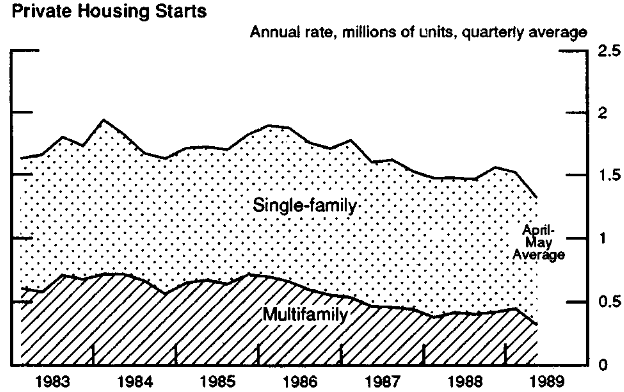
Real Income and Consumption



Personal Saving



Private Housing Starts



while fixed-rate mortgage rates have dropped about 1¼ percentage points.

Meanwhile, multifamily starts fell further in the first half of the year from the already low level recorded in 1988. Multifamily housing production has been limited by an overhang of vacant rental units. Moreover, building in this sector continues to reflect the effects of the Tax Reform Act of 1986, which, by curtailing many of the financial advantages associated with investment in rental housing, sharply reduced its aftertax profitability.

The Business Sector

In contrast to the household sector, business capital spending strengthened in early 1989, responding in part to high levels of capacity utilization in the United States and to international pressures to lower costs. In the first quarter of 1989, real business fixed investment rose at an annual rate of 7½ percent, and such spending appears to have increased substantially further in the second quarter.

The gain in investment has occurred in the equipment category. Particularly noteworthy in the first quarter was a sharp rise in outlays for industrial machinery. Increases in that area, which includes spending for fabricated metal products, engines, turbines, and a variety of other types of industrial apparatus, have been exceptionally strong since mid-1987. Spending for high-technology equipment also has been robust. Computer outlays decelerated during the second half of 1988, possibly reflecting some hesitation on the part of potential purchasers in response to the rapid pace of new product announcements, but spending was up considerably in the first quarter, and another gain appears in train for the second quarter.

High levels of factory utilization apparently have spurred a rise in industrial building in recent quarters. Outlays for construction of office and other commercial buildings also rose earlier this year, although the level of total spending on commercial structures remained below that of the 1985–86 period, depressed by excess space in many areas. And, while the rise in energy prices led to some increase in oil and gas drilling in the spring, the level of activity remained very low compared with that of the early 1980s.

Inventory investment slowed over the first five months of 1989, as businesses adjusted with apparent promptness to the more moderate expansion of final demand. Inventory buildups by manufacturers have been concentrated in the aircraft and other capital goods industries, where production has risen and order backlogs are large. In contrast, in the retail sector, automobile inventories rose sharply in the first quarter and have remained high. In an effort to reduce the overhang before introducing new models in the fall, carmakers have lowered factory assembly rates and have enhanced sales incentives. Qualitative reports have suggested that stocks at some other retailers also may have risen above desired levels, although most firms appear to have been following cautious inventory policies and problems of excess stocks seem to be limited.

In the first quarter of 1989, before-tax economic profits of nonfinancial corporations declined, in part because unit labor costs increased as sales growth slowed and productivity deteriorated. The drop in profits was spread over most types of businesses; the largest decline was in the manufacturing sector, which had especially strong gains in both 1987 and 1988. Meanwhile, corporate tax liabilities edged up in the first quarter, owing in part to higher profits generated from the rise in prices of inventories. The combination of lower operating profits and higher tax liabilities reduced the internal cash flow of nonfinancial corporations.

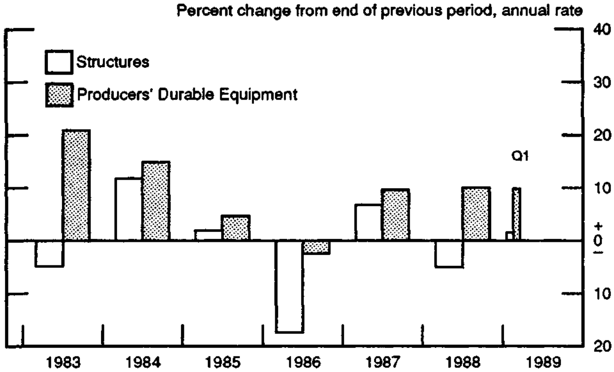
The Government Sector

In the first quarter, real federal purchases of goods and services, the part of federal outlays that is counted directly in GNP, were virtually unchanged. Such purchases are dominated by defense; nominal spending authority in this area has been virtually flat since 1985, and procurement of some major new weapon systems is winding down. As a result, real military purchases have fallen and in the first quarter were nearly 5 percent below the mid-1987 peak. The decline in defense spending has been partially offset by increases in other federal purchases. Inventories held by the Commodity Credit Corporation edged down further in the first quarter, but the rate of decline has been slowing (on a seasonally adjusted basis) since the middle of last year as the effects of last summer's drought have dissipated. Spending for the space program and for tax and immigration enforcement also has risen.

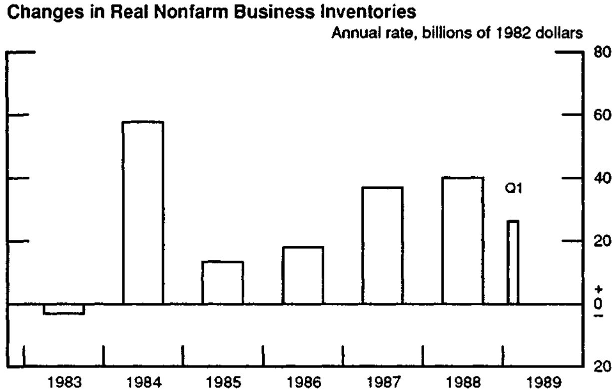
On a unified budget basis, total nominal outlays for the fiscal year through May were more than 6 percent above the comparable year-earlier total. Spending related to the thrift institution problem spiked at year-end 1988 and then dropped sharply in the first half of this year. On the other hand, growth has continued in entitlement spending (principally Medicare and Social Security) and in net interest outlays.

Federal receipts have grown even more rapidly than outlays, buoyed by increases in employment and in-

Real Business Fixed Investment



Changes in Real Nonfarm Business Inventories



After-tax Profit Share of Gross Domestic Product *

* Ratio of profits from domestic operations with inventory valuation and capital consumption adjustments to gross domestic product of nonfinancial corporate sector.

come. In addition, there was an extraordinary spurt in nonwithheld tax collections in April and May, the sources of which are at this point uncertain. Some possible explanations relate to the Tax Reform Act of 1986 and include greater-than-anticipated effects from its base-broadening provisions and a shifting of income from earlier years into 1988, when the reduction in personal tax rates was fully phased in. In addition, realizations of taxable capital gains may have been hefty last year because of the large number of corporate mergers and leveraged buyouts. All told, receipts thus far in 1989 are 10 percent above year-earlier levels, and the Administration now projects that the total budget deficit for FY1989 will be $148 billion, compared with the $155 billion recorded in FY1988.

Real purchases of goods and services by state and local governments have been on a moderate uptrend this year. Outlays for personnel and construction in the education and law enforcement areas have been subject to considerable upward pressure. Some other expenditures have risen because of federal mandates, especially those in recent health legislation. As in the federal sector, growth of state and local outlays has been tempered by budgetary pressures; excluding retirement trust funds, which are running a large surplus, the sector had a deficit of about $17 billion at an annual rate in the first quarter. Revenue experience was favorable this spring, however, as a significant number of states reported personal income tax receipts that were larger than expected.

Labor Markets

Job growth was substantial over the first half of 1989, though it slowed in the spring. In the first quarter, additions to nonfarm payrolls averaged 264,000 a month, about the same pace seen over the prior two years. By spring, hiring had begun to slow, and payroll employment growth dropped back to 200,000 per month in the second quarter as a whole. Even at this reduced rate, however, job gains were larger than are likely to be sustained, given the underlying trend in labor force growth. Manufacturing employment declined in the second quarter, while the number of construction jobs was about unchanged. Growth of employment moderated in the service-producing sectors, where advances have been the largest over the course of this business expansion.

The moderation in the growth of the demand for labor in the second quarter did not lead to any appreciable reduction in labor market tightness. The unemployment rate has fluctuated between 5.0 and 5.4 percent thus far this year; in June it stood at 5.3 percent. Although many Americans remain involuntarily unemployed, the difficulty of matching workers with jobs – given skill and locational considerations – is much greater than it was earlier in the expansion.

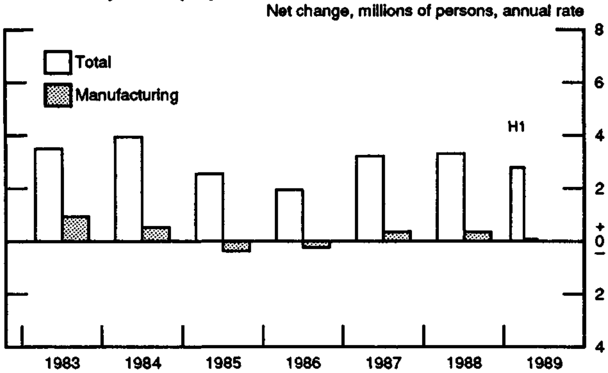
By at least one aggregate measure, the rate of increase in wages seems to have leveled off in recent quarters. Average hourly earnings of production and nonsupervisory workers accelerated from late 1986 through mid-1988; since then the rate of increase has flattened out, and in June earnings were up 3¾ percent from a year earlier. The employment cost index for wages and salaries in the private nonfarm sector, a broader measure of wages that is available only through March, indicated some easing of wage trends in the goods-producing sector; however, in the service-producing industries, the trend remained sharply upward. The cost of benefits provided to employees in the goods and services sectors rose slightly faster than wages over the year ended in March, and total compensation per hour – wages and salaries plus benefits – was up 4½ percent over that period, in the same range as the 12-month increases recorded in the preceding three quarters.

Productivity performance has deteriorated somewhat in recent quarters. In some instances, higher levels of production have forced firms to use less efficient capital and to employ less skilled labor. Output per hour in the nonfarm business sector was down in the first quarter, and virtually unchanged on a four-quarter basis. With the sizable increases in compensation over the same period, unit labor costs accelerated to a 5¼ percent annual rate, the largest year-over-year increase since late 1982. In manufacturing, the rise in unit labor costs in the year ended in the first quarter was about 1 percent; unit costs had declined earlier in the business expansion. This step-up in unit labor costs reflects a slackening in the improvement of factory productivity; compensation increases have remained moderate.

Price Developments

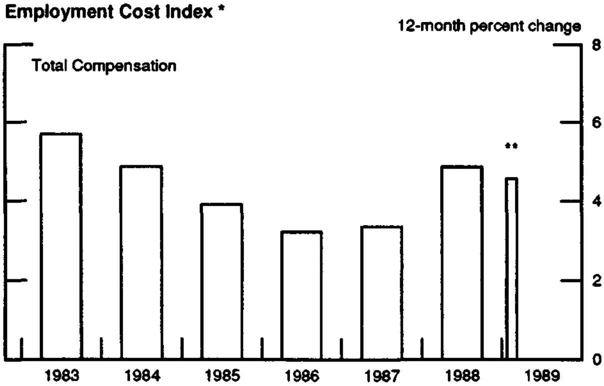
Inflation increased sharply in early 1989, reflecting higher costs for food and energy. The consumer price index for all items, a broad-based measure for finished goods and services, rose at an annual rate more than 6 percent through May, compared with the 4½ percent pace in 1987 and 1988. The producer price index for finished goods recorded an even more pronounced acceleration, owing to the greater importance of food and energy in that index. However, the underlying inflation trend has not deteriorated: excluding food and energy, inflation at the retail level has been running at a rate of around 4¾ percent, about the same as in 1988.

Nonfarm Payroll Employment

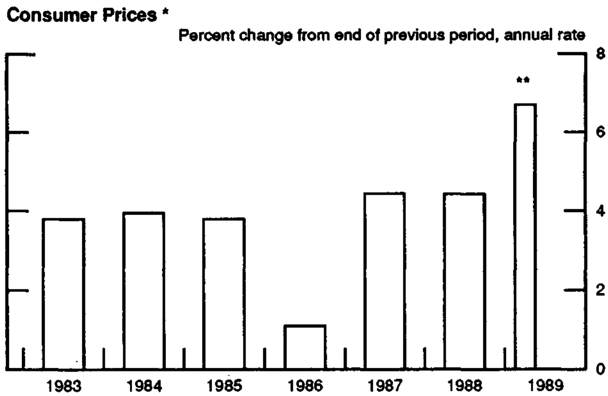


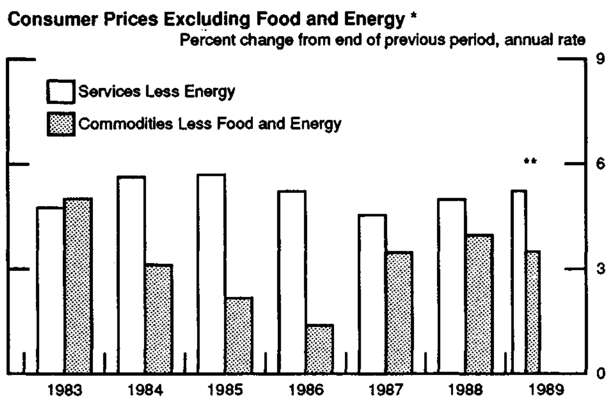
Civilian Unemployment Rate

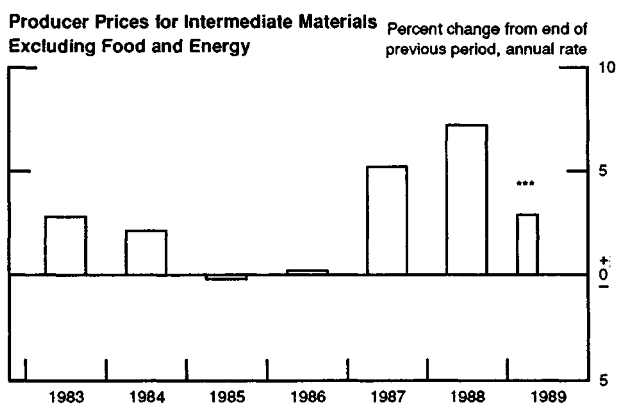
Employment Cost Index *



* Employment cost index for private industry, excluding farm and household workers.
** Percent change from Q1 1988 to Q1 1989.







* Consumer Price Index for all urban consumers.
** Percent change from December 1988 to May 1989.
*** Percent change from December 1988 to June 1989.

Energy prices began rising sharply last November, after the OPEC nations agreed to limit crude oil production. Subsequently, temporary supply disruptions in Alaska and in the North Sea added to price pressures. The posted price of West Texas Intermediate, the U.S. benchmark for crude oil, jumped from about $13 per barrel in November to over $19 in early May. As a result, energy prices at the producer level soared, and consumer energy prices rose nearly 25 percent at an annual rate between December and May. More recently, posted prices of crude oil have remained between $19 and $20 per barrel.

Increases in retail food prices were large in the first half of 1989, in part reflecting the lingering effects of last summer's drought and additional damage to some crops this year. From the beginning of the year through May, the rise in the CPI for food was close to 8 percent at an annual rate. Although drought curtailed the winter wheat crop for 1989, total crop acreage has expanded, and overall production should rebound this year, if weather conditions are satisfactory. In addition, meat supplies seem likely to hold fairly steady over the second half of this year. Thus, pressures from the supply side should not be a big factor in the food price outlook.

Excluding food and energy, prices for commodities at the consumer level have risen at a rate slightly lower than that recorded for 1988. A marked diminution of increases in non-oil import prices associated with the appreciation of the dollar apparently has restrained the prices of many goods, notably apparel and a variety of household items. In contrast, inflation in the service sector has increased, especially in labor-intensive services, such as medical care, entertainment, and public transportation.

At early stages of processing, prices of goods have risen little or declined in recent months. Prices for many crude industrial commodities, which had climbed sharply in 1987 and 1988 with the expansion of factory output, have softened this year. This in turn has helped hold down the increase in prices at the intermediate level of production; the producer price index for intermediate materials, excluding foods and energy, was unchanged on net in the second quarter.

Section 3: Monetary Policy and Financial Developments during the First Half of 1989

In conducting monetary policy over the first half of the year, the Federal Open Market Committee continued its effort to foster long-run price stability, so as to build a base for sustainable expansion of the economy. In again reducing the ranges for money and debt growth at its February meeting, the Committee recognized that restraint on the expansion of money and credit would be needed to promote this goal.

At the same time, the Committee realized that considerable uncertainty remained about the behavior of the monetary aggregates. Relatively wide monetary ranges—4 percentage points in breadth—were retained, in part to take account of the substantial interest-rate sensitivity of money demand over horizons of as long as a year and of the unpredictable effects on money demand of the resolution of the crisis in the thrift industry. Moreover, in these circumstances, the Committee recognized that, in addition to the behavior of the monetary aggregates, a variety of indicators of inflationary pressures and the course of economic activity would have to be taken into account in shaping policy over 1989.

The Implementation of Monetary Policy

As noted previously, developments early in 1989 suggested that a worrisome risk remained that inflation was picking up and could become more deeply embedded in the economy. Wage and benefit costs had accelerated in 1988, and the readings for the consumer and producer price indexes were troubling. Extending the move toward restraint that began almost a year earlier, the Federal Reserve increased reserve market pressures at the start of this year and again in mid-February. On February 24 the discount rate was raised ½ percentage point to 7 percent.

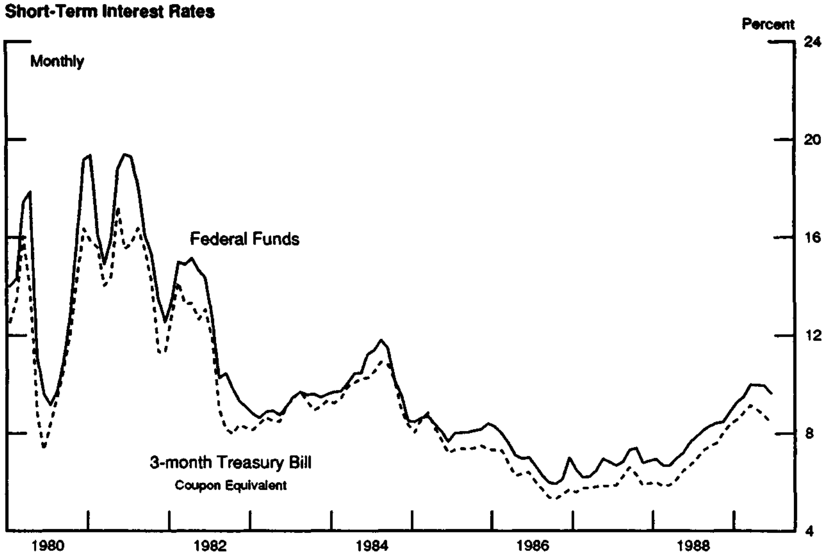
These policy actions were accompanied by marked increases, of about a percentage point, in most short-term interest rates. Yields on long-term securities also moved up, but by considerably less than short-term rates. The foreign exchange value of the dollar strengthened as interest rates in the United States rose relative to those abroad. Money growth slowed: M1 was roughly flat in the first quarter, and M2 and M3 decelerated from already reduced rates in the second half of 1988.

By spring, the outlook for spending and prices had become more mixed. Employment growth still looked strong, indicators of capital spending suggested a rebound from the fourth quarter of 1988, and prices continued to advance rapidly. But consumer demand appeared to have moderated, industrial production was weakening, and the behavior of commodity prices and some other indicators of potential price trends suggested that inflationary momentum might begin to wane. In view of the uncertainties surrounding the outlook, and taking into account the subdued pace of money growth, the Committee left reserve market conditions unchanged through the middle of the second quarter.

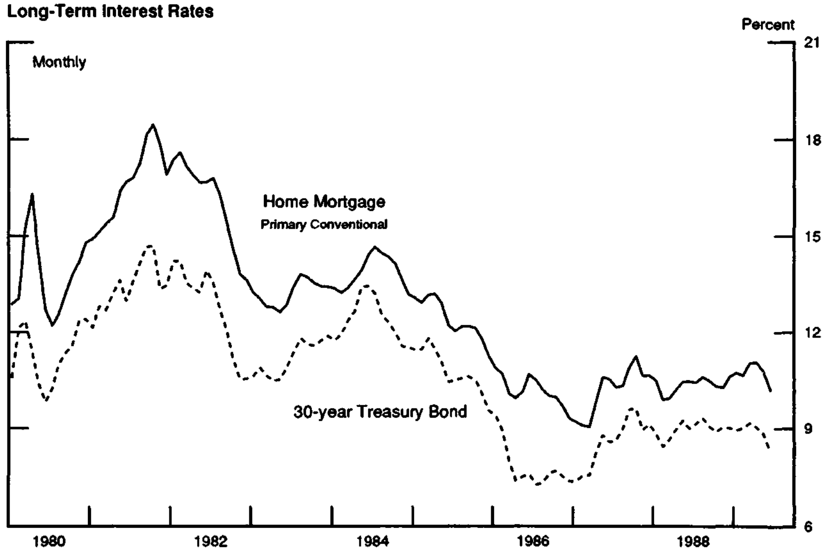
Many interest rates began to move off their March highs early in the second quarter as indications mounted of moderation in the pace of economic activity and in underlying price pressures. With the passing weeks, a considerable weakening in housing activity became evident, and incoming data showed employment to be expanding at a noticeably slower rate. Market expectations of some additional tightening of monetary policy shifted to anticipations of an easing. The ensuing decline in interest rates did not, however, prompt a drop in the foreign exchange value of the dollar. Instead, the dollar appreciated further over this period, in part because of political uncertainties abroad and in part because of data on the U.S. trade balance that were better than expected. The dollar also may have gained support for a while from expectations that the rallies in U.S. securities markets would continue. The monetary aggregates weakened further in April and early May, reflecting the drawdown of liquid balances to make personal tax payments that were larger than expected. In May, M2 fell to the lower edge of the parallel band associated with its annual target range (see chart), and M3 slipped just below the bottom of its growth cone.

The FOMC eased policy slightly at the beginning of June and again in early July. The federal funds rate moved down about ½ percentage point in two steps to around 9¼ percent. Evidence that the more moderate pace of economic activity was persisting, indicators of the behavior of wages and sensitive prices, and the weakness of the monetary aggregates all were consistent with a prospective ebbing of inflationary pressures. Moreover, the dollar was appreciably above year-end levels, which could be expected to have favorable effects in restraining inflation. While inflation remained a concern, an intensification of price pressures did not appear to be a present danger, and the risks of cumulating weakness in the economy had increased.

Short-Term Interest Rates

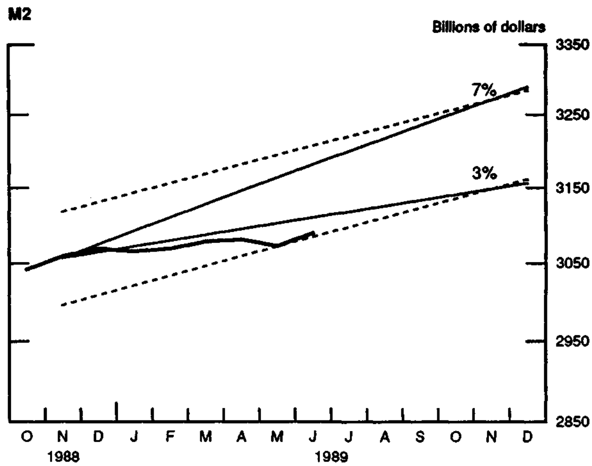


Long-Term Interest Rates



Observations are monthly averages of daily data;
last observation is for June 1989.

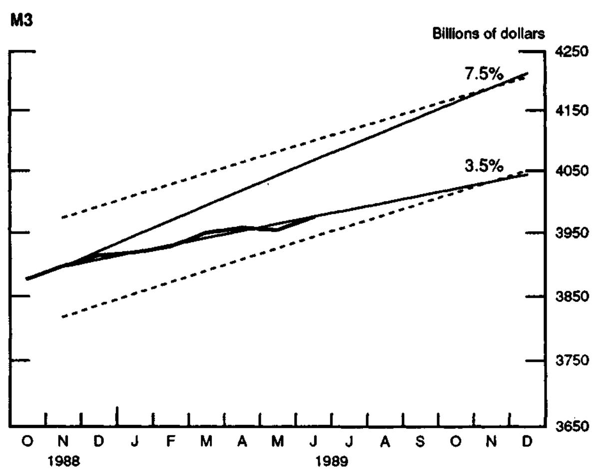
Ranges and Actual Money Growth



Rate of Growth

1988 Q4 to 1989 Q2
1.6 Percent

1988 Q4 to June
1.9 Percent



Rate of Growth

1988 Q4 to 1989 Q2
3.4 Percent

1988 Q4 to June
3.5 Percent

Although the easing steps were largely expected, most short-term interest rates continued downward in anticipation of further monetary policy actions, more than offsetting their first-quarter rise. The bond market rallied further, leaving long-term rates by mid-July down ½ to 1 percentage point on balance from late-1988 levels. Stock prices continued their brisk upward movement, reaching post-October 1987 highs. The value of the dollar also moved down somewhat in late June and dropped further in early July; it retraced most of its rise during the second quarter, although remaining well above its level at year-end 1988.

The Behavior of the Monetary Aggregates

Growth of the monetary aggregates was quite sluggish over the first half of 1989, reflecting the effects of increases through March in market interest rates relative to returns on monetary assets, some depositor concern over the problems of the thrift industry, and large tax payments by individuals. From the fourth quarter of 1988 through June, M2 edged up at an annual rate of only 2 percent, markedly below last year's pace of 5¼ percent. M2 velocity rose sharply through the second quarter.

The deceleration of M2 in the first quarter stemmed largely from a combination of continued increases in market interest rates and unusually slow upward adjustment of rates paid on retail deposits. Yields on NOW accounts moved up only about 10 basis points over the year ended in March, while those on other liquid deposits—savings and Money Market Deposit Accounts (MMDAs)—rose about ¼ and 1 percentage point, respectively; many short-term market rates increased more than 3 percentage points over the same period. Rates on small time accounts increased much more than those on the more liquid retail deposits, but they too failed to keep up with the rise in market yields.

Some of the sluggishness in the adjustment of returns on retail deposits over this period may have reflected continued regulatory pressures on thrift institutions to moderate their pricing of deposits, as well as the closing last year of some insolvent institutions with aggressive pricing policies. More broadly, the slow upward adjustment of deposit rates, especially on accounts without fixed terms—NOW accounts, MMDAs, and savings deposits—also reflected the continued evolution of pricing strategies by depository institutions in the deregulated environment. By concentrating upward rate adjustments in small time deposits and offering more sophisticated account structures, in which larger balances receive higher rates, institutions found that they could retain the bulk of their funds while minimizing the effects of higher market rates on their overall interest expense.

Nonetheless, as yields on market instruments became increasingly attractive relative to those on deposits over the first quarter, some funds were redirected to instruments not included in the monetary aggregates. Noncompetitive tenders for Treasury bills and notes, a rough indicator of the extent to which individual investors are increasing their holdings of Treasury securities, surged early in the year and remained strong through March. The increase in demand for Treasury securities was greater than would have been expected from interest rate movements alone, suggesting that depositors' nervousness about the problems of the thrift industry were playing a role too. Although the President submitted to the Congress a comprehensive plan for resolving the industry's difficulties early in the year, and gave assurances that the U.S. government would back insured deposits fully, FSLIC-insured thrift institutions experienced large outflows of deposits throughout the first quarter. These outflows apparently depressed overall M2 growth somewhat during that period, but the bulk of the funds likely remained within the aggregate. Commercial banks experienced relatively strong growth in core deposits, and M2-type money market mutual funds, whose rates adjust relatively quickly to changes in market interest rates, saw sizable inflows of funds.

The increased opportunity costs of the first part of the year continued to damp money growth into the second quarter, but, in addition, liquid balances were drawn down to meet large April tax payments. Nonwithheld personal tax payments were $16 billion greater this April than last. The tax-related effect was manifested in a sharp drop in the liquid components of M2 in late April and into May as the payments continued to clear. Transaction accounts posted large declines, outflows of savings and MMDA balances accelerated, and inflows to money market mutual funds paused. Balances began to bounce back in late May, however, as depositors started to rebuild their holdings of monetary assets, and in June M2 grew at an annual rate of 6¾ percent.

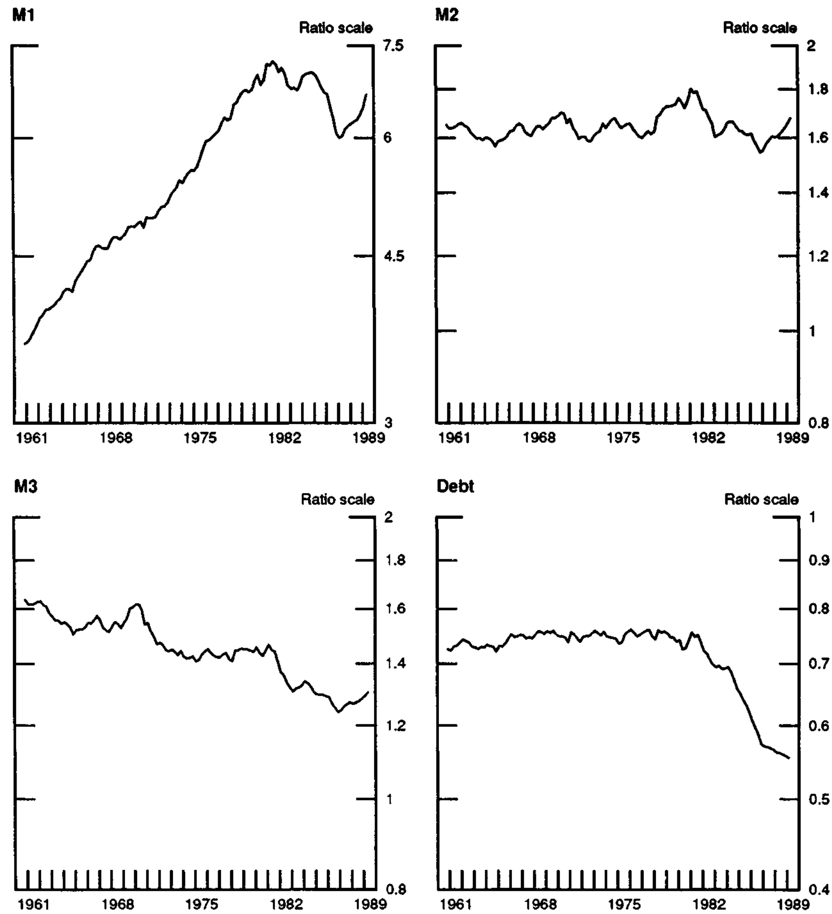
Also contributing to the rebound in holdings of money balances after mid-May were declines in opportunity costs as market interest rates headed down. Yields on small time deposits lagged this move, and returns on these deposits at times exceeded those on market instruments. Demand for Treasury securities through noncompetitive tenders fell back, and growth in small time deposits, already robust, jumped to an annual rate of more than 20 percent for the quarter. Yields on small time deposits at thrift institutions

Growth of Money and Debt *(Percent)*

		M1	M2	M3	Debt of domestic nonfinancial sectors
Fourth quarter to fourth quarter					
1979		7.7	8.2	10.4	12.3
1980		7.4	9.0	9.6	9.6
1981		5.2 (2.5)*	9.3	12.3	10.0
1982		8.7	9.1	9.9	9.0
1983		10.2	12.1	9.8	11.3
1984		5.3	7.7	10.5	14.2
1985		12.0	8.9	7.7	13.2
1986		15.6	9.3	9.1	13.4
1987		6.4	4.2	5.7	9.8
1988		4.3	5.2	6.2	8.9
Quarterly growth rates (annual rates)					
1989	Q1	−0.4	1.9	3.7	8.2
	Q2	−5.5	1.3	3.1	7.4e

*M1 figure in parentheses is adjusted for shifts to NOW accounts in 1981.
e - estimated

Velocity of Money and Debt
(Quarterly)



responded somewhat more slowly than those at banks to the downturn in market interest rates, and growth of these deposits at thrift institutions surged. Largely because of this strength in small time accounts, and because the most anxious depositors probably had already moved their funds elsewhere, overall deposit balances at FSLIC-insured thrift institutions stabilized in the second quarter.

M3 grew at an annual rate of 3½ percent from the fourth quarter of last year to June, placing it at the lower bound of its target range. In the first quarter, expansion of M3 was subject to offsetting forces. It was bolstered somewhat by bank funding needs generated by strong demand for business loans. Added demand for commercial and industrial loans stemmed both from merger-related financings and from shifts to short-term borrowing by businesses facing rising long-term interest rates and investor concerns about "event risk"—the possibility that a firm's debt obligations would be significantly downgraded in a corporate buyout or restructuring. Acting to damp M3 growth over the first quarter, however, was heavy reliance by thrift institutions on Federal Home Loan Bank advances and other borrowings, which are not included in the money stock. M3 growth edged down a bit in the second quarter with some easing of bank credit demands and strong growth in government deposits—also not included in the money stock—resulting from the large volume of tax payments. By June, however, M3 had rebounded as tax effects unwound.

Reflecting interest-rate and tax-related effects, M1 declined at an annual rate of 3½ percent from the fourth quarter of 1988 to June. Balances in other checkable deposits, which had moved down a little over the first quarter in response to higher opportunity costs, dropped substantially in late April and early May as the tax payments cleared. Demand deposits also declined on balance over the first half of the year, because opportunity costs increased and because the balances businesses are required to hold to compensate their banks for services fell. After changes in market rates of interest, banks often adjust with a lag the "earnings credit" rates used to determine the level of required compensating balances; thus, downward adjustments to compensating balances can continue for some time after market rates have stopped rising. The large personal tax payments also affected household demand-deposit balances. Late in the quarter, however, both demand and other checkable deposits began to increase, perhaps as some of the earlier influences started to be reversed with the drop in market interest rates over the second quarter.

Credit Flows

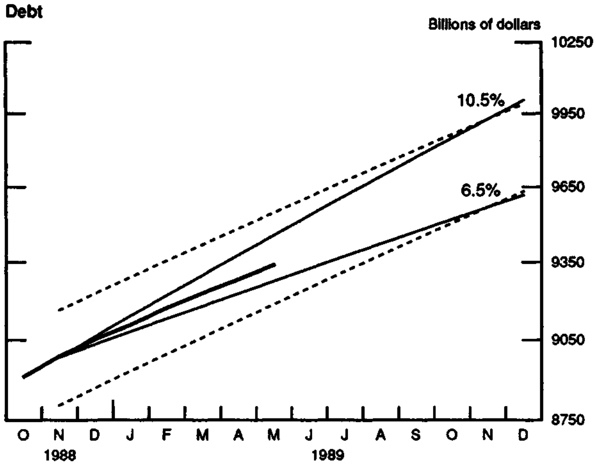
The aggregate debt of domestic nonfinancial sectors expanded at an annual rate of close to 8 percent over the first half of this year, near the midpoint of its monitoring range and down somewhat from its 1988 pace. The growth of federal sector debt slowed as tax receipts surged. Expansion of the debt of nonfederal sectors also moderated, partly in response to higher levels of market interest rates over much of the first half of the year. Household borrowing in mortgage markets slowed as increases in lending rates damped housing demand, while the pace of consumer borrowing slackened along with the deceleration in consumption spending.

Mortgage lending by thrift institutions did not appear to be unusually weak in the first few months of 1989, given the prevailing interest rates. These institutions coped with weak deposit flows by running off cash and investments and, through the first quarter, stepping up borrowing from the Federal Home Loan Banks. Despite signs of a reduction in mortgage lending activity by these institutions in the second quarter, the overall availability of housing credit did not appear to be significantly impaired.

Spreads between rates on both fixed-rate mortgages and mortgage-backed securities and rates on Treasury instruments of comparable maturity did widen over the first six months of the year, with some market participants reportedly fearing that large-scale liquidations of mortgage-backed securities by troubled thrift institutions could adversely affect the market for those instruments. However, the widening also may have reflected other developments: a general increase in uncertainty about movements in long-term interest rates (and therefore about prospective prepayments), and the flattening of the yield curve, which discouraged issuance of derivative mortgage instruments and thus reduced demand for the underlying mortgage-backed securities.

Total borrowing by nonfinancial businesses in the first half of the year was close to its 1988 pace. Credit demands continued to be buoyed by sizable merger-related financing in the first quarter, and an apparent pickup in capital expenditures increased business borrowing in the second quarter even as credit demands related to mergers and restructurings, while still strong, eased a bit. Because of investor fear of event risk triggered by the RJR-Nabisco acquisition in late 1988 as well as higher long-term rates through much of the period, corporate borrowing was concentrated in short-maturity vehicles. Commercial paper issuance surged during the first half of the year; businesses also relied on bank loans, albeit to a lesser extent. In response to

Range for Debt and Actual Debt and Money Growth

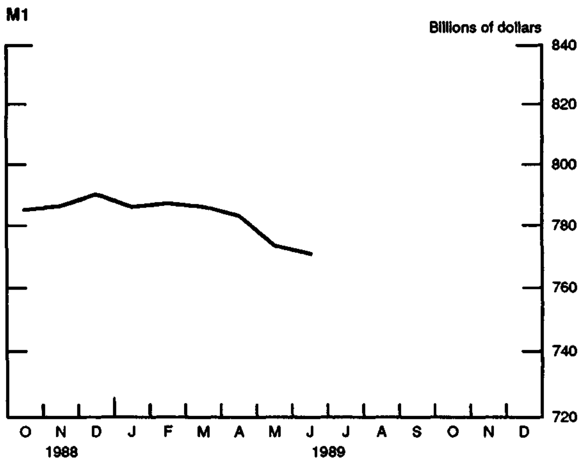


Rate of Growth

1988 Q4 to 1989 Q2[e]
7.9 Percent

1988 Q4 to May
7.9 Percent

e - estimated



Rate of Growth

1988 Q4 to 1989 Q2
-2.9 Percent

1988 Q4 to June
-3.6 Percent

investor concerns about event risk, many firms issued bonds with relatively short maturities of one to five years, or they brought issues to market with straight puts or with so-called poison puts, covenants designed to protect against negative effects on bondholders from future restructurings. Toward the end of the second quarter, with the introduction of these protections and the decline in rates, long-term financing in the corporate bond market was on the upswing.

Net issuance of tax-exempt securities by state and local governments fell sharply over most of the first half of 1989. Investor demand for tax-exempt securities remained strong and, with diminished supply, the ratio of tax-exempt to taxable yields fell to its lowest level since 1984. This ratio rose somewhat late in the second quarter, when the decline in long-term interest rates began to bring forth an increase in refunding activity and a pickup of issuance of bonds to raise new capital.

U.S. HOUSE OF REPRESENTATIVES

COMMITTEE ON BANKING, FINANCE AND URBAN AFFAIRS

ONE HUNDRED FIRST CONGRESS

2129 RAYBURN HOUSE OFFICE BUILDING
WASHINGTON, DC 20515

September 20, 1989

Mr. Alan Greenspan
Chairman
Board of Governors of
the Federal Reserve System
20th & C Streets, N.W.
Washington, D.C. 20551

Dear Chairman Greenspan:

I want to thank you for appearing before the House Banking Committee on July 20, 1989 to discuss the Federal Reserve Board's semi-annual monetary policy report to Congress.

Since I was unable to question you during that hearing, I respectfully ask you to answer the following questions so that they may appear in the hearing record.

1) Moody's recently released a report showing that even a mild recession could triple the number of junk bond defaults. A July 20, 1989 Wall Street Journal article reported that so far this year about $3 billion of different companies junk bonds have stopped paying interest or are mired in forced restructuring designed to bail out the companies at the investors expense. As you are aware, savings and loans associations are allowed to invest in junk bonds. Some state-chartered thrifts have as much as 40% of their assets invested in junk bonds. Should S&L's be permitted to invest in junk bonds? If so, should these investments be limited? Should these investments be marked-to-market? How much capital should be held against these investments?

) What is the Fed's target for the real GNP growth rate over the next six months? one year?

`) The Chairman of the Joint Economic Committee recently introduced a bill, H.R. 2795, that would place the Secretary of the Treasury on the Federal Open Market Committee. Do you think the Executive Branch should have direct representation on the FOMC? Why or Why not?

) Recent news articles have publicized the Fed's usage of a new inflation barometer called P-star. Please explain P-star, and its relative importance as a guide to monetary policy. As a policy guide, is P-star more important that the GNP growth rate or unemployment rate? How long has the FED relied on P-star as a policy guide?

;) Mr. Greenspan, since you were nominated as Chairman of the Federal Reserve Board, you have come before this Committee and other Congressional Committees stating that the number one economic problem facing this country is the huge budget deficit. On occasion you have voiced a preference that the deficit be controlled through lower Federal spending rather than through raising taxes.

Between 1987-88 total Federal Reserve System expenditures increased 5.8 percent. Between 1988-89 total Federal Reserve System expenditures increased 5.5 percent. In addition, the Federal Reserve Board recently implemented a new compensation structure giving top level employees a pay raise, and during the monetary policy hearing you appeared to favor a pay raise for Federal Reserve Board Members. Clearly, Mr. Greenspan, your own agency has been required to increase expenditures. It would seem, then, that if you can't cut spending at your agency, and other equally committed managers cannot do so, then your prescription for reducing Federal government spending may not work in practice. In light of this, do you think taxes should be raised to lower the budget deficit?

:) It is my understanding that in preparation for Federal Open Market Committee deliberations, a beige book, a blue book and a green book containing various economic data and policy options are used to brief FOMC participants. Would you explain the function of each book, the information contained in each, and why these books should not be made public immediately following FOMC meetings? In addition, please justify the Federal Reserve's policy of keeping the FOMC Policy Directive secret for up to six weeks after the date of the FOMC meeting.

I appreciate your thoughtful consideration of the questions and look forward to your timely reply.

With best wishes.

Sincerely,

Henry B. Gonzalez
Chairman

HBG:dk

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

August 25, 1989

ALAN GREENSPAN
CHAIRMAN

The Honorable Henry B. Gonzalez
Chairman
Committee on Banking, Finance and
Urban Affairs
House of Representatives
Washington, D.C. 20515

Dear Mr. Chairman:

Thank you for your letter of July 20 enclosing written questions in connection with the hearing held on the Federal Reserve's monetary policy report. I am pleased to enclose my responses to your questions for inclusion in the record of the hearing.

Please let me know if I can be of further assistance.

Sincerely,

Signed Alan Greenspan

Enclosure

Chairman Greenspan subsequently submitted the following in response to written questions from Chairman Gonzalez in connection with the hearing held on July 20, 1989:

Question 1: Moody's recently released a report showing that even a mild recession could triple the number of junk bond defaults. A July 20, 1989 Wall Street Journal article reported that so far this year about $3 billion of different companies' junk bonds have stopped paying interest or are mired in forced restructuring designed to bail out the companies at the investors' expense. As you are aware, savings and loan associations are allowed to invest in junk bonds. Some state-chartered thrifts have as much as 40 percent of their assets invested in junk bonds. Should S&L's be permitted to invest in junk bonds? If so, should these investments be limited? Should these investments be marked-to-market? How much capital should be held against these investments?

Answer: The questions raised concerning whether savings and loan associations should be permitted to invest in junk bonds have been addressed by the Financial Institutions Reform, Recovery and Enforcement Act of 1989 ("FIRREA"). Under section 222, state and federal savings associations may not directly or through a subsidiary, acquire or retain any corporate debt securities that are not of investment grade--i.e., junk bonds. Under this provision, the FDIC is authorized to require a savings association or its subsidiary to divest these securities as quickly as can be done prudently but not later than July 1, 1994. The legislation permits a savings association to transfer these securities to a holding company or holding company affiliate under certain circumstances in exchange for a note, subject to certain conditions.

Question 2: What is the Fed's target for the real GNP growth rate over the next six months? One year?

Answer: We have no target for real GNP growth. Our policy is to maximize long-term sustainable growth through a tamping down of inflationary pressures. We have communicated to the Congress in our monetary policy report the GNP forecasts of Federal Reserve policymakers. But policy, *per se*, is not directed at achieving those particular forecasts. They are not policy targets. The successful implementation of policy goals could engender higher or lower growth rates than those forecast by the Federal Reserve Governors and Presidents.

Question 3: The Chairman of the Joint Economic Committee recently introduced a bill, H.R. 2795, that would place the Secretary of the Treasury on the Federal Open Market Committee. Do you think the Executive Branch should have direct representation on the FOMC? Why or why not?

Answer: I do not believe the Executive Branch should be represented on the FOMC or the Board of Governors. This could only serve to politicize the decisions of the Federal Reserve, to the detriment of sound economic policy.

It is true that the original Federal Reserve Act provided for membership on the Board--the FOMC wasn't created until 1935--of the Secretary of the Treasury and the Comptroller of the Currency. In fact, the Secretary was designated the ex-officio Chairman of the Board. Carter Glass favored this arrangement when he guided the Act through the House in 1913. But in 1932, Glass, then a Senator, took the opposite view. During debate on the Glass-Steagall Act, Glass said that he, himself, as Secretary of the Treasury, "had an undue influence in the activities of the board" and that the Federal Reserve, as structured in the original Act, had "been made a doormat of the United States Treasury."

In the Banking Act of 1935, Congress removed the Secretary and the Comptroller from the Board. In supporting the change, Senator Glass said in part:

> "With respect to the Secretary of the Treasury, it was urged--and I know it to be a fact because I was once Secretary of the Treasury--that he exercised undue influence over the Board; that he treats it rather as a bureau of the Treasury instead of as a board independent of the Government, designed to respond primarily and altogether to the requirements of business and industry and agriculture, and not to

> be used to finance the Federal Government, which was assumed always to be able to finance itself."

Clearly, the intent of Congress in removing the Secretary and the Comptroller from ex-officio membership on the Board was to assure that the Board would be insulated from partisan political pressure and influence by the Treasury Department and the Administration.

This is not to say that the Federal Reserve should operate in isolation from the Treasury. We enjoy cordial and close relations with the Secretary and the Treasury generally. Both staffs are in daily communication with each other and the Secretary and I meet at least once a week, more often if necessary. We are also in daily telephone communication on issues of mutual concern.

Question 4: Recent news articles have publicized the Fed's usage of a new inflation barometer called P-star. Please explain P-star, and its relative importance as a guide to monetary policy. As a policy guide, is P-star more important than the GNP growth rate or unemployment rate? How long has the Fed relied on P-star as a policy guide?

Answer: P-star (in symbols, P*) is an approach that was developed last fall for representing the long-run relationship between the price level and the outstanding quantity of the M2 measure of money. Specifically, it is an indicator of the average price level that would be established in the long-run if M2 were maintained at its current level. As described in more detail in a staff study, the approach was based on a version of the "equation of exchange" for the monetary aggregate M2.[1] On the assumptions that in the long-run velocity settles down to an equilibrium average level called V*, and that real output attains its potential level identified by Q*, then according to the equation of exchange, current M2 holdings would support an implicit GNP deflator given by the following equation:

$$P^*_t = \frac{M2_t \times V^*}{Q^*_t}.$$

1. See Jeffrey J. Hallman, Richard D. Porter, and David H. Small, "M2 per Unit of Potential GNP as an Anchor for the Price Level," Board of Governors of the Federal Reserve System, Staff Study 157.

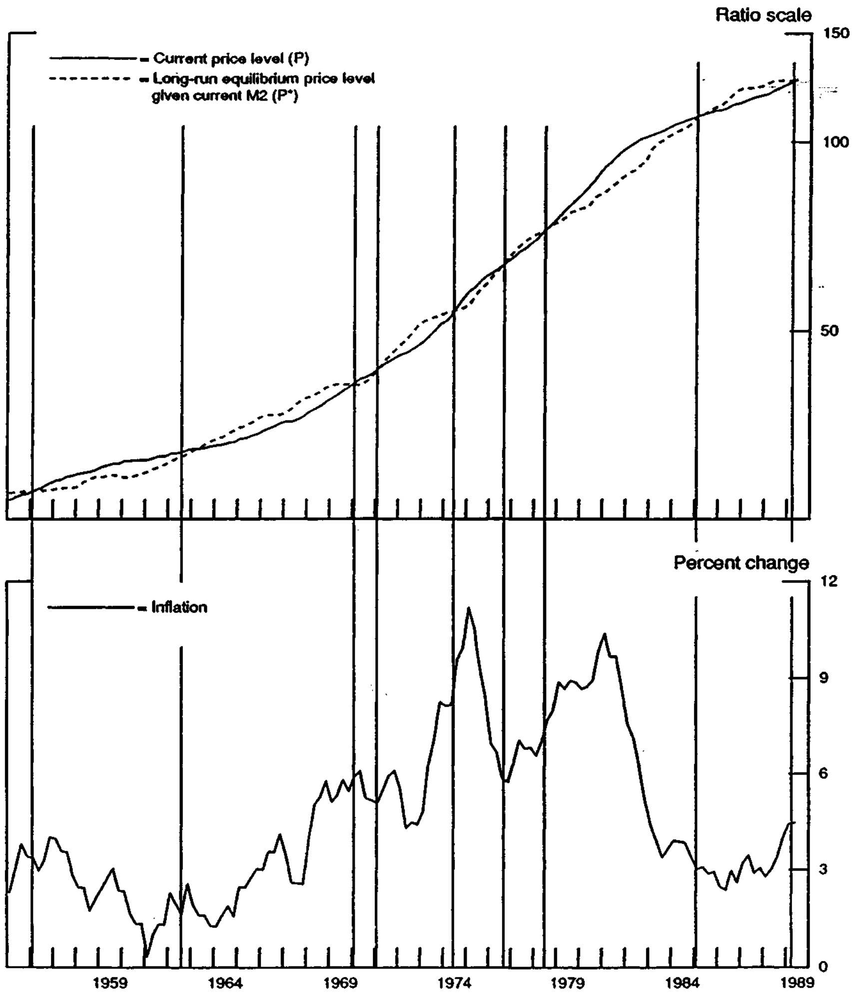
The staff study showed that since the early 1950s, inflation tended to accelerate with a lag when the long-run price measure moved above the current price level, and conversely, tended to decelerate with a lag when the long-run price measure moved below the current price level (see chart).

Because of the substantial lags between current monetary actions and their ultimate effects on prices, a variety of indicators of the future thrust of policy can provide information useful in the design of monetary policy. P-star appears to be one suggestive and comprehensible indicator of the longer-run consequences of current monetary developments for the behavior of the average prices of goods and services. This experimental measure thus may offer some guidance to the Federal Reserve in its effort to attain its long-term goal of price level stability.

It must be remembered, however, that the P* model is a very simple representation of an actually very complex process determining average prices in the U.S. economy. The simplifying assumptions in the model--such as that velocity tends to return in the long run to a constant equilibrium level--have the advantage that the model can highlight monetary forces that in the long-run emerge as crucial factors influencing inflation trends. Still, by intentionally abstracting from a variety of other influences that clearly play an important role in shaping the shorter-run dynamics of price setting, the model does have the disadvantage of not fully encompassing all the relevant influences in the ongoing process of price determination. Nor does the model even try to describe other aspects of overall economic performance with which policymakers need to be concerned. Thus, the Federal Reserve necessarily must place considerable weight on a wide variety of indications of the current and prospective behavior of the economy--such as the level of resource use and conditions in financial markets--in reaching judgments about the appropriate stance of policy. Of course, measures of actual macroeconomic performance, such as GNP, the unemployment rate of price indexes, are followed closely because they directly relate to the ultimate goals of maximum sustainable economic growth with stable prices. Yet current readings on these measures need to be supplemented by forward-looking indicators to more accurately signal developing trends. P-star can serve as one cross-check on the likely implications of M2 growth for future inflation pressures, and its reliability relative to a number of other indicators monitored by the Federal Reserve will be assessed, but these other indicators will continue to play an important role in formulating monetary policy.

Attachment (Question 4)

Inflation Indicator Based on P*



The current price level (P, the solid line in the top panel) is the implicit GNP deflator, which is set to 100 in 1982.
Inflation (bottom panel) is the percentage change in the implicit GNP deflator from four quarters earlier.
P* uses the mean of the GNP velocity of M2 from 1955Q1 to 1988Q1.

Question 5: Mr. Greenspan, since you were nominated as Chairman of the Federal Reserve Board, you have come before this Committee and other Congressional Committees stating that the number one economic problem facing this country is the huge budget deficit. On occasion you have voiced a preference that the deficit be controlled through lower Federal spending rather than through raising taxes.

Between 1987-88 total Federal Reserve System expenditures increased 5.8 percent. Between 1988-89 total Federal Reserve System expenditures increased 5.5 percent. In addition, the Federal Reserve Board recently implemented a new compensation structure giving top level employees a pay raise, and during the monetary policy hearing you appeared to favor a pay raise for Federal Reserve Board Members. Clearly, Mr. Greenspan, your own agency has been required to increase expenditures. It would seem, then, that if you can't cut spending at your agency, and other equally committed managers cannot do so, then your prescription for reducing Federal government spending may not work in practice. In light of this, do you think taxes should be raised to lower the budget deficit?

Answer: I believe that our agency has done a highly creditable job in containing expenditure growth over the years, in the face of a substantial increase in our responsibilities, dictated by legislation and the continuing changes in the economy and financial markets that have added to our burdens. The other federal depository regulators also have faced these pressures, and, indeed, over the past two years their budgets have expanded by 8 to 13 percent per annum. Nonetheless, we continue to work hard at increasing the efficiency of our operation, and, indeed, the change in our compensation system promises to yield benefits in that regard.

But as regards your broader question, I recognize that cutting federal expenditure growth is not an easy matter. It isn't simply a question of better management; rather, it involves difficult choices about programs and objectives. In facing up to those choices, however, we may find that we actually can maintain or enhance the welfare of our people without the scale of federal activity in some fields that we now have. In any event, it is my belief that the alternative path to deficit reduction, that is, increased taxes, not only carries with it the likelihood of losses in incentives and efficiency but also is likely to prove unreliable: It is a great deal to ask a political body, faced with an endless list of wants from its constituency, to maintain strong spending discipline over time when revenues are flowing in in increasing volume.

Question 6: It is my understanding that in preparation for Federal Open Market Committee deliberations, a beige book, a blue book, and a green book containing various economic data and policy options are used to brief FOMC participants. Would you explain the function of each book, the information contained in each, and why these books should not be made public immediately following FOMC meetings? In addition, please justify the Federal Reserve's policy of keeping the FOMC Policy Directive secret for up to six weeks after the date of the FOMC meeting.

Answer: The Beigebook, Greenbook, and Bluebook are included among the materials used to brief FOMC members prior to meetings of the Federal Open Market Committee.

The Beigebook is a compilation of information on current business conditions in each Federal Reserve District obtained through informal surveys of Reserve Bank Directors, as well as business, labor, and community leaders. Copies of the Beigebook are made available to the public without delay, usually ten days or so before FOMC meetings.

The Greenbook and Bluebook are reports prepared by the staff of the Board of Governors. The Greenbook contains a sector-by-sector analysis of recent economic, financial, and international developments, along with a detailed staff forecast of key economic variables. The Bluebook sets out several monetary policy alternatives, summarizes their implications for economic and financial developments, and analyzes technical issues that may arise in the implementation of policy.

It is important to emphasize that these are staff documents, addressed to the FOMC. The views of individual FOMC members, and even consensus views of the Committee, regarding the economic outlook and monetary policy alternatives, do not always coincide with those expressed in the Greenbook and Bluebook. Committee members have other sources of data and analysis which they also use in arriving at policy decisions, including the views and forecasts of a wide range of institutions and individual contacts outside the Federal Reserve System, analyses undertaken by the staff of the twelve district Reserve Banks, and other staff work at the Board. Release of the Greenbook and Bluebook could be misinterpreted by the public. Participants in financial markets could over-react to possible outcomes that they read into those reports, taking them for the views of FOMC members, and resulting in destabilizing reactions in markets. Because the Greenbook includes multi-year forecasts and the Bluebook discusses contingencies that may apply for several quarters, release of sensitive material included in these documents could have far-reaching repercussions for markets.

Moreover, as internal staff documents providing background for FOMC members' deliberations, they are protected from disclosure under the Freedom of Information Act. In that Act Congress recognized that the prospect of an immediate public airing of staff analysis would be likely to inhibit the free flow of information so important to decisionmakers. This effect is likely to be especially pronounced for documents like the Greenbook and Bluebook, which have the potential to affect markets. A staff conscious of this possibility could feel constrained in its analyses and projections, making these documents less useful in preparing Committee members for the decisions they must make.

For these reasons, the Greenbook and Bluebook are released to the public only after a suitable delay, taking account of the sensitive material they convey.

The Directive contains the instructions of the FOMC to the Federal Reserve Bank of New York concerning open market operations until the next meeting. Typically, those instructions encompass both a statement about the Federal Reserve's stance in the reserves market in the period immediately ahead and language conditioning possible policy responses to new information as it becomes available over the intermeeting period. The latter statements are designed to allow flexibility in monetary policy over the period between FOMC meetings, but within guidelines set by the Committee. In establishing those guidelines, the Committee considers a number of possible contingencies and in a general way how it would like policy to respond.

The Directive itself is not made public until a succeeding FOMC Directive has been issued, a practice that the courts have ruled is consistent with the Freedom of Information Act.[2] This is done in part to avoid over-reactions in financial markets to contingencies or reserve pressure alternatives mentioned in a Directive that may not occur or that may be superseded by intermeeting developments and adjustments. With some knowledge of the conditional plans of the FOMC, market participants naturally will try with even more conviction than at present to react in advance to the likelihood of changes in reserve conditions. To the extent they anticipate contingencies that never come to pass, they will be adding unnecessarily to market volatility.

Moreover, earlier release of the Policy Directive would force the Committee itself to focus more on the market impact of announcement effects resulting from its choice of words rather than on the ultimate economic impact of its actions. To avoid premature market reaction to only possible future actions, FOMC decisions could well lose their conditional character. Given the uncertainties in economic forecasts and in the links between monetary policy actions and economic outcomes, such a loss would lessen the effectiveness of policy.

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2. Merrill v. Federal Open Market Committee, 483 U.S. 340 (1979), on remand, 516 F.Supp. 1028 (D.D.C. 1981).

APPENDIX

August 2, 1989

TESTIMONY OF

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BEFORE THE SUBCOMMITTEE ON DOMESTIC MONETARY POLICY
OF THE COMMITTEE ON BANKING, FINANCE AND URBAN AFFAIRS
U.S. HOUSE OF REPRESENTATIVES
JULY 25, 1989

A confluence of events, some anticipated and some not, make me supportive of the path being followed by the Federal Reserve Board. In general, the quick slowdown in the U.S. economy during the first half of 1989 has bought the Fed time over which to gradually reduce the underlying rate of U.S. inflation. It is true that in the postwar period, inflation's trend has not been significantly reduced without incurring a recession. But this is not because a non-recession approach has been tried and failed. A non-recession approach has never been tried. There is a good chance this time that the economy will continue to grow very sluggishly and that the underlying trend of inflation can slowly be reduced over the next few years.

Before proceeding to the whys and wherefores of this conclusion let me first present our economic forecast for the U.S. We expect an extended period of sluggish growth from 2% in the first half of 1989 to 1% in the second half, then back up to perhaps 2% as we move into 1990. If realized, this growth rate should lend itself to a gradual paring of the underlying inflation rate back to a trend of about 4.0%-4.5%. It is clear that the concern about monetary policy has shifted from its role in solving the big global problems related to the twin deficits to its role in a purely cyclical context. This is because a major slowdown in the economy in the first half of 1989 is now visible for all to see and there are now fears that too much weakness was created.

Sluggish growth is being signalled by an increasing array of figures. These include important domestic sectors such as consumer spending and housing as well as indicators of manufacturing activity such as factory orders, manufacturing employment and average workweek, various components of the Purchasing Managers' Survey, and industrial production itself. The sources of the slowdown were quite diverse and included tighter monetary policy, reduced consumer purchasing power stemming from rising inflation, satiated demand for housing and consumer durables, less willingness on the part of consumers to use credit and savings, more subdued net export growth since mid-1988, and a slower in pace of inventory growth.

The slowdown in the economy will contribute to continued consumer weakness because of a so-called "multiplier effect". This simply refers to the fact that personal income growth tends to slow in response to a slower economy regardless of the source of the initial weakness. Thus, the initial weakness is perpetuated unless other negative factors are removed or new positive forces are introduced. There has in fact been a sharp slowdown in personal income growth in recent months because the building blocks of the key wage and salary component -- employment, the average workweek, and hourly earnings -- are no longer providing the support for rapid growth.

Two props supporting the economy -- exports and capital spending -- should continue to do so, albeit at lesser pace. The rise in the dollar since late 1987 should weaken export growth some, and anecdotal evidence suggests that export growth will diminish during the second half of 1989. But U.S. goods are still competitive in foreign markets and growth abroad is still much faster than in the U.S. Capital spending is unlikely to continue increasing rapidly now that economic growth has shifted into a sluggish mode, but neither is a decline likely so long as net exports keep expanding. Indeed, orders for nondefense capital goods, machine tool orders and contract awards for new nonresidential construction spending point toward a persistently slower but still positive growth rate of capital spending during the second half of the year.

All in all, the (nonfarm) economy downshifted very quickly in the first half of 1989 to about a 2% growth rate from 3.5% in 1988 and 5.0% in 1988. With more widespread signs of weakness, the warning flag of impending recession has been raised. But the opposite view seems more likely to us. That is, <u>the early-1989 weakening of the economy is an antidote for a recession developing later</u>. Most forecasts that called for a recession by 1990 had as a primary ingredient an overheating economy with intensifying inflation pressures during most of 1989. Economic weakness has quickly stemmed upward pressures on inflation, particularly from the manufacturing side. Even wage increases appear to have stopped accelerating with the ongoing rate of change seemingly stuck at about a 4% annual rate.

With inflation pressures in the pipeline diminishing, four of the negative consequences of inflation that historically helped turn episodes of sluggish growth into recession should be avoided -- eroding consumer purchasing power, sharply declining consumer confidence, speculative inventory building and aggressive monetary tightening. Stated conversely, there are four benefits from a quick containment of inflation that reduce the odds of recession:

(1) Slowing price inflation will ease the squeeze on real wages that hurt the average consumer during the first half of the year.

(2) Consumer confidence should remain at a relatively high level, thus avoiding a major consumer retrenchment. Historically, inflation concerns have been the key factor undermining confidence prior to a recession.

(3) An absence of inflation fears also means an absence of a motive or an opportunity for firms to speculate on their inventory holdings. As a result, the manufacturing sector appears to be quickly paring production schedules rather than building up potentially destabilizing inventory excesses.

(4) And finally, a quick easing of inflation pressures (e.g., as signalled by vendor performance falling under 50% in May and June) has given the Fed has more leeway to ease policy rather than continuing to clamp down on a weakening economy. In this regard, as discussed below, the current period is turning out to be much more like two sluggish growth episodes in the postwar period that did not turn into recession (1966-67 and 1985-86) than four sluggish episodes that were followed by recession (1956-57,1969,1973 and 1979).

In short, with the Fed's focus quickly shifting from fighting inflation to warding off too much economic weakness, and with consumers and businesses already being cautious rather than speculating on profits to be made from higher inflation, the excesses that lead to recession most should not develop. Unfortunately, there is no hard evidence that recession forces are not cumulating. In fact, the consumer slowdown in the first half of 1989 is of the same magnitude that preceded most recessions in the postwar period. But, there are very few signs of the imbalances that normally lead to recession, and the downturn in the key housing sector has been extremely modest compared to the housing collapses that preceded most recessions.

But what about inflation? A significant easing of inflation pressures in the pipeline is being signalled from a variety of sources. For one, the June Purchasing Managers' Survey suggested that downward pressure on industrial commodity prices is building. Vendor performance (the percent of companies reporting slower deliveries) dropped to 47.5%, the second month in a row below the critical 50% level for the first time since mid-1985, four years ago. Vendor performance is the single most reliable indicator of commodity price trends. Furthermore, an index representing the percent of purchasing agents reporting higher prices continued to fall sharply to the lowest level since 1986. Together with the generally soft tone of the manufacturing sector, these two indicators suggest that some easing of general inflation from the commodity side of the equation is in store unless offset by more sharply rising wages. This in turn seems unlikely if the economy is as weak (1% or so) as now seems likely for the second half of 1989.

Inflation statistics themselves are clearly showing an easing of the pressures in the pipeline. First, industrial commodity prices by any measure have on average either fallen slightly over the past six months. or have flattened out. Some prices, copper and aluminum for example, have in fact fallen sharply. Reflecting this weakness, prices of fabricated manufactured products as measured by the producer price index for intermediate materials are rising more slowly. This has become increasingly apparent in the latest producer price reports. At the finished goods level, prices are still reflecting prior increases in costs and as a result are still rising at a 4.5%-5.0% annual rate. But this is the tail of the inflation process and so long as pressures in the pipeline remain subdued, these prices will begin increasing more slowly. In effect, a wave of declining industrial commodity prices (and shrinking profit margins) has replaced the prior wave of sharply rising commodity prices (and widening margins).

On the labor cost side, wage figures suggest that wage increases have stalled out at about a 4% annual rate. There has been a sharp pickup in unit labor cost increases, but this is the result of declining productivity which historically has always accompanied a slowdown in economic growth. And in the past, most of such a unit labor cost pickup has tended to squeeze profit margins rather than being pushed through into larger price increases. The current weakness in corporate operating profits reflects this tendency. Once economic growth stabilizes for several quarters, in say the 1%-2% range we expect, productivity should resume growing at its trend 1% rate. Unit-labor cost increases will then slow back to an underlying trend rate of about 4.0%-4.5%. This relates back to the price figures in a straightforward manner. The CPI excluding food and energy has increased by 4.5% over the most recent twelve months, and the current spot growth rate also appears to be about 4.5%. This reflects the underlying trend growth rate of unit-labor costs plus some passthrough of the productivity slump.

Even if for now inflation appears to be under some semblance of control, its next step is very uncertain. For that matter, what inflation does will help determine what is likely to be the next step for the economy. This brings me back to the introductory comment that soft-landing attempts to subdue inflation have not really been tried.

Six episodes of a year or so of sluggish growth can be identified since the 1950s (1956-57, 1966-67, 1969, 1973, 1979, 1985-86), four of which culminated in recession, two of which were followed by an economic rebound. Each of the six replicates to a significant degree the conditions that have unfolded over the past year: rising inflation pressures, tightening monetary policy, then a shift from rapid to sluggish economic growth.

The key point is that in not one of the six episodes did the Federal reserve pursue a moderate course after the onset of sluggish growth. This is not necessarily a criticism of policy during these periods because under extreme circumstances an extreme policy stance can be justified. Such was certainly the case, for instance, in 1979 when aggressive tightening was called for because of extraordinary inflation pressures, or in 1985-86 when aggressive easing was justified because of the economic weakness created by trade deficit deterioration.

But nonetheless, aggressively active policy was the norm. A relatively stable or unchanged course has never been tried during periods of sluggish growth, and therefore the soft-landing waters have never really been tested. This is shown in the sequence of charts at the end of this testimony which show the average behavior of several economic variables for the four sluggish growth episodes that culminated in recession (1956-57, 1969, 1973, 1979) and the two sluggish growth episodes that were followed by a resumption of relatively strong economic growth and accelerating inflation (1966-67, 1985-86).

The critical similarities and differences among the six episodes can be summarized as follows:

* The economy, inflation and interest rates behaved similarly in the year immediately preceding sluggish growth: growth was

strong, utilization rates were rising, inflation pressures were building and the Federal Reserve was tightening.

In the ensuing year or so of sluggish growth, the behavior of inflation was the key difference between the four episodes that culminated in recession and the two that did not. All six were marked by a similar pace of sluggish economic growth, but in the recession episodes, inflation pressures continued to build, while in the other two they did not.

The continued buildup of inflation caused an aggressive further tightening in credit market conditions in the recession episodes, whereas conditions eased significantly in the two nonrecession instances. That is to say, short-term interest rates rose consistently by 2-3 percentage points during the years of sluggish growth that were followed by recession, but fell 2-3 percentage points in the slow growth years that were followed by an economic rebound.

In short, sluggish growth either turned into recession or was followed by a resumption of strong growth, depending, apparently, on the behavior of inflation and the latitude this presented to the Fed once sluggish growth began, and not simply on the conditions that brought about the sluggish growth in the first place. For the most part, conditions during the current episode of sluggish growth are tracking the nonrecession episodes.

The behavior of interest rates, inflation indicators, and inflation are shown in Charts 1-3 for the six sluggish growth episodes, including the years immediately preceding and following the year or so of sluggish growth. For comparison, current figures are shown as if sluggish growth got underway early in January 1989.

The behavior of interest rates is shown in Chart 1, with short-term rates in the top panel and the yield curve in the lower panel. Up to the onset of sluggish growth, interest rates were rising in all instances and the yield curve became relatively flat. After the onset of sluggish growth, the differences between the recession and nonrecession episodes are dramatic -- short-term interest rates either up an additional 200-300 basis points, followed by recession, or down by 200-300 basis points, then an economic rebound. This difference is reflected in the yield curve -- either further inversion when short rates rose or a return to a positive slope when short rates fell. These aggressive policy changes help explain why extended periods of sluggish growth have never occurred and why the economy always seemed to fall off the runway rather than achieving a sustained soft landing. In principle, there is considerable room in the middle and therefore no need for the historical precedents to be repeated.

An apparent reason for the two different policy responses was the behavior of inflation pressures. As shown in Chart 2, there was a sharp contrast between a weakening in industrial commodity markets during the two nonrecession slowdowns and continued strong upward pressure during the four slowdowns that culminated in recession. Vendor performance, a key manufacturing indicator which measures delays in deliveries, eased abruptly during the two nonrecession episodes but remained above the neutral 50% level through the four recession episodes. In response to the easier market conditions signalled by the 1966-67 and 1985-86 declines in vendor performance, industrial commodity prices fell about 15%, whereas they rose more than 20% on average in the other four episodes.

Reflecting an easing of inflation pressures in the pipeline, consumer inflation slowed a bit during the sluggish growth phase of the nonrecession episodes, whereas the in the four recession periods, consumer inflation continued to rise (Chart 3). Wage inflation, on the other hand, is much less sensitive to sluggish growth, and hence, exhibited little cyclical difference among the six episodes. However, the level of wage inflation was on average considerably higher during the four periods that ended in recession than the two which did not.

In addition to a great deal of latitude for the Fed to act in a more moderate fashion than historically, there are two conjectures that suggest to us more chance of a soft landing this time. First, there is some evidence that a restructuring of the labor markets has occurred over the past ten years or so such that the full employment unemployment rate has dropped back down again. As a result, wage inflation will be better behaved with unemployment in the 5%-6% range than is generally expected. At about 5.3%, the total civilian unemployment rate does look low compared to the cyclical troughs of the 1970s. But for one key segment of the labor force which has had a stable participation rate, adult males, the current 4% unemployment rate looks high compared to the 3% troughs in the 1970s. Furthermore, it can be argued that the labor markets were never really that tight during the 1970s and that the upward swings of wage inflation in 1973-74 and 1977-79 were more induced by price shocks. By pre-1970 standards, current unemployment rates are obviously extremely high.

Second, and even more conjecturally, I think it can be argued that it is very difficult to generate a serious inflation, that it takes the financing of wars, an extended period of extremely tight labor markets, and/or major price shocks to push inflation upward significantly. This goes to the heart of the question as to how prone the U.S. economy is to inflation. The 1970s have conditioned us to believe that inflation is always ready to rear its ugly head. But, the inflation of the 1970s was to large extent put in place by the Vietnam War. Four years of extremely tight labor markets pushed the trend of wage inflation up to 7% before the 1970s even began. Then deteriorating productivity and major price shocks twice carried the inflation rate to about 10%. Getting rid of an on going inflation is as difficult as creating it in the first place, and the tightening to do so did not take place until the early 1980s. George Perry coined the term "wage norm" to advance the idea that wage inflation has a great deal of inertia and that it requires extreme circumstances to significantly shift the wage norm. This is a view to which I am increasingly sympathetic, and as a result, I conclude that until extreme conditions bring back very high inflation rates, soft landings are more likely than hard landings.

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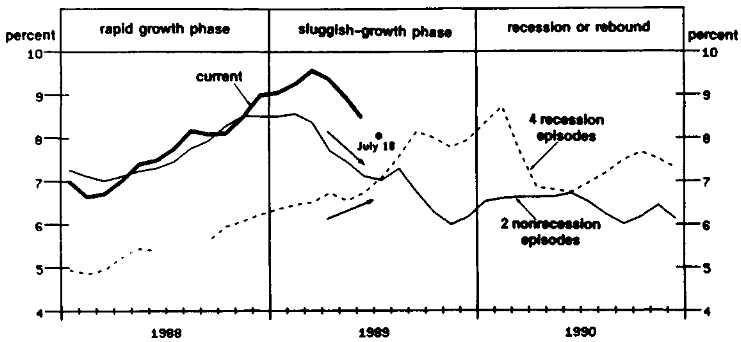
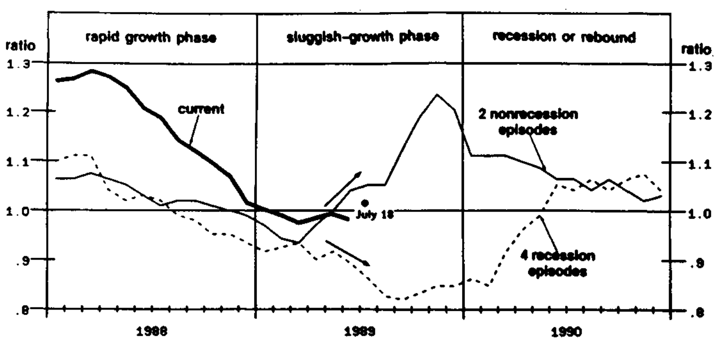
Chart 1

Interest Rate Pressures Rise (Fall) During Recession (Nonrecession) Episodes

1-Year Treasury Bills



Yield Curve: Ratio of Long Bonds (10 Years or More) to 1-Year Bills



Note: Average level of short-term rates and average yield curve ratio for 4 recession and 2 nonrecession episodes.

Source: Federal Reserve Board.

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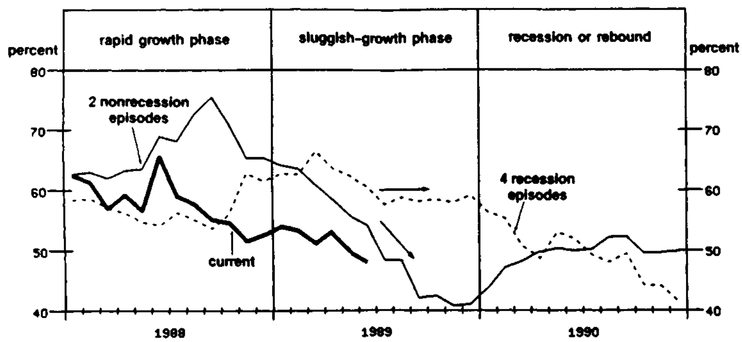
Economic
Research

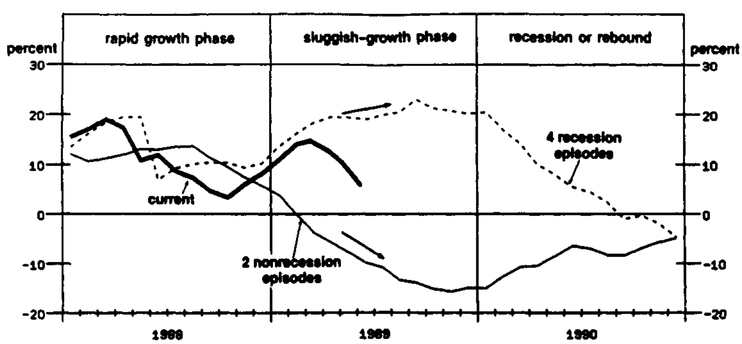
Chart 2

Rising (Falling) Commodity Price Pressures During Recession (Nonrecession) Episodes

Level of Vendor Performance



Year-to-Year Growth Rate of Industrial Commodity Prices



Note: Average level of vendor performance and average year-to-year percent change in Commodity Research Bureau spot industrial commodity price index for 4 recession and 2 nonrecession episodes.

Source: National Association of Purchasing Management, Commodity Research Bureau.

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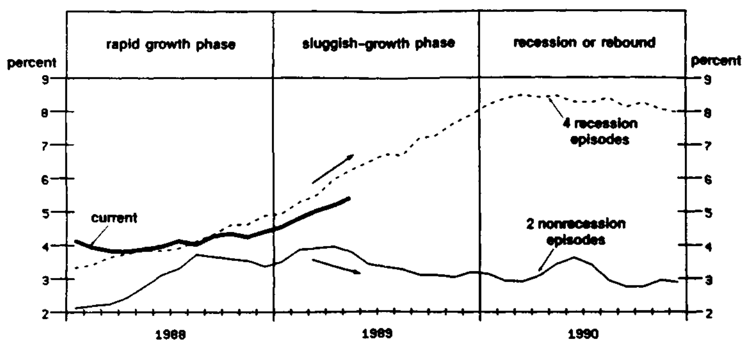
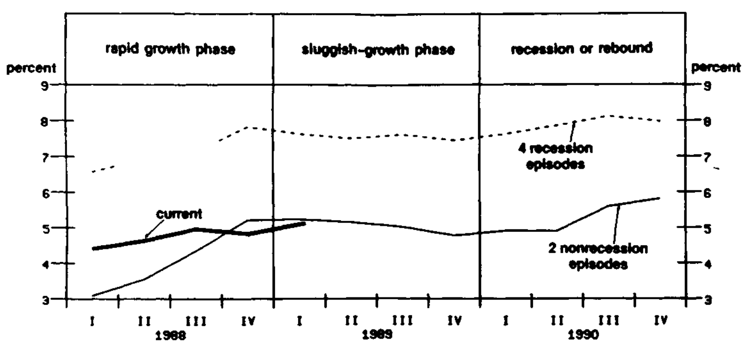
Chart 3

Consumer Inflation Rises (Falls) During Recession (Nonrecession) Episodes

Year-to-Year Rate of Consumer Price Inflation



Year-to-Year Rate of Wage Inflation



Note: Average year-to-year percent change in the Consumer Price Index and Compensation per Man-Hour (nonfarm) for 4 recession and 2 nonrecession episodes.

Source: Bureau of Labor Statistics.

Testimony of

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on

THE STATE OF THE ECONOMY AND THE CONDUCT OF MONETARY POLICY

Before the

Subcommittee on Domestic Monetary Policy
Committee on Banking, Finance and
Urban Affairs
U.S. House of Representatives
July 25, 1989

THE STATE OF THE ECONOMY AND THE CONDUCT OF MONETARY POLICY

Good morning! It is a pleasure to be here today to share with you my views on the state of the U.S. economy and the conduct of monetary policy. The economics profession is very much a judgmental science; we can each examine the same economic data and reach different conclusions. Thus, it is useful, as you do here, to seek opinions from a number of sources in evaluating the state of the economy.

Presently, a "consensus" which thinks the economy has beaten the inflation cycle and is about to land softly is gathering momentum. That view has been a key factor behind the recent interest rate plunge. Financial markets have, in turn, gone beyond the "consensus". They are now positioned for far lower short-term rates later this year, intimating that severe economic weakness may be ahead.

My own views differ sharply from that sentiment. **First**, I believe the economy is stronger than either the consensus or the financial markets' views, though admittedly operating on a slower growth plane than last year. **Second**, inflation, while likely to be lower than the first half's pace, is faster than last year's rate. More importantly, this year's slower growth plane will not neutralize persistent pressures for a gradual acceleration in the inflation rate.

Third, the economy is far short of a recession at this point, though a reversal of the inflation cycle will eventually require the therapeutic effect of an economic downturn. On this score, the FOMC's grudging response to the sharp fall in market rates runs a risk of precipitating that downturn now, though we put a low likelihood on that, since the FOMC is likely to continue to ease its policy stance.

Next, the monetary aggregates provide an inadequate yardstick of monetary conditions; as such, they should not be used in setting the course of monetary policy. **Finally**, the FOMC gets good marks for the speed with which it adapted to changing economic conditions. Because of that, the FOMC has successfully contained the speed with which inflation accelerated as the economy neared full utilization of its resources.

Eventually, however, short-term containment will come into conflict with the FOMC's long-term objective of near-zero inflation. When it does, tensions (the product of either FOMC or market-based actions) will mount to bring the short-term inflation rate into closer harmony with the long-term objective of near-zero inflation. Slow growth will not harmonize the short- and long-term inflation objectives. As past history shows, only a recession can bring the inflation rate down. Thus, the FOMC will some day have no choice but to accept the blame for the end of this expansion.

RECENT ECONOMIC GUIDEPOSTS IN PERSPECTIVE

The FOMC met on July 5 and 6 amid signs of slow growth compared with last year's brisk pace. On this score, May's weak economic performance was summed up in the month's 1.2% drop in the index of leading indicators. Moreover, early data for June is not much better. Car sales were only 9.9 million units, even with continued incentives, compared with 10.1 million units for May and 10.6 million units last year.

June's report on payroll employment showed a gain of 180,000 persons, a bit below market expectations. While revisions to May's earlier results doubled the monthly gain, manufacturing employment remained weak. May's 11,000 drop gave way to a 31,000 plunge for June. Half of June's plunge was attributable to the transportation sector, presumably reflecting production adjustments by the automobile industry in response to lackluster demand.

That drop in manufacturing employment quickly translated into widespread estimates of a drop in industrial production in June, while the overall employment gain and the drop in car sales pointed to weak retail sales for month. On the positive side, energy and food prices led to expectations of weak producer price inflation for the month. Against that backdrop, the bond rally continued.

In response to the widespread signs of less robust growth, the FOMC may be showing some indirect signs of an easier policy stance. The timing of open market actions in early July suggested that the FOMC set a 9.25% floor to its short-run Federal funds rate objective, down from its previous floor of 9.62%. As the apparent easing registered on financial markets, they began to position other short-term rates as if there was a high probability of a sizable cut in the Federal funds objective ahead.

Even so, we must be careful not to overreact to the weak indicators. While the economy has slowed from its 1988 pace, the chances of it slipping into a recession may not be as high as some notables think.

First, the weakness in the leading indicators so far this year has led to a media infatuation with the supposed link between three successive declines in the leading indicators and the onset of a recession. However, the lead time is actually far longer—usually nine to twelve months. At worst, continuation of the recent behavior of the leading indicators point to an economic problem sometime late in the first half of 1990—not in 3Q1989 as some intimate.

Moreover, the leading indicators frequently falsely signalled (as they did, for example, in late 1966 and mid-1984) a recession's start. In those instances, a sharp drop in interest rates counteracted the effects of the high rates which had precipitated the peaking in the leading indicators before irreparable damage was done. The same may be in store now. As we argue later, the sharp fall in rates since their March peak will likely have a buoying effect on activity.

Second, the recent slowdown in employment growth, while welcomed by most, may be the result of forces other than the FOMC's tight monetary policy. In particular, with the economy functioning at full employment, subsequent employment gains must be linked more closely to increases in the working-age population than in this expansion's earlier years. In the earlier years of this expansion, fast employment gains (Charts 1.1 and 1.2) were met without serious pressure on compensation by the combination of a lower unemployment rate and an upward ratchet in the labor force participation rate (the proportion of the working age population in the work force).

Now, the buffer of high unemployment rates is gone, and we are close to the social limit to upward shifts in the labor force participation rate. Thus, it would be hard or impossible to continue to secure 250,000 to 350,000 gains in payroll employment given the monthly additions to the working age population, regardless of the FOMC's policy stance. Gains of around 150,000 per month are the most that population growth can support. Because of that, the recent slowdown in payroll employment growth is unlikely to stop the gradual pick up in wage costs we expect later this year.

Next, the consumer is not as depressed as the auto sales data intimates. 1 On this score, though consumer confidence has zigzagged so far this year, it remains 2.0% above last year's pace. More importantly, nonautomotive consumer spending is holding up. Its slowdown from 3.5% last year to a 2.0% gain over the first half of this year was partly the result of a surprising and questionable drop in nondurable goods spending which will likely be eliminated with this month's benchmark revisions.

Fourth, imbalances normally associated with recessions are presently absent. Though demand growth slowed in the first half, production rates quickly responded. For the period, industrial production advanced only 2.1%, compared with 5.0% last year. Thus, a recession-producing inventory correction is unlikely at this time.

Finally, M2's weak (1.6%) growth between 4Q1988 and 2Q1989 might have incorrectly led some to conclude that the FOMC could be forcing the economy over the brink of a recession. To us, M2's weakness reflects the deposit pricing strategy (particularly for saving deposits and MMDAs) of banks and thrifts, not the effect of FOMC policy on credit demands. In contrast, commercial bank loans and securities climbed at an estimated 7.9% rate for the same span, as nondeposit sources of funds (not captured in the aggregates) offset the effects of slow money growth. Moreover, the public's ability to avoid banks in satisfying credit needs also lessens the importance of the aggregates. For the 4Q1988-May span (the latest month of available credit data), domestic nonfinancial credit advanced 8.1%.

RECENT INTEREST RATE MOVEMENTS IN PERSPECTIVE

As July opened, short-term rates dipped again, as expectations of an eventually easier FOMC policy stance intensified. Long-term rates, in contrast, showed little change. As a result, a slight positive slope reappeared in the Treasury yield curve for maturities between one and seven years. Market rates now seem positioned for a cut in the FOMC's Fed funds objective to 8.75% or less. Only a few weeks ago, the short-term market rates seemed to be ready for a 9.12% Fed funds.

Long-term rates are probably near their low point for 1989, though some prominent forecasters see still lower long-term yields in the months ahead. At this point, the 30-year bond yield is close to the level (Chart 2.2) prevailing in 1986—a time when observed inflation (Exhibit 1) was depressed thanks to the collapse in energy prices, the effects of the dollar's long appreciation on tradeable goods, and the beneficial effects of sharp productivity gains in the manufacturing sector.

The bigger potential for rate declines lies among short-term rates. If the economy is as weak as some argue, the chances are good for far lower short-term rates even if long-term rates show little further decline. A 30-year bond yield of 8.00% is quite consistent with short-term rates of 6.50%-7.00% (e.g., for Fed funds, 3-month CDs or 3-month Eurodollars)—though so far it appears that the economy is lacking the conditions needed to produce that rate outcome.

While rates are beneath the March highs, not all rates have benefited equally from the 2Q1989 rate drop. **First,** because the FOMC anchored the short-term end of the yield curve, short-term rates barely outpaced the drop in long-term rates. Usually, short-term rates move over a much wider range than long-term rates when interest rates undergo substantial movements. Because of the Fed funds anchor, an upward slope has only recently returned to the Treasury yield curve.

Second, since markets continue to expect an easier policy stance in the near-term, the very short-term yield curve (overnight through six months) is downward sloping. As the FOMC eases later this month and in August, this portion of the yield curve will likely become positively sloped again. This is captured in our baseline forecast (Table 3.1 and 3.2).

Finally, mortgage rates (Table 3.2) have not fallen as much as Treasury yields. For example, the ten-year Treasury yield dropped from a high of 9.36% in March to less than 8.00% in early July. During the same span, the FHLMC mortgage rates dropped, in turn, only about 100 basis points from March's 11.03%, exacerbating the spread between mortgage rates and market rates.

Last year, the spread between 10-year Treasury yields and FHLMC rates averaged 149 bp; in 2Q1989, it averaged 190 bp. The wider gap has been ascribed to a heavy volume of mortgage sales by thrifts. Looking ahead, congestion created by the ongoing restructuring of the thrifts' balance sheets and FDIC sales of assets seized from failed thrifts could lead to a wider than usual spread between mortgage rates and competing market rates.

INFLATION AND THE OUTLOOK FOR INTEREST RATES

...The Inflation Model...

Our view of inflation rests heavily on trends in the growth of unit labor costs (Chart 1.3). These are defined as the difference between the growth in hourly compensation and productivity (Chart 1.1). Next, the gap between inflation and unit labor costs is viewed as a ~~national (macroeconomic)~~ proxy for profit margins, while the growth in GNP is considered a national proxy for SALES volume.

Together, inflation, unit labor costs and GNP growth form the basic determination of corporate profits. If unit labor costs rise relative to inflation, profits are squeezed. Eventually, if unit labor cost growth cannot be curtailed, the narrowed national margin will trigger faster inflation. The reverse also holds. A drop in unit labor cost growth will eventually feed through to slower broad-based inflation.

Commodity prices, while considered a harbinger of future broad-based inflation by many, do not figure prominently in our formation of inflation forecasts. The reasons are simple. **First**, there is far from a strong relation between basic commodity price movements and broad-based inflation. In fact, some extremists hold that every commodity inflation surge was followed by broad-based inflation, but not every broad-based inflation surge had an associated commodity price explosion.

At the very least, commodity prices can lead to some distortion in the underlying background rate of inflation in the short run. For example, the collapse in energy prices in early 1986 figured prominently in that year's sharp slowdown in broad-based inflation. More recently, as will be discussed in the next section, energy commodity prices were the culprit in 2Q1989's inflation surge.

Second and more importantly, labor costs are the major expense faced by U.S. enterprises—particularly in the ever more important service sector. As a result, labor costs will dominate the broad-based inflation cycle over time.

...The Near-Term...

To begin, 3Q1989 will post a slower rate of inflation than 2Q1989's energy-swollen results. In fact, CPI inflation will likely dip beneath 5.0% this quarter, after pushing toward a 7.0% rate last quarter. Only a short time ago, inflation was expected to be above the 5.0% rate for the second half.

Since short-term rates peaked in March, their fall as inflation surged during 2Q1989 led to a sharp narrowing of the real interest rate which neutralized some of the burden of the high level of rates. So far this quarter, the rate decline has been short of the expected deceleration in the inflation rate. As a result, the projected real rate ballooned and may be approaching threatening proportions when measured against the scope of the inflationary threat—a threat which enhances the case for even lower rates this quarter.

In addition to less virulent inflation this quarter, the interactions between saving (both personal and corporate), the public-sector deficit, foreign capital inflows and investment will likely provide room for marginally lower rates in the second half for any given rate of inflation. In particular, the combination of a higher personal saving rate, a marginally smaller Federal budget deficit and slower growth in investment spending experienced so far this year could be creating an excess availability of funds. If so, that excess would drive down interest rates until either saving is cut (i.e., consumption growth accelerates) or investment spending accelerates.

...Inflation through 1990...

With the completion of the feed-through effect of higher crude oil prices, the fundamental determinant of inflation (labor costs) is again important. When this is considered in today's full-employment environment, the recent slowdown in economic growth does not hold much hope for an inflation rate beneath last year's pace. Instead, that economic slowdown simply helps keep inflation within bounds.

CPI inflation (Exhibit 1 and Table 1.2) is expected to average 4.8% for the second half. While a welcomed relief from the first half's blistering 6.1% pace, the second half projection is still faster than the 4.4% seen during the 1987-1988 span. Behind that acceleration stands a slight increase in inflation of services less energy from 4.9% last year to 5.2% for the first half to 5.4% for the second half. Inflation for goods less food and energy also shows a slight pick-up.

After a low point of 1.3% in 1986, inflation for this grouping climbed 3.7% for 1987 and 1988. Inflation of 3.8% for the first half of 1989 should be followed by a 4.2% gain for the second half of 1989. Together, price increases for all items less food and energy are expected to average 5.0% this half, versus 4.7% for the first half, 4.6% for 1988 and 4.2% for 1987.

Next year, inflation is expected to continue to accelerate, a view contrary to the mainstream view. For example, the average of 45 forecasters surveyed in the July 1, 1989, issue of **Blue Chip Financial Forecasts** see inflation slowing from 4.9% this quarter to 4.7% a year from now. It is important to note that while we expect faster inflation next year, the acceleration is mild in comparison with the 1970s. That is an important fact often overlooked in the zeal of inflation forecasting.

A mild acceleration in unit labor cost growth stands behind our expected inflation pick-up. After 2.6% yearly increases between 1984 and 1987, unit labor costs advanced 3.6% last year and a 5.0% hike is anticipated this year. Next year, unit labor cost are expected to climb 6.2%. ~~(See Table 2.2)~~ 3

Productivity and hourly compensation developments (also Table 2.2) stand, in turn, behind that foreseen acceleration in unit labor costs. As business expansions mature, productivity growth slows and compensation gains accelerate; the current expansion is no exception, though shifts so far have not been as dramatic as in the 1970s. Nonetheless, they have been enough to nudge up the growth in unit labor costs in the last year and a half, and more is expected.

Separately, compensation gains are showing the strains of tight labor market conditions. As conditions tightened last year, compensation gains began to tick upward. After averaging 4.3% between 1984 and 1987 (Table 2.2), compensation growth accelerated to 4.7% last year, and a 5.5% pace is estimated for the first half.

The slower growth seen so far this year will do very little to alter those trends. While employment gains of 200,000 are slower than last year's 280,000 monthly gain in payroll employment, they still exceed the 150,000 monthly gain in the working age population. With the economy at functionally full employment, it is unlikely that the gap can be filled with further cuts in the unemployment rate.

As a result, the only other route is further increases in the labor force participation rate (i.e., an increase in the proportion of the working age population in the work force). Unfortunately, after sharp increases for much of the last two decades the participation rate is probably nearing an upper limit. (See Charts 1.2 and 1.4 for trends in labor market conditions.)

Thus, even modest employment growth will trigger ever faster compensation gains, both to coax additional workers into the work force and to signal opportunities in expanding firms/industries. This is reflected in our 1989-1990 forecast. For 1989, compensation gains (Table 2.2) are placed at 5.7%, followed by 6.5% next year.

As compensation gains accelerate in the advanced stage of an expansion, pressure on unit labor costs is intensified due to slower productivity gains. Conventional wisdom holds that current additions to the work force have a lower skill base than additions earlier in the expansion when the economy had a larger pool to draw upon. Now, however, the slower growth in the manufacturing sector further erodes national productivity growth, but thanks to tight labor market conditions, the slower growth in manufacturing will not likely dent the building pace of compensation settlements.

Nonfarm productivity growth of 1.6% during the 1984-1987 (Table 2.2) span gave way to a 0.9% rise last year. This year, only a 0.7% advance is seen, with next year's improvement probably slipping to a dismal 0.3%.

...Prospects for Interest Rates...

Once markets realize that inflation is in the 4.5%-5.0% range, the fall in rates will end. In fact, we are likely at that point for long-term yields now. Unless a recession is at hand, yields beneath 8.00% for the 30-year bond is extremely unlikely.

The fall in short-term rates will, in turn, probably run its course this quarter, given our view on inflation. Moreover, higher short-term rates will emerge by the fourth quarter as renewed growth rekindles apprehension over inflation. Since inflation is expected to continue to inch up later this year and in early 1990, interest rates are seen rising in tandem. (See Tables 3.1 and 3.2 for details.)

This view contrasts sharply with the growing "consensus" of a soft landing—a concept in which we do not put much faith. Experience shows that the inflation cycle can be reversed only by the restraining effect of a recession or a substantial external shock. The baseline forecast sees the economy bouncing against capacity ceilings in the remainder of this year and next year, even though GNP growth (Table 2.2) is expected to be slower than in the earlier years of the expansion.

Thus, pressure on wages and productivity, and hence prices, will persist and will eventually manifest itself in higher interest rates. The eventual recession pulls the economy far enough away from its capacity ceilings to recalibrate the inflation cycle at a lower rate. Such a recession is projected for the later part of 1990.

Because usual excesses which presage a recession are minimal, the next downturn's duration will be short. Nonetheless, effects on inflation, when combined with continued intense international competition in tradeable goods, will be dramatic.

...The Risk: Even Lower Rates Before the Rate Cycle Bottoms

Interest rates moved down at an astonishing pace since their March peak. Admittedly, the upswing since November 1988 (when the Treasury yield curve began to invert) may have been excessive when positioned against the background or core inflation rate. Nonetheless, rates have systematically moved through each downward revision of our interest rate outlook for the last two months. Moreover, short-term markets are positioned for still lower short-term rates.

For example, the yield curve for short-term debt instruments (e.g., bank CDs, Eurodollars and commercial paper) is currently downward sloping. That means markets expect lower short-term interest rates in the future. (See Chart 3.1 for the "spot" Eurodollar yield curve for overnight through one-year maturities.)

The expectation of lower rates is mirrored in the futures market for short-term debt instruments. For example, the December Eurodollar contract was priced at a yield close to 8.00% in July. The average yield for the four 1990 contracts is around 7.90%. Based on the futures market, there is the implicit assumption that the Federal funds rate could be 7.75% for most of next year.

Admittedly, the futures market is no more accurate in its prediction of things to come than other forecasting techniques. (See Chart 3.2 for the Eurodollar futures rates as of 3/13/89). Nonetheless, it does serve to illustrate the scope of the potential rate decline for which markets are positioned.

Because of the sheer size of that potential drop, it seems prudent to establish an alternative regime which captures lower short-term rates during 3Q1989. This case is compared with the baseline in Chart 3.3. In it, short-term rates (Fed funds and CDs) fall to the 7.87% area by October, a bit ahead of the futures market forecast. It is important to note that in both the base and the "backup" case, 3Q1989 represents only a temporary interruption in the rising rate channel. By year-end, the contingency case sees rates rising again.

An important point should be noted here. While the near-term state of the economy may cloud the rate outlook in the months ahead, we feel confident that rates at the end of 1990 will be higher than at the end of 1989. Any debate should revolve around the probable year-end rate level and the pace of the 1990 rise.

...Shocks, Rolling Readjustments and the Inflation Cycle...

In this expansion, forecasters have regularly warned of an imminent acceleration in the inflation rate ever since commodity prices jumped in early 1984; However, that acceleration has failed to arrive on cue which admittedly casts some doubt on our forecast of marginally higher inflation later this year.

In retrospect, two forces combined to help keep the inflation rate within bounds: external shocks and a process we call rolling readjustment.

Three external shocks benefited the U.S. inflation rate since the last recession's trough. The first was the persistent appreciation of the dollar from its 3Q1980 low point until its 1Q1985 peak. This had an obviously beneficial effect on the inflation rate of tradeable goods, which likely had a lot to do with the gradual deceleration in price inflation of goods less food and energy. As can be seen in Exhibit 1, the inflation rate for that grouping fell from 5.0% in 1983 to 1.3% in 1986.

The second shock was the early 1986 collapse in oil prices. For the four quarters of 1986, prices of energy goods in the CPI plunged 30.1%. That plunge, and the weak inflation in goods less food and energy, played a major role in the year's slow growth (1.3%) in the overall CPI.

The third shock was the October 19, 1987 stock market crash. Prior to the crash, markets were reeling under the fears of higher U.S. inflation which was buffeting the dollar in exchange markets. After the crash, we hypothesized that it would have a sobering effect on wage and price decisions but would not have a untoward effect on growth. As 1988 unfolded, that turned out to be a good forecast. Growth soared and inflation was about equal to 1987's rate, though we admittedly had a few worrisome months in Black Monday's aftermath.

Looking ahead, it is unlikely that we can rely upon either a rapid rise in the dollar or a collapse in energy prices to secure a lower inflation rate in the quarters to come.

The second effect, rolling readjustment, depends upon the rapid reaction of financial markets to early warning signs of inflation. In it, the fast reaction is seen choking off budding excesses before they can become entrenched. Once those excesses are stopped, the process relies upon an equally fast financial market response which lowers interest rates before the stress of high rates triggers a recession.

The best example of this was the sharp rise in interest rates in the first half of 1984 and their subsequent decline in late 1984. More recently, the sharp run-up in rates prior to Black Monday, while a causative agent of the crash, probably also had a lot to do with choking off inflationary excesses that markets feared were building in mid-1987. The sharp drop in rates after the crash was a big reason we felt the crash would have no lasting effect on economic activity.

However, so far in this expansion, rolling readjustment did not reverse the inflation cycle. Rather, it simply kept inflation within bounds—no mean feat when viewed against the 1970s. In fact, rolling readjustment is probably at least partly responsible for the remarkable length of this expansion and the surprising "low" inflation rate given current capacity limits.

Some may see our concept of rolling readjustment as a close proxy for the term soft landing. However, there is a big difference. Soft landing proponents seem to think that slow growth can keep the inflation rate within bounds indefinitely. Rolling readjustment, in contrast, simply generates a succession of temporary reprieves from an inevitable outcome: progressively faster inflation.

The 1Q1989 jump in rates, for example, pulled the economy back only slightly from binding capacity limits. As the economy rolled back from the ceiling, inflation fears subsided; but lower rates associated with those lessened inflation fears will soon catapult the economy back to the capacity ceilings. With it will come renewed concern over inflation and an upturn in U.S. rates.

In sum, rolling readjustment has been a significant contributor to this expansion's length; however, it would be a mistake to believe that it has eliminated the business cycle. Eventually, a recession will be called upon to reverse the inflation cycle.

THE ECONOMIC OUTLOOK FOR THE SECOND HALF OF 1989 AND BEYOND

As noted before, the 2Q1989 rate drop will likely rejuvenate activity in the second half As a result, GNP growth (Table 1.1) of 2.5%-3.0% may be possible.

Among the separate sectors, auto sales (Table 1.2) will likely show no pick-up despite the lower interest rates. In comparing 1988 and 1989, it appears that last year's high volume (10.6 million units) probably came at the expense of 1989's sales. Technically, 1988's auto scrappage rate was boosted to an abnormally high level; this year's scrappage rate is more typical of recent behavior.

Nonautomotive consumption (Table 1.1) rebounds from 2.0% for the first half to 2.8% for the second half. As noted earlier, the first half's results were depressed by a sharp (and most surprising) decline in spending on nondurable goods for May which depressed the entire 2Q1989 estimate for nondurable goods. We suspect that this is related to the procedures used to estimate the early data and will likely be raised with July's benchmark revisions.

Housing (Table 1.2) will show a marginal revival in the second half. Single family starts are expected to creep up to 1.05 million units compared with 2Q1989's 1.02 million unit rate. However, the second half rate is still beneath 1988's 1.09 million units Little improvement is expected in the multi-family sector, as regional excesses continue to plague that market.

The outlook for 1990 is more complicated and is based upon an important thread woven throughout this testimony. Namely, the inflation cycle cannot be reversed without a recession. It can be held within bounds by the dual forces of fast responding capital markets and properly reactive monetary policy. But as the economy approaches full employment, inflation will rise. Low points in undulating inflation sub-cycles (the product of rolling readjustment) should not be confused with victory over the primary inflation cycle, particularly if each sub-cycle brings the primary inflation cycle to an ever higher background rate. Failure to recognize this will lead to a repeat of past mistakes; now however, financial markets will have a punishing effect on the unwary.

Against that background, we feel that an economic downturn is lurking at some point in the future. While it may be arbitrary, it is presently projected to begin during the latter part of 1990. Because imbalances are few and inflation has not been allowed to become entrenched as it was in the 1970s, the downswing will be brief—probably no more than two to three quarters.

Effects on cyclically sensitive sectors (autos, housing and capital spending) will be felt, but not on the scale of the 1970s. Effects on inflation will be faster than in earlier recessions, again, because it was not allowed to become entrenched.

By early 1991, the new expansion will be underway, thanks to the projected drop in interest rates as markets respond to a sizeable slash in the perceived background inflation rate.

The longer-term outlook, while not a subject of this testimony, does highlight a potential problem. Though the projected recession has the desired therapeutic effect on inflation, it is short-lived. Because of weak domestic oil drilling activity and strong demand for crude oil, we fear that the balance will tip toward sharply higher oil prices by 1992 which leads to a higher inflation rate.

THE MONETARY AGGREGATES: SHOULD THEY MATTER FOR POLICY DELIBERATIONS?

The monetary aggregates have received renewed attention with their surprisingly slow growth so far this year. The FOMC's principal target variable (M2) rose a scant 1.6% between 4Q1988 and 2Q1989 versus a target growth of 3%–6%. Those of a monetarist persuasion maintain that tight monetary policy was responsible for the slowdown, and if it persists, an economic recession is not far off. Aside from the leading indicators, this may be the only sign of a problem. However, opinions are far from uniform on this issue. Statistical research is divided on the usefulness of the aggregates; our view is that changes in the financial service industry in recent years have rendered the aggregates all but useless in policy deliberations.

...Statistical Support of Ideological Views on the Aggregates...

At one extreme, research at the National Bureau of Economic Research found very little to support the monetarist view. One study found a **negative association** between money growth and both inflation and nominal GNP since the early 1980s. As a result, the research argues that the monetary aggregates have lost any value as an "instrument" variable in the conduct of policy deliberations—hardly a rousing endorsement of the importance of monetary aggregates.

At the other side, recent research by Federal Reserve Board economists may have breathed new life into the monetarist view and the monetary aggregates. That study takes a long-run view of the aggregates and distinguishes equilibrium inflation (termed "P star" by the media) from observed inflation. Equilibrium inflation is derived from trend velocity, potential GNP growth and observed money growth.

In it, movements in the aggregates account for shifts in the equilibrium inflation rate—a slight departure from the usual monetarist view where money growth directly influences price inflation (albeit with a lag). In the Fed model, gaps between equilibrium inflation and observed inflation are closed, but with a long and variable lag. If the equilibrium rate is above the observed rate, inflation can be expected to accelerate and vice versa.

The recent slowdown in money growth has pulled the equilibrium rate beneath the observed rate, leading some to use this model to justify expectations of slower inflation. The implication of the Fed's research report for inflation over the second half of 1989 was one of the factors seized by markets to fuel the bond rally.

...Changes in the Financial Services Industry and the Aggregates...

Our own view of the aggregates steps away from econometric models. Instead of relying upon statistical research, we feel that identifiable changes in the financial services industry invalidates the role of the monetary aggregates as a yardstick of monetary tension or stimulus. If so, their use in FOMC policy deliberations is a mistake. More importantly, use of the aggregates by Congress as a yardstick of monetary policy is an equal error.

Since M2 seems to be the FOMC's main monetary target, our analysis focuses on that variable. This aggregate is composed of saving and small time deposits (which we later refer to as retail deposits), money market mutual funds, overnight repurchase agreements and repatriated overnight Eurodollars.

Several facts led us to minimize the economic consequences of M2. **First**, deregulation of retail (personal) deposit rates in the early 1980s altered the relationship between trends in bank deposits and monetary policy. That process got underway in mid-1978 with the introduction of the six-month money market certificate. It was completed in 1983 when the last of the ceilings on personal saving and time deposits was lifted.

Before ceilings on deposits were lifted, rising rates had devastating effects on bank deposits. Though the ceilings were periodically adjusted, they never fully reflected market rates in the late stages of interest rates cycles. The resulting disintermediation had a fast and dramatic effect on the aggregates as the banking system literally ran short of personal (retail) deposits. On the asset side, implicit nonprice rationing was very often the response to the shortage of retail deposits, and the housing market seemed to bear the brunt of the adjustment.

In understanding the economic process behind the strong statistical appeal of the monetarist doctrine through the late 1970s, it seems that implicit credit rationing was an important element in the linkage between the aggregates and activity as interest rate cycles matured. Alternatively, the excess availability of deposits at the low point of the interest rate cycle would be reflected in implicit underpricing of assets to fully utilize the deposit inflows. In sum, the inefficiency of deposit ceilings found relief in the alternating pattern of implicit rationing and underpricing.

Now, with the exception of demand deposits, depository institutions have complete control over deposit rates. All other rates are adjusted to reflect the efforts of depository institutions to minimize net interest expense while satisfying the need to fund asset levels; personal deposits are but one of a number of funding sources.

So far this year, yields on passbook and MMDA accounts have been sticky, as depository institutions came to rely upon time deposits to control the growth of interest expense in the period's rising rate environment. As a result, saving deposits and MMDAs plunged, while small time deposit growth exploded. In an effort to limit the hemorrhage of saving deposits and MMDAs, while simultaneously controlling interest expenses, rates were changed by the introduction of new saving and MMDA products, not the blanket increase in the rate on all such deposits.

On balance, however, the growth of the aggregates was still lethargic. However, since banks had control over deposit rates, that weakness reflected factors other than the effect of the policy stance, not the least of which was the banking system's demand for personal deposits. That depends, in turn, upon asset growth, which brings us to the remaining reasons why the aggregates are of little meaning today.

Second, the adoption of an investment banking mentality by the larger banks has also played a role. In an effort to replace net interest income with fee-based income, the money center banks have increased the importance of originating loans for sale or securitization. Not only can this produce a higher return on equity for any given asset base, but the fee earnings would, hopefully, be more stable than the net interest income. The consequence, however, is a slower growing asset base of the banking system. With slower asset growth comes a lessened demand for deposits.

Third, while often ignored in discussions, more stringent capital requirements are influencing the aggregates, particularly since 4Q1988. At that time, regulatory pressures to raise equity capital ratios to 4.0% have led to very tough management of bank balance sheets. However, the tougher capital requirements did not necessarily limit the role of banks in the credit generation process; they simply increased the importance of "origination for sale or securitization".

With balance sheet growth tightly managed, deposit generation is also more aggressively managed. As fee income becomes more important than net interest income, the corollary is a lessened need for deposits. Not surprisingly, this process, helps explain this year's meager growth in M2.

Fourth, it is becoming ever easier for credit users to avoid banks in satisfying their needs. The corporate community's increasing use of commercial paper and growing access to the bond market is well documented. More recently, banks have aided the processes though development of a variety of off-balance sheet products, credit enhancement products, and an increased presence in direct placements.

However, retail or personal credit is beginning to feel the effects of more efficient credit markets. E.g., in the mortgage arena, both banks and thrifts have a lessened role in the day-to-day origination of mortgages as mortgage brokers and bankers become more active in the origination process. Mortgages originated by those "brokers" are sold to banks or thrifts which package them for sale as mortgage-backed securities. Such mortgages are not permanently on the banks' balance sheet, but servicing fees charged by the banks are an important source of income.

Also, home equity loans are issued by finance companies in addition to banks. As these rise in importance in the credit process (due to tax considerations of the interest expense) credit growth through nonbank finance companies lessens the need for deposits at banking institutions.

Fifth and finally, the definition of money has once again changed. Several years ago, in an attempt to capture the evolution of financial innovations, money market mutual funds were added to the definition of M2 and M3. Those instruments had a family resemblance to other forms of nontransaction balances captured in the Ms. As such, their addition to the money stock definitions was logical.

The type of funds offered has proliferated tremendously since then, and thanks to flexible rules on transfers, the effective distinction among types of accounts is blurred. For example, one major firm offers 55 different "no load" funds. Of these, 50 allow telephone transfers between accounts or to a bank account. In addition telephone redemption via check can be made. These include money market mutual funds, bond funds and stock funds. In addition to the MMMFs, the bond funds also allow check writing privileges. The flexibility offered through such "families" of funds give them all the characteristics of money, but except for the MMMFs, they are not counted in any of the money stock definitions.

In sum, the monetary aggregates can only be viewed as a grossly incomplete measure of the monetary tension or stimulus faced by the U.S. economy. Total nonfinancial credit may be a better yardstick, though I personally feel that any single measure of monetary tension or stimulus is fraught with problems.

This brings us to the final part of the prepared statement.

THE CONDUCT OF MONETARY POLICY

...Strategic Objectives...

Strategic or long-term objectives are reaffirmed each month in the FOMC directive. In particular, the Committee "seeks monetary and financial conditions that **foster price stability, promote growth in output on a sustainable basis, and contribute to an improved pattern of international transactions.**" As part of the process, as well as a requirement of the Full Employment and Balanced Growth Act, the Committee sets annual target bands for the monetary aggregates believed consistent with the national objectives. Presently, the principal monetary target is M2, with a target band of 3%-7%.

The qualitative objectives are not officially translated into quantitative or numerical objectives. Nonetheless, some sense of the numerical objectives can be gleaned from official statements and formal testimony. First, the clearest view seems to be on the long-run inflation objective. Here, the popular term used by the Federal Reserve is noninflationary growth—a term that seems to be roughly equivalent to zero, or near-zero, long-run inflation, though admittedly, the term zero inflation has not been used in policy statements.

Nevertheless, a careful reading of speeches and testimony leaves little doubt that this is the long-run objective. Such an objective was first articulated in the early 1980s by former Chairman Volcker in a speech to the American Economics Association. At that time, he argued that there should be no difference between nominal and real values for long-term business planning purposes. This notion has been periodically reaffirmed since then.

Next, the numerical estimate of the growth objective is less clear cut. It seems to be purposefully vague which thus allows for whatever growth rate is viewed as consistent with price stability. Chairman Greenspan has personally used a 2.5% pace for the last year, arguing that this is the most that can be achieved without faster inflation in today's full employment environment. However, that pace has not been endorsed by other members of the FOMC, preferring generalities instead.

Nonetheless, vagueness has not stopped markets from forming a view on the precise growth objective. Many practitioners take the FOMC's central tendency forecast (part of the the Federal Reserve's Humphrey-Hawkins report) as the growth objective for the coming year.

Finally, international transactions are to be achieved within the context of G-7 coordination. The dollar's exchange value is a key element here. Many feel that the beneficial effects of the dollar's drop between 1Q1985 and 1Q1987 have been exhausted. So far this year, the merchandise trade deficit bears out that view. At the same time, however, the G-7 may be waffling on the importance of reducing the size of the global imbalances, as the communique from the July economic summit took a softer stand on this issue.

...Tactical Objectives...

Broadly speaking, the FOMC has pursued its strategic objective of noninflationary growth by gradually reducing the monetary aggregates' annual target bands. For example, this year's range for M2 is 3%-6%; for 1985, the range was 6%-9%.

In fact, however, the FOMC pursues its strategic objectives within a context of short-run conditions. These conditions also determine what I call the FOMC's tactical objectives. These objectives bridge, in turn, the long-run objectives and the FOMC's day-to-day actions, i.e., the "degree of reserve restraint" the FOMC creates in the money markets. The tactical objectives have two parts: (1) the priority attached to the FOMC's short-run objectives and (2) the balance of the directive issued to the manager of its open market activities.

The priority of the short-run objectives vary depending on prevailing economic conditions. Presently they are ranked as inflation, economic growth, the monetary aggregates and financial market conditions. Inflation has been the number one priority for the last year and a half; however, in the aftermath of the stock market crash, economic growth had top billing at the December 1987 FOMC meeting.

The directive's balance establishes the intensity with which the FOMC intends to pursue its short-run objectives. It is expressed in terms of allowable inter-meeting shifts in the degree of reserve restraint in reaction to deviations in economic conditions from expectations. The directive's balance ostensibly gives the open market account's manager room to react to changing conditions between meetings. In fact, it establishes the relative importance of the top objective and the FOMC's willingness to sacrifice the other objectives in pursuit of the top objective.

For example, during the last year and a half, not only was inflation the FOMC's top short-run priority, it was also the top priority of the G-7. Containing inflation was so important that the FOMC directed the open market account manager to exercise a greater degree of reserve restraint should inflationary pressure warrant. That directive led to a number of official statements last winter and spring indicating that policy was set to err on the side of restraint. Presumably, against 1988's fast growth pace, excess restraint posed little near-term threat to the expansion, while the threat of faster inflation posed a fundamental threat to its longevity.

At the May 16, 1989 meeting (released July 7th), the directive's balance changed. Inflation was still the number one priority, but the presence of a slower growth plane was evident. Moreover, those of a monetarist persuasion pointed to the threat to growth posed by the weak M2 growth. As a result, the FOMC adopted a "balanced" directive; i.e., an easier or tighter policy was equally likely. Against that backdrop, its Federal funds target was eased a bit during June.

...Policy Indicators...

A good amount of judgment goes into the deliberations which sets the directive's balance. This is not surprising since the economy's position in the inflation cycle is far from obvious. As a result, most of us seek forward looking guideposts for short-run policy setting. The members of the FOMC are no different. However, the perspective of the Board of Governors and the district bank presidents do differ.

The Governors see things on a macro level and, as such, come to rely on broad national measures. For example, several years ago, Governor Angell proposed an experimental commodity price index on the assumption that commodity prices are the leading edge of the inflation cycle.

Soon after his appointment, Vice Chairman Johnson gave some notion of the factors important to him in the conduct of monetary policy. As with Wayne Angell, commodity prices were an important harbinger of future inflation. In addition, however, he believed that important forward-looking information was contained in financial markets; exchange rates and the shape of the yield curve were considered particularly important. Basically, he believed that markets, through efficiencies gained in integrated globalized deregulated markets, contained forward-looking information which the FOMC could take into account in setting its policy stance.

Chairman Greenspan's statements suggest that the unemployment rate is important to him, though he has become less doctrinaire on its role this year.

So far, personal preferences for the various indicators have not evolved into fixed rules for short-run policy settings. Nonetheless, commodity prices seem to be a common thread among many FOMC members; moreover, it is a theme which has found some support within the G-7, as they have agreed to at least consider commodity prices as part of their policy coordination deliberation. I would caution against a dominant role for commodity prices because they lose sight of the role of labor costs as expansions mature.

The twelve distinct bank presidents, in contrast, see the economy from a more micro perspective, i.e., conditions in their own regions. These are summed up before each FOMC meeting in a document popularly termed the TAN or BEIGE BOOK. As a result of their limited geographic hegemony, the presidents may have a more practical sense of the actual efficacy of monetary policy than the Board. If so, it could explain the supposed division on the FOMC regarding the severity of the inflation threat between the Board of Governors and the district presidents.

...Inflation and Growth: An FOMC Success Story...

The expansion has had two big surprises: its length and the persistent failure of inflation to shoot upward. The FOMC's adaptive policy stance has been an element of that outcome. More importantly, the Committee's policy tone has differed radically from the 1970s. Simply put, inflation is not now an option for extending the current economic expansion. Quite the contrary, holding the line on inflation is considered crucial in sustaining economic growth. If successful, economic actors believe the policy, so none feel comfortable taking action which assume the acceptability of inflation in policy circles.

Nonetheless, it is equally clear that the low point of the current inflation cycle was early 1986. As noted before, the dollar's sharp appreciation through early 1985 and strong productivity gains in the manufacturing sector in the early years of the expansion helped drag down inflation among goods excluding food and energy. Tight policy had a spillover effect on services; although since services did not feel the effect of global competition, gains were not as significant as in the manufacturing sector. Still, excluding food and energy, inflation bottomed out at 3.9% in 1986.

Since then, the trend has been admittedly upward; however, its movement has been systematically beneath expectations. In retrospect, at least three factors account for that. First, fast adaptation by foreign producers to the dollar's 1985–1987 drop has kept global competition a potent force. Second, monetary policy, as measured by the level of real interest rates compared with the 1970s, remained taut. Third, markets have responded exceptionally fast to any hint of accelerating inflation

However, in reviewing the FOMC's record, it is important to keep in mind a functional difference between it short- and long-term objectives for inflation. In the short-run, the FOMC seeks to **contain inflation.** However, it is important to recognize what that term means in practice; namely, limiting its inevitable acceleration as the expansion matures. On this score, the FOMC has been very successful; inflation's accelerations has been systematically beneath expectations.

That process eventually puts short-term trends in fundamental conflict with the long-term objective of zero or near-zero inflation, and at some point, the two must be brought into harmony. To end the acceleration (even a "contained" acceleration), history shows a recession plays a critically important role.

...Global Markets, Exchange Rates and Inflation....

While the FOMC's commitment to disinflation was an important agent in holding a line on inflation in this expansion, it was not alone. Global financial markets, with powerful efficiencies acquired through global integration, enhanced the efficiency of rolling readjustment in controlling inflation in this expansion. For example, exchange rate pressure in August and September 1987, the product of a feared acceleration in U.S. inflation, put tremendous pressure on U.S. interest rates in general and long-term rates in particular as investors fled dollar-denominated assets.

The resulting global pressure on U.S. rates was probably far greater than could have been generated from domestic sources alone. Admittedly, those high rates figured prominently as a causative agent of the stock market correction which began in early September and ended with Black Monday. Nonetheless, their speed stood as a stark reminder of the new speed with which financial markets can react to distrust of monetary policy.

Similarly, the sharp fall in U.S. rates this spring was partly the result of an intense foreign appetite for dollar-denominated assets. Had foreign interest not appeared, the rate fall would have been more gradual.

...An Inevitable Cyclical Downturn is Ahead, Eventually...

Success in containing inflation and sustaining growth has created the illusion in some quarters that the business cycle may be a thing of the past. There seems to be a notion that monetary policy can be fine tuned to choke off inflation without a recession—a dangerous and incorrect assumption. If widely believed, economic participants (whether in the product or labor markets) will be less cautious.

Such a development would reduce the efficiency of rolling readjustment and possibly set the stage for more serious economic problems (namely inflation) in the quarters or years ahead. The 1960s are a good example of that problem. Thanks to the long expansion (the product of the Vietnam War and "Great Society" fiscal initiatives), many came to believe that the business cycle was dead, and that period laid the ground work for the inflation surge of the 1970s.

Throughout this expansion, fast growth moved the economy inexorably toward full employment. Prior to 1988, there were ample excesses in both labor and industrial capacities; however, ever since 1986, the economy has moved ever closer to capacity limits, particularly in the labor markets.

As noted earlier, with tighter capacity came faster compensation gains, weaker productivity gains and a notch-up in the inflation rate. It is a mistake to think that fine-tuning monetary policy can reverse the pressures as the economy bumps against capacity limits. Rolling readjustment can extend the life of the expansion, but not indefinitely. Effects of each rate swing will become less biting on the underlying inflation cycle, and the pauses in inflation's upward march will become shorter. Eventually, a recession will be triggered to reverse the inflation cycle. When the recession materializes, the FOMC will need to accept at least part of the blame.

Earlier in this testimony, the start of that recession was placed in late 1990. However, the precise timing of its start is conjecture at best; it is possible that rolling readjustment could push the expansion out through 1990. Nevertheless, it would be a mistake to think that inflation could be reduced without a recession, notwithstanding the FOMC's effort to gradually slow the monetary aggregates' growth.

IN SUM

The FOMC should be given high marks for creating a credible anti-inflation policy in this expansion. On only a few occasions did markets doubt the Federal Reserve's seriousness, and their response (mid-1984 and 3Q1987) quickly pushed the FOMC to the right course, which could have influenced Vice Chairman Johnson's willingness to use market information as input into FOMC decisions.

The partnership between efficient, deregulated, global capital markets on the one hand and the FOMC on the other hand has worked very well in holding inflation within bounds as the expansion matured. However, as the data show, the background inflation rate is moving upward, even if it seems to be a glacial rate of acceleration.

Because of that, the FOMC will eventually be called upon to take a decisive stand in its inflation offensive. If the FOMC responds responsibly, the economy will likely be pushed into a recession; it came close to one this spring. If it steps aside, financial markets will do the job for the FOMC--as they almost did in 1984 and again in 1987.

When the test comes, the FOMC will undoubtedly receive much public criticism. Realistically, however, if the inflation demon is to be put back into the jar, slow growth will be ineffective. Moreover, slow growth runs the danger of institutionalizing stagflation because of its detrimental effects on productivity. Reversal of the inflation cycle will eventually require some economic pain.

The global situation will have a heavy bearing on the speed with which the FOMC may be forced to act. There is little doubt that the members of the European Monetary System are committed to low inflation. Germany, which seems to be the de facto spokesman for the EMS, has systematically raised its interest rates for the last year in response to its domestic inflation threat and has left little doubt that the current inflation rate is unacceptable.

Moreover, other EMS members are using the discipline of the relatively fixed exchange rates imposed by the EMS to wind down their own domestic inflation rates. Against that background, any question by the global community of the U.S. anti-inflation commitment will have a fast and severe effect upon the dollar's exchange rate, and U.S. interest rates will be quick to follow. We have only to look to August-October 1987 to refresh our memories.

Just as the current decline in U.S. rates probably had its genesis in the foreign community, the eventual stress point will likely come from that arena. We should be prepared for that eventuality and not be lulled by the belief that the FOMC is omniscient and omnipotent enough to fine tune policy enough to drive inflation down without adverse economic consequences.

CHART 1.1
PRODUCTIVITY & COMPENSATION

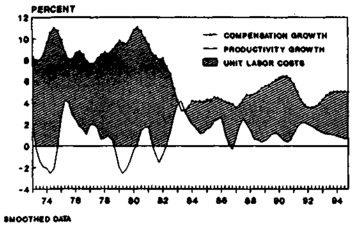

CHART 1.3
UNIT LABOR COSTS & INFLATION

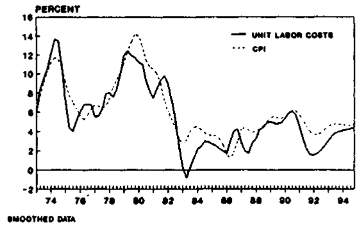

CHART 1.2
LABOR FORCE PARTICIPATION RATE & EMPLOYMENT RATIO

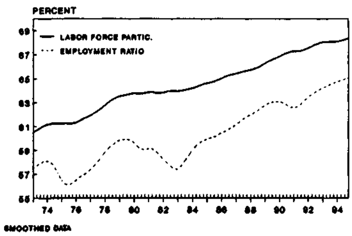

CHART 1.4
CIVILIAN EMPLOYMENT GROWTH & WORKING AGE POPULATION GROWTH

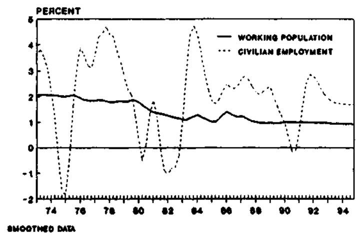

EXHIBIT 1
CPI INFLATION
(FOURTH-QUARTER TO FOURTH-QUARTER GROWTH)

YEAR	ALL ITEMS	ALL ITEMS LESS FOOD	ALL ITEMS LESS ENERGY	ALL ITEMS LESS FOOD & ENERGY	FOOD	ENERGY
1976-1981*	10.1	10.3	9.3	9.5	8.8	16.5
1982	4.4	4.6	4.9	5.2	3.2	1.9
1983	3.2	3.5	3.8	4.2	2.2	-1.9
1984	4.2	4.2	4.7	5.0	3.8	0.2
1985	3.5	3.8	3.8	4.3	2.2	1.0
1986	1.3	0.7	3.9	3.9	4.2	-19.1
1987	4.4	4.6	4.1	4.2	3.4	8.3
1988	4.3	4.2	4.6	4.6	5.3	0.3
1H1989(F)*	6.1	5.9	5.1	4.7	6.8	18.6
2H1989(F)*	4.8	4.7	5.1	5.0	5.2	1.2
1989(F)	5.4	5.3	5.1	4.9	6.0	9.6
1990(F)	6.1	6.1	6.3	6.3	5.9	4.0

YEAR	ENERGY@ GOODS	ENERGY# SERVICES	ALL GOODS	GOODS LESS FOOD & ENERGY	ALL SERVICES	SERVICES LESS ENERGY
1976-1981*	18.7	12.7	9.0	7.4	11.6	11.5
1982	-4.2	14.2	3.5	5.7	5.5	4.8
1983	-5.8	5.0	2.9	5.0	3.8	3.7
1984	-2.3	4.1	2.8	3.4	5.4	5.6
1985	2.0	-0.4	2.1	2.1	5.1	5.6
1986	-30.1	-3.0	-1.8	1.3	4.5	5.4
1987	19.0	0.0	4.7	3.6	4.3	4.6
1988	-2.3	2.6	3.8	3.8	4.8	4.9
1H1989(F)*	36.5	2.4	7.3	3.8	5.0	5.2
2H1989(F)*	0.0	2.3	4.3	4.2	5.2	5.4
1989(F)	17.8	2.3	5.8	4.0	5.1	5.3
1990(F)	5.7	2.5	5.9	5.9	6.3	6.5

*ANNUALIZED RATE
@ENERGY GOODS = MOTOR FUEL, FUEL OIL AND OTHER HOUSEHOLD FUELS
#ENERGY SERVICES = PIPED GAS AND ELECTRICITY
/0006H

CHART 2.1
SHORT-TERM YIELD CURVE

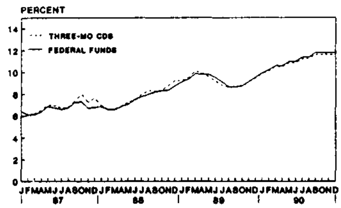

CHART 2.3
3-MONTH CD RATE

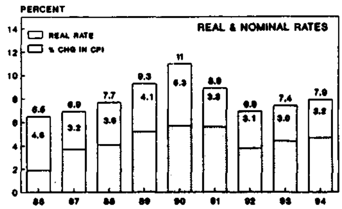

CHART 2.2
LONG-TERM YIELD CURVE

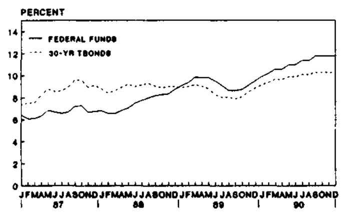

CHART 2.4
QUARTERLY PATH

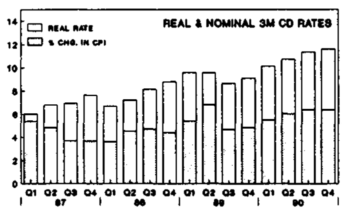

CHART 3.1
THE EURODOLLAR YIELD CURVE

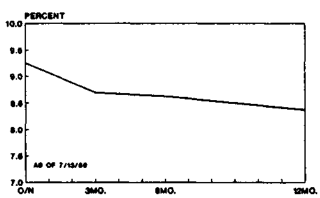

CHART 3.2
EURODOLLAR FUTURES VS.
BASELINE EURODOLLARS

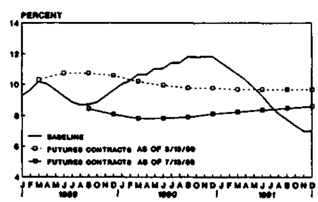

CHART 3.3
BASELINE VS. CONTINGENCY VIEW

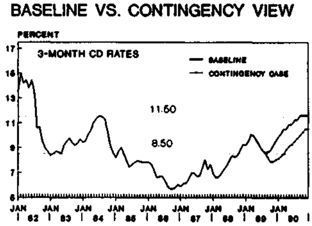

TABLE 1.1
GROSS NATIONAL PRODUCT - QUARTERLY DATA

	I(A) 1988	II(A) 1988	III(A) 1988	IV(A) 1988	I(A) 1989	II(E) 1989	III(E) 1989	IV(E) 1989	I(E) 1990	II(E) 1990	III(E) 1990	IV(E) 1990
GROSS NAT'L PRODUCT	4724.5	4823.8	4909.0	4999.7	5099.0	5206.3	5300.2	5391.4	5488.3	5581.5	5652.5	5697.4
CHANGE*	5.4	8.7	7.3	7.6	8.2	8.7	7.4	7.1	7.4	7.0	5.2	3.2
GROSS NAT'L PRODUCT ('82$)	3956.1	3985.2	4009.4	4033.4	4077.5	4103.4	4128.8	4150.9	4171.3	4183.7	4175.7	4148.0
CHANGE*	3.4	3.0	2.5	2.4	4.4	2.6	2.5	2.2	2.0	1.2	-0.8	-2.6
FINAL SALES ('82$)	3890.1	3949.9	3969.9	4004.4	4042.0	4069.9	4092.8	4112.4	4130.3	4140.2	4147.2	4152.0
CHANGE*	3.6	6.3	2.0	3.5	3.8	2.8	2.3	1.9	1.8	1.0	0.7	0.5
DOMESTIC FINAL SALES ('82$)@	4018.4	4059.3	4080.3	4119.1	4132.6	4156.4	4185.4	4209.9	4229.0	4236.2	4230.5	4214.7
CHANGE*	3.6	4.1	2.1	3.9	1.3	2.3	2.8	2.4	1.8	0.7	-0.5	-1.5
CYCLICAL DEMAND ('82$)#	1064.0	1090.4	1097.0	1104.5	1107.1	1122.3	1130.5	1138.5	1142.9	1138.1	1123.2	1101.2
CHANGE*	7.4	10.3	2.4	2.8	0.9	5.6	2.9	2.9	1.5	-1.7	-5.1	-7.6
NONCYCLICAL DEMAND ('82$)&	2954.4	2968.9	2983.3	3014.6	3025.5	3034.1	3054.9	3071.4	3086.1	3098.1	3107.3	3113.5
CHANGE*	2.3	2.0	2.0	4.3	1.5	1.1	2.8	2.2	1.9	1.6	1.2	0.8
PRIVATE FINAL SALES ('82$)**	3113.7	3166.1	3196.4	3208.9	3243.8	3260.9	3280.0	3295.1	3309.3	3316.2	3322.0	3325.6
CHANGE*	6.7	6.9	3.9	1.6	4.4	2.1	2.4	1.9	1.7	0.8	0.7	0.4
PERSONAL CONSUMP. EXP ('82$)	2559.8	2579.0	2603.8	2626.2	2634.9	2646.6	2663.8	2677.6	2687.6	2692.8	2696.8	2694.4
CHANGE*	4.5	3.0	3.9	3.5	1.3	1.8	2.6	2.1	1.5	0.8	0.6	-0.4
DURABLE GOODS	401.1	410.6	410.4	416.5	412.3	418.0	418.2	420.0	419.0	415.2	411.2	403.8
AUTO + PARTS	173.5	179.0	178.7	179.6	172.6	175.3	172.5	171.8	168.8	164.0	160.5	153.6
OTHER	227.6	231.6	231.7	236.9	239.7	242.7	245.7	248.2	250.2	251.2	250.7	250.2
NONDURABLE GOODS	892.7	893.6	904.5	907.4	911.5	904.5	911.5	914.5	917.5	919.5	921.5	922.5
SERVICES	1265.9	1274.8	1288.9	1302.2	1311.1	1324.1	1334.1	1343.1	1351.1	1358.1	1364.1	1368.1
GROSS PRI. DOM. INV. ('82$)	728.9	715.1	726.1	717.1	730.2	737.8	748.3	757.1	764.9	766.4	740.4	693.5
CHANGE*	2.3	-7.4	6.3	-4.9	7.5	4.2	5.8	4.8	4.2	0.8	-12.9	-23.1
FIXED PRIVATE INVEST.	662.9	679.7	686.6	688.0	694.8	704.3	712.3	718.6	723.9	722.9	711.9	697.5
CHANGE*	3.3	10.5	4.1	0.8	4.0	5.6	4.6	3.6	3.0	-0.6	-5.9	-7.9
FIXED BUS. INVEST.	473.4	490.2	495.0	491.4	500.5	511.0	519.5	526.5	532.0	535.5	531.0	519.0
STRUCTURES	124.0	125.0	125.8	125.5	125.9	126.4	126.9	127.4	127.9	128.4	126.4	121.4
PRODUCERS' DURABLE EQ.	349.4	365.1	369.2	365.9	374.6	384.6	392.6	399.1	404.1	407.1	404.6	397.6
RESIDENTIAL STRUCTURES	189.5	189.6	191.6	196.6	194.3	193.3	192.8	192.1	191.9	187.4	180.9	178.5
CHG. IN BUS. INVENTORIES	66.0	35.3	39.5	29.1	35.5	33.5	36.0	38.5	41.0	43.5	28.5	-4.0
CHG. IN FARM INVENTORIES	14.1	5.3	-0.8	-8.5	9.2	1.0	1.0	1.0	1.0	1.0	1.0	1.0
NET EXPORTS ('82$)	-109.0	-92.6	-93.9	-105.4	-85.9	-89.9	-96.0	-101.1	-102.2	-99.5	-86.8	-66.2
EXPORTS	486.2	496.9	514.0	522.1	540.7	546.9	554.5	560.8	565.6	569.2	573.7	581.0
CHANGE*	25.7	9.1	14.5	6.5	15.0	4.7	5.7	4.6	3.5	2.6	3.2	5.2
IMPORTS	595.1	589.5	607.9	627.4	626.6	636.8	650.6	661.8	667.8	668.7	660.5	647.3
CHANGE*	6.9	-3.7	13.1	13.5	-0.5	6.7	8.9	7.1	3.6	0.5	-4.8	-7.8
GOVERNMENT PURCHASES ('82$)	776.4	783.8	773.5	795.5	798.2	809.0	812.8	817.3	821.0	824.0	825.2	826.4
CHANGE*	-7.9	3.9	-5.2	11.9	1.4	5.5	1.9	2.2	1.8	1.5	0.6	0.6
FEDERAL	327.8	331.6	320.1	335.5	335.8	343.1	343.6	345.1	346.1	347.6	348.1	348.6
DEFENSE	264.6	263.6	256.4	262.5	256.6	256.6	256.6	258.1	258.6	259.1	259.6	260.1
OTHER	63.2	67.9	63.7	72.9	79.1	86.5	87.0	87.0	87.5	88.5	88.5	88.5
CHG. IN CCC INVENTORIES	-19.3	-16.8	-16.5	-9.4	-4.7	3.5	3.5	3.5	3.5	3.5	3.5	3.5
STATE + LOCAL	448.7	452.2	453.4	460.0	462.4	465.9	469.2	472.2	474.9	476.4	477.1	477.8

* QUARTER - TO - QUARTER PERCENT CHANGES EXPRESSED AT COMPOUND ANNUAL RATES
A-ACTUAL; E-ESTIMATED; P-PRELIMINARY; R-REVISED
@ GNP LESS NET EXPORTS AND CHANGES IN BUSINESS INVENTORIES AND CCC INVENTORIES
# FIXED PRIVATE INVESTMENT, AUTO CONSUMPTION AND OTHER DURABLE CONSUMPTION
& DOMESTIC FINAL SALES LESS CYCLICAL DEMAND
** FINAL SALES LESS GOVERNMENT SPENDING

MMB - ECONOMICS GROUP
JULY 17, 1989

TABLE 1.2
RELATED QUARTERLY DATA

	I(A) 1988	II(A) 1988	III(A) 1988	IV(A) 1988	I(A) 1989	II(E) 1989	III(E) 1989	IV(E) 1989	I(E) 1990	II(E) 1990	III(E) 1990	IV(E) 1990
CORPORATE PROFITS (B.T.)	286.2	305.9	313.9	320.6	320.2	319.5	315.9	311.6	310.2	305.0	294.3	278.1
CORPORATE PROFITS (A.T.)	149.4	162.7	169.1	174.5	172.6	172.0	170.1	167.8	167.0	164.2	158.5	149.7
CHANGE*	10.6	40.7	16.7	13.4	-4.3	-1.3	-4.5	-5.2	-1.9	-6.5	-13.3	-20.3
INTERNAL FUNDS (A.T.)	387.9	393.5	396.3	409.9	388.9	400.9	410.7	414.7	418.8	421.0	420.7	417.7
CHANGE*	3.8	5.9	2.9	14.4	-19.0	12.9	10.2	4.0	4.0	2.1	-0.3	-2.8
PERSONAL INCOME	3951.4	4022.4	4094.0	4180.5	4315.7	4392.3	4471.7	4552.6	4635.4	4720.7	4783.4	4846.8
CHANGE*	4.6	7.4	7.3	8.7	13.6	7.3	7.4	7.4	7.5	7.6	5.4	5.4
DISPOSABLE INCOME	3375.6	3421.5	3507.5	3582.5	3680.6	3737.8	3830.0	3899.3	3970.3	4043.3	4097.0	4151.3
CHANGE*	7.4	5.6	10.4	8.8	11.4	6.4	10.2	7.4	7.5	7.6	5.4	5.4
SAVINGS RATE	4.4	3.7	4.2	4.3	5.4	4.9	5.4	5.5	5.5	5.7	5.4	5.4
CIVILIAN POPULATION (MIL.)	184.0	184.4	184.8	185.3	185.8	186.2	186.6	187.1	187.6	188.0	188.5	189.0
CHANGE*	1.1	0.9	1.0	0.9	1.1	0.9	1.0	1.0	1.0	1.0	1.0	1.0
CIVILIAN EMPLOYMENT (MIL.)	114.2	114.7	115.2	115.8	116.9	117.3	117.7	118.1	118.4	118.7	118.4	118.1
CHANGE*	2.4	1.9	1.8	2.2	3.7	1.3	1.4	1.4	1.2	1.0	-1.0	-1.0
CIVILIAN UNEMPLOYMENT RATE	5.7	5.5	5.5	5.3	5.2	5.3	5.4	5.4	5.6	5.8	6.5	7.2
EMPLOYMENT RATIO	62.05	62.20	62.33	62.53	62.93	63.00	63.05	63.11	63.14	63.14	62.82	62.51
LABOR PRODUCTIVITY*	3.3	-2.5	2.2	0.7	-1.1	1.3	1.3	1.1	1.0	0.6	0.7	-0.6
HOURLY COMPENSATION*	3.6	4.2	5.8	5.1	5.5	5.6	5.8	6.0	6.5	6.5	6.5	6.5
UNIT LABOR COSTS*	0.2	6.8	3.6	4.1	6.8	4.3	4.5	4.9	5.5	5.9	5.8	7.1
GNP DEFLATOR ('82=100)*	1.7	5.5	4.7	5.3	3.6	5.8	4.8	4.8	5.3	5.7	6.0	6.0
CONSUMER PRICE INDEX *	3.6	4.5	4.7	4.4	5.4	6.9	4.7	4.9	5.5	6.1	6.4	6.4
C.P.I. ENERGY (7.3%)*	-4.1	2.4	2.6	0.3	5.8	33.0	2.5	0.0	3.0	3.0	5.0	5.0
C.P.I. FOOD (16.2%)*	3.2	5.0	8.4	4.4	6.4	7.1	5.0	5.5	5.7	6.0	6.0	6.0
C.P.I. COM. LESS F&E(25.7%)*	2.9	5.0	2.4	4.8	4.0	3.5	4.0	4.4	5.0	5.7	6.5	6.5
C.P.I. SER. LESS EN.(50.8%)*	5.3	4.5	4.9	5.1	5.7	4.7	5.3	5.6	6.1	6.7	6.7	6.7
PRODUCER PRICE INDEX*	2.4	3.2	4.7	3.5	9.1	6.6	5.8	6.2	6.7	7.0	7.0	7.0
INDEX OF IND. PROD. ('67=100)	134.5	136.0	138.4	139.9	140.7	141.4	142.4	143.8	144.9	145.2	143.4	141.6
CHANGE*	4.0	4.5	7.1	4.5	2.2	2.0	3.0	4.0	3.0	1.0	-5.0	-5.0
UTILIZATION RATE	82.4	82.9	83.7	84.1	84.0	83.8	83.9	84.1	84.2	84.0	82.4	80.9
NEW CAR SALES (MIL.)	10.70	10.46	10.66	10.50	9.73	10.25	10.00	9.90	9.70	9.40	9.20	8.80
CHANGE*	30.0	-8.7	7.9	-6.0	-26.2	23.3	-9.5	-3.9	-7.8	-11.8	-8.2	-16.3
DOMESTIC	7.64	7.37	7.60	7.47	6.92	7.27	7.20	7.13	7.03	6.82	6.72	6.42
FOREIGN	3.06	3.09	3.06	3.03	2.81	2.98	2.80	2.77	2.67	2.59	2.48	2.38
NEW LIGHT TRUCK SALES (MIL.)	4.77	4.79	5.01	4.63	4.49	4.66	4.70	4.67	4.58	4.42	4.09	3.71
CHANGE*	27.9	1.5	19.4	-26.8	-11.9	16.6	3.4	-2.5	-7.5	-13.3	-27.0	-31.9
PRIVATE HOUSING STARTS (MIL.)	1.48	1.48	1.47	1.56	1.52	1.35	1.40	1.42	1.35	1.25	1.20	1.20
CHANGE*	-12.8	0.1	-2.8	27.5	-10.2	-37.3	15.7	5.8	-18.3	-26.5	-15.1	0.0
SINGLE-FAMILY	1.10	1.06	1.06	1.14	1.07	1.02	1.05	1.05	1.00	0.90	0.85	0.85
MULTI-FAMILY	0.38	0.42	0.41	0.42	0.45	0.33	0.35	0.37	0.35	0.35	0.35	0.35
EXISTING HOME SALES (MIL.)	3.30	3.64	3.66	3.77	3.48	3.31	3.37	3.41	3.32	3.17	3.03	2.92
CHANGE*	-10.2	48.5	2.2	12.2	-27.7	-18.1	7.8	4.5	-10.3	-16.0	-16.5	-14.7

* QUARTER - TO - QUARTER PERCENT CHANGES EXPRESSED AT COMPOUND ANNUAL RATES
A-ACTUAL; E-ESTIMATED; P-PRELIMINARY; R-REVISED

MHB - ECONOMICS GROUP
JULY 17, 1989

TABLE 2.1
ECONOMIC, MONETARY AND CREDIT OUTLOOK
FULL YEAR ANNUAL AVERAGES

	88(A)	89(E)	90(E)	87/84	88/87	89/88	90/89	91/90	92/91	93/92	94/93
	ABSOLUTE LEVELS			ANNUAL PERCENT CHANGE							
GROSS NATIONAL PRODUCT	4864.3	5249.2	5604.9	6.3	7.5	7.9	6.8	7.2	8.6	7.4	7.0
GROSS NATIONAL PRODUCT ('82$)	3996.0	4115.2	4169.7	3.2	3.9	3.0	1.3	1.8	4.9	3.1	2.3
FINAL SALES ('82$)	3953.6	4079.3	4142.4	3.5	3.7	3.2	1.5	2.1	4.1	3.2	2.5
DOMESTIC FINAL SALES ('82$) @	4069.3	4171.1	4227.6	3.8	3.1	2.5	1.4	1.5	5.2	3.8	2.6
PRIVATE FINAL SALES ('82$) #	3171.3	3270.0	3318.3	3.2	4.6	3.1	1.5	2.4	4.7	3.6	2.9
PERSONAL INCOME	4062.1	4433.1	4746.6	6.7	7.5	9.1	7.1	6.3	6.6	7.1	7.3
CORPORATE PROFITS (A.T.)	163.9	170.6	159.9	-0.7	14.7	4.1	-6.3	5.7	13.6	-1.5	-12.2
INTERNAL FUNDS (A.T.)	396.9	403.8	419.6	2.8	4.8	1.7	3.9	8.6	10.5	4.3	1.9
CIVILIAN EMPLOYMENT (MIL.)	115.0	117.5	118.4	2.3	2.3	2.2	0.8	0.8	2.7	2.0	1.7
CIVILIAN UNEMPLOYMENT RATE	5.5	5.3	6.3	-6.2	-11.2	-3.5	18.2	7.2	-13.0	-9.4	-9.4
LABOR PRODUCTIVITY	110.6	111.1	112.1	1.4	1.5	0.5	0.9	1.2	2.0	1.3	0.9
HOURLY COMPENSATION	198.1	208.9	222.0	4.1	4.7	5.5	6.3	5.6	3.7	4.3	5.0
UNIT LABOR COSTS	179.1	188.1	198.2	2.7	3.1	5.0	5.4	4.4	1.7	3.0	4.1
GNP DEFLATOR ('82=100)	121.7	127.6	134.4	3.0	3.4	4.8	5.4	5.3	3.5	4.2	4.6
CPI ('82=100)	118.4	124.6	131.6	3.0	4.1	5.2	5.7	5.6	3.8	4.4	4.7
PPI ('82=100)	108.0	114.5	122.1	0.5	2.5	6.0	6.6	5.3	2.5	4.4	4.9
INDX. OF IND. PROD. (67=100)	137.2	142.1	143.8	2.3	5.7	3.6	1.2	-0.1	8.5	6.0	4.4
UTILIZATION RATE	83.3	84.0	82.9	-0.1	3.2	0.8	-1.3	-2.4	5.8	3.4	1.9
FRB TRADE-WEIGHTED $ INDEX	92.7	99.4	96.6	-11.2	-4.3	7.1	-2.8	-6.3	-4.3	-0.1	0.0
PRODUCT-SPECIFIC DATA											
NEW CAR SALES (MIL.)	10.58	9.97	9.28	-0.3	2.9	-5.8	-7.0	1.1	18.0	6.0	0.0
DOMESTIC (MIL.)	7.52	7.13	6.75	-3.8	6.1	-5.2	-5.3	4.3	19.5	6.0	1.3
FOREIGN (MIL.)	3.06	2.84	2.53	9.4	-4.2	-7.1	-11.1	-7.4	13.4	6.0	-4.2
NEW LIGHT TRUCK SALES (MIL.)	4.80	4.63	4.20	6.6	4.2	-3.5	-9.3	3.4	31.9	9.9	4.0
PRI. HOUSING STARTS (MIL.)	1.49	1.42	1.25	-2.6	-8.5	-4.9	-12.1	26.0	10.0	-4.2	-10.5
EXISTING HOME SALES (MIL.)	3.59	3.39	3.11	7.9	-0.2	-5.7	-8.3	7.7	18.0	2.4	-3.0
M1	776.0	783.6	819.4	11.4	4.3	1.0	4.6	8.0	11.4	9.2	8.6
M2	3009.4	3104.0	3280.8	7.9	5.1	3.1	5.7	6.9	7.1	7.4	7.4
SM. DENOM. NONTRANS.(M2 - M1)	2233.4	2320.4	2461.4	6.8	5.4	3.9	6.1	6.5	5.7	6.7	7.0
M3	3818.7	3997.4	4280.7	8.1	6.3	4.7	7.1	7.8	6.7	7.2	7.4
LG. DENOM. NONTRANS.(M3 - M2)	807.9	893.2	999.9	8.5	10.9	10.6	11.9	10.7	5.4	6.7	7.5
CONS. INSTAL. DEBT	637.7	705.6	752.1	12.8	8.5	10.6	6.6	4.7	11.5	11.5	10.6
AUTO LOANS	276.7	294.8	315.6	17.0	7.7	6.6	7.1	5.3	11.3	13.1	12.9
REVOLVING CREDIT	165.0	188.7	209.2	17.2	14.0	14.4	10.9	8.9	15.6	13.9	12.8
MOBIL HOME LOANS	26.2	24.4	24.0	3.1	-4.2	-7.1	-1.4	0.0	0.0	0.0	0.0
OTHER CONS. CREDIT	169.9	197.7	203.2	5.8	6.8	16.4	2.8	-0.1	8.4	7.2	4.7
MORTGAGE DEBT	3006.3	3320.1	3680.8	14.0	10.3	10.4	10.9	11.1	13.7	14.1	13.0
SINGLE-FAMILY	2036.7	2264.1	2524.1	13.0	11.2	11.2	11.5	11.5	14.3	15.0	13.7
MULTI-FAMILY	281.5	302.7	325.6	14.7	5.8	7.5	7.6	9.5	13.5	13.8	12.1
COMMERCIAL	688.1	753.4	831.2	16.7	9.6	9.5	10.3	10.4	12.0	11.5	11.1
SHORT-TERM BUS. BORROWING	1007.9	1132.5	1238.5	10.1	11.0	12.4	9.4	6.2	9.5	12.1	12.6
C + I LOANS	587.9	626.5	677.8	7.2	6.2	6.6	8.2	5.2	8.8	12.4	13.6
COMMERCIAL PAPER	420.0	506.0	560.7	15.2	18.4	20.5	10.8	7.4	10.5	11.9	11.4

A-ACTUAL; E-ESTIMATED; P-PRELIMINARY; R-REVISED
ABSOLUTE LEVELS IN BILLIONS OF DOLLARS UNLESS OTHERWISE NOTED
@ GNP LESS NET EXPORTS AND CHANGES IN BUSINESS INVENTORIES AND CCC INVENTORIES
# FINAL SALES LESS GOVERNMENT SPENDING

JULY 17, 1989

TABLE 1.3
QUARTERLY MONETARY AND CREDIT DATA

	I(A) 1988	II(A) 1988	III(A) 1988	IV(A) 1988	I(A) 1989	II(E) 1989	III(E) 1989	IV(E) 1989	I(E) 1990	II(E) 1990	III(E) 1990	IV(E) 1990
M1 ($ BIL.)	760.8	772.9	782.9	787.4	786.7	775.8	781.4	790.7	803.8	815.9	825.2	832.5
CHANGE	3.2	6.6	5.2	2.4	-0.4	-5.4	2.9	4.8	6.8	6.1	4.6	3.6
M2 ($BIL.)	2950.2	3001.1	3029.5	3057.0	3071.2	3081.5	3110.6	3152.6	3204.3	3257.2	3307.4	3354.3
CHANGE*	6.3	7.1	3.8	3.7	1.9	1.3	3.8	5.5	6.7	6.8	6.3	5.8
SM. DENOM. NONTRANS. DEPOSITS ($ BIL.)												
(M2 LESS M1)	2189.4	2228.1	2246.7	2269.5	2284.7	2305.6	2329.2	2362.0	2400.5	2441.3	2482.2	2521.8
CHANGE*	7.3	7.3	3.4	4.1	2.7	3.7	4.2	5.8	6.7	7.0	6.9	6.5
M3 ($BIL.)	3730.7	3797.5	3850.2	3896.2	3932.3	3962.5	4012.7	4082.2	4159.2	4240.1	4321.6	4402.0
CHANGE*	7.0	7.4	5.7	4.9	3.8	3.1	5.2	7.1	7.8	8.0	7.9	7.7
LG. DENOM. NONTRANS. DEPOSITS ($ BIL.)												
(M3 LESS M2)	779.1	795.2	819.3	837.9	860.2	881.0	902.1	929.6	954.9	982.9	1014.1	1047.7
CHANGE*	9.3	8.5	12.7	9.4	11.0	10.1	9.9	12.7	11.3	12.3	13.3	13.9
CONS. INSTAL. DEBT ($ BIL.)	620.2	633.0	643.5	654.4	686.9	697.6	712.3	725.8	738.5	750.1	758.0	761.7
CHANGE*	11.3	8.5	6.8	6.9	21.4	6.4	8.7	7.8	7.2	6.4	4.3	1.9
AUTO LOANS ($ BIL.)	271.2	276.6	278.8	280.0	288.0	290.5	297.3	303.3	309.0	314.2	318.3	321.0
CHANGE*	11.2	8.2	3.3	1.7	11.9	3.6	9.6	8.3	7.7	6.9	5.4	3.4
REVOLVING CREDIT ($ BIL.)	158.0	162.4	166.9	172.7	179.4	186.4	191.9	197.3	202.7	208.0	211.9	214.4
CHANGE*	17.1	11.6	11.6	14.5	16.5	16.7	12.3	11.6	11.4	10.9	7.8	4.7
MOBIL HOME LOANS ($ BIL.)	26.5	26.2	26.2	25.9	25.4	24.0	24.0	24.0	24.0	24.0	24.0	24.0
CHANGE*	-6.5	-4.0	-0.1	-4.5	-7.9	-20.0	0.0	0.0	0.0	0.0	0.0	0.0
OTHER CONS. CREDIT($ BIL.)	164.4	167.7	171.5	175.8	194.1	196.7	199.0	201.2	202.8	203.9	203.8	202.3
CHANGE*	9.3	8.3	9.3	10.3	48.7	5.4	4.9	4.5	3.3	2.1	-0.2	-2.8
HOME EQUITY LOANS ($ BIL.)	17.7	18.9	19.8	21.2	22.6	24.2	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
CHANGE*	65.8	29.0	21.4	32.3	29.4	30.2	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
MORTGAGE DEBT ($ BIL.)	2896.0	2970.2	3045.2	3113.9	3182.8	3270.9	3367.1	3459.7	3539.3	3639.6	3730.5	3813.7
CHANGE*	6.0	10.7	10.5	9.3	9.1	11.5	12.3	11.5	9.5	11.8	10.4	9.2
SINGLE-FAMILY ($ BIL.)	1951.4	2012.3	2067.9	2115.2	2162.0	2227.4	2299.8	2367.3	2420.9	2494.7	2560.8	2619.8
CHANGE*	5.6	13.1	11.5	9.5	9.2	12.7	13.6	12.3	9.4	12.8	11.0	9.5
MULTI-FAMILY ($ BIL.)	278.1	278.9	281.5	287.6	294.3	299.9	305.3	311.2	317.2	323.4	328.3	333.4
CHANGE*	6.3	1.1	3.7	9.0	9.6	7.9	7.3	8.0	7.9	8.0	6.3	6.4
COMMERCIAL ($ BIL.)	666.5	679.0	695.8	711.1	726.5	743.6	762.1	781.2	801.2	821.5	841.4	860.5
CHANGE*	7.0	7.8	10.2	9.1	8.9	9.8	10.3	10.4	10.6	10.5	10.0	9.4
SHORT-TERM BUS. BORROWING #	959.0	1000.6	1025.5	1046.4	1095.7	1120.6	1143.4	1170.4	1199.7	1229.4	1254.5	1270.6
CHANGE*	13.9	18.5	10.3	8.4	20.2	9.4	8.4	9.8	10.4	10.3	8.4	5.2
C. AND I. LOANS ($ BIL.)	567.7	585.6	598.3	599.9	611.8	621.0	629.9	643.3	658.2	673.4	686.0	693.7
CHANGE*	4.3	13.2	8.9	1.1	8.2	6.1	5.9	8.7	9.6	9.6	7.7	4.5
COMMERCIAL PAPER ($ BIL.)	391.3	415.0	427.2	446.4	483.9	499.6	513.4	527.2	541.5	556.1	568.4	576.9
CHANGE*	29.7	26.5	12.3	19.3	38.0	13.6	11.5	11.2	11.3	11.2	9.2	6.1
FRB TRADE-WEIGHTED $ INDEX	90.0	90.4	97.6	93.0	96.0	100.4	101.0	100.1	98.3	97.7	96.0	94.4
CHANGE*	-9.4	1.7	35.6	-17.6	13.5	19.7	2.6	-3.6	-7.2	-2.5	-6.7	-6.4
YEN/DOLLAR	128.0	125.7	133.7	125.1	128.5	137.9	140.0	136.7	132.4	128.3	124.2	120.3
CHANGE*	-20.7	-6.9	27.9	-23.3	11.1	32.7	6.3	-9.0	-12.0	-12.0	-12.0	-12.0
DM/DOLLAR	1.68	1.71	1.87	1.77	1.85	1.93	1.93	1.87	1.83	1.83	1.78	1.74
CHANGE*	-6.0	7.3	43.1	-18.6	18.7	18.2	0.0	-11.7	-9.5	0.0	-9.5	-9.1

* QUARTER-TO-QUARTER PERCENT CHANGES EXPRESSED AT COMPOUND ANNUAL RATES
A-ACTUAL; E-ESTIMATED; P-PRELIMINARY
\# C & I LOANS PLUS CP

MMB - ECONOMICS GROUP
JULY 17, 1989

TABLE 2.2
ECONOMIC, MONETARY AND CREDIT OUTLOOK
YEAR-END (FOURTH QUARTER) DATA

	88(A)	89(E)	90(E)	87/84	88/87	89/88	90/89	91/90	92/91	93/92	94/93
	ABSOLUTE LEVELS			PERCENT CHANGE							
GROSS NATIONAL PRODUCT	4999.7	5391.4	5697.4	6.6	7.2	7.8	5.7	9.1	7.8	7.4	6.6
GROSS NATIONAL PRODUCT ('82$)	4033.4	4150.9	4148.0	3.5	2.8	2.9	-0.1	4.4	4.2	2.7	2.0
FINAL SALES ('82$)	4004.4	4112.4	4152.0	3.3	3.9	2.7	1.0	3.5	3.9	2.9	2.2
DOMESTIC FINAL SALES ('82$) @	4119.1	4209.9	4214.7	3.5	3.4	2.2	0.1	3.7	5.0	3.2	2.2
PRIVATE FINAL SALES ('82$) #	3208.9	3295.1	3325.6	3.0	4.8	2.7	0.9	4.0	4.5	3.2	2.5
PERSONAL INCOME	4180.5	4552.6	4846.8	7.0	7.0	8.9	6.5	6.6	6.7	7.3	7.3
CORPORATE PROFITS (A.T.)	174.5	167.8	149.7	1.5	19.8	-3.8	-10.8	22.9	5.4	-5.2	-16.2
INTERNAL FUNDS (A.T.)	409.9	414.7	417.7	2.3	6.7	1.2	0.7	15.3	6.4	3.7	1.0
CIVILIAN EMPLOYMENT (MIL.)	115.8	118.1	118.1	2.3	2.1	1.9	0.0	2.1	2.5	1.8	1.7
CIVILIAN UNEMPLOYMENT RATE	5.3	5.4	7.2	-6.9	-9.6	1.3	33.3	-13.9	-8.1	-12.3	-4.0
LABOR PRODUCTIVITY	110.9	111.6	112.1	1.6	0.9	0.6	0.4	2.1	1.7	1.1	0.7
HOURLY COMPENSATION	201.9	213.4	227.3	4.3	4.7	5.7	6.5	4.6	3.6	4.7	5.0
UNIT LABOR COSTS	182.0	191.3	202.9	2.6	3.6	5.1	6.1	2.5	1.9	3.6	4.3
GNP DEFLATOR ('82=100)	124.0	129.9	137.4	2.9	4.3	4.7	5.7	4.5	3.5	4.6	4.5
CPI ('82=100)	120.3	126.9	134.6	3.1	4.3	5.5	6.1	4.8	3.7	4.8	4.6
PPI ('82=100)	109.5	117.1	125.2	0.6	3.4	6.9	6.9	3.7	2.9	4.9	5.0
INDX. OF IND. PROD. (67=100)	139.9	143.8	141.6	2.8	5.0	2.8	-1.6	4.8	7.6	5.2	4.1
UTILIZATION RATE	84.1	84.1	80.9	0.5	2.4	0.0	-3.8	2.4	5.0	2.7	1.6
FRB TRADE-WEIGHTED $ INDEX	93.0	100.1	94.4	-14.4	0.7	7.7	-5.7	-6.5	-2.0	0.0	0.0
PRODUCT-SPECIFIC DATA											
NEW CAR SALES (MIL.)	10.50	9.90	8.80	-0.9	4.7	-5.7	-11.1	13.6	15.0	2.2	-0.9
DOMESTIC (MIL.)	7.47	7.13	6.42	-4.5	12.0	-4.6	-9.9	18.3	15.0	2.2	0.5
FOREIGN (MIL.)	3.03	2.77	2.38	7.9	-9.7	-8.4	-14.3	1.0	15.0	2.2	-5.0
NEW LIGHT TRUCK SALES (MIL.)	4.63	4.67	3.71	4.7	3.2	0.9	-20.5	33.2	22.2	5.9	3.2
PRI. HOUSING STARTS (MIL.)	1.56	1.42	1.20	-2.1	2.0	-8.9	-15.5	37.5	4.8	-7.5	-11.3
EXISTING HOME SALES (MIL.)	3.77	3.41	2.92	6.6	11.2	-9.6	-14.4	24.4	11.6	-0.7	-4.1
M1	787.4	790.7	832.5	11.3	4.3	0.4	5.3	11.2	10.1	9.0	8.3
M2	3057.0	3152.6	3354.3	7.4	5.2	3.1	6.4	7.4	6.9	7.6	7.3
SM. DENOM. NONTRANS.(M2 - M1)	2269.5	2362.0	2521.8	6.2	5.5	4.1	6.8	6.1	5.9	7.1	6.9
M3	3896.2	4082.2	4402.0	7.5	6.2	4.8	7.8	7.5	6.6	7.5	7.3
LG. DENOM. NONTRANS.(M3 - M2)	837.9	929.6	1047.7	7.7	10.0	10.9	12.7	7.9	5.5	7.2	7.5
CONS. INSTAL. DEBT	654.4	725.8	761.7	11.4	8.4	10.9	4.9	7.0	12.4	11.0	10.4
AUTO LOANS	280.0	303.3	321.0	15.5	6.0	8.3	5.8	7.0	12.7	13.2	12.7
REVOLVING CREDIT	172.7	197.3	214.4	15.6	13.7	14.3	8.7	11.9	15.6	13.2	12.7
MOBIL HOME LOANS	25.9	24.0	24.0	1.8	-3.8	-7.4	0.0	0.0	0.0	0.0	0.0
OTHER CONS. CREDIT	175.8	201.2	202.3	4.3	9.3	14.5	0.6	2.5	9.6	5.8	4.1
MORTGAGE DEBT	3113.9	3459.7	3813.7	14.1	9.1	11.1	10.2	12.3	14.2	13.8	12.6
SINGLE-FAMILY	2115.2	2367.3	2619.8	13.4	9.9	11.9	10.7	12.7	14.9	14.7	13.3
MULTI-FAMILY	287.6	311.2	333.4	13.9	5.0	8.2	7.1	11.7	14.0	13.4	11.2
COMMERCIAL	711.1	781.2	860.5	16.0	8.5	9.9	10.1	11.1	12.0	11.2	11.0
SHORT-TERM BUS. BORROWING #	1046.4	1170.4	1270.6	8.8	12.7	11.9	8.6	6.3	11.1	12.4	12.7
C + I LOANS	599.9	643.3	693.7	6.1	6.8	7.2	7.8	5.2	10.8	12.9	13.9
COMMERCIAL PAPER	446.4	527.2	576.9	13.5	21.8	18.1	9.4	7.7	11.6	11.8	11.2

A-ACTUAL; E-ESTIMATED; P-PRELIMINARY; R-REVISED
ABSOLUTE LEVELS IN BILLIONS OF DOLLARS UNLESS OTHERWISE NOTED
@ GNP LESS NET EXPORTS AND CHANGES IN BUSINESS INVENTORIES AND CCC INVENTORIES
# FINAL SALES LESS GOVERNMENT SPENDING

JULY 17, 1989

TABLE 3.1

SELECTED SHORT-TERM INTEREST RATES

	PRIME RATE	FED FUNDS RATE	1-MO CD RATE	3-MO CDS SEC MARKET	3-MO CDS RES ADJ	6-MO CDS	3-MO EUROS O/N EUROS	3-MO EUROS MARKET	3-MO EUROS RES ADJ	6-MO EUROS	3-MO BAS	1-MO CP	3-MO CP	POOL RATE
JAN 1989	10.50	9.12	9.06	9.20	9.57	9.36	8.93	9.30	9.59	9.38	8.93	9.03	9.04	9.48
FEB 1989	10.93	9.36	9.33	9.51	9.89	9.71	9.16	9.63	9.93	9.80	9.27	9.29	9.37	9.77
MAR 1989	11.50	9.85	9.92	10.09	10.49	10.40	9.70	10.18	10.49	10.47	9.83	9.89	9.95	10.33
APR 1989	11.50	9.84	9.81	9.94	10.33	10.13	9.69	10.05	10.36	10.23	9.68	9.77	9.81	10.22
MAY 1989	11.50	9.81	9.61	9.59	9.97	9.60	9.66	9.64	9.94	9.63	9.35	9.58	9.47	9.97
JUN 1989	11.07	9.53	9.35	9.20	9.57	9.09	9.47	9.28	9.57	9.15	8.97	9.34	9.11	9.61
JUL 1989	10.75	9.12	8.92	8.80	9.16	8.60	9.20	8.88	9.15	8.80	8.55	8.92	8.65	9.20
AUG 1989	10.37	8.65	8.65	8.62	8.97	8.70	8.65	8.70	8.97	8.78	8.50	8.50	8.55	8.92
SEP 1989	10.25	8.65	8.55	8.65	9.00	8.73	8.53	8.74	9.01	8.82	8.49	8.52	8.55	8.94
OCT 1989	10.37	8.76	8.65	8.75	9.11	8.82	8.64	8.85	9.12	8.91	8.59	8.62	8.65	9.05
NOV 1989	10.57	9.15	9.01	9.12	9.49	9.17	9.02	9.23	9.51	9.26	8.95	8.98	9.00	9.43
DEC 1989	10.96	9.55	9.39	9.50	9.88	9.52	9.41	9.62	9.92	9.62	9.32	9.35	9.37	9.83
QUARTERLY DATA														
Q1 1988	8.59	6.66	6.63	6.72	7.01	6.86	6.58	6.86	7.07	6.99	6.59	6.63	6.69	6.97
Q2 1988	8.78	7.16	7.08	7.22	7.53	7.45	7.04	7.36	7.58	7.55	7.10	7.09	7.18	7.49
Q3 1988	9.71	7.98	7.98	8.17	8.51	8.45	7.79	8.29	8.55	8.54	8.01	7.97	8.08	8.42
Q4 1988	10.18	8.47	8.65	8.80	9.15	8.86	8.32	8.91	9.18	8.93	8.55	8.60	8.67	9.01
Q1 1989	10.98	9.44	9.44	9.60	9.98	9.82	9.26	9.70	10.00	9.88	9.34	9.40	9.45	9.86
Q2 1989	11.36	9.73	9.59	9.58	9.96	9.61	9.61	9.66	9.96	9.67	9.33	9.56	9.46	9.94
Q3 1989	10.46	8.81	8.71	8.69	9.04	8.68	8.79	8.77	9.04	8.80	8.51	8.65	8.58	9.02
Q4 1989	10.63	9.15	9.02	9.12	9.49	9.17	9.02	9.23	9.52	9.26	8.96	8.98	9.01	9.43
Q1 1990	11.67	10.24	10.05	10.16	10.56	10.14	10.09	10.30	10.62	10.24	9.97	9.99	10.01	10.51
Q2 1990	12.40	10.86	10.62	10.75	11.16	10.68	10.69	10.91	11.25	10.80	10.53	10.55	10.57	11.12
Q3 1990	13.01	11.52	11.24	11.37	11.81	11.26	11.34	11.56	11.92	11.39	11.14	11.16	11.17	11.76
Q4 1990	13.35	11.78	11.49	11.62	12.07	11.49	11.59	11.82	12.19	11.63	11.38	11.39	11.40	12.02
ANNUAL DATA														
1984	12.04	10.23	10.17	10.37	10.78	10.68	10.15	10.73	11.06	11.09	10.15	10.05	10.10	10.65
1985	9.93	8.10	7.97	8.05	8.38	8.25	8.03	8.29	8.54	8.54	7.92	7.94	7.95	8.35
1986	8.33	6.81	6.62	6.52	6.81	6.51	6.83	6.71	6.92	6.70	6.39	6.62	6.50	6.86
1987	8.20	6.66	6.74	6.86	7.16	7.00	6.50	7.06	7.28	7.20	6.74	6.73	6.81	7.05
1988	9.32	7.57	7.59	7.73	8.05	7.90	7.43	7.85	8.10	8.00	7.56	7.57	7.66	7.97
1989	10.86	9.28	9.19	9.25	9.62	9.32	9.17	9.34	9.63	9.40	9.04	9.15	9.13	9.56
1990	12.61	11.10	10.85	10.98	11.40	10.89	10.93	11.15	11.49	11.02	10.75	10.77	10.79	11.35
1991	10.64	8.90	8.78	8.88	9.24	8.95	8.77	9.05	9.33	9.10	8.70	8.70	8.71	9.18
1992	8.44	6.81	6.82	6.90	7.20	7.10	6.73	7.04	7.26	7.27	6.75	6.75	6.76	7.15
1993	8.93	7.31	7.29	7.38	7.69	7.54	7.22	7.53	7.76	7.71	7.22	7.22	7.22	7.62
1994	9.51	7.90	7.85	7.94	8.27	8.07	7.80	8.11	8.36	8.24	7.77	7.77	7.77	8.20
1995-99	10.17	8.55	8.46	8.55	8.90	8.64	8.44	8.70	8.97	8.79	8.37	8.39	8.40	8.84

MMB ECONOMICS GROUP
JULY 14, 1989

JULY BASED ON PARTIAL DATA

TABLE 3.2

SELECTED LONG-TERM INTEREST RATES

	U.S. GOVERNMENT SECURITIES YIELD CURVE										OTHER INTEREST RATES			
							COUPON ISSUES				AUTO	FHLMC	NEW	MUNI
	T-BILL DISCOUNT RATE			ONE	TWO	THREE	FIVE	SEVEN	TEN	THIRTY	LOAN	COMMIT	AA	BOND
	3-MO	6-MO	12-MO	YR	YR	YR	YR	YR	YR	YR	RATE	RATE	UTILITY	RATE
JAN 1989	8.27	8.36	8.37	9.27	9.18	9.20	9.15	9.14	9.09	8.93	13.27	10.73	9.93	7.35
FEB 1989	8.53	8.55	8.55	9.49	9.37	9.32	9.27	9.23	9.17	9.01	13.07	10.65	10.13	7.44
MAR 1989	8.82	8.85	8.82	9.82	9.68	9.61	9.51	9.43	9.36	9.17	13.07	11.03	10.20	7.59
APR 1989	8.65	8.65	8.64	9.60	9.45	9.40	9.30	9.24	9.18	9.03	12.10	11.05	10.07	7.49
MAY 1989	8.43	8.41	8.31	9.20	9.02	8.98	8.91	8.88	8.86	8.83	11.80	10.77	9.79	7.25
JUN 1989	8.15	7.93	7.84	8.63	8.41	8.37	8.29	8.31	8.28	8.27	11.68	10.20	9.28	7.02
JUL 1989	7.76	7.55	7.25	7.93	7.75	7.80	7.82	7.90	8.00	8.05	11.51	9.95	9.05	7.00
AUG 1989	7.37	7.29	7.08	7.73	7.75	7.80	7.82	7.90	8.00	8.05	11.23	9.95	9.05	7.00
SEP 1989	7.25	7.17	6.97	7.60	7.62	7.66	7.68	7.76	7.85	7.90	11.09	9.89	8.88	6.90
OCT 1989	7.45	7.37	7.15	7.82	7.83	7.88	7.90	7.97	8.07	8.12	10.99	9.83	9.12	7.04
NOV 1989	7.86	7.75	7.51	8.24	8.26	8.30	8.32	8.40	8.49	8.54	11.04	10.02	9.60	7.33
DEC 1989	8.26	8.12	7.86	8.66	8.66	8.70	8.71	8.77	8.86	8.90	11.23	10.41	10.00	7.57
							QUARTERLY DATA							
Q1 1988	5.72	6.03	6.34	6.86	7.36	7.58	7.91	8.23	8.42	8.63	12.23	10.08	9.63	7.64
Q2 1988	6.21	6.49	6.82	7.42	7.87	8.10	8.42	8.73	8.91	9.06	12.30	10.37	10.20	7.83
Q3 1988	7.01	7.27	7.45	8.17	8.46	8.59	8.76	8.97	9.10	9.17	12.67	10.50	10.22	7.74
Q4 1988	7.73	7.86	7.91	8.72	8.70	8.75	8.80	8.90	8.96	8.97	13.18	10.39	9.93	7.51
Q1 1989	8.54	8.59	8.58	9.53	9.41	9.38	9.31	9.27	9.21	9.04	13.14	10.80	10.09	7.46
Q2 1989	8.41	8.33	8.26	9.14	8.96	8.92	8.83	8.81	8.77	8.71	11.86	10.67	9.71	7.25
Q3 1989	7.46	7.34	7.10	7.76	7.71	7.75	7.77	7.85	7.95	8.00	11.28	9.93	8.99	6.97
Q4 1989	7.86	7.75	7.51	8.24	8.25	8.29	8.31	8.38	8.47	8.52	11.09	10.09	9.57	7.31
Q1 1990	8.91	8.73	8.44	9.35	9.32	9.33	9.30	9.34	9.40	9.41	11.77	11.06	10.56	7.91
Q2 1990	9.47	9.26	8.93	9.96	9.89	9.86	9.80	9.81	9.84	9.83	12.43	11.66	11.03	8.19
Q3 1990	10.02	9.78	9.42	10.56	10.43	10.35	10.25	10.22	10.21	10.16	12.84	12.02	11.40	8.41
Q4 1990	10.24	9.99	9.61	10.80	10.65	10.55	10.42	10.37	10.35	10.28	13.17	12.27	11.54	8.49
							ANNUAL DATA							
1984	9.52	9.76	9.93	11.20	11.65	11.89	12.24	12.40	12.44	12.39	14.62	13.87	13.51	10.11
1985	7.48	7.65	7.81	8.60	9.27	9.64	10.13	10.51	10.62	10.79	11.98	12.42	11.84	9.10
1986	5.98	6.03	6.08	6.57	6.87	7.06	7.31	7.55	7.68	7.80	9.44	10.18	9.36	7.32
1987	5.78	6.03	6.32	6.85	7.41	7.67	7.94	8.22	8.38	8.58	10.73	10.21	9.72	7.64
1988	6.67	6.91	7.13	7.79	8.10	8.26	8.47	8.71	8.85	8.96	12.60	10.34	10.00	7.68
1989	8.07	8.00	7.86	8.67	8.58	8.59	8.56	8.58	8.60	8.57	11.84	10.37	9.59	7.25
1990	9.66	9.44	9.10	10.17	10.07	10.02	9.95	9.93	9.95	9.92	12.55	11.75	11.13	8.25
1991	7.97	7.82	7.54	8.29	8.58	8.64	8.67	8.75	8.86	8.91	12.12	10.92	10.01	7.57
1992	6.33	6.27	6.08	6.57	7.06	7.24	7.37	7.56	7.76	7.89	10.55	9.58	8.88	6.90
1993	6.72	6.65	6.45	6.99	7.45	7.61	7.72	7.89	8.06	8.18	10.80	9.88	9.20	7.09
1994	7.19	7.10	6.88	7.49	7.92	8.05	8.14	8.28	8.43	8.53	11.15	10.25	9.58	7.32
1995-99	7.66	7.55	7.32	8.03	8.28	8.36	8.40	8.50	8.61	8.67	11.50	10.46	9.73	7.40

MMB ECONOMICS GROUP
JULY 14, 1989

JULY BASED ON PARTIAL DATA

ECONOMIC PERFORMANCE, INFLATION AND MONETARY POLICY

TESTIMONY OF

MICKEY D. LEVY
CHIEF ECONOMIST
FIRST FIDELITY BANCORPORATION

SUBCOMMITTEE ON DOMESTIC MONETARY POLICY
COMMITTEE ON BANKING, FINANCE AND URBAN AFFAIRS
U.S. HOUSE OF REPRESENTATIVES

AUGUST 2, 1989

ECONOMIC PERFORMANCE, INFLATION AND MONETARY POLICY

Testimony of

Mickey D. Levy
Chief Economist
First Fidelity Bancorporation

Mr. Chairman and Members of the Committee, I am pleased to have this opportunity to appear before you today and present my views on the outlook for economic performance and inflation, and the crucial role monetary policy plays in the economy, particularly at this critical juncture of the cycle. My comments will focus on four issues: 1) the outlook for the economy, 2) the outlook for inflation, 3) implications for the federal budget, and 4) monetary policy objectives and an appropriate course of Federal Reserve action.

A brief summary of my views is:

° The rate of economic growth will continue to decelerate, and a mild recession is a better than even chance. I forecast real GNP growth to average less than 1 percent through year-end 1990. This outlook, which is based on the anticipated slowdown of export growth and the impact of the very tight monetary policy on domestic demand, is more pessimistic than projections of the Federal Reserve, the Administration, or the Congressional Budget Office.

° Inflation has increased since 1986 in response to the rapid acceleration in aggregate demand growth. Restrictive monetary policy has begun to slow growth, which should constrain inflationary pressures. Since the underlying rate of inflation lags shifts in demand growth, inflation should remain approximately 5 percent in the second half of 1989. Slower growth in real and nominal GNP growth in 1989-1990 will push inflation below 4 percent by year-end 1990 and lower in 1991.

° The federal budget deficit will remain far above official projections as weak economic growth suppresses tax revenues, eliminating any possibility of achieving the Gramm-Rudman-Hollings (GRH) deficit targets of $100 billion in Fiscal Year 1990 and $64 billion in FY1991. It is likely that actual and projected economic performance will be sufficiently weak to prompt Congress to vote to suspend the GRH sequestration process. The debate about an appropriate fiscal policy in a recessionary environment is disappointingly absent.

The Federal Reserve under Chairman Greenspan properly recognizes that low inflation is a necessary condition for sustained maximum economic growth, and in recent testimony has reaffirmed price stability as its fundamental objective. Contrary to the common misperception, there is <u>not</u> a tradeoff between anti-inflation efforts and long-run economic growth; they are complements.

° The Fed has tightened monetary policy in pursuit of its objectives. However, the degree of monetary restrictiveness has been excessive and, if sustained, may prove counterproductive. On a year-over-year basis, bank reserves are now declining at their most rapid rate since 1960, the broader monetary aggregates are either growing very slowly or declining, and the yield curve has been inverted since January 1989. The federal funds rate is a misleading measure of monetary policy because it reflects demand pressures associated with economic conditions as well as Federal

Reserve actions. The recent modest decline in the funds rate reflects primarily subsiding demand pressures, not monetary easing, and will not reignite economic growth.

° The Fed is urged to 1) immediately end the year-long trend of declining bank reserves which, if sustained, would generate continued declines in real money balances that would virtually guarantee recession, and 2) continue to pursue its low inflation objective even as economic growth weakens. The anticipated economic weakness is a transition cost of eliminating earlier excesses and reducing inflation. The Fed must avoid a dramatic shift to overly expansive monetary policy, which would arrest the disinflation process and create a fragile basis for economic growth in the early 1990s. Avoiding attempts to fine-tune the real economy or to manage the U.S. dollar exchange rate, and recognizing that monetary policy affects the economy and inflation with a lag, will help dampen wide swings in monetary policy that historically have generated undesired volatility in aggregate demand growth and inflation.

I. The Outlook for Economic Performance.

My assessment is that the economy is fragile, and real GNP growth is slowing sharply. Based on the Federal Reserve's tight monetary policy and other long-run indicators of economic activity, I forecast real GNP growth to average less than 1 percent through year-end 1990. There is a better than even chance of recession unfolding in the next year. In response to recent events, the Federal Reserve, the Administration, the Congressional Budget Office (CBO), and the majority of private forecasters have lowered their projections of real GNP growth. My outlook for real GNP growth remains more pessimistic than these other projections (See Table 1).

Real Indicators of Economic Weakness. The strong growth of real GNP in 1987-1988 was driven primarily by two sources: a) accelerating exports, which pushed up product demand and capacity utilization, and generated a surge in capital spending, and b) stronger domestic demand in response to the very stimulative monetary policy of 1985-1986 (See Chart 1).

Those two sources of economic strength have faded, and a period of sustained economic weakness is unfolding: export growth has begun to slow, and domestic demand growth is decelerating sharply in response to the recent restrictive monetary policy. Evidence of economic weakness is mounting, and I see no factors that suggest a reacceleration of growth.

Export growth is forecast to slow sharply, from its 15.7 percent annualized growth from fourth quarter 1986 to second quarter 1989, to an approximate 5 percent rate through year-end 1990 (See Chart 1). This slowdown is based on expected weaker demand for U.S. goods in response to the appreciation in the U.S. dollar since its December 1987 trough and the acceleration of price increases of U.S. exports, and tighter monetary policy in other industrialized nations, including some of the largest trading partners of the U.S. (Canada, Japan, and Germany), which should slow their economic growth.

As growth of exports and product demand have slowed, capacity utilization in U.S. manufacturing has begun to recede and business capital spending has softened. This trend should continue: I forecast capital spending to be nearly flat through year-end 1990, compared to its 8.1 percent growth rate since early 1987.

Growth of consumption and domestic demand has begun to slow sharply in response to the Fed's tight monetary policy. Real consumption grew at a 1.5 percent rate in the first half of 1989, compared to 3.8 percent from fourth quarter 1987 to fourth quarter 1988. Auto sales have been particularly weak, forcing sizeable cutbacks in auto production. Both residential and nonresidential construction activity have been very sluggish, reflecting the rise in interest rates, slack demand, and large available stocks. New housing starts have been in a declining trend, and residential investment fell sharply in the first half of 1989.

Industrial output has begun to respond to the slowdown in product demand. The index of industrial production has flattened and capacity utilization has declined from its January 1989 peak. Durable goods orders have declined, despite the sizeable increases in orders for civilian aircraft. Vendor deliveries, which measure the percentage of purchasing agents who are experiencing slower deliveries, and the purchasing managers index have fallen sharply from their June 1988 peaks (See Chart 2). The most recent reading of the purchasing managers index, 48.8 percent, is the second consecutive month below 50 percent, suggesting that a rising majority of respondents anticipate activity to decline.

Monetary Tightness and Economic Slowdown. Monetary policy affects economic activity with a lag, and domestic demand growth is just beginning to respond to nearly two years of monetary restrictiveness. Coupled with slower export growth, the monetary-induced slowdown in domestic demand will generate a prolonged period of economic weakness.

Some observers question whether monetary policy has been restrictive, or whether sustained shifts in Fed policy and money supply affect significantly economic growth and inflation. By almost any measure, monetary policy has been and remains very restrictive, and the linkages between money growth, aggregate demand, and inflation, are unmistakable.

Bank reserves are declining at their most rapid rate since 1960, and growth of the monetary base (reserves plus currency) has slowed to its lowest year-over-year growth rate since 1967 (See Chart 3). Sharply slower growth or declines in the broader measures of money, the inverted term structure of interest rates, declining commodity prices (particularly gold), and the stronger U.S. dollar, also reflect Fed tightness.

Two widely-followed monetary policy indicators that currently suggest monetary tightness -- year-over-year change in real M2 and the spread between the yield on the 30-year Treasury bond and the federal funds rate -- when combined, have always provided accurate predictions of major shifts in economic performance (See Chart 4). Every recent recession has been precipitated by a decline in real M2 and an inversion of the typical relationship between these short and long-term interest rates. The present situation is ominous: real M2 is declining on a year-over-year basis and the yield spread is significantly negative for the first time since the recessionary 1981-1982 period. Domestic demand growth has begun to respond to these tight monetary conditions.

In the early 1980s, financial deregulation and a downward shift in inflationary expectations and interest rates caused a one-time shift in the relationship between money, economic activity, and inflation. This has led some observers to argue that the relationship between money growth and economic activity has permanently broken down. In search of alternative indicators of monetary influence, some contend that monetary policy is not tight because the ratio of nonborrowed-to-required reserves (excluding extended credit) is above the range normally associated with monetary tightness. This argument is invalid. It is well documented that the ratio of nonborrowed-to-required reserves is a function of interest rate spreads and several other factors, and is not always a reliable proxy of monetary tightness or easiness. Moreover, the ratio, which has implied a net borrowed position since late 1988, has been prevented from falling further by the sharp declines in demand deposits (and their required reserves), not an excess of reserves.

Another specious argument is that the buoyant stock market suggests that monetary policy is not tight. However, the inversion of the yield curve and the decline in <u>long-term</u> interest rates associated with the monetary tightness would lift rather than suppress stock prices. In addition, the stock market is influenced by factors other than monetary policy, including actual and expected trends in the level and quality of corporate profits.

The argument that large swings in money growth have little impact on aggregate demand growth and inflation, implying a permanent and ongoing shift in money velocity, is <u>not</u> supported by empirical evidence. While there is evidence confirming a one-time downward shift in money velocity in the early 1980s, the relationship between money and domestic spending has since stabilized. One particularly misleading argument used to explain why velocity is rising and unstable is that recent widespread use of debt securitization increases the amount of credit to finance economic activity. This argument is based on the misperception that repackaging and reselling credit creates new credit, when in fact securitization merely redistributes the ownership of credit, but does not create it.

By properly accounting for the difference between domestic spending and domestic production, and the lags between monetary policy and economic activity, money growth provides a powerful guideline to trends in nominal domestic spending growth. Even if one allowed that money velocity moves around a wider range than earlier, the shift in annualized growth of reserves and M2 from 16.4 percent and 9.0 percent fourth quarter 1984 to fourth quarter 1986 to -2.7 percent and 2.7 percent in the past year clearly will generate wide swings in aggregate demand growth, economic performance, and inflation. Simply put, the recent swing in monetary policy is too dramatic to ignore.

The dampening impact of the monetary tightening on domestic demand will persist long after the Fed allows the federal funds rate to recede. While the funds rate is a policy lever of the Fed, it also reflects demand pressures associated with the rate and mix of economic growth. Since early 1989, the shift toward economic weakness and slower capital spending growth has implied subsiding demand pressures. As the economic environment has weakened, the Fed has drained reserves in order to prevent the funds rate from falling. Going forward, if the Fed only allows the funds rate to fall to reflect the subsiding demand pressures associated with the economic weakness, the Fed's actions will not represent a shift to stimulative monetary policy that reignites economic growth.

Will economic growth merely slow down, or will the economy fall into recession? In official statements, the Federal Reserve envisions a picture-perfect "soft landing." While policymakers like to talk about a soft landing, history suggests that they are very difficult to achieve, and shifting from a period of above average growth to undesirably sluggish activity is more common.

Concerning the soft landing versus recession debate, the issue is not so clear-cut; soft landings are in the eyes of the beholder. Based on the leading indicators, particularly monetary conditions, there is better than a 50 percent chance of a recession occurring. However, any recession would likely be mild, unlike the economic downturns of the early 1980s, for two reasons: 1) except in the automobile industry, nonfarm business inventories are very low, so that any fall-off in product demand would require less of a correction in production, and 2) the Fed's sensitivity about the potentially large adverse impact of a recession on the savings and loan industry, LBO debt, LDC debt, and the federal budget deficit would lead it to shift quickly toward a stimulative monetary policy. This may not prevent recession, but it may lessen its severity.

II. The Outlook for Inflation.

The trend of rising inflation is ending. I forecast the core rate of inflation to be approximately 5 percent in the second half of 1989, slightly below its first half rate, recede below 4 percent by year-end 1990, and fall further in 1991 (See Chart 5). My relative optimism stems from the Fed's restrictive monetary policy, and the expected lagged impact of slower nominal and real GNP growth on unit labor costs. Rising inflation is initiated by overly stimulative macroeconomic policies that generate excessive growth of product demand relative to long-run output capacity, or economic policies or other factors that suppress potential growth. Monetary policy does not affect long-run capacity, but does influence demand growth. As Chairman Greenspan stated in February 1989 and reaffirmed in his Humphrey-Hawkins testimony, "Inflation cannot persist without a supporting expansion in money and credit; conversely, price stability requires moderate growth in money."[1]

Persistent excess demand pushes up wages, unit labor costs, and prices. As a crude guideline, the core rate of inflation -- that is, reported inflation excluding any temporary impacts on the general price level of shifts in certain prices such as oil prices -- approaches the difference between the longer-term trend of nominal GNP (product demand) growth and the nation's capacity to grow. The underlying rate of inflation recedes in response to restrictive macroeconomic policies that slow demand growth -- that is, reduce the gap between nominal GNP growth and potential GNP growth.

A dramatic example of this inflation process began in the late 1970s, when an overly expansive monetary policy generated nominal GNP growth of nearly 12 percent. Wage increases shot up to 10 percent in 1979-1980 and, with declining productivity, increases in unit labor costs averaged 11 percent. Reported inflation was temporarily boosted above this level by the large jump in oil prices. The severe monetary tightening of 1979-1982 generated a sharp deceleration of nominal GNP growth to 5.6 percent in 1982-1983, which induced a dramatic decline in the core rate of inflation. Annual compensation increases fell to slightly above 4 percent from 1982 to 1986, and productivity gains helped generate lower increases in unit labor costs and inflation through 1986.

The present, milder inflation cycle was initiated in the mid-1980s by

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[1]Testimonies of Alan Greenspan, Chairman, Board of Governors of the Federal Reserve System, February 21, 1989 and July 20, 1989.

record-breaking money growth that contributed to the reacceleration in real and nominal GNP growth. The current monetary-induced economic slowdown, which will persist during the remainder of 1989 and in 1990, will restrain the recent acceleration of wages and unit labor costs, and eventually generate lower inflation. Historically, trends in unit labor costs have lagged changes in real and nominal GNP growth. Based on recent trends and my projection of slower growth of real and nominal GNP growth through 1990 (nominal GNP is projected to grow approximately 6 percent from fourth quarter 1988 to fourth quarter 1989 and 5 percent in 1990), unit labor cost increases will remain approximately 5 percent through year-end 1989, and then begin receding in early 1990. By year-end 1990, they should decline below 3.5 percent and slow further in 1991.

In 1987-1988, businesses incurred more rapid unit labor cost increases as they allowed wage increases to rise faster than productivity gains, but strong product demand enabled them to raise product prices more than operating costs and widen profit margins. As economic growth and product demand have slowed, unit labor cost increases have accelerated, reflecting a combination of lower productivity and wage momentum. However, in 1989, weaker demand has lessened the ability of businesses to raise product prices, and profit margins have been squeezed. Corporate profits have declined so far in 1989. As nominal growth softens further and margins narrow more, increases in wages and unit labor costs will begin to recede. This trend should begin in early 1990 and continue into 1991.

Consistent with this forecast of sharply slower economic growth and eventually lower inflation, I project significant declines in short-term interest rates through year-end 1990. While the Federal Reserve influences the timing of interest rate changes, in the longer term, rates reflect the economic and inflation fundamentals. Just as interest rates rose sharply from early 1987 to early 1989 associated with strong economic performance, rising investment share of GNP, and increasing inflation, I anticipate short-term interest rates to ratchet down to approximately 6 3/4 percent by year-end 1990 (See Chart 6).

III. Implications for the Federal Budget.

Based on this forecast of economic weakness, I project higher federal budget deficits in Fiscal Years 1990 and 1991 than either the Administration or the CBO (See Table 2). The sharp slowdown in economic growth will depress incomes and tax receipts below official current services estimates. Even though lower interest rates will reduce net interest outlays, the Administration already assumes substantial interest rate declines.[2] Accordingly, the rate declines will not improve its current services budget outlook. Net interest outlays will fall below earlier CBO baseline projections because they assume smaller rate declines than the Administration.[3] However, even if rates decline in line with the Administration's forecast, the term structure of the U.S. Treasury's publicly-held debt implies that the favorable impact on net interest outlays will be gradual, while the impact of the weaker economic growth on federal tax receipts will be immediate.

This economic weakness will eliminate any possibility of meeting the Gramm-Rudman-Hollings (GRH) deficit targets of $100 billion in FY1990 and

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[2]Executive Office of the President, Building a Better America, February 9, 1989, and Mid-Session Review of the 1990 Budget, July 18, 1989.

[3]Congressional Budget Office, The Economic and Budget Outlook: Fiscal Years 1990-1994, January 1989, and Statement of Robert D. Reischauer, Director, Congressional Budget Office, July 20, 1989.

$64 billion in FY1991. In its Mid-Session Review of the 1990 Budget, the Administration projects deficits of $105.1 billion in FY1990 and $88.0 billion in FY1991, excluding asset sales. I consider these forecasts unrealistic. The Administration's FY1990 deficit projection, which represents a dramatic cut from FY1989, requires substantial further deficit-cutting legislation and the seemingly inconsistent assumptions of continued healthy economic growth and declining real interest rates. Technical re-estimates by the CBO, based on its January 1989 economic assumptions, project that the deficit will be $116.8 billion in FY1990 and $138.1 billion in FY1991 if the costs of the Resolution Financing Corporation (REFCORP) of the pending legislation to restructure the savings and loan industry is placed off-budget (S.774), and $140.1 billion in FY1990 and $150.9 billion in FY1991 if the costs of the REFCORP are on-budget (H.R.1278).

If real GNP grows 1.7 percent from fourth quarter 1988 to fourth quarter 1989 and slightly less than 1 percent in 1990, and interest rates fall sharply in line with the Administration's projection, without enactment of the Administration's proposed legislation, deficits excluding the cost of REFCORP would be approximately $122 billion in FY1990 and $150 billion in FY1991. Deficit projections would be higher if either REFCORP is included on-budget or there is legislative slippage in the enactment of the Administration's proposed fiscal policy changes.

There is a high probability that the GRH sequestration process will be suspended by FY1991. Under the amended GRH law, if either 1) real GNP growth is below 1 percent for two consecutive quarters or 2) OMB or CBO forecast recession, the House and Senate must vote on a joint resolution to suspend sequestration. Congress is likely to vote to suspend sequestration. If deficit projections for FY1991 rise anywhere close to the levels I forecast, the percentage cuts to sequestered programs necessary to meet the current GRH deficit targets would be sufficiently large as to be undesirable economically and intolerable politically.

Presently, neither the Congress nor the Administration is considering seriously what should be an appropriate fiscal policy during or when emerging from recession or sharp economic slowdown. To date, GRH has provided a deterrent to rising deficit spending, but it has turned the budget process into a bean-counting game, relying heavily on tax increases (See Chart 7). GRH's porous sequestration process has generated a poorly designed and skewed mix of spending restraints. It has steered attention away from sorely needed structural changes in certain spending programs, particularly some of the fastest growing outlay programs that are excluded from sequestration. In general, GRH eludes debate about the critical issue of the optimal allocation of national resources.

Suspending GRH will only postpone addressing these important issues, and the higher deficits associated with economic weakness may not be an environment conducive to enacting a rational fiscal policy. Merely "re-benching" the GRH deficit targets and stretching-out the artificial deficit reduction schedule would not constitute meaningful fiscal policy reform.

IV. Monetary Policy Objectives and Policy.

The ultimate objective of the Federal Reserve and elected economic policy makers is healthy long-run economic growth. High and unpredictable inflation is inconsistent with sustained economic growth because it reduces economic efficiency, generates uncertainties about expected real rates of return on investment that dampen capital spending, and induces misallocations of productive resources. A credible monetary policy aimed at stable prices, on the other hand, reduces distortions in private decision making and encourages longer planning horizons and capital formation. Low inflation is a necessary ingredient to maximizing long-run economic growth and job creation.

Unfortunately, there is a widespread misperception that a policy of anti-inflation implies anti-growth. This notion has no conceptual basis, is not supported by historical trends, and is misleading to policymakers and the public. The Federal Reserve recognizes that low inflation and long-run economic growth are complements, and that monetary policy plays a crucial role in achieving low inflation. Federal Reserve Chairman Greenspan began his recent Humphrey-Hawkins testimony by referencing this "fundamental objective" of money policy: "That objective remains to maximize sustainable economic growth, which in turn requires the achievement of price stability over time."[4]

Chairman Greenspan has established the proper framework for achieving these objectives: "Price stability -- indeed, even preventing inflation from accelerating -- requires that aggregate demand be in line with potential aggregate supply. In the long run, that balance depends crucially on monetary policy."[5]

Historically, the Federal Reserve has not always followed a monetary policy consistent with these stated objectives. Bank reserves and money supply have swung wildly from periods of very rapid growth to declines and

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[4]Testimony of Alan Greenspan, Chairman, Board of Governors of the Federal Reserve System, July 20, 1989.

[5]"1989 Monetary Policy Objectives," Testimony of Alan Greenspan, Chairman, Board of Governors of the Federal Reserve System, February 21, 1989.

back again. This has generated erratic trends in domestic spending growth and, subsequently, inflation. Every recent recession has been precipitated by high and/or rising inflation and the Fed's belated and heavy-handed monetary tightening in an effort to subdue inflation. The sharp shift to monetary restrictiveness beginning October 1979 and the jarring economic downturns of the early 1980s were necessary costs of the earlier monetary excesses that generated double-digit demand growth and inflation.

A key factor underlying the sustained economic expansion since late 1982 has been low inflation, which trended down through 1986. The record-breaking money growth of 1985-1986, associated with the efforts of the Treasury to lower the U.S. dollar and the Fed to pump up the economy, contributed to the 1987-1988 acceleration in demand growth. The resulting rise in inflation and the Fed's response to it now threaten this economic expansion. Less erratic monetary policy would improve economic performance.

Sources of Monetary Policy Mistakes. Such wide swings in money growth and undesired fluctuations in economic performance have stemmed from the tendency of the Fed to alter its desired economic outcomes and the policy instruments it uses to achieve those goals. Patterns that the Fed occasionally falls into include: (a) a general tendency to target short-term interest rates rather than keep money growth within official target bands, (b) an attempt to "fine-tune" the real economy, (c) the frequent, apparent failure to take account of the lags between shifts in monetary policy and impacts on the real economy and inflation, (d) an attempt to adjust monetary policy to achieve a desired fiscal policy-monetary policy mix, and (e) a willingness to use monetary policy to achieve the Treasury's misplaced U.S. dollar management objectives.

The Fed's typical efforts to fine-tune have involved altering its target for the federal funds rate in response to recently released economic statistics and inflation conditions. Since monetary policy works with a lag, responding to current events cannot affect current economic or inflation conditions. Moreover, the linkage between the federal funds rate and reserve growth varies, depending on demand conditions. Many such fine-tuning attempts, however well-intended, have tended to compound mistakes and generate large swings in money growth whose lagged impacts on domestic spending have exerted inflation pressures. Using monetary policy in an attempt to adjust the industrial mix of growth or regional disparities in growth is a similarly inappropriate action that has contributed to unintended consequences.

Attempts to adjust monetary policy in response to fiscal actions in order to achieve a desired fiscal-monetary policy mix are misguided because they assume incorrectly that monetary policy and fiscal policy are substitutes for achieving the objectives of long-run economic growth and stable prices. This would require that a shift in fiscal policy would be capable of generating a permanent shift in aggregate demand, while a shift toward monetary stimulus would be capable of raising long-run output. It is generally recognized that excessively stimulative monetary policy raises the long-run equilibrium price level, but does not raise long-run potential output. Fiscal policy alters the allocation of national resources between the public and private sectors and influences long-run potential output by altering incentives to consume, save, and invest, but does not generate a permanent shift in aggregate demand. Moreover, attempts to achieve a desired policy mix require that monetary policymakers understand the magnitude and timing of the impacts of fiscal policy on economic activity.

In light of the disarray of fiscal policy, the general lack of under-standing about its impacts, and misperceptions about the substitutability of fiscal and monetary policy, efforts to adjust monetary policy to fiscal actions are counterproductive.

Managing the U.S. dollar exchange rate, either independently or in coordination with foreign central banks, is a seductive course of action that has been the source of recent monetary policy mistakes. Such efforts to manage the dollar involve a subjective judgment about the dollar's "proper level." This level or range, which is typically based on some desired outcome (i.e., reduced trade deficit), may be either inappropriate for the desired goal, or inconsistent with the level of the dollar justified by international differences in economic growth, fiscal and regulatory policy, and expected rates of return on assets denominated in various currencies. Sterilized intervention into exchange markets (that is, intervention matched by offsetting domestic operations) cannot influence the long-run trend in the dollar. Unsterilized intervention does alter the dollar's value -- through changing domestic interest rates and money supply, which alter expected rates of return on dollar denominated assets relative to assets denominated in other currencies -- but it does so through a monetary policy that is inconsistent with domestic demand and inflation objectives. Quite simply, despite the allure of managing the U.S. dollar, common sense suggests that a single policy instrument (i.e., monetary policy) by itself is not capable of achieving simultaneously two conflicting performance outcomes, i.e., desired levels for the dollar and domestic inflation.

Unfortunately, these obvious limitations have not deterred attempts to manage the dollar. For example, the "lower-the-dollar" monetary policy of mid-1984 to year-end 1986 required steep declines in short-term interest rates and overly excessive money growth. The Fed abruptly shifted policy in early 1987 when the U.S. Treasury decided (subjectively) that the dollar had fallen sufficiently, and further declines would be "damaging." Unsterilized intervention into foreign exchange markets to achieve the new dollar range agreed upon by the U.S. Treasury and other central banks (the Louvre Accord, February 1987) required sharply higher interest rates and a dramatic slowdown in reserve and money growth. The three month moving average of bank reserve growth fell from 28 percent in December 1986 to minus 10.2 percent in June 1989. Such abrupt shifts in monetary policy not only fail to achieve desired international objectives, but they generate undesired large shifts in financial markets conditions, domestic spending and, with a lag, inflation.

"P-Star" as a Potential Framework for Monetary Policy. In an effort to create a monetary policy framework that would avoid mistakes that previously have led to accelerating inflation, a recent highly publicized Federal Reserve Board staff study initiated by Chairman Greenspan develops an equation of the equilibrium price level.[6] The long-run equilibrium price level (P^*) is determined as M2 times the average long-run velocity of M2 (V^*) divided by potential output (Q^*).[7] The actual price level (P^A)

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[6]Jeffrey J. Hallman, Richard D. Porter, and David H. Small, "M2 Per Unit of Potential GNP as an Anchor for the Price Level", Board of Governors of the Federal Reserve System, April 1989.

[7]This equation, $P^*=(M2 \cdot V^*)/Q^*$, is simply a modification of the classical Quantity Theory of Money, MV=PQ or P=(MV)/Q, using the long-run price equilibrium instead of the current price level of P; the average long-run velocity V^* instead of current velocity V; and the Federal Reserve's estimate of long-run potential output (Q^*) rather than current output Q.

trends around P^*, so that inflation (the rate of change of P^A) is a function of the gap between P^* and P^A. The model tracks inflationary developments relatively well over the periods tested.

This model involves potentially useful characteristics as a policy guideline, but may lead to some of the same mistakes committed in the past. As a modified Quantity Theory of Money, the equation reinforces long-term objectives by focusing on M2 as a policy instrument and nominal GNP as a policy guideline. However, its effectiveness depends on more detailed operational procedures not provided in the study. Although the authors of the study carefully qualified the model's operational limitations, the way in which it would be implemented has been misconstrued by many observers.

The model leaves open the issue of the perceived optimal equilibrium price level and inflation, and it does not preclude the traditional Fed practice of short-term fine-tuning. It does not consider the issue of the lags between monetary policy, economic activity and inflation. It does not address the Fed's ability to control M2 growth. Crucially, it does not suggest a policy procedure when actual velocity deviates from its long-run trend line, an opportunity some policymakers would consider prime-time for "leaning against the wind." Nor does it prevent the Fed from altering policy in response to a shift in aggregate supply that involves a change in potential output (Q^*). These gaps leave open the potential for traditional monetary policy mistakes.

Despite these potential pitfalls of the "P-Star" model, such efforts to construct a monetary policy framework consistent with the Federal Reserve's long-run objectives are constructive and should be encouraged.

Recommendations for Monetary Policy. The Fed provided liquidity to financial markets following the October 1987 stock market collapse, but in response to strong economic growth and rising inflation, it has pursued a decidedly restrictive monetary policy since early 1988. I support the Fed's pursuit of low inflation. However, monetary policy and this economic expansion are now at a critical juncture, and I have several suggestions for an appropriate course of Federal Reserve action.

First, the Fed must take immediate steps to prevent further declines in bank reserves and money stock. If sustained, declines in reserves and money will virtually guarantee recession. Bank reserves declined 3.7 percent from June 1988 to June 1989, their most rapid year-over-year decline since April 1960. Associated, the monetary base (reserves plus currency), M1, and M2 have all declined since last year in inflation-adjusted terms. Although technical factors may have contributed to the steepness of the declines in M1 and M2 in Spring 1989 and their recent bounce-back, continued declines in bank reserves are inconsistent with keeping M2 within its targeted growth band.

Preventing reserves from declining further will require a reduction in the federal funds rate. Many observers and policymakers would associate a decline in the funds rate as a monetary easing and "backing-off" in the Fed's fight against inflation. This is a misperception that has led to major policy mistakes in the past. While the federal funds rate is a policy lever of the Federal Reserve, it is also a market rate that is affected by changing demand pressures associated with the rate and mix of economic growth. It is very difficult to distinguish between a change in the funds rate due to changing market conditions and a change due to an effective easing or tightening of monetary policy. Consequently, short-term interest rates are not an accurate measure of monetary stimulus or tightness, and should not be the primary targetted policy instrument of the

Federal Reserve. In contrast, growth of bank reserves and money supply, which are determined directly by the Fed, are more reliable indicators of the posture of monetary policy, and are more efficient measures for targetting policy. This has proved particularly true when economic performance shifts gears.

As an example, in 1987 and the first half of 1988, the federal funds rate rose due to the strong economic growth and rising investment share of GNP, as well as a monetary tightening. Since then, economic performance has weakened, and demand pressures on short-term rates have subsided. Consequently, pegging the funds rate at 9 3/4 percent from late-February to early-June required continually draining bank reserves, effectively a further monetary tightening. Although the Fed has allowed the funds rate to recede modestly since then, further declines in reserves suggest that monetary policy remains restrictive. Presently, targetting the funds rate while only paying lip service to trends in reserves and money could inadvertently trigger an economic downturn.

Preventing a further decline in reserves by allowing the funds rate to recede to reflect subsiding demand pressures would not interrupt the Fed's fight against inflation, and is necessary to avoid a jarring, counterproductive downturn in economic activity. Announcing the reasons for this course of action would help avoid the public's misperception about the Fed's intent.

Second, when economic growth decelerates below the Fed's projection range, or turns slightly negative, the Fed must avoid overreacting by swinging monetary policy too far the other way and becoming overly expansive. A period of sluggish economic activity is a transition cost of eliminating earlier monetary excesses and higher inflation. The Fed has recently lowered its "central tendency" projection of real GNP growth in

1990 to $1\frac{1}{2}$-2 percent. This may signal a willingness of the Fed to accept this lower growth, and not allow it to sidetrack the pursuit of low inflation. This interpretation, however, may be too charitable. First, the Fed's central tendency projection of $4\frac{1}{2}$-5 percent inflation for 1990 is too pessimistic. The Fed's projection of lower real growth and no change in the targetted bands for money growth may imply the Fed's acceptance of too high a level of inflation.

Moreover, if real growth is decidedly weaker than the Fed's projected range, as I anticipate, the Fed may succumb to its traditional mistake of shifting to excessive monetary stimulus. This would not avoid current economic weakness, but would only interrupt the disinflationary process and establish an undesirably high floor for the underlying rate of inflation. This would mean that we would incur weak economic activity without any compensating reduction in long-term inflation. Moreover, this would create a fragile environment for economic growth in the early 1990s. The Fed's recent disinflationary policy has generated significant credibility, as evidenced by the decline in long-term bond yields and the inversion of the yield curve. Shifting back to overly expansive monetary policy would destroy that credibility, which would increase the costs of future disinflationary monetary policy.

Excessively restrictive monetary policy increases the probability of shifting to overly stimulative monetary policy. This is not a necessary policy outcome, but Chairman Greenspan's recent Humphrey-Hawkins testimony last week, which recognizes inflation as a lower risk and places a greater focus on preventing recession, leaves open the possibility of this occurring. The Fed must avoid the temptation of responding to current events that tends to compound mistakes and lead to economically distabilizing swings in monetary policy. Instead, it must keep reserves and money growth within bands consistent with longer-term objectives.

The direction of monetary policy is now particularly important because it will determine not only the extent and duration of economic weakness, but it will have a profound impact on how much inflation is reduced and the economic environment of the early 1990s. Sustained maximum long-run economic growth requires a prudent course of monetary policy that suppresses inflation. Congress should encourage the Federal Reserve to continue to pursue these long-term objectives.

CHARTS AND TABLES SUPPLEMENTING THE TESTIMONY OF

MICKEY D. LEVY
CHIEF ECONOMIST
FIRST FIDELITY BANCORPORATION

BEFORE THE
SUBCOMMITTEE ON DOMESTIC MONETARY POLICY
OF THE
HOUSE COMMITTEE ON BANKING, FINANCE AND URBAN AFFAIRS
U.S. HOUSE OF REPRESENTATIVES

AUGUST 2, 1989

Table 1

COMPARISON OF REAL GNP PROJECTIONS
(% Change, Fourth Quarter to Fourth Quarter)

	1989	1990
Administration a/	2.7	2.6
Federal Reserve b/	2-2½	1½-2
CBO c/	2.4	2.0
First Fidelity Bancorporation	1.7	0.9
Blue Chip d/	2.6	1.5

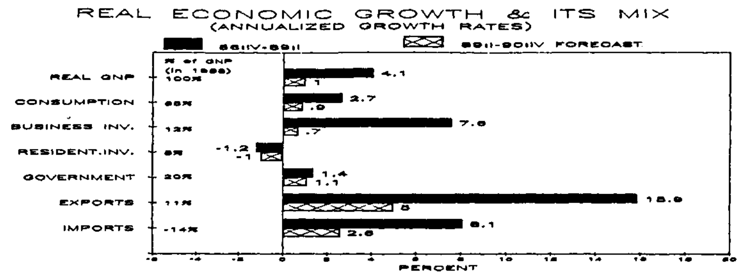
SOURCES: a/ Executive Office of the President, Mid-Session Review of the 1990 Budget, July 18, 1989.

b/ Testimony of Alan Greenspan, Chairman, Board of Governors of the Federal Reserve System, July 20, 1989.

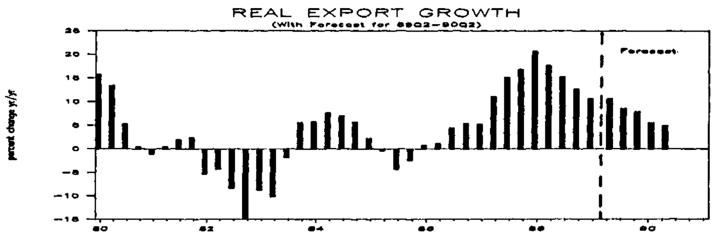
c/ Testimony of Robert D. Reischauer, Director, Congressional Budget Office, July 20, 1989

d/ Blue Chip Economic Indicators, July 10, 1989.

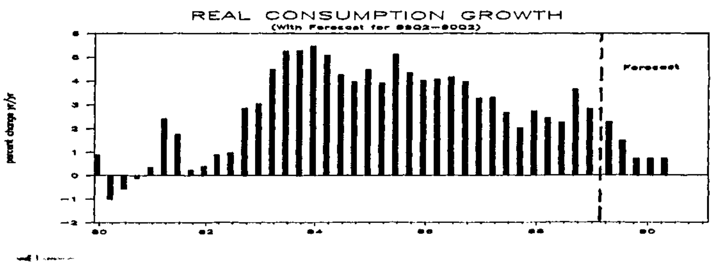
CHART 1



THE STRONG ECONOMIC GROWTH IN 1987-1988 WAS HIGHLIGHTED BY BOOMING EXPORTS AND EXPANDED BUSINESS INVESTMENT. REAL GNP GROWTH IS FORECAST TO SLOW DRAMATICALLY, AS EXPORT DEMAND AND CAPITAL SPENDING MODERATE, AND CONSUMPTION FLATTENS.



THE RECENT SLOWDOWN IN EXPORT GROWTH SHOULD CONTINUE. THE U.S. DOLLAR HAS APPRECIATED, PRICES OF U.S. EXPORTS HAVE ACCELERATED, AND TIGHTER MONETARY POLICY IN MAJOR TRADING NATIONS SHOULD SLOW THE DEMAND FOR U.S. PRODUCTS.

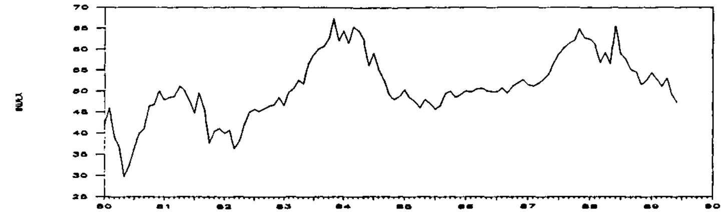


CONSUMPTION GROWTH HAS WEAKENED IN RESPONSE TO TIGHT MONETARY POLICY. NUMEROUS ECONOMIC INDICATIONS SUGGEST THAT THIS TREND SHOULD CONTINUE.

CHART 2

INDICATORS OF INDUSTRIAL OUTPUT

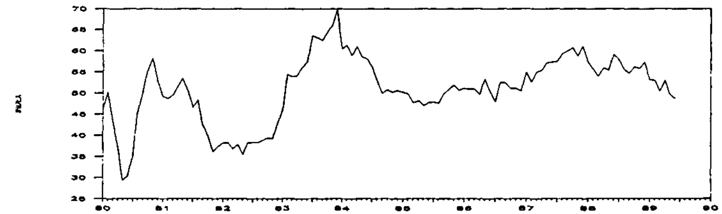
VENDOR DELIVERIES



NUMEROUS LEADING ECONOMIC INDICATORS SUGGEST THAT ECONOMIC ACTIVITY IS SLOWING DRAMATICALLY.

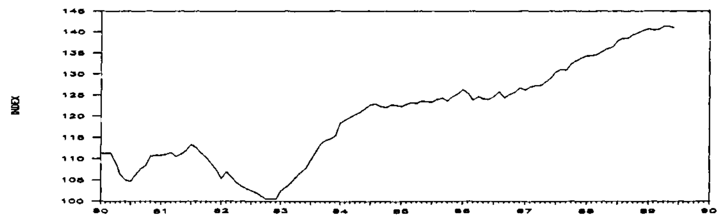
VENDOR DELIVERIES, WHICH MEASURE THE PERCENTAGE OF PURCHASING AGENTS WHO ARE EXPERIENCING SLOWER DELIVERIES, HAVE FALLEN SHARPLY FROM THEIR JUNE 1988 PEAK.

PURCHASING MANAGER'S INDEX



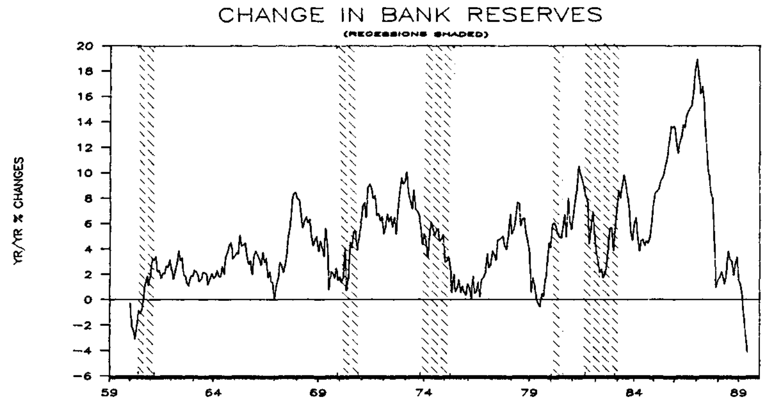
THE PURCHASING MANAGERS INDEX HAS FALLEN BELOW 50 PERCENT FOR THE FIRST TIME SINCE MID-1986.

INDEX OF INDUSTRIAL PRODUCTION



THE INDEX OF INDUSTRIAL PRODUCTION HAS FLATTENED OUT.

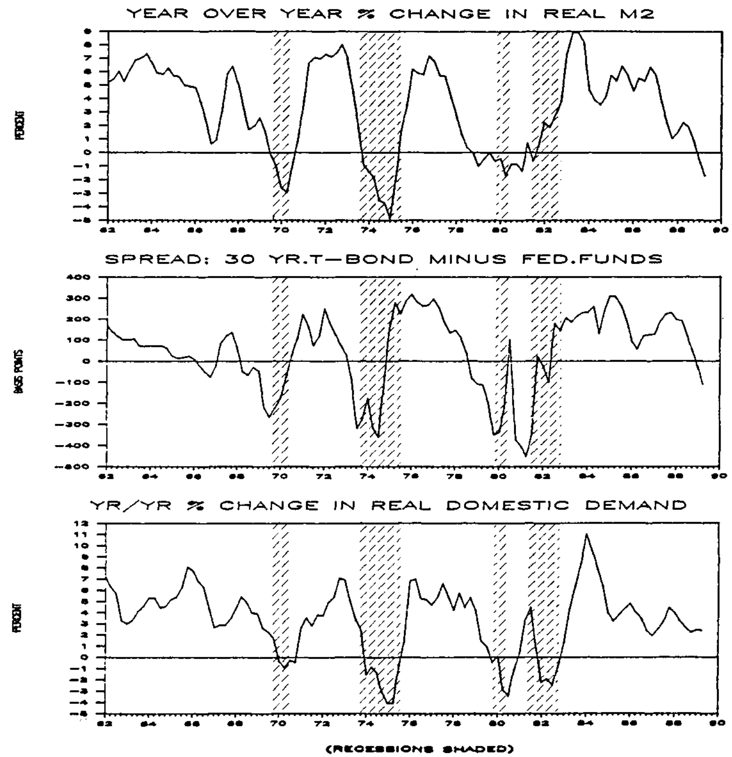
CHART 3



YEAR-OVER-YEAR CHANGES IN BANK RESERVES ARE DECLINING AT THEIR MOST RAPID RATE SINCE 1960, A DRAMATIC REVERSAL FROM THEIR EXPLOSIVE GROWTH IN 1986. IF THESE DECLINES CONTINUE, A RECESSION IS VIRTUALLY GUARANTEED.

CHART 4

MONETARY POLICY INDICATORS OF DOMESTIC DEMAND GROWTH



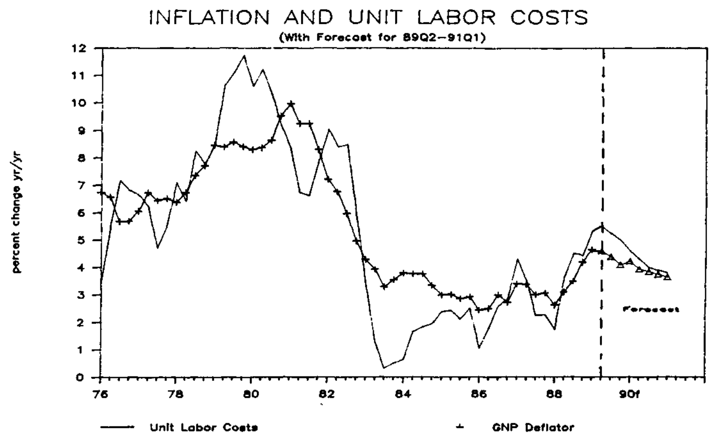
REAL (INFLATION-ADJUSTED) M2 HAS BEEN DECLINING YEAR-OVER-YEAR SINCE LATE 1988.

THE SPREAD BETWEEN THE LONG-TERM TREASURY BOND YIELD AND THE FEDERAL FUNDS RATE HAS INVERTED FOR THE FIRST TIME SINCE THE 1981-1982 RECESSION.

A DECLINE IN REAL M2 AND AN INVERSION OF THE SPREAD HAS PRECEDED EVERY RECENT RECESSION

THESE INDICATORS OF MONETARY POLICY, WHEN COMBINED, HAVE ALWAYS PROVIDED AN ACCURATE PREDICATION OF MAJOR ECONOMIC SHIFTS. THEY NOW POINT TOWARD SHARPLY SLOWER DOMESTIC DOWNWARD GROWTH.

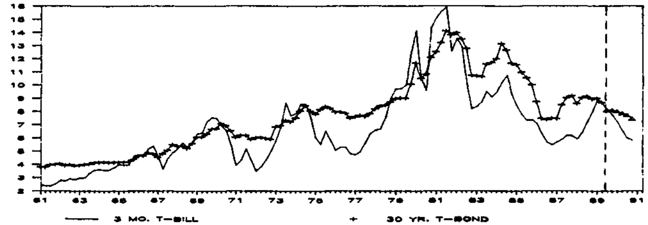
CHART 5



UNIT LABOR COST INCREASES AND INFLATION REMAINED LOW DURING MUCH OF THIS ECONOMIC EXPANSION, BUT THEY HAVE RISEN SINCE 1987, AND ARE NOW ABOVE DESIRED RANGES. INFLATION IS FORECAST TO RECEDE IN RESPONSE TO THE SLOWDOWN IN DEMAND GROWTH.

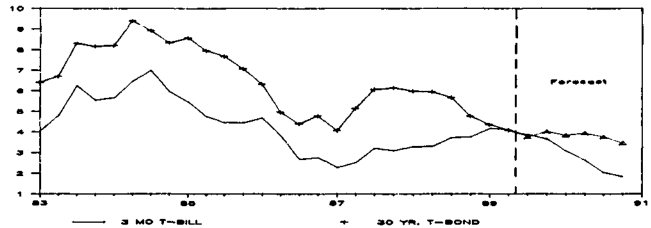
CHART 6

SELECTED INTEREST RATES



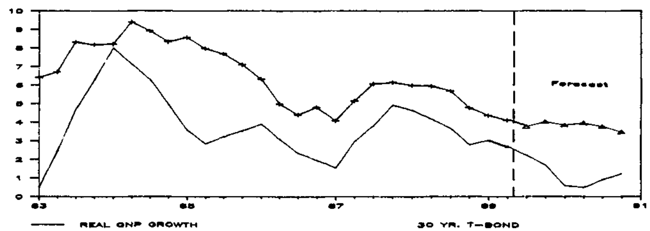
INTEREST RATES ROSE IN THE 1960s-1970s, BUT HAVE RATCHETED DOWNWARD SINCE THE EARLY 1980s. RATES ARE FORECAST TO DECLINE FURTHER IN 1989 AND 1990.

SELECTED INFLATION ADJUSTED RATES



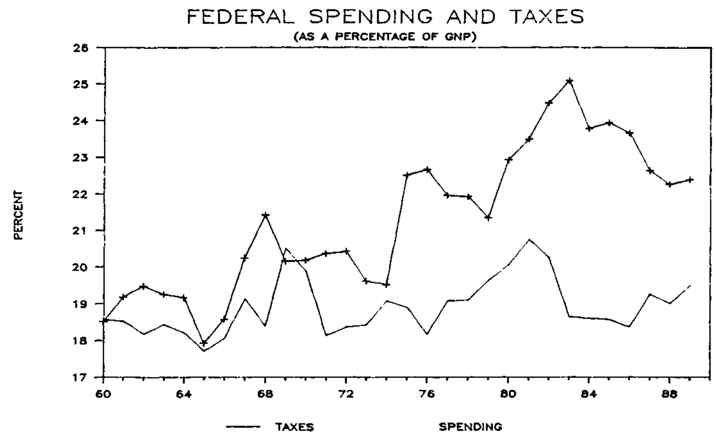
REAL (INFLATION-ADJUSTED) RATES HAVE DECLINED FROM EARLIER PEAKS BUT REMAIN SUBSTANIALLY ABOVE HISTORICAL AVERAGES.

REAL INTEREST RATES AND GNP GROWTH



REAL INTEREST RATES TEND TO RISE AND FALL TO REFLECT REAL ECONOMIC GROWTH.

CHART 7



SINCE THE 1960s, FEDERAL TAX RECEIPTS HAVE REMAINED APPROXIMATELY 19 PERCENT OF GNP, WHILE THE FEDERAL SPENDING SHARE OF GNP HAS RISEN SUBSTANIALLY.

Table 2

DEFICIT PROJECTIONS and GRAMM-RUDMAN-HOLLINGS TARGETS a/
(In Billions of Dollars)

	Fiscal Years		
	1989 est.	1990	1991
Administration b/	148.3	105.1	88.0
CBO Technical Re-estimate c/	150.0	116.8	138.1
CBO February 1989 Baseline d/	155	141	140
First Fidelity Bancorporation	150	122	150
Gramm-Rudman-Hollings Targets	136	100	64

NOTES:

a/ Budget projections exclude asset sales and costs of Resolution Financing Corporation in the pending savings and loan rescue bill.

b/ Executive Office of the President, Mid-Session Review of the 1990 Budget, July 18, 1989.

c/ Testimony of Robert D. Reischauer, Director, Congressional Budget Office, July 20, 1989.

d/ Congressional Budget Office, The Economic and Budget Outlook: Fiscal Years 1990-1994, January 1989.

THE FEDERAL BUDGET DEFICIT:
WHAT SHOULD BE DONE AND POLITICALLY REALISTIC TAX OPTIONS FOR THE NEXT ADMINISTRATION

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THE FEDERAL BUDGET DEFICIT:
WHAT SHOULD BE DONE AND POLITICALLY REALISTIC OPTIONS FOR THE NEXT ADMINISTRATION

The U.S. Federal budget deficit and policy choices to narrow it are once again in the news. Four reasons account for the renewed interest in our budget deficit. First, the new fiscal year began a few days ago, and we missed spending sequestration under the Gramm-Rudman-Hollings (GRH) targets by the narrowest of margins. Second, the National Economic Commission will soon issue its preliminary report on the subject. Third, both Presidential candidates are bemoaning the deficit, but have gone out of their way to avoid making concrete suggestions to deal with its enormity. Finally, the sheer size of our deficit remains, in the minds of most, the prime engine of our massive trade imbalance.

Acceptance of draconian solutions to the deficit depend, of course, on the public's recognition of the seriousness of the problem. Before GRH was passed in 1985, deficit projections associated with current service levels were headed straight up; a revenue shortfall in excess of $300 billion was seen for the early 1990's. The budget process was deemed out of control, and a fixed and binding formula was viewed as the only way to begin to turn the tide.

Effects were dramatic; in August 1988, the Congressional Budget Office (CBO) estimated FY 1988's deficit at $155 billion; four years ago, CBO projected a deficit of $254 billion for FY 1988. Whether the success was due to the discipline of GRH or unexpectedly big revenue flows from the Social Security Act amendments (passed in 1983) is debated in some circles. Despite the debate, the situation is clearly better now than four years ago.

Nevertheless, the deficit is still large by pre-1980 standards; in FY 1988, it was equal to 3.2% of GNP compared with a 1.7% share in the 1970's. More importantly, its sheer size remains at the core of discussions on global imbalances, and foreign critics maintain that the solution to those imbalances is tied to the resolution of our own budget imbalance.

Finally, the political process has come to recognize the enormity of the interest burden of accumulated past and projected deficits as an incredibly heavy mortgage on future generations. The servicing of that debt burden could threaten future U.S. living standards as more and more of the deficit is owned by foreigners.

Whether those forces are enough to move Congress and the next administration decisively remains to be seen. I personally do not feel they are awesome enough to force the political process to move toward a balanced budget.

THE SCOPE OF THE PROBLEM

Before options can be considered, the scope of the problem needs to be laid out; after that, realistic objectives can be specified. Those parameters define the scope of politically acceptable spending cuts or tax increases.

The CBO estimates successive declines in the deficit in the years ahead. From $155 billion for FY 1988, the deficit is expected to slip to $148 billion next year and to drift down to $121 billion by FY 1993. This compares with a GRH objective of $144 billion for FY 1988 and a balanced budget for FY 1993.

While the direction is right, the improvement owes much to the growing annual surplus in trust funds in general and the Social Security trust fund in particular. For example, the social security surplus for FY 1988 was $39 billion; it is expected to climb to $99 billion in FY 1993. Without that increase, the FY 1993 deficit projection would be at a more threatening $181 billion.

The social security trust funds should continue to provide a growing cushion through the year 2010, though the rate of increase will likely be slower during the 1990's than in the late 1980's. Beyond 2010, the retirement of the first of the baby boom generation will begin to nip away at the surplus; by the year 2015, social security should be running in a yearly deficit. While a remote date, the effects of the graying of the baby boom generation stand as a stark warning of an even more serious budget crisis looming ahead. As a result, we had best get on with meeting the current challenge.

THE OPTIMAL OBJECTIVE: A ZERO FEDERAL BUDGET DEFICIT OR SIMPLY A PROGRESSIVELY NARROWER DEFICIT?

GRH seeks a balanced budget over a fixed time schedule, though in reality the schedule has been far from fixed. The original legislation (passed in 1985) set a zero budget deficit objective for 1991 by narrowing the deficit by $35 billion a year. Only two years later, the interim objective was violated by such a wide margin that the schedule was recast--1993 became the zero deficit target point.

The new law also seeks to narrow the deficit by $35 billion a year, with FY 1993 the year in which a balanced budget is to be achieved. Under the new legislation, it is the Office of Management and Budget's (OMB) assessment which determines whether sequestration will be triggered. For FY 1989, the objective is $136 billion plus a $10 billion margin for error. OMB's August 1988 estimate placed the FY 1989 deficit at $144 billion, just within the $146 billion target but beneath CBO's $148 billion CBO estimate. The difference between the two rests with the economic assumptions for 1989.

Most analysts have concluded that the CBO's estimates are the more realistic. In addition, legislation passed since the OMB estimate will almost certainly breech the GRH limit even with OMB's more optimistic assumptions. When the probable budget consequences of FSLIC's restructuring of the S&L industry are fully captured, the deficit will be even higher. Thus, a $165 billion deficit might be a more realistic estimate for FY 1989, but even that may not fully reflect the FSLIC effects.

Should that outcome materialize for 1989, it will likely have spill-over effects on the FY 1990 deficit. Even barring a contamination of FY 1990's deficit from FY 1989's problems, it is most unlikely that the political process will be able to devise spending cuts or tax increases to hit the FY 1990 objective of $100 billion, even after adding the $10 billion margin for error.

As a result, by next April, Congress will probably be forced to consider GRH-III. Factors blamed for the problem would be the budget consequences of events viewed as beyond the control of Congress, e.g. (1) the S&L restructuring, (2) the impact of the farm drought, (3) net interest expense, and (4) the fixed formula driving entitlements.

In sum, Congress is not seriously considering a balanced budget in 1993. Instead, it is using the external discipline of the GRH timetable to keep a lid on the deficit and make it smaller in successive years; however, even that is laudable.

A review of the deficit reduction proposals of both Messrs. Bush and Dukakis (discussed later) bear this out. Conceptually, both are able to produce close to a zero deficit in 1993, but only with the help of some drastic assumptions. Based on what details can be gleaned from their public statements, neither approach would seem to have a wide political constituency in Congress.

Of the two, Mr. Bush has revealed the cleanest plan, which calls for a "flexible freeze", line item veto power for the President, and the balanced budget amendment. Unfortunately, as will be shown later, because the flexible freeze moves the budget dramatically toward balance, it will severely crimp spending and probably win few constituents in Congress today. Moreover, the line item veto and the balanced budget amendment are not realistic political options today. Here, the experience of states with line item veto power shows that it is most effective in negotiating and/or controlling the mix of spending and has very little to do with controlling the level of spending.

While both see the deficit as one of the principle dangers to the nation, the avoidance of specifics on a cure leads me to conclude that neither candidate envisions actually closing the gap. Rather their preference appears to be simply to assure that (1) at best, the deficits shrink at a pace that balances the political hostility toward higher taxes and the public's demand for current programs or (2) at worst, the deficits do not become any larger in absolute terms going forward.

THE OPTIONS

There are no shortages of options to narrow the deficit. In its March 1988 report (Reducing the Deficit: Spending and Revenue Options), the CBO summarized 105 different spending cuts and 25 different tax increases. These will likely serve as the point of departure for the National Economic Commission's deliberations.

The tax increases are separated into four different categories.

Increasing Tax Rates

Raise marginal tax rates for individuals and corporations or impose a surtax on existing schedules

Amend or repeal indexing of income tax schedules

Increase alternative minimum tax

Broaden the Tax Base

Reduce tax credits for rehabilitation of older buildings

Tax investment income from life insurance products

Tax credit unions like other thrift institutions

Repeal tax preferences for extractive industries

Eliminate private-purpose tax-exempt bonds

Further restrict deductions for business meals and entertainment

Tax capital gains at death

Tax 30 percent of capital gains from home sales

Decrease limits in contributions to qualified pensions and profit-sharing plans

Phase out child and dependent-care credit

Limit mortgage interest deductions

Eliminate or limit deductibility of state and local taxes

Increase taxation of social security and railroad retirement benefits

Tax the income-replacement portion of workers' compensation and black lung benefits

Tax nonretirement fringe benefits

Raise Payroll Taxes

Expand Social Security coverage

Repeal the Medicare taxable maximum

Index the unemployment insurance taxable wage base

Taxes on Consumption

Impose a value-added or national sales tax

Increase energy taxes

Increase excise taxes

Impose pollution charges

ASSESSMENT OF THE CANDIDATES VIEWS

Taxes, however, seem to be the scourge of this Presidential campaign. Both candidates have gone out of their way to avoid mention of which taxes they would find acceptable. Nevertheless, preferences can be surmised from their respective political philosophies.

Mr. Bush has expressed clear vocal opposition to tax increases as a means of dealing with the deficit. He even went so far as to sign a pledge to that effect during the primary campaign. However, his advisors are less committed to this notion than he; in fact some may recall that Martin Feldstein broke with the Reagan Administration several years ago over the issue of tax increases to deal with the burgeoning budget deficit.

While vocally opposed to tax increases, it is not clear how deep his commitment runs. Few commentators seem to remember that eight years ago, it was George Bush who was the most middle-of-the-road candidate in the Republican primary campaign, and many political analysts were surprised when he was chosen as Mr. Reagan's running mate. As a result, Mr. Bush's policy orientation at that time suggests that he might find certain tax increases acceptable now, if they could be camouflaged as something politically palatable and leave the 1986 marginal tax rates intact.

Taking all this into account, it is likely that (1) Mr. Bush will be counseled to accept a tax increase if it has bi-partisan support, i.e, it is the recommendation of the National Economic Commission and (2) Mr. Bush would probably follow that advice if the proposal were truly bi-partisan and leaves the marginal tax rates unaffected.

In the meantime, his main line of attack on the deficit lies with the flexible freeze. That freeze will hold the line on spending growth to the annual inflation rate and allow the President (and Congress) to sort out priorities.

Mr. Bush sees economic growth, along with lower interest rates, as necessary elements of any deficit reduction package. However, his philosophy is one of creating an environment for growth, not actively managing a government-business-labor partnership to achieve growth. Mr. Bush's emphasis on preserving the tax neutrality achieved through the 1986 tax reform stems from this foundation. His view is that growth will follow, if the environment is conducive, and he points to the successes of the last eight years in term of growth and jobs.

Mr. Dukakis, on the other hand, appears both in terms of philosophy and personality more of an interventionist in the day-to-day affairs of the economy. Just as Mr. Bush takes credit for the spectacular and consistently strong growth in this expansion, Mr. Dukakis takes credit for the extraordinary performance of the Massachusetts economy in recent years. He views Massachusetts' success, however, as due to his efforts to manage the economic scene through active intervention. Because he wants to manage growth, he puts a more eloquent emphasis on growth in his campaign than does Mr. Bush.

Finally, as with Mr. Dukakis, Mr. Bush wants better IRS enforcement, but the latter has not put a dollar magnitude on the amount that might be recovered nor does it form a cornerstone of his deficit reduction package. Neither has offered cost estimates for the stricter enforcement; this is a bit surprising in the case of Mr. Dukakis, since the magnitude to be collected ($90 billion over five years) is so big.

While both candidates have avoided the "T" word, opinions are nonetheless forming on tax increases that are likely to be acceptable to each. A survey of 50 prominent financial economists (reported in the The Blue Chip Financial Forecasts, September 1, 1988) conducted in late August revealed the following actions likely in a Bush Administration in addition to the flexible freeze:

Higher excise taxes, particularly sin taxes
Higher federal gasoline tax
Higher user fees
Imposition of oil import fee
Reduced growth in defense spending
Cuts in non-means tested entitlement programs
Other: capital gains tax cut; farm subsidies cut.

Either singularly or collectively, the revenue gains from these tax measures are not significant enough to close the deficit by 1993. As a result, they would probably be considered (1) in conjunction with the flexible freeze to meet a balanced budget objective or (2) more acceptable than increases in the personal tax rates to meet the "revised" GRH deficit objective for FY 1990 and to finance new spending programs promised during the campaign.

Mr. Dukakis is less hostile toward tax increases than Mr. Bush. However, he has stopped short of endorsement of tax increases to stem the budget's red ink, arguing instead that tax increases should be only "a last resort." Despite this disclaimer, opinions are drawing up on likely tax increases under a Dukakis Administration. Among the tax choices, the same 50 Blue Chip analysts considered the following likely choices under a Dukakis Administration:

Personal tax increases--higher marginal tax rate for middle and upper incomes
Higher effective corporate tax rates
Impose an oil import fee
Higher federal gasoline tax
VAT--on nonfood items
Other: higher excise and estate taxes; capped home mortgage deductions.

Taxes aside, the top item in Mr. Dukakis' deficit-reduction arsenal is slowing the growth or cutting the level of defense spending. Three broad options exist: eliminate programs, stretch out procurement and/or stretch out development of selected programs and systems.

Improved tax collection is also part of his agenda with $90 billion frequently mentioned as the possible revenue gain over a five year period. While an impressive magnitude, many feel there is little incremental revenue left to be gained given the progress made in improving enforcement over the last few years. Nevertheless, most believe it should be pursued aggressively in the interests of equity, particularly if it can spread the tax net more effectively over the cash or "gray economy".

Growth and lower interest rates form the third leg on the Dukakis budget stool. Growth is unquestionably an important ingredient in any deficit reduction program; however, his emphasis of it seems to suggest that past growth was inadequate.

On this score, we had surprisingly strong growth in this expansion [a 4.3% annualized growth in GNP between the recession's bottom (4Q1982) and 2Q1988]. Capacity constraints, however, are biting into more and more industries; and more and more firms now note labor shortages in national surveys. Thus, it is improbable that growth can continue at that pace (let alone a faster pace) in the coming years without the disruptive effects of rapidly accelerating inflation.

Indeed, it is questionable whether GNP growth above 3.0% (our estimate of the long-term trend growth) could be sustained indefinitely going forward from this point in the current expansion without tremendous advances in productivity. The Federal Reserve is concerned with this issue and sees growth at only 2.0%-2.5% next year, if inflation is to be contained.

In short, without advances in productivity, above-trend growth would have severe effects on inflation now that the economy is approaching capacity. Unfortunately, it is not likely that productivity can be increased fast enough in the nonmanufacturing (service) industries to accommodate growth in the 3.5%-4.0%. The best growth prospect is probably one of trend growth, but simply maintaining trend growth will offer no net benefit to the deficit reduction effort beyond that already captured in the CBO forecast.

Finally, both deficit reduction plans would be affected by any new program initiatives proposed by either Mr. Bush or Mr. Dukakis. The Democratic platform contains much more in the way of new spending than the Republican platform, but Mr. Bush has not shunned new spending proposals. His child care proposal and his verbal pledge to upgrade environmental protection programs come to mind. In the end, potential spending programs heighten the probability of higher taxes of some form to meet a revised GRH deficit reduction path in the years ahead.

EVALUATION: THE FLEXIBLE FREEZE SEEMS TO BE THE BEST ROUTE TO A BALANCED BUDGET

Putting all this in perspective, the most dramatic impact on the deficit appears to come through Mr. Bush's flexible freeze. The explanation is simple. If expense growth is held to the inflation rate and revenues move more closely with nominal GNP, a gap of 2.0-2.5 percentage points will emerge between their average growth rates over the 1988-1993 horizon, using CBO inflation estimates.

The original proposal seems to exempt defense spending, interest payments and social security from the freeze. As such, the Economist Magazine estimates that applying the flexible freeze to the remaining components would cut their FY 1993 spending level by $50 billion. Other things equal, that would reduce the CBO baseline deficit estimate for FY 1993 from $121 billion to $71 billion, still a hefty number if a balanced budget is sought.

Applying the flexible freeze to the entire spending package, does the trick, though Mr. Bush supports the narrow flexible freeze. Taking the CBO's estimate for the FY 1988 outlay level and grossing it up by their long-run inflation assumption (4.5%) produces a spending level in FY 1993 which is $72 billion less than the CBO baseline estimate. Without taking account of feed-through effects to the economy via the resulting lower interest rates or the favorable effects of lower rates and a smaller deficit on net interest, the FY 1993 deficit is reduced from $121 billion to $49 billion. Increases in nuisance taxes and excise taxes and lower net interest expenses would easily push the deficit to zero.

Given the power of the flexible freeze, even his narrowly defined freeze, it is not surprising that Mr. Bush has resisted any public consideration of taxes in the campaign. They are simply not necessary with a sufficiently taunt spending goal.

The likely taxes most associated with a Bush Administration preserve the benefits of the relatively neutral effect of the marginal rates. They are also very consistent with the freer-market approach to government that his administration would pursue.

Among the tax preferences of the two candidates identified by the 50 Blue Chip analysts, **an oil import fee is common to both.** Without doubt, this is an appealing, revenue raiser.

In 1988, the U.S. imported oil at a 2.7 billion barrel annual rate through August; a $5 per-barrel fee would generate $13.5 billion. However, it has some very serious drawbacks.

First, by raising the price of foreign crude, it would encourage consumption of domestic crude -- an obvious benefit to U.S. oil interests. However, that has the effect of "draining America first," and without added reserves, heightens our vulnerability to foreign producers in the early 1990's. Second, at current world prices, a $5 per barrel fee would not boost the price of domestic crude enough to encourage additional domestic exploration. Third, an oil import fee would increase U.S. production costs and hurt the global competitiveness of U.S. manufacturing facilities. Thus, the oil import fee is not really as attractive as it appears.

The Dukakis proposals offer less progress on the deficit. The first line of attack is on the defense budget. While vague on the details, some growth limit is inherent in the Dukakis agenda. However, the CBO baseline forecast already limits the growth in defense spending to only 3.5% from FY 1988 through 1993. That's 1.0% less than its inflation assumption and therefore represents a 1.0% decline in real terms each year. The CBO baseline budget assumptions move defense spending from a 6.1% share of GNP this year to 5.2% by 1994, roughly in line with its share of GNP before the initiation of the defense buildup.

Some say Mr. Dukakis wants to freeze real defense spending at FY 1988's level, a proposal more generous than the CBO assumptions which produce a $121 budget deficit in FY 1993.

This would suggest to some that he would endorse a more restrictive level of defense spending. His limit on defense spending could be interpreted as calling for a freeze in nominal terms at FY 1988's level which would cut defense spending by 4.5% a year in real terms using the CBO's inflation estimate. This would diminish defense's share of GNP even more precipitously than the CBO's assumptions. Though drastic, a freeze at FY 1988's nominal level, defense spending in FY 1993 would be $55 billion less than the CBO's baseline.

Next, regarding the revenue gains from stricter enforcement, the $90 billion revenue gain Mr. Dukakis espouses translates into $15 billion per year.

Combining the effects of flat nominal defense spending (a fall in real spending equal to the inflation rate) and the bigger revenue collections produces a deficit reduction of $70 billion in FY 1993, about the same as the broad flexible freeze.

The Dukakis agenda, however, places the bulk of the adjustment in one segment of the budget, with little regard for Congressional preferences or national needs and a questionable revenue gain from IRS enforcement. Because Congress will likely differ with Mr. Dukakis on the acceptability of a severe cut in real defense spending and because the $15 billion annual improvement in revenues may prove fleeting, a Dukakis Administration would need to consider significant tax increases if it is going to be serious about the deficit.

The need for taxes will be even more pressing if the Democratic platform (which has not been discussed in the campaign) becomes policy initiatives in 1989 and 1990. Because of the commitment to new programs and limited cuts available elsewhere, a freeze is impossible in a Dukakis Administration and the probability of more taxes almost a certainty even if proclaimed as a last resort for now.

REALITY: LITTLE POLITICAL APPETITE FOR A DRASTIC REDUCTION

Private discussions with a wide range of individuals leaves me with the belief that there is little national stomach for tax increases on the scale needed to reach a balanced budget. The mention of most of the tax options proposed by the CBO immediately triggers visions of pressure by special interest groups which would likely overwhelm any political enthusiasm for those taxes.

Revenue gains from increases in the personal tax rates or the imposition of a VAT are enormous. However, these two revenue raisers are even more contentious than the small gains generated by taxes on special interest groups. As a result, it appears that the personal tax rates and a VAT will not be touched next year unless there is a clear public mandate to move toward a balanced budget.

The corporate tax structure is probably a tempting plum. However, little potential exists here. The effective rate (Federal and state taxes) is already high, averaging 47.3% during the first half of this year. Moreover, the base is small. Pre-tax profits were at a $296.1 billion annual level for the first half, a scant 6.2% of nominal GNP. An increase of a few percentage points in the effective rate from here would have a devastating effect on incentives. However, specific efforts to deal with the remaining "profitable" firms which pay no taxes would obviously have broad public endorsement. While important from an equity perspective, net revenue gains would probably be minor.

In sum, there will likely be no major tax increase in 1989 or 1990, barring a national or international financial crisis. Even then, the experience of the aftermath of Black

Monday indicates that legislative action would be slow in coming and woefully inadequate to do much on the deficit.

This said, the most significant motivator to the deficit reduction effort promises to be the National Economic Commission. The Commission will likely recommend some combination of spending cuts and tax increases, using the March 1988 CBO list as a starting point. The options eventually chosen by Congress depend, however, upon national objectives. To secure a balanced budget within the GRH time frame is probably too severe; the nation has repeatedly demonstrated that it is unwilling to tolerate either the massive tax increases or the spending cuts needed to achieve the balanced budget. Otherwise, we would probably be a lot closer now.

In fact, as I said earlier, we will probably continue to recast the GRH timetable every few years and postpone the date of ultimate balance. The problem becomes keeping on a deficit reduction path of any sort. Since Congress can re-cast the timetable, the will to control spending is diluted.

AND A BALANCED BUDGET OBJECTIVE TOO RESTRICTIVE

For some time, I have argued that a zero budget deficit is unduly restrictive when considering the size of net interest expenses. This year, it will be about $151 billion, roughly the size of the deficit. In 1993, using CBO economic assumption and current service levels, net interest will swell to an estimated $198 billion. That represents roughly 1.6 times the CBO's deficit estimate for 1993.

As such, the remaining budget items must be in surplus by $77 billion. (For convenience we call that surplus the operating balance.) To achieve an overall balanced budget in FY 1993, the year's operating balance would need to be in surplus by $198 billion--a staggering sum and one that is probably politically unacceptable, notwithstanding the upcoming report of the National Economic Commission.

Not only is it dangerously restrictive and politically unrealistic, but it makes even less sense to chase after a balanced budget when a more complete measure of "public sector borrowing requirements" is considered. Most discussions of the public sector's drain on the nation's savings ignores the surplus of state and local governments. This year, they will total around $56 billion when the surplus from the state and local social insurance funds is included.

I have, from time to time, suggested that the state and local surpluses and the Federal deficit should be viewed collectively as a measure of "public sector borrowing requirements," a concept closer to the European measure of the public sector's drain on an economy's saving.

Thanks to growth in the social insurance trust funds of states and localities, the state and local surplus (on a national income account basis) could swell to $70 billion or more by 1993. If such a surplus materializes, "public sector (Federal, state and local) borrowing requirements" would be $51 billion or less (based on the CBO baseline deficit estimate of $121 billion). That is a far easier gap to bridge with politically acceptable spending and tax initiatives.

A NEW AND MORE REALISTIC DEFICIT REDUCTION FORMULA

This criticism of balanced budget efforts must not be mistaken for uncritical acceptance of deficits. I am quite concerned about the Federal budget deficit and its implication for both today's global imbalances and tomorrow's living standards. The problem is, however, to achieve fiscal discipline without suicidal restraint. More importantly, the formula should be able to withstand the test of time better than the GRH timetable.

Net interest expense is at the core of today's difficulty in trimming the deficit. Its size is also the result of a lack of public concern over the growing deficit after the Kemp-Roth tax cuts which set the stage for today's problem. Too much time was allowed to pass before decisive action was taken in the form of GRH. In the interim, the net interest bill climbed to a point where it swallowed a significant portion of the revenue stream each year. In FY 1988, net interest expense was 14.2% of expenses and 16.6% of revenues.

The problem, as I see it, is that the GRH deficit reduction formula is too rigid and doomed to failure. The prospects of unacceptably large spending cuts or tax increases led to one restatement of the deficit reduction path last year. With GRH-II only a year and a half old, we are likely to see GRH-III within the next six months. That too will be successful for the first and maybe the second year. But, before long, GRH-IV will be needed.

What's really needed is a formula which instills the discipline intended in the original GRH, has the proper trajectory in the deficit's path, and can remain in place for some time.

To this end, I have a proposal. The allowable deficit for each upcoming fiscal year should be expressed in terms of the net interest expense. The loosest rule would limit the deficit to no more than the year's projected net interest expense. In a sense, it would allow the net interest to be capitalized through the issuance of debt. Unfortunately, this rule is more liberal than the CBO's baseline deficit projections. Net interest expense will be on the order of $198 billion in 1993. Thus, limiting the deficit to net interest expense would be more generous than the $121 billion deficit the CBO expects and violate any sense of discipline.

Instead, I would suggest that the deficit target be intensified each year. Beginning in FY 1990, the deficit would be limited to 87.5% of the year's projected net interest expense. If the projected deficit is greater than that, the same rules for sequestration that apply now would apply, including a $10 billion error margin.

The ratio would be cut by 12.5% in successive years, until the deficit limit is cut to 50% of net interest expense in FY 1993. The CBO baseline budget estimates place FY 1993 net interest expense at $198 billion. Half of that would limit the FY 1993 deficit to $97 billion, before taking account of the effects of (a) a smaller deficit (versus the baseline $121 billion deficit) on the outstanding stock of government debt or (b) lower interest rates due to the smaller deficit on net interest expenses.

Taking these factors into account could lower net interest expenses to $170-$180 billion in FY 1993, which in turn would cut the year's permissible deficit to $85-$90 billion. That is probably a politically achievable deficit which would bring combined federal, state and local public sector borrowing requirements into balance.

If successful in limiting the deficit to 50% of net interest expenses by FY 1993, the next choice would be whether to leave the target at 50% of net interest expense or to shrink the share further in subsequent years.

OPTIONS TO MEET A MORE CREDIBLE DEFICIT REDUCTION PATH

Neither Mr. Bush nor Mr. Dukakis appear to have a program that can produce a balanced Federal budget by FY 1993 with politically acceptable options. Part of the problem lies with the unnecessarily restrictive framework of a balanced budget. To this end, I have proposed a less restrictive formula (i.e., tying the allowable deficit to a shrinking share of the net interest expense in each successive year) but one that still maintains the discipline of a narrowing deficit between now and FY 1993. However, even to meet this less rigorous objective, spending cuts or new taxes will be needed between now and FY 1993.

In reality, the choices will likely draw from options acceptable to both political parties. To this end, I would like to offer an array of possibilities.

On the spending side, some type of flexible freeze has merit in defining the limit on total spending allowable in the coming fiscal year. I personally would favor a broad flexible freeze that limits the growth in total expenditures to the CPI. Beyond that broad guideline, the political process decides spending priorities.

Here, in setting priorities, we cannot ignore an inescapable reality that future levels of defense spending will need to be revisited. Mr. Bush's efforts to exclude defense from his flexible freeze is probably unacceptably generous, just as a freeze in nominal terms is probably unacceptably restrictive. The eventual choice will likely lie between the two extremes. One possible avenue would be to reach the 5.0% share of GNP for defense spending a bit sooner than FY 1994 as assumed in the CBO baseline budget estimates.

Also on the spending side, we will eventually need to deal with the issue of non-means tested entitlements. These run the course from Medicare (though premiums are paid they are woefully inadequate, and the program received a subsidy of $26 billion in FY 1988) to Social Security. On the latter, 50% of social security benefits are subject to personal taxes but only when an individual's adjusted gross income is above $20,000. One means test would be to raise the portion subject to taxation to 75% or even 100%.

On the revenue side, I would hope either incumbent would leave the current marginal tax brackets unaltered in the years to come, though I suspect that Mr. Dukakis is less wedded to this than Mr. Bush. The current marginal rates provide us with tremendous international competitive advantage. More importantly, the current marginal rates make the tax structure relatively neutral, i.e., the current tax structure does not encourage tax avoidance activities to the degree the old marginal rate structure did. Any effort to raise the marginal tax rates would likely lead to renewed tax shelter activity as part of the negotiations to secure political agreement.

However, there is still room for revenue enhancers which leave the marginal rates unaffected. For starters, it would be equitable to reopen the issue of mortgage deductibility. Currently, interest on both first and second homes can be deducted up to a ceiling based on a complicated formula. One approach would be to loosen the limit on interest deduction on the primary home and eliminate entirely the deduction of interest on second homes.

Also on the revenue side, the proliferation of home equity loans since December 1986 goes against the spirit of the intent of the early tax reform packages. Elimination or more restrictive allowances for the deductibility of interest on home equity loans could be considered, but only if allowance is made for student loans. Currently, home equity loans are the only avenue available to most families to secure tax-deductible interest on student loans.

While Mr. Dukakis seeks to restore some of cuts made to the student loan programs in the past eight years, it is unlikely that deficit considerations will allow much for middle and upper-middle class families. For them, the home equity loan will be the main funding avenue, and their plight must be recognized in any alteration of the tax deductibility of interest expenses.

Finally, enhanced excise taxes, particularly sin taxes, should be considered before any broader taxes are considered. Higher gasoline taxes should be included in this category.

User fees must also be considered. In particular, they should be brought into alignment with the equivalent prices, including a return on equity, of similar products in the private sector. In some cases, market-based user fees might create some personal hardships. Those hardships should not be used as a excuse for no action; instead, hardship effects could be neutralized by means-tested offsetting subsidies.

There is some merit to the restoration of a 15% capital gains tax for all the reasons mentioned by Mr. Bush. However, Mr. Dukakis' criticisms of that proposal cannot be ignored. Two suggestions could blunt those criticisms and should be added to any consideration of a 15% capital gains tax. First, the definition of capitals gains should be lengthened from six months to at least a year, if the objective is to encourage (as proponents of the tax preference argue) the mobilization of capital for long-term investments. Second, it might be equitable to consider taxation of capital gains at death.

Taxes to avoid should include any increase in the effective corporate tax rate or the establishment of an oil import fee for reasons mentioned earlier.

Finally, there is the question of a value-added tax which amounts to a national sales tax. Often criticized as an unacceptably regressive tax, that shortcoming can be limited by the exclusion of housing, medical care and food from the tax. Even with those exclusions, the VAT is a tremendous revenue raiser; CBO estimates that a 5% VAT would raise $79.8 billion in FY 1993. If a big revenue raiser is needed, I would recommend a VAT (with adequate shielding of necessities) as opposed to increases in marginal tax rates.

A VAT has several advantages. Its most important is the fact that it broadens the tax base without affecting marginal tax rates. In addition, it raises revenues without adversely affecting the nation's global competitive position, since the VAT does not apply to exported goods. The European nations all utilize the VAT and benefit from its neutral affect on global competition. Were we to combine a VAT with a slight reduction in corporate tax rates, the effect could be a tax-induced benefit to our global competitive position. To succeed, however, any corporate tax cut would need to be structured in a way to encourage investment in export-sensitive industries.

The VAT is not without its disadvantages. Beyond the criticisms of its regressivity, its introduction would cause an immediate (but one-time) jump in the Consumer Price Index which would impact all indexed government entitlement programs as well as private-sector labor agreements with COLAs. More importantly, because it is a powerful revenue raiser, its benefits could easily be squandered due to a lack of discipline in controlling expenses. A firm and binding budgetary process which controls expenses must be established prior to enactment of any VAT.

Finally, higher marginal personal tax rates are also a powerful revenue raiser. A increase from 15%/28% to 16%/30% could raise an additional $35.9 billion in FY 1993 according to the CBO, while a 5% surtax on existing rates could raise $26.6 billion. Thus, I would hope that any decision to increase personal income tax rates be similarly coupled to the establishment of a firm and binding control over expenses, lest the added revenue fuel politically expedient spending programs. In addition, establishment of a 15% capital gains tax should be part of any proposal to hike personal tax rates or to place a surtax on existing rates.

IN SUMMARY

The international community has exhibited tremendous patience with U.S. budget and trade imbalances. That patience should not be misunderstood as acceptance of continued big budget or trade deficits. My contacts in both Europe and Japan consistently warn that the new President should get on with establishing a credible program of shrinking the nation's deficit.

Interestingly, in recent meetings with European and Japanese bankers, I have not heard overwhelming clamoring for the U.S. to achieve a zero Federal budget deficit. Instead, they warn that the path need be only toward a progressively narrower deficit over coming years and that the options to achieve the path be politically realistic. Credible progress, not a miracle, is the hope.

In the absence of a credible path with credible policy options, these same bankers warned that this year's strengthened dollar could quickly give way to downward pressure on the dollar. Such a crisis of confidence is the surest route possible to higher interest rates with their disabling effect on U.S. activity.

My formula to tie the allowable deficit to a shrinking share of net interest expenses provides a credible path--it is doable with a minimum of economic disruption to the national economy. More importantly, the spending and revenue options offered earlier probably have the basis of a political consensus. The proposals soon to be released by the National Economic Commission offer hope for a broader array of acceptable options. Together, they provide the credible path and options sought by financial markets.