## THIRD MEETING ON THE CONDUCT OF MONETARY POLICY

HEARINGS BEFORE THE COMMITTEE ON banking, housing and drban affairs united states senate<br>NINETY-FOURTH CONGRESS SECOND SESSION<br>ON<br>OVERSIGHT ON THE CONDUCT OF MONETARY POLICY PURSUANT TO HOUSE CONCURRENT RESOLLTION 133<br>MAY 3, 4, AND 5, 1976<br>Printed for the use of the Committee on Banking, Housing and Urban Affairs



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THIRD MEETING ON THE
CONDUCT OF MONETARY POLICY

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## THIRD MEETING ON THE CONDUCT OF MONETARY P0LICY

## MONDAY, MAY 3, 1976

> U.S. Senate,
> Committee on Banking, Housing and Urban Affairs, Washington, D.C.

The committee met at 10:06 a.m. in room 5302 of the Dirksen Senate Office Building; Senator William Proxmire (chairman of the committee) presiding.

Present: Senators Proxmire, Sparkman, McIntyre, Biden and Morgan.

The Chairman. Today we begin our semi-annual meeting on monetary policy pursuant to the resolution passed in March 1975.

This calls upon the Board of Governors to "consult with the Con-gress-about the Board of Governors' and the Federal open market committee's objectives and plans with respect to the ranges of growth of the monetary and credit aggregates in the upcoming 12 months."

This morning, Dr. Arthur Burns, Chairman of the Federal Reserve Board will give us his report on the intentions of the Board and the open market committee to conduct policies-again I quote from the resolution-"to promote effectively the goals of maximum employment, stable prices and moderate long-term interest rates."

We shall have two other hearings. Tomorrow, Tuesday, May 4, the committee will receive testimony from Mr. Leonard Woodcock, president of the United Auto Workers; from Dr. Andrew Brimmer, visiting professor at the Harvard Business School and recently a Governor of the Federal Reserve System; and from Dr. James O'Leary, vice chairman of the United States Trust Co. of New York.

Then on Wednesday, May 5, our witnesses will be Professor Franco Modigliani of the Massachusetts Institute of Technology, who is this year's president of the American Economic Association; Professor Gardner Ackley of the University of Michigan, a past chairman of the Council of Economic Advisers; and Mr. Darryl Francis, who recently retired from the presidency of the Federal Reserve Bank of St. Louis.

In welcoming you, Dr. Burns, I want to say that your regularly scheduled consultation with the Congress is proving to be a most useful occasion for us to examine the basic intentions of the Fed.

It has enabled the Congress, and the public too, to take a longer perspective on monetary policy than the usual day-to-day watch on the markets.

And, while the Congress has made notable changes in its treatment of fiscal policy through the new budget process, the less marked
shift in its approach to monetary policy seems to me to be also of great potential value.

The Congress is being challenged by these consultations, and I hope that we can make a constructive contribution to them.

I believe, Dr. Burns, that this appearance before the Banking Committee may be, for you, the easiest to date.

You have had a very good year. You have been able to find that your analysis and your proposals of monetary strategy have been borne out on the basis of our recovery and the basis of the performance of interest rates with the possible exception of long-term mortgage rates. At any rate, nobody seems to be very upset with the Fed at present. The year-old recovery is on track and monetary policy had made a good and steady contribution to it. But I shall give you only two cheers for that, because I believe that you are now the beneficiary of the nation's past distress, and of the deep tax cut that Congress insisted on early last year. It might not be quite so easy for the Federal Reserve Board if the recession had not reached such depths last spring.

I believe also that you try to make things easier for yourself by announcing to the Congress ranges of intended growth of the monetary aggregates that are so broad that you will feel yourself entitled to do whatever you please with monetary policy.

Let me emphasize that this not only makes the consultative process less useful to the Congress. It fails to give the public an adequate account of your intentions.

I understand that you have to deal with a very complex situation, and that nobody can claim the ability to forecast monetary velocity with any degree of accuracy.

But, the object of the exercise is to inform Congress of the Fed's intentions. If circumstances change, the Fed is explicitly allowed, in the terms of the resolution, to make necessary changes in policy.

The object is that the Fed declare its view of the monetary and the general economic prospect over the next 12 months, how you view things now, not whether you have hedged your estimates so that you surely will not be proved to have erred.

I have far less trouble with your review of past events. Since our last consultation, you have maintained the monetary and credit conditions that have helped restore confidence.

The monetary aggregates have only recently begun a faster growth rate, short-term interest rates have been at lower levels for a longer time than many observers would have thought likely, and long-term interest rates have moved downwards since last fall, although I say that they are still, on an historical basis, much too high. However, most of these are good developments, and the low inflation rate and brisk first-quarter growth in the economy put us in a position to benefit from monetary moderation.

That is why I foresee some difficult problems of monetary judgment in the future rather than at present.

The economy seems set for 1976. But the real need is to anticipate how to keep it advancing in 1977.

I hope that your statement, and our exchangs of thoughts, will deal with that.

We will put your entire statement in the record.

Proceed any way you wish. Senator Sparkman?
Senator Spariman. I have no statement.
The Chairman. Go ahead, sir.

## STATEMENT OF ARTHUR F. BURNS, CHAIRMAN, BOARD OE GOVERNORS, FEDERAL RESERVE SYSTEM

Dr. Burns. It is a pleasure to meet once again with this distinguished committee on behalf of the Federal Reserve Board. My remarks today will begin with a review of our experience during the first year under House Concurrent Resolution 133; and I shall then turn to the course of monetary policy we consider appropriate for the year ahead.
Last May, when the Board made its first report under the new procedure, the economy was just emerging from the deepest recession of the postwar period. Unemployment was at the highest level in many years, and a large part of our industrial plant stood idle. Prices nevertheless continued to rise at a disconcerting rate. With confidence of consumers and businessmen at a low ebb, the task for monetary policy was clear-to facilitate a substantial recovery in economic activity, and yet avoid aggravating our problem of inflation.

In that initial report, I indicated that the Federal Reserve anticipated that $\mathbf{M}_{1}$-that is, the money stock defined so as to include only currency and demand deposits-would grow between 5 and $71 / 2$ percent in the year ahead. For $\mathrm{M}_{2}$-which also includes time and savings deposits, other than large CD's, at commercial banks-a range of $81 / 2$ to $101 / 2$ percent was specified. For $M_{3}-a$ still broader measure of money balances encompassing, besides the components of $\mathbf{M}_{2}$, the deposits at nonbank thrift institutions-the range was set at 10 to 12 percent.
When these growth ranges were first adopted, they applied to the year ending in March 1976. Subsequently, because of the erratic movements to which monthly figures on money are subject, the base for measuring the growth ranges was shifted from the level of money belances in a single month to the average level for a quarter.

As time passed, the base periods were moved forward in accordance with the requirements of the concurrent resolution. In July 1975, we presented ranges of monetary growth for the year ending in the second quarter of 1976. In October, ranges were adopted for the year ending in the third quarter of 1976. And this January, the ranges were again moved forward to embrace the 12 -month period ending in the fourth quarter of this year.

We at the Federal Reserve have viewed these growth ranges as useful guides for the conduct of monetary policy. However, the objective of monetary policy is not to achieve any preconceived growth rates of monetary or credit aggregates, but to facilitate expansion of economic activity and to foster stability in the general price level. We have therefore stood ready to alter our projected ranges if new developments in the sphere of employment, or production, or prices suggested the need to do so. During this first year under the resolution, we did not find it necessary to change our annual growth ranges for any such reason.

Some modifications in the growth ranges were advisable, however, because of emerging trends in financial markets. Last October, the ranges for $M_{2}$ and $M_{3}$ were widened by reducing the lower end of each range by 1 percentage point. Under the credit conditions that prevailed in the late summer and early fall, it appeared that somewhat less growth in these aggregates might be associated with any given rate of expansion in $\mathcal{M}_{\text {, }}$-the narrowly-defined money stock. More recently, this January, the range for $\mathrm{M}_{1}$ also was widened by reducing the lower limit by one-half percentage point. This adjustment took account, among other factors, of the large transfer of funds from demand balances to savings accounts at commercial banks-a movement occasioned by a regulatory change in November 1975, when commercial banks were granted authority to offer savings accounts to partnerships and corporations.

These modifications of the monetary growth rates were duly reported to the Congress. Thus, when I appeared before the House Banking Committee in February, I indicated that our range for the year ending in the fourth quarter of 1976 was $41 / 2$ to $71 / 2$ percent for $\mathrm{M}_{1}, 71 / 2$ to $101 / 2$ percent for $\mathrm{M}_{2}$, and 9 to 12 percent for $\mathrm{M}_{3}$. These departures from the initial projected ranges are small, particularly so for volatile financial magnitudes whose relation to economic activity and prices has always been rather loose and imprecise.

Growth rates of the monetary aggregates over the past year have varied from month to month, as they generally do. But as I have noted on previous occasions, even sizable divergences from desired growth rates have little practical significance if they last only a few months. However, when indicators develop that the monetary aggregates are likely to move significantly above or below the desired ranges for a sustained period, remedial action by the Federal Reserve may be needed.

Twice in the past year, the system made noteworthy adjustments in its policy instruments to ensure that monetary expansion would. over the longer run, stay on a moderate course. In May and June of last year, when large Treasury disbursements of tax rebates and special social security checks were made, growth rates of all of the moneystock measures soared to extraordinarily high levels. This development did not come as a surprise, but its magnitude was much greater than we had expected from the special Treasury disbursements. Consequently, we set forces in motion around midyear that were designed to return the growth of the aggregates to their longerrun paths. These actions left their mark only temporarily on shortterm market rates of interest, but they had a lasting effect on public confidence by confirming the Federal Reserve's commitment to a moderate course of monetary policy.

We also did not hesitate to act later last year when growth of $\mathrm{M}_{1}$, in particular, fell well below the desired range. Because of the rather rapid pace of economic expansion. the relative ease of financial markets, and the absence of any evidence of a developing shortage of money and credit, we were inclined to view the sluggish growth of $\mathbf{M}_{1}$ during that period as reflecting fundamental changes in financial technology-changes that were reducing the amount of money needed to finance economic expansion. We also realized, however, that is was impossible to predict with any precision the scale on which further
economies in the use of money might be realized. We therefore took a series of steps to insure that the rate of monetary expansion would not slow too much or for too long. Beginning in the late fall, open market policies became more accommodative in providing reserves to the banking system. This was reflected in a decline of Federal funds to around 5 percent. Later on, the discount rate was reduced, and reserve requirements against time deposits were also lowered.

These actions appear to have borne fruit during the past few months. Thus far this year, $\mathbf{M}_{1}$ appears to have grown at an annual rate of 6 to 7 percent, compared with a rate of less than 3 percent over the preceding 6 months. The influence of the System's somewhat more accommodative policy has shown up also in $\mathrm{M}_{2}$ and $\mathrm{M}_{3}$, both of which have grown at more rapid rates during recent months.

Looking back at the past year as a whole, we find that the pace of monetary expansion was generally in line with the announced ranges. During the 12 months ended in March 1976, $\mathrm{M}_{1}$ grew by 5 percent, or at the lower end of the projected range. $\mathrm{M}_{2}$, on the other hand, rose by $91 / 2$ percent, which was at the midpoint of its range, while $\mathrm{M}_{3}$ grew by 12 percent and was thus at the top end of its range.

The appropriateness of the monetary policy pursued by the Federal Reserve over the past year cannot, however, be evaluated by merely comparing actual rates of monetary expansion with previously adopted ranges. The fundamental questions always are: How well did the economy perform? And did developments in financial markets contribute to the achievement of our Nation's economic objectives? Let me turn now to these basic issues.

When our longer run growth ranges for the monetary aggregates were announced a year ago. concern was expressed by some economists, as well as by some Members of Congress, that the rates of monetary growth we were seeking would prove inadequate to finance a good economic expansion. Interest rates would move up sharply, it was argued, as the demand for money and credit rose with increased aggregate spending, and shortages of money and credit might soon choke off the recovery.
We at the Federal Reserve did not share this pessimistic view. We knew from a careful reading of history that the turnover of money balances tends to rise rapidly in the early stages of an economic upswing. We also suspected that changes in financial practices might of themselves by acting strongly to reduce the amount of monev needed to support economic expansion. And we never lost sight of the danger that excessive expansion of money and credit could reignite the fires of inflation and plunge the economy into even deeper trouble.
Subsequent events have borne out our judgment. The Nation's economv has experienced substantial recoverv since last spring, financed in large part by increased turnover of existing money balances. During the past three quarters, the physical volume of our Nation's total production rose at an annual rate of 8 percent, and there is no clear sign as yet of any diminution in the pace of expansion.

The rebound of the industrial sector of our economy has been even stronger. Since its low noint in April 1975, the output of factories, mines, and powerplants has increased at an annual rate of 11 percent.

The output of nondurable goods already surpasses its previous peak, and of late the production of durable goods has begun to move up briskly. In February and March, the output of durable goods advanced more rapidly than the overall volume of industrial production.

As the level of business activity rose, the demand for labor strengthened. Employment across the Nation has increased by $21 / 2$ million since last spring, and now stands at the highest level in history. The unemployment rate has declined from about 9 percent to $71 / 2$ percent; the proportion of job losers among the the unemployed has diminished substantially; the growth rate in manufacturing has been rising; and the amount of overtime work has increased notably.

The rate of utilization of our industrial plant has also improved. In the major materials industries, only 70 percent of available plant capacity was effectively used during the first quarter of 1975. By the first quarter of this year, the rate of utilization of capacity in these industries had climbed to 81 percent. In some individual industries, notably paper and textile, the rate of capacity use has returned to a level close to the peaks reached during 1973-74.

These gains of production and employment have resulted in higher personal incomes and increased consumer purchasing power. After a long period of decline, the after-tax earnings of workers have increased substantially during the past year in real terms-not only in nominal dollars. Business profits, too, have recorded large gains.
Throughout this past year, conditions in financial markets have been favorable for economic expansion, and they remain so today. The movement of interest rates during the current recovery contrasts sharply with that observed in past cyclical upswings. Short-term interest rates normally begin to move up at about the same time as the upturn in general business activity, although the extent of rise varies from one cycle to another. In the current instance, with inflation still continuing and the Treasury borrowing at an unprecedented rate, the vigorous rebound of economic activity might well have been expected to exert upward pressure on short-term market interest rates. However, after a brief run-up in the summer of last year, short-term rates turned down last fall, and have since then declined to the level of late 1972. Long-term rates have also moved down; yield on high grade corporate bonds are at their lowest level in more than two years.
Declines in interest rates have extended also to loans from financial institutions. Interest rates have come down on residential mortgage loans. The rate of interest on bank loans to borrowers of the highest credit rating has declined sharply. Rates paid by other bank customers are also lower; in fact, interest rates on loans to small businesses and farmers have fallen to their lowest levels since mid-1973.
Moreover, the stock market has staged a dramatic recovery. The average price of a share on the New York Stock Exchange at present is more than 60 percent above its 1974 trough. A large measure of financial wealth has thus been restored to the millions of individuals across our land who have invested in common stocks.
Our Nation's business enterprises have taken advantage of the prevailing financial climate to improve their liquidity position. Corporations have issued a huge volume of long-term bonds, and they
have used the proceeds largely to repay short-term debt and to acquire liquid assets. For a time, access to public markets for funds was confined largely to firms with the highest credit ratings. Of late, however, some lower rated firms have found a more receptive public market for their debt issues, and others have met their needs for long-term funds through private placements with life insurance companies and other institutional lenders.

Besides this, the improvement in the stock market has made it considerably easier for many firms to raise funds for new investment programs or for restoration of equity cushions. Nearly $\$ 2$ billion of new shares were sold to the public during March. And if the average pace of new stock offerings in the first 4 months of this year is sustained, 1976 will see the largest volume of corporate stock flotations in our history.

The market for State and local government securities has also improved since last fall, when the New York City financial crisis made investors cautious and drove up borrowing costs to many States and their political subdivisions. Since then, interest rates on municipal securities have declined, and they are now well below their 1975 highs. New York City's difficulties have had a restraining influence on the financial policies of local and State governments throughout the country; but the volume of new issues of municipal securities has remained relatively large.

The condition of financial institutions has also improved over the past year. Numerous stories have recently appeared in the press about so-called problem banks, but much of this writing has been mislead-ing-if not altogether inaccurate.
True, some of our banks, particularly the larger banks, got caught up in the euphoria of inflationary developments during the early 1970's and permitted their financial condition to deteriorate. By now, however, these attitudes have decidedly changed. Last year, large banks increased their holdings of liquid assets by one-third, while reducing sharply their reliance on volatile sources of funds. With greater attention to canons of prudent management, commercial banks also achieved moderate increases in profits-even in the face of a substantial drain on earnings from increased provision for losses on bad loans. A large share of bank profits was used to bolster capital positions, so that the ratio of capital to risk assets, which had declined steadily during the early 1970 's, increased appreciably. Confidence in the banking system has therefore been strengthened, and bank stock prices have been rising along with stock prices generally.

Many banks are still working out special arrangements with real estate investment trusts and other customers who have encountered difficulties in repaying loans. This process will continue for some time. But our commercial banking system is basically sound, its financial condition has improved, and our banks are well prepared to meet increased credit demands as the recovery proceeds.
Other depositary institutions are likewise well situated to meet credit demands in the months ahead. Savings and loan associations, in particular, have repaid large amounts of debt besides adding heavily to their holdings of liquid assets. Furthermore, with savings inflows continuing to be very ample, the thrift institutions have of late become somewhat more aggressive in seeking to expand their
mortgage lending. Outstanding loan commitments have risen to the highest level in 3 years; mortgage interest rates have declined, and other terms on mortgage loans-such as downpayment requirements -are being liberalized.

It is fair to conclude, I believe, that the prudent course of monetary policy that the Federal Reserve has pursued over this past year has improved the state of confidence and fostered conditions in financial markets that contributed to economic recovery. Moreover, a financial base has been laid for a substantial further rise of general business activity.

We may reasonably look forward now to continued expansion of production and employment in the months ahead. Consumer spending, which began to strengthen early in 1975, has been gathering momentum. Retail sales have risen at a faster pace since late last year, increasing 2.8 per cent in March alone. Consumers are now looking to the future with greater confidence-they are spending a larger fraction of their current incomes; sales of new autos, in fact, have regained the levels of late 1973.

The upsurge of consumer spending has resulted in a substantial decline in the ratio of inventories to sales in many lines of activity. Delivery times are lengthening in some sectors, and businessmen are encountering more difficulty meeting customer needs from stocks on hands. As a consequence, many firms are seeking to rebuild inventories to levels consistent with the faster pace of consumer buying. Taken in the aggregate, stocks of goods have recently begun to rise, and the need for further accumulation will act as a significant stimulus to recovery throughout most of this year.

Residential construction also is moving ahead. Housing starts in February and March were at an average annual rate of 1.5 million units-about 10 per cent above the level in the fourth quarter of last vear, and 50 per cent above a year ago. To date, the rebound in residential construction has been concentrated in single-family homes. But with rental vacancy rates declining, some pickun in the construction of multifamily dwellings may also be expected this year.
Larger expenditures for business plant and eduipment also are in prospect. There have been several signs recently of a quickening tempo of activity in the lagging capital goods sector. New capital appropriations of large manufacturing firms rose sharply during the final quarter of 1975: new orders for nondefense capital goods have now increased 3 months in a row ; production of business equipment has risen briskly during the past 4 or 5 months: and the physical volume of total business investment in fixed canital has increased significantly in each of the past two quarters. With rates of capacity utilization increasing, corporate profits moving up stronglv, business confidence gaining, and the stock and bond markets much improved. it is reasonable to exnect considerable further strengthening this year in business expenditures for new equipment and new facilities-as normally happens in the course of a businesscycle expansion.
Our foreign trade balance, however, will probablv diminish this vear. The volume of exports declined somewhat in the first quarter. Imports, on the other hand, have continued to rise in response to the recovery of our economy, and they now exceed exports once again.

Economic recovery is well under way in a number of foreign countries, notably in Japan, Germany, and France. The outlook for the overall volume of international trade thus seems generally favorable. I am, however, concerned about the possible adverse effects on the world economy of recent developments in international exchange markets. The strength of the dollar in exchange markets over recent months is, of course, a tribute to our economy. But abrupt changes: in the relative values of national currencies, such as we have been witnessing, add to the risks and the costs of international trade. Worse still, they tend to add to already existing pressures on governments to invoke measures to protect their domestic industries. Fortunately, despite the severe economic problems of recent years, new trade restrictions have been generally avoided.

The countries whose currencies have of late declined steeply in exchange markets are the very one whose economies are still being demaged by extremely high rates of inflation. In our own country, notable progress has been made over the past 12 to 15 months in reducing the rate of inflation. The 7 percent rise in consumer prices last year was about half the increase recorded in 1974. The rise in wholesale prices slowed even more.

In recent months, there has been some further abatement of inflation. The average level of wholesale prices has remained practically unchanged since last October, and the advance in consumer prices during the first quarter of this year was the smallest in several years.

This recent improvement in price performance, however, stems entirely from declines in the prices of foods and fuels-prices which have tended to move erratically. Meanwhile, the prices of other goods and services are continuing to rise at a troublesome pace, and wages are still increasing much faster than the long-term rate of growth of productivity. The underlying trend of costs and prices thus is still clearly upward, and inflation must remain a major consideration in formulating public policy.
We at the Federal Reserve recognize our responsibility for sticking to a course of monetary policy that will promote further economic expansion, so that our Nation may regain satisfactory levels of production and employment. We also recognize that monetary policy needs to be consistent with an eventual return to stability of the general price level. Our projected ranges for the monetary aggregates in the year ahead have been established with both of these objectives in mind.

The ranges adopted by the Federal Open Market Committee for the year ending in the first quarter of 1977 differ only a little from those announced previously. For $\mathbf{M}_{1}$, the projected growth range is $41 / 2$ to 7 percent; for $M_{2}$, the range has been set at $71 /$ to 10 percent; and for $\mathrm{M}_{3}$, a range of 9 to 12 percent has been established.
The growth ranges for $\mathbf{M}_{1}$ and $\mathbf{M}_{2}$ have been narrowed by lowering the upper end of each range by a half percentage point. The change is small. but it is a logical sten in light of developments in financial markets and in the nonfinancial economv.

Our decision to reduce the upper limit of the $\mathbf{M}_{1}$ range reflects the experience of the past year, when a very moderate rise in the moner stock proved sufficient to finance a good economic recovery with declining interest rates. One reason is that the pace of inflation mod-
erated more than might have been expected on the basis of underlying trends of wages and costs. Of larger moment, however, have been the recent advances in financial technology that enable the public to reduce the quantity of checking deposits held for transactions purposes. Further economies in money use are likely in the year ahead, and a reduction of the upper end of the growth range for $\mathbf{M}_{1}$ therefore seems warranted.
Some downward adjustment in the upper boundary of the growth range for $M_{1}$ might have been called for in any event, because a full year of renewed expansion in business activity is already behind us. I have advised the Congress repeatedly that, as every economist knows, the rate of monetary expansion would eventually have to be lowered to be consistent with restoration of general price stability. The adjustment in the projected growth range of $\mathbf{M}_{1}$ over the year ahead is a very small but prudent step in that direction. Further downward adjustments will be needed as the economy returns to fuller utilization of its labor and capital resources.
Some of the same considerations apply also to $\mathbf{M}_{2}$. True, changes in financial technology have had less effect on $\mathbf{M}_{2}$ than on $\mathbf{M}_{1}$, since savings accounts at commercial banks-which are included in $\mathbf{M}_{2}$ have increasingly come to be used in lieu of checking deposits for transactions purposes. But, as I noted earlier, growth of $\mathrm{M}_{2}$ during the past year also fell well below the upper end of the range projected earlier. Hence some lowering of the upper boundary of the range appeared to be justified also in the case of $\mathbf{M}_{2}$.

Growth of $\mathbf{M}_{3}$ over the past year has been at the upper end of the range announced originally, thus reflecting heavy inflows of con-sumer-type time and savings deposits at savings and loan associations and at mutual savings banks. We cannot be at all certain that these savings inflows will persist at such a rapid pace. We would, however, welcome a continued ample flow of funds to institutions that are major suppliers of funds for homebuilding. Our projected growth range of $M_{3}$ has therefore remained unchanged.

The growth ranges of the aggregates adopted by the Federal Reserve for the year ahead represent our present judgment as to the rate of monetary expansion that is consistent not only with continued economic expansion at a satisfactory pace, but also with further gradual unwinding of inflationary tendencies. There are, however, profound uncertainties surrounding the relationships among the various monetary aggregates, and between rates of monetary expansion and the performance of the economy. House Concurrent Resolution 133 recognizes that the Federal Reserve may need to modify its anticipated growth ranges as circumstances change. Let me assure this committee that we shall report full to the Congress our actions and the reasons for them.
The Federal Reserve has been pleased by the thoughtful way in which this committee has dealt with the problems of monetary policy in its reports on these monetary oversight hearings. We believe that the dialog between the System and the Congress stimulated by the concurrent resolution has been constructive.
This dialog is just one indication that the Congress is attending seriously and effectively to its responsibilities in the field of economic policy. Another is the concerted effort being made by the Congress to
improve its procedures for control of the Federal budgetary process. Evidence of greater financial discipline on the part of Congress is helping to restore the confidence of the American people in their own and the Nation's economic future.

Our country is still faced with many serious economic problems. The menace of inflation is still with us. Unemployment is much too high. Productivity has been lagging. The expansion of our industrial plant is proceeding at too slow a pace. The homebuilding industry and other branches of construction are still depressed. And independence in the energy area is still a distant goal.

Over the past year or so, however, we as a Nation have begun to face up squarely to our major economic problems and to deal with them more constructively. There is now more reason for hoping that our country will proceed resolutely to establish the basis for a lasting prosperity.

The Chairman. Thank you very much, Dr. Burns, for as usual, a masterful analysis and very interesting indication of what monetary policy is going to be for the coming year.
Dr. Burns, could you explain how the Board formulates its monetary targets? Here you seem to have a situation where you have decided to follow a more conservative, cautious monetary policy in the coming year than last year.

You have lowered the range of $\mathbf{M}_{1}$, for example, from 5 to $71 / 2$ percent to $41 / 2$ to 7 percent. Midpoint was six and a quarter. Now the midpoint is five and three-quarters.

In explaining this, you say that it was partly because the change in financial markets and because of the nonfinancial economy and developments as you go on to say that it would seem that a very small prudent step in the direction of restoring general price stability is achieved by taking this reduction in your monetary range goals.

How did you arrive at these numbers? What factors did the Board take into account?

What I am getting at is what assumptions did the Board make about velocity, about inflation, about economic growth?

Dr. Burns. That is a very difficult question to answer because the Federal Open Market Committee, as you know, consists of 12 individuals. A great deal of evidence is presented to the Committee by our staff. Each of us reviews the evidence presented, adds to it, modifies it in his own fashion. At the end, after deliberating for some time, the Committee reaches a conclusion. Generally, but not always, the conclusion is unanimous.

The Chairman. Let me follow up by being a little more specific. Is the monetary policy, for example, influenced in any way by the expected fiscal policy of the government?

For example, the President's proposal of roughly a $\$ 395$ billion expenditure policy with a deficit of around $\$ 43$ billion.

The Congress apparently being somewhat higher than that, coming in with between $\$ 412$ and $\$ 415$ billion in expenditures and a somewhat larger deficit.

What assumption did you make with respect to fiscal policy? Did you assume that the President's prescription would be about what the Federal Government would do, or did you take a halfway point?
How did you decide that?

Dr. Burns. The staff laid before us the President's original estimate, recent revisions of that estimate, the figures arrived at by the two budget committees of the Congress, and the staff's own projection. How individual members of the committee judged the matter, I can't be sure. I will give you my own judgment.

The Chairman. Good.
Dr. Burns. I felt that the decision of the Congress would prevail, and that the president's recommendation would not be accepted.
I proceeded on that assumption. My colleagues probably did as well, but I can't be sure.
The Chairman. What are your expectations based on, this monetary policy and this fiscal policy that you have described? What do you expect this to do to production and gross national product in the coming year?
Dr. Burns. I am a little troubled by the way in which you formulate your question.

Your question seems to assume that you in the Congress and we at the Federal Reserve Board determine what will happen to the nation's economy. Your formulation seems to ignore the fact that there is a private sector with a vitality-

The Chairman. I'm glad you corrected me, because I certainly didn't mean to imply that. All I'm saying, is that the only areas we can control consciously as a nation, are the fiscal policies and monetary policies of our country, unless we want to use some kind of income policy which we don't have.

You have to make assumptions as to what is going to happen in the private sector. I would agree with you that is the most important of all, but we don't have that kind of control.
Dr. Burns. I think the economic expansion has now developed a momentum of its own. Expansion is being generated by the internal workings of the economy, and the economy no longer needs any stimulus from the fiscal side or any special stimulus from the monetary side.
The Charrman. All right then, what are your own assumptions as to production and growth in the coming year?

Dr. Burns. As I indicated in my statement. I see no evidence as yet of any decline in the rate of expansion, and I think we can very reasonably look forward to expansion of overall production in the year ahead at a rate in the neighborhood of 7 percent.

The Chairman. How about prices, what do you expect to happen there?

Dr. Burns. There I am concerned. Mv thinking about prices has been out of line with members of my staff and most of the economics profession.
I guess my trouble is that I have been a student of the business cycle practically all my life. When there is an expansion of the economy, I rather expect prices to rise; they have done so historically And when the economic recovery starts with an already high inflation rate, as in the present instance, I am fearful that the rate of inflation may intensify.

We have done better than I expected so far on the price front. I hope that we will continue to do so. But I cannot disregard the fact that the improvement in the rate of inflation, if you put aside food
prices and energy prices, stopped around the middle of last year. Food and energy prices tend to be erratic, and the underlying trend of the price level is, I think, better disclosed when they are put to one side. On doing so, I find a basic inflation rate in the neighborhood of 6 , or $61 / 2$, or 7 percent. I hope we can do very much better, but I don't know of any basis historically for expecting that we are going to do better in the year ahead.
The Charrman. Now, as far as employment is concerned, you pointed to the fact that it's gone from 9 percent down to $7 \frac{1}{2}$ percent. I think that surprised most economists and certainly most of us on the committee.
Dr. Burns. I don't know why it surprised them. They should study history; then they would find fewer surprises.

The Charrman. As one who has studied history and is less surprised, tell us what you expect in the coming year for unemployment.
Dr. Buras. As you study business cycle history, you find that in the first 9 to 12 months of a business cycle expansion, the rate of unemployment has typically dropped $11 / 2$ to 2 percentage points. So there is nothing remarkable in what has happened this time.

As for the year ahead, $I$ expect the rate of unemployment by yearend to be down to 7 percent or a little below.
The Charrman. Now, you are-
Dr. Burns. But I may easily be wrong.
The Charrman. You say that the decision to reduce $\mathbf{M}_{1}$, reflects the experience of last year when a very moderate rise in the money stock was sufficient to finance a good economic recovery, with declining interest rates.

Now, a remarkable element of this was that we did have a rather slow growth in the money supply and as you say, we did have a good growth in the economy and we did have moderating short-term interest rates.

However, one remarkable accompanying factor is, as I understand it, the rate of increase in the velocity of $\mathbf{M}_{1}$ which, as you pointed out often to us, is a neglected element here.

The increase in velocity during the past year was very great, unprecedented in the past 20 years or so. Furthermore, there have been few instances of sustained acceleration lasting more than three or four quarters.

We have had that kind of stimulation, the increase in velocity that has enabled us to get along with a relatively slow increase in the money supply and the moderating interest rates.

The long-term average rate of increase in velocity is about 3 percent per annum, compared with about a $71 / 4$ percent increase in velocity in the first quarter of 1975 and first quarter of 1976.

In view of that history, doesn't it seem we are likely to get a slowdown in velocity, and that combined with a slowdown in the increase of the money supply, would suggest that monetary policy is going to be more restraining in the coming year? Why is that wrong?
Dr. Burns. The projected ranges for $\mathbf{M}_{1}$ and $\mathbf{M}_{2}$ have been reduced somewhat. But you have been one of our great critics. Senator, and earlier today you pointed to the width of the ranges. In view of the width of the ranges and in view of the fact that over the past three quarters the average rate of growth in $\mathbf{M}_{1}$ has been below the lower

[^0]limit, there is ample room for monetary growth to remain constant or possibly even to increase a little.
The Chamman. So what you are saying is that although the range is lower this year than it was last year, the fact is that last year you were close to the bottom of the range. Therefore, if you are at the midpoint of the range in the coming year, you will have an increase in $\mathrm{M}_{1}$ ?

Dr. Burns. You might have a small increase. Let me give you an analogy.

You have a family with small children, and you want to set boundaries within which the children can play. You put up little sticks to indicate just how far they can go. In fact, the children may play close to the house and never get to the outer boundary of their playfield. Six months later, for some reason-maybe complaints from your neighbors-you change the boundary line. This time, the kids may go right up to the boundary line. In the same way these projected monetary ranges indicate Federal Reserve thinking, Federal Reserve intent. But they do not indicate what will actually happen, if only because within wide limits we have very little control.

The Chatrman. My time is up. I will be back.
Senator Spariman?
Senator Spariman. Doctor, I gratefully enjoyed this presentation that you have given us this morning. It is, I may say, customary with you to give such very fine presentations.

There are a few things that $I$ want to ask about, of a general nature.

Did I understand you correctly, did you say the rate of inflation now is 6 or $61 / 2$ percent?
Dr. Burns. I'd judge the underlying rate of inflation to be about that.
In the first quarter of this year the actual consumer price level rose at an annual rate of 2.9 percent. A Department of Commerce estimate placed the annual rate of increase in the general price level at about $31 / 2$ percent, as I remember.
By adjusting these figures to remove food prices, which always move erratically, and energy prices, which recently have been quite erratic, I get at what I consider to be the underlying rate of inflation. That has been in the neighborhood of 6 or $61 / 2$ percent.
Senator Sparimana. If I also understand you to say that unemployment during this year has declined to about $71 / 2$ percent now?

Dr. Burns. That was the unemployment figure reported by the Labor Department for the month of March.

Senator Sparkman. What is happening in the way of plant expansion and new equipment and so forth?

Dr. Burns. That sector of our economy has been lagging. It always tends to lag, but in this expansion, the lag is more pronounced than it has been historically. But signs are now multiplying that a recovery in business fixed investment is getting underway.

Senator Sparkman. What about our trade balances. You said something about that our balance of payments.

Dr. Burns. I think our trade policy, by and large, has been sound. I was very pleased by the President's decision not to impose a quota
on shoe imports. That would have caused great difficulties, political as well as economic, for some other countries of the world.
I think we have been fortunate, thus far, in able to avoid restrictive trade policies in spite of the unemployment that we and other countries have had. But there is restlessness in our own country, as you well know, and there is restlessness abroad.

The recent turbulence in exchange markets has not helped matters any. When the exchange rate for a currency depreciates, business and government people in other countries may interpret the depreciation to be the result of deliberate governmental policy, rather than as the result of natural market forces. That, of course, tends to breed more suspicion, and may lead to retaliatory policy actions. So far, we have been very fortunate; there has been practically none of that.

Senator Sparkman. Does the difficulty that Britain is having have any reaction on our own economy?
Dr. Burns. I am not aware of any direct effects on our own economy. But I think the difficulties of Britain have stimulated a great deal of thought in our country.
All of us in government, and many individuals in business and other pursuits, are following what is happening in Britain with great concern.

Senator Spariman. A few months ago we worked out with France an agreement to try to stabilize conditions between our two currencies. Is that working satisfactorily?

Dr. Burns. In all honesty, I believe that agreement has been widely misinterpreted.
What happened at Rambouillet, essentially, was that a desire to cooperate manifested itself. But policies for cooperation were not spelled out, and in the actual conduct of affairs, very little has resulted as yet from the Rambouillet understanding.

It is like the case of a husband and wife who have been estranged, and who get together with good intentions; they will try to get along better. That is what was accomplished at Rambouillet: good intentions.

As to actual achievement, I don't know of any so far. In fact, since Rambouillet and the later agreement in Kingston, we have had greater instability in exchange markets than before.

Some people may argue that in the absence of these meetings, things would be worse still. I don't argue that way. I think the actual effect on governmental intervention in exchange markets has been very small.
Senator Spariman. Let me ask you something of interest to all, I am sure, at home, and that has to do in the field of housing, supporting our housing programs and the mortgage market and so forth.

What is the outlook for long-term mortgage rates?
Dr. Buras. Senator, if you would tell me what the outlook is for inflation-looking ahead 2 years, 5 years, 10 years-I would be able to answer your question. But you probably can't tell me that any more than I could tell you.

I can say this: If the rate of inflation comes down, you can be rest assured that mortgage interest rates will come down-as will longterm interest rates generally. That is because an inflation premium is built into our long-term rates. They have come down as expecta-
tions of inflation have moderated, but they haven't come down nearly as much as they should.

Senator Spariman. I interpret your statement to be rather optimistic with reference to inflation, so I hope that the way you tied the interest rates to that, I hope that may be interpreted as being optimistic or long-term mortgage interest rates, too.

Dr. Burns. I am optimistic, provided the Congress continues to practice restraint, and provided the Federal Reserve stays on a moderate course. If we had an explosion in spending on the part of the Congress, or if the Federal Researve raised its monetary growth ranges substantially, then the outlook for inflation would be grim.

Senator Spariman. Well, thank you very much. My 10 minutes is up.

I want you to know I have enjoyed very much your presentation.
Dr. Burns. Thank you, Senator.
The Chatrman. Senator Biden?
Senator Biden. Mr. Chairman, thank you.
Dr. Burns, how are you?
I would like to follow up on where we just left off. That is, what recommendations would you have for us in the Senate and Congress generally, of things which we should not do, other than not increasing spending. Is there anything that you see that we are presently considering that could impede this economic recovery and/or affect inflation adversely?
Dr. Burns. I see one difficulty. I don't know how much support the Humphrey-Hawkins bill has in the Congress, and I don't know how it might be amended if it is passed by the Congress. But if the bill passed is anything like its present form, it would be very dangerous for our economy, in my judgment. It would undoubtedly release strong new forces of inflation.
Therefore, that bill should either be substantially amended or put on the shelf for some time.

Senator Biden. Why would it release strong forces for inflation?
Dr. Burns. First, if history is any guide, the objective of a 3 -percent unemployment rate is unrealistic. If monetary and fiscal policies were used to move our Nation steadily toward that goal and that is the intent of the bill, as I understand it.

Also, under that bill, the Federal Reserve's independence would be gone; monetary policy would, in effect, be dictated by the President of the United States. Someday we might have a President who would urge the Federal Reserve to pursue a policy of great restraint, but I wouldn't count on it.

Senator Biden. One last question, Dr. Burns. In your statement, you say that, although there are recent improvements in price performance, they stem mainly from food and fuel. You go on to say that, "Meanwhile, the prices of other goods and services are continuing to rise at a troublesome pace, and wages are still increasing much faster than the long-term rate of growth of productivity."
Can you expand on that a little bit, about wages, what you had in mind and where you see rate settlements going in the next couple of years or the next year?

Dr. Burns. Yes, I will be glad to do that.
Let me first add a few words on prices, if I may.

Senator Biden. Sure.
Dr. Burns. And then turn to wages.
I have before me-I was looking for it earlier in conversing with Senator Sparkman-the record of behavior of the Consumer Price Index with food and energy items removed. With these two volatile and erratic categories excluded the annual rate of increase in the third quarter of 1974 was 14 percent. There was then a steady decline until the second quarter of 1975 , when the annual rate of increase was 5.1 percent.
Since then, the figures for successive quarters have run as follows: $5.8 ; 7.1 ; 7.7$. Because of difficulties of measurement, I don't consider these increases as significant, but I also see no further improvement. Therefore, as I said before, I think the underlying rate of inflation is in the neighborhood of $6,61 / 2$, possibly 7 percent.

Now, let me turn to the wage record.
There has been some moderation in the rate of advance in wages. On the basis of figures for the first quarter of this year, it appears that the annual rate of increase of wages that is, compensation per-hour-is a great deal higher than the rate of improvement in productivity.
The rate of improvement of productivity during the first year of an expansion generally is very high. Productivity has risen during this year of expansion, but the increase is well below historical standards. The sluggishness in productivity evident during the past 15 years seems to be continuing.

I emphasize that because I think it is a longer range problem that should be on our minds, and whose causes and remedies should be explored.
The settlement just reached with the teamsters is one that I find very troublesome. I don't know whether that settlement will stimulate trade union leaders around the country to demand oversize wage increases, but I fear there will be a tendency in that direction.

In all fairness to our trade union leaders, I should say thatconsidering the kind of world we live in, and considering the imperfection of man, and considering what is happening in other countries by and large, they have acted responsibly and by and large, they are continuing to act responsibly. I wish they would act still more responsibly.

Senator Biden. Thank you very much.
I have no further questions.
The Chairman. Senator McIntyre?
Senator McIntyre. Thank you, Mr. Chairman.
I regret I couldn't be here at the outset. I was testifying at Government Operations just below.

One question for Dr. Burns regarding my interest in thrift institutions and their ability to compete.
In your statement, you mention that thrift institutions, as well as banks, are well situated to meet credit demands in the months ahead. Last week, on April 29, Thursday. John Heimann, New York Banking Commissioner, stated that thrift institutions in New York State, particularly the savings banks. are operating with less capital than is safe, and at the yearend 1975. they had lower capital levels than "any institution could have and still operate with safety."

How do you explain the discrepancy between your two assessments, and how do you respond to his suggestion that thrift institutions should be allowed to issue preferred stock as a way of bolstering sagging capital?
Dr. Burns. I think that in the statements you cite the banking commissioner and I are concerned with different problems.
I was discussing the inflow of funds to the thrift institutions, which has been at extremely high rates. To give you some figures: At mutual savings banks and savings and loan associations together, the annual rate of growth of deposits was 16.0 percent in the first half of 1975 and 14.6 percent in the second half. In January of this year, the growth rate was 15.9 percent; in February, 13.3 percent; and in March, 15.1 percent.

The commissioner was discussing the question of capital adequacy of the thrift institutions. That, I am sorry to say, is a question that I have not explored. I think his judgment is to be taken seriously, and his suggestion about raising funds through preferred stock is one that I would want to consider sympathetically.

Senator McIntyre. You say mortgage commitments have risen to the highest level in 3 years. They are up, but are they where they should be?
Dr. Burns. I am not good at judging where they should be. But they have risen very materially.

Let me give you the figures. The outstanding mortgage commitments of all savings and loan associations in March 1975 were $\$ 13$ billion. In March of this year, they were $\$ 19.4$ billion.

I have before me a table going back a number of years, and $\$ 19.4$ billion is the second highest figure shown for the month of March. It was exceeded only in March 1973.
Senator McIntyre. $\$ 19.4$ billion is exceeded only by the March figure in 1973?

Dr. Burns. That is right.
Senator McIntyre. What is so sacred about March ?
Mr. Burns. The figure for March 1976 is the latest I have.
Senator McIntyre. I see.
Thank you.
Dr. Burns. Figures for earlier months would tell much the same story.

I have one comment that bears on your question of whether mortgage commitments are where they should be. We had an extraordinary real estate boom in our country, and we are still suffering the aftermath of that boom.

While our inventory of unsold homes has come down, it is still large-about an 8 -months' supply. We have had great overbuilding of office structures and multifamily structures. It will take some 2 or 3 years to correct that condition.

A moderate expansion of residential construction is, I think, in order at the present time. If it proceeded too rapidly, we would be adding a new boom on top of difficulties that have not yet been corrected. These difficulties, as you well know, have affected our banking system as well as the real estate and construction industry.
I wouldn't like to see a very rapid expansion of residential construction until the existing difficulties have been more adequately corrected.

Senator McIntyre. I have an additional question.
In your statement, you note recent advances in financial technology which enable the public to reduce the quantity of checking deposits held for transaction purposes.

That raises the question about the Fed's proposal on regulation J, much of the comment which I have seen to regulation $J$, has been extremely critical of the Fed's proposal.

Is it fair to assume at this point that the Fed will abandon any intention of aggressively pursuing an active role in providing EFTS services and defer more to the private marketplace?

Dr. Burns. I hesitate in answering because the Board has not discussed this question recently. We published for comment the proposed amendment to regulation $J$ in January. At that time, the National Commission on Electronic Fund Transfers-a Commission which you had a great deal to do with establishing, Senator-was in process of being organized. The Board thought that it ought to have the benefit of that Commission's thinking before taking any significant new step in this area. That was the Board's view at the time, and it is still my view today.

I would want to proceed cautiously. There are philosophic questions to be answered as to the role of the Government as against private enterprise. There is a question of the role to be played by the Federal Reserve, if the Government is to be involved in this activity to a larger extent. There is the question of whether the services should be free, as they have been, or whether a price should be charged.

On the last subject, the Board's intention is clear. We intend to move towards a pricing system, whether our activity in this area is expanded or not.

By and large, however, I would like to be guided by the new Commission. I think we ought to await the Commission's findings rather than plunging ahead on our own.

Senator McIntyre. Thank you, Mr. Chairman.
The Charmans. You have told us you expect unemployment to go to perhaps 7 percent in the coming year, production to increase about the same, 7 percent.

Is this the best we can do without triggering inflation that would be unacceptable?

Do you think we can do better than that?
Dr. Burns. We might be able to do better than that. We certainly could do better than that if we were willing to use devices other than monetary and fiscal policy.

The Chairman. Such as?
Dr. Burns. The list includes a range of unpopular measures, particularly in a year such as this, Senator.
I think our unemployment insurance benefits are excessive. I have no doubt that they tend to increase unemployment; that has been demonstrated by several studies.

I think that the minimum wage for teenagers serves to deprive them of many job opportunities they would otherwise have.

I think that we have been much too slow in developing comprehensive job banks, and that we are inefficient in our training and retraining programs for workers.

Labor market policies would weigh heavily, in my scheme of things, in looking to a near-term reduction in unemployment. To push
monetary and fiscal policies any further than at present would, $\mathbf{I}$ think, be hazardous.

The Chairman. I wonder about that.
I sympathize greatly with your position as you know, holding down Federal spending. I think the Federal Government has gotten too big, too insensitive. We are not solving problems by excessive spending.

At the same time, I think the record indicates this past year we have had the biggest deficit we have ever had in our history.

I have a copy of the President's economic report. Even at the height of World War II, we had nothing like a $\$ 76$ billion deficit. The previous big one was $\$ 54$ billion.

Of course, we had price control during World War II, otherwise we would have had greater inflation at that time. We had a $\$ 76$ billion deficit, not only the biggest in dollars, but except for World War II, the biggest percentagewise in relationship to the overall budget. In spite of that, we had a sharply moderating inflation situation, great increase in Federal spending, enormous increase in the deficit, yet, inflation dropped more sharply than we expected.

I think that it's obvious that there were reasons, and you have touched on some of them, energy prices stabilized. Food prices tended to drop.

But, I think we haven't given quite enough attention to the remarkably constructive performance of wages. You touched on it, but I think we ought to recognize that we had a really sharp contrast here.

In the first quarter, major collective bargaining settlements provided for increases of 8.8 percent for the first year of the contract.
Last year first quarter it was 10.2 percent. While that is only a moderate reduction in the increase in wages, the important thing is that last year there was a-there was very little productivity increase. In fact, there might even have been a productivity decrease, I'm not sure. But this year there was an improvement of 4.6 percent in productivity.

As you say, that is not as good as it has been in the past, in recovery periods. Nevertheless, it resulted in a drop in the increase unit labor cost from an annual rate of 9.3 percent last year to only 3.7 percent this year.

Just cut much more than in half. Of course, in view of the fact that labor costs constitute about 70 percent of the costs in our economy, that sharp drop in cost was undoubtedly a major element, perhaps the major element in the fact that prices rose much more slowly.

That is not altogether inconsistent with your argument that unemployment compensation is too high, minimum wages are too high. But it does suggest that if we have moderate wage settlements, that we might be able to have a faster growth in the economy with a sharper diminution in unemployment in addition to the elements that you suggested that are indeed unpopular.

Dr. Bemas. I would agree with that, Senator.
The Chatrman. You did touch on some elements here, but I am concerned about another one.

Let me go back to one other point which is very interesting that you are touching on the Humphrey-Hawkins bill.

I notice that that has been modified.
Dr. Burns. Has it?
The Charrman. It's my understanding it's been modified so that the 3 percent goal for overall unemployment is no longer the goal. The new goal is 3 percent for adult employment. And, as I understand it

Dr. Burns. Stating the goal in terms of adult unemployment doesn't make much difference.
The Chairman. Well, I understand that would be less or more than a 4 percent overall unemployment.

Dr. Burns. I have got the figures here.
The Chairman. That is important to us, because that bill will be before this committee and we will have hearings in the future. I think your opinion on the bill would be very important to the committee.

Dr. Burns. Let me give you some figures.
I think the adult unemployment rate is now defined as referring to individuals of age 18 or over.
Consider 1952 and 1953 , when we had a remarkably low rate of unemployment. In 1952, the total unemployment rate was 3 percent, and the adult unemployment rate was 2.8 percent. In 1953, the total unemployment rate was 2.9 percent, and the adult rate 2.8 percent.

The difference was larger-but still rather small-in two other recent years of very low unemployment, 1968 and 1969. In 1968, the total unemployment rate was 3.6 percent, and the adult rate 3.2 percent. In 1969, the total unemployment rate was 3.5 percent, and the adult rate 3.1.

The Chatrman. Well, again, I think it is a matter of the definition. I am not sure it was 18 and above.

If you move that up to 24 and above, you get quite a different situation. If you have the adult defined as 24 years old and above, or 21 and above.

What I'm saying is that particularly-
Dr. Burss. That was my point. As the Humphrey-Hawkins bill stands now, it ought to be forgotten; but it's capable of great improvement.

The Chairman. You may not appreciate this. But with the influence you have, you gave, the government-as-an-employer-of-lastresort more support than I think anybody else did, because of your great prestige as a respected conservative economist, when you said the government should be an employer of last resort, you did, it's true, specify at less than the minimum wage. That was quite a modification, but nevertheless, we can discuss what the wage ought to he.
How about a compromise. How about making it something like this: But saying after 10 weeks of unemployment compensation, the person receiving it has to take the job that is available or he goes off unemployment compensation at the unemployment compensation wage?

Dr. Burns. That would be an improvement on HumphreyHawkins.
I would be very glad to study that suggestion. But, let me differentiate my approach from the approach of Humphrey-Hawkins.

Humphrey-Hawkins continues the old game of setting a target for the unemployment rate. You set one figure, I set another figure. If your figure is low, you are a friend of mankind; if mine is high, I am a servant of Wall Street. And so forth, and so on.

I think that is not a profitable game and would like to do away with it. I don't want to debate with you or with other economists the question of the proper unemployment rate. Numbers taken out of the air without regard to history cannot be used in developing a workable scheme aimed at a full employment.
I favor aiming literally at a zero rate of involuntary unemployment. But, whereas I would have the government be the employer of last resort, I would deliberately make these governmental jobs unattractive in terms of pay, so that individuals would have a great incentive-

The Chairman. I agree with that principle. I think that principle is right. I think that is the only way, short of rigid wage price controls that you can sharply reduce unemployment realistically without unacceptable inflation.

You have to somehow close that link in the Humphrey-Hawkins bill, or you do have something that wouldn't fy, I agree with that.

I think the whole definition of what is unattractive enough to provide incentive for people who are given temporary employment in the public sector to move back into the private sector without inflation.

Dr. Burns. You are a good legislator, and so you suggest a compromise. That is the way you have to legislate practically.
But, when I suggested that the Federal Government pay a wage below the minimum wage, it wasn't because I am heartless. It was because I had in mind the 7 million or so individuals who are now working for a wage at or below the minimum.

If the Government goes above that, these individuals will tend to move out of their private jobs into the governmental jobs-which in any case might be more secure, possibly a little more dignified, possibly easier.

I would want to guard against that kind of movement, because I believe, as I know you do, in free enterprise in our country. You have been fighting over the years to limit the growth of the Government. If you set a wage on a principle other than mine, I am afraid that expansion of Government will continue, perhaps at an extraor-dinarily fast rate.

The Cifairman. But look at the post-catastrophic effect on the economy if you provide what you suggested. If after a short time on unemployment compensation, those on unemployment compensation receive less than the minimum wage, which is about $\$ 4,000$ a year, say $\$ 2$ an hour for 2,000 hours.

Now, $\$ 4,000$ a year would mean people who are now getting $\$ 8,000$ and $\$ 9,000$ on unemployment compensation and are able to keep up payments to their home and car, would just be absolutely desolate. Would be in a position where you would tend to have the kind of snowballing depression we have so often had before World War II.
Dr. Burns. I don't deny that there are difficulties. But I think you have to face up to the fact that the availability of unemploy-
ment insurance for a very long period keeps many people from looking for a job.

The Chatrman. I agree. I think many, many people on unemployment compensation admit the system is wrong.

Can you comment on the adequacy of the Council on Wage Price Stability?
Do you think they have enough resources and authority to do an effective job?

Dr. Burns. No, I don't think they do. I think they ought to have more authority.

I get a great deal of mail from my business friends who are very critical of my views on this, and I may well be wrong. But the world being as it is, I think we do have abuses of economic power in the field of business and in the field of labor.

Mandatory controls may work well for a time, but then they deteriorate; their effectiveness erodes.
I doubt whether our monetary and fiscal policies will prove sufficiently restricting to prevent inflation. And, therefore, I keep stressing structural policies.
I also believe that we, along with other countries, will find ourselves experimenting with income policies. We don't quite know how to make them work, but we will keep on trying.

What I would like to see us do in this country at the present time is to give the Council on Wage and Price Stability a little more power-power to suspend price or wage increases in key industries for a brief period, perhaps 30 or 45 days.

The Charrman. Would such an action in steel, for example, have been helpful in your view?
Dr. Burns. I would rather not comment on that specific instance, not having studied it. But that may well be a good example.

The Chairman. One other point with respect to inflation.
You have warned us in previous testimony the capacity utilization rate reported by the Fed understates the potential for inflation especially when bottlenecks occur in key sectors of the economy.
As our recovery picks up steam do you foresee any shortages or bottlenecks that will have a serious inflationary effect and, if so, what does that do to the economy?
Dr. Burns. I would not be surprised if in a year or a year and a half we found that there was a shortage of capacity in some of our raw material producing industries once again. Steel might be one of them.

The Chamman. What in your view can we do about this, if anything?

Dr. Burns. One reason we have had limited investment in our country recently has been a shortage of confidence but confidence is returning. I think the policy of moderating inflation gives encouragement to the business community; it gives businessmen the feeling that the future is more secure.

By keeping the problem of inflation before us-not letting fiscal policy go wild again, and not letting monetary policy go wild-we will help to maintain and to strengthen confidence.

That is one thing. We are doing that now and we must stay on that course.

Beyond that, I think that some changes in our tax laws could be very helpful in stimulating business capital investment.

The Chatrman. One area where capacity shortage is especially significant is in the energy area.
We had testimony before the committee from Vice President Rockefeller and others on their proposal for an enormous sum, $\$ 100$ billion, for an energy independence authority.

The effect on the capital markets, of course, would be profound.
The effect of the Federal Government's deciding what technologies to develop-and it wouldn't be research, it would be actually bringing new technologies on scene, producing-would be profound.

Do you have any judgment on the wisdom of that?
Mr. Burns. I have a definite view on the general problem. I think independence in the energy area is a goal that the Congress and the administration should be working towards far more actively than we have been doing. Our reliance on imports of oil is increasing, which means that our economy may be at the mercy of what a number of Arab sheiks may decide to do in the way of price or in the way of embargos. I think our national security requires that we achieve energy independence, or substantial independence, once again.

As for the Rockefeller proposal, the proposal is awesome.
I don't know whether the right sum is $\$ 100$ billion, or $\$ 50$ billion or $\$ 30$ billion, and I am not sure anybody does.

I would say only one thing on the financial side. If we go in for a large program-no matter how we define that-we ought to keep the books straight. The proposal originally put forward by the administration would allow off-budget accounting for this type of outlay, and I think that is wrong.

You spoke earlier, Senator, of a budget deficit this vear of approximately $\$ 76$ billion. That excludes some $\$ 9$ billion, I believe, of off-budget outlays. The true deficit, therefore, is more nearly $\$ 85$ billion than $\$ 76$ billion.

If an expert like yourself can misstate the deficit by $\$ 9$ billion, others are unlikely to know its true size.

I think our accounting should be simple and straightforwardas simple and straightforward as we can make it. Congress ought to move to eliminate the off-budget category.

The Chatrman. So you would put the energy independence authority in the budget.

Do you have any judgment on the $\$ 25$ billion so-called OECD safety net fund for assisting countries that have been seriously affected by energy shortages?
Mr. Burns. I have been in favor of that, and I still am, as much for political reasons as for economic reasons. I don't think that the countries in Europe should be at the mercy of what an Arab potentate may want to wring from them.

The Chairman. Finally, I have a great difficulty, as you know, with this range.
It seems to me we aren't being told as precisely as the Federal Reserve Board can tell us what your aims are, recognizing fully that you are free, of course, to change the-and there is no way we could make you unfree because, as you say, we can't control the situation.

Dr. Burvs. We have reduced the range, Senator.
The Chatrman. Well, you have the same range you started off with last year.

Dr. Berns. That's correct; 2.5 percentage points.
The Chairman. Isn't that such a broad area?
After all, if you have a 4.5 percent increase in the money supply, that is quite conservative. If you have 7 percent, that is-that is quite stimulative.
There is such a big difference that we aren't sure really what the policies or as sure as-the Germany Central Bank, I understand last year announced an 8 percent goal.
Dr. Burns. Well-
The Chamman. Why wouldn't it be proper for you to say it is 5.75 , recognizing that you aren't going to be on target?

Wouldn't that be more informative?
Mr. Burvs. My own judgment, and that of my colleagues, has been that it would be more misleading than informative.

If, let us say, we announced a figure of-to take a round num-ber-6 percent, and if we had the ability to hit that target or come close to it, and if we also had the intention to stay with it, the single figure would be more informative than a range.
But we have no such intention. We shouldn't have any such intention; the whole genius of monetary policy lies in its flexibility.
The Chatrman. Look at the flexibility you have.
We would expect-and you have done a fine job of educating us into recognizing that we can't expect anything like this target for a week or a month or maybe a little more than a monthbut you are free to come up and you do come up before either this committee or the House committee every 3 months to revise it, change it, modify it.

So that if you had told us that it would be for example, 5:75 percent and it was more than that or less than that for a month or two, we would certainly understand that.

Then when you came up you could change it and explain it.
It just seems to me that we would have a more precise and useful formulation of what your monetary policy is instead of a range that encompasses almost anything.

Dr. Bervs. Yours is a respectable opinion.
I must say that that position was argued by some members of the open market committee. It has not prevailed so far, and I shall do my best to see that it does not prevail in the future.

The Chatrman. I hope you would consider opening up your mind.

I realize it is a very
Dr. Brens. That is the trouble with my mind, that it is so open. I am going to invite you to open yours.
Let me give you some figures, Senator-
The Chatrman. Your mind is open on many things, but it is closed on this one, especially when you say you are going to do your best regardless.

Dr. Burvs. All that I can do, Senator, is to make the best use at any given time of the knowledge that I have or that I think I have.

Let me give you some figures which have influenced, and continue to influence, my thinking. For the month of March we published a figure for $\mathbf{M}_{1}$ that implied growth from February at a seasonally adjusted annual rate of 6.1 percent.
We used one particular method of seasonal adjustment. However, we might have used any of a number of respectable methods.

I have before me a table showing a dozen or so different seasonal corrections that might have been applied. If we had used a different seasonal, the growth rate indicated for March might have been 4.8 percent, or it might have been 9.7 percent.

For the month of February, we published a figure that implied growth at a rate of 6.5 percent. Using different seasonals, the growth rate might have been zero or 10.6 percent.
Now, Senator, that is not the end of the story; these figures are revised.
The Chairman. Let me just stop at that point.
I would agree with you wholeheartedly that a month wouldn't mean anything even if you didn't have a seasonal because there are so many aberrations in the money situation, the credit situation in this country, and the activity of the Treasury and so forth can distort this.
What a seasonal, of course, therefore eliminated, that we should have something a little more precise than we have.

Dr. Burns. Senator, I did not mean to imply that a range of 2.5 percentage points for $M_{1}$ is right and that a range of 2 percentage points would be wrong. All I meant to say is that a moderately wide range is essential if the public and the Congress are not to be misinformed.

The Chatrman. Let me say in conclusion that I am concerned about the adequacy of this range, particularly the midpoint.

It seems to me if you assume, as you have, that we will have an increase in real growth of around 7 percent, and an inflation rate of 6 percent, that adds up to a need to finance money transactions of around 13 percent.

That would mean with an increase in the money supply of, say, 5.75 or 6 , that you would have to have a velocity at almost as high a rate as it has been over the last year and all our experience is that that is unlikely.

Therefore, my conclusion would be that if you follow this kind of a policy you are likely to be restricting the money supply with a result that interest rates would tend to start rising.
Dr. Burns. Your conclusion would be inescapable if the Federal Reserve set forth some targets and then went to sleep for a full year.

We are not going to go to sleep even for 1 day or 1 hour, Senator.
Our job is to watch the economy and not to worship this or that number.

The Chairman. I realize you are going to be wide awake, but. as I say, this arithmetic just doesn't add up.
Dr. Burns. I have figures on recent changes in the velocity of $\mathbf{M}_{1}$ before me. In the third quarter of 1975 velocity increased at an annual rate of 11.3 percent; in the fourth quarter, at a rate of 9 percent; and in the first quarter of this year, at a rate of 8.1 percent.

It is true that the rate of growth in velocity is likely to diminish assuming that there are no changes in financial technology. That assumption may or may not be accurate.

But, Senator, if we are mistaken in our assumptions, as we may well be, we don't spend much time in shedding tears over the past. We know we are capable of making mistakes. But it is our job to correct them, and I can assure you that we will be fast in doing so.

The Chairman. What you are saying, if the velocity should drop down to 4 percent or 3 percent, that then you would increase the money supply at a more rapid rate than you have indicated and you would tell us that?

Dr. Burns. We would certainly reconsider the growth ranges, and would do so before velocity reached that level. What decision we would reach, I can't say.

The Chatrman. Dr. Burns, thank you very much.
I must say that you are a superb witness.
I hope you have as good a year this coming year as you had last year. It was a mighty good one from your standpoint. Your policies turned out to be most constructive to the economy.

Thank you very much.
Dr. Burns. I want to thank you, Senator, for your kindness and for the contribution you are making.

I enjoyed my last visit with you, and would like to sit down with you soon again.

The Chairman. Thank you, sir.
The committee will stand in recess until tomorrow morning at 10 o'clock.
[Whereupon, at 11:53 a.m., the committee was adjourned, to reconvene at 10 a.m., Tuesday, May 4, 1976.]

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# THIRD MEETING ON THE CONDUCT OF MONETARY POLICY 

## TUESDAY, MAY 4, 1976

U.S. Senate, Committee on Banking, Housing and Urban Affairs, Washington, D.C.
The committee was reconvened, pursuant to adjournment, at 10:07 a.m. in room 5302 of the Dirksen Senate Office Building; Senator William Proxmire (chairman of the committee) presiding.

The Chairman. The committee will come to order.
Yesterday, we had the Chairman of the Federal Reserve Board announcing his monetary target for the coming year, and he informed the Congress and the committee that the coming year, he was going to have a somewhat slightly tighter goal than he had last year.

Last year, he began by saying that the goal, the increase in the money supply, $\mathrm{M}_{1}$, would range between 5 percent and $71 / 2$ percent.

This year, it will be $41 / 2$ to 7 percent. The announcement concerns this Senator very much, because we still have very heavy unemployment. We have to recognize the fact that in the first year of recovery, on the basis of all of our experience, the velocity of money increases sharply and increased with very great rapidity in the last year.

This was the reason why, in spite of a rather limited increase in the money supply, interest rates moderated and the recovery was able to move ahead.

I am very much concerned about what happens if velocity slows down, as it has typically in the past in the second year of recovery and the increase in the money supply also slows down.

We may have a situation where interest rates would rise sharply and the recovery might be aborted, or at least slowed down more than it should be.

We also had an interesting discussion of the Humphrey-Hawkins bill, which was criticized vigorously by the Chairman of the Federal Reserve Board, and I think we can have some useful testimony on that.

That bill comes before this committee because this committee is responsible for the Employment Act of 1946, and, of course Hum-phrey-Hawkins is an amendment to the Employment Act of 1946.

It's a very serious effort to answer the problem of chronic unemployment in our society. It does raise the question that Governor Burns properly emphasized of the inflationary effect of that kind of a proposal.

Well, we are very fortunate this morning in having three outstanding American citizens appear before us with differing viewpoints.

Our witnesses are Mr. Leonard Woodcock of the United Auto Workers, Dr, Andrew Brimmer, visiting professor, Harvard Business School, and, of course, the former Governor of the Federal Reserve Board, Dr. James O'Leary, U.S. Trust Co. of New York, an old friend of the committee and an outstanding economist.

Gentlemen, will you come forward and we will hear first from Mr. Woodcock, then Dr. Brimmer and Dr. O'Leary, and then we will have some questions.
I might say, gentlemen, that if you want to abbreviate or skip over your statement in any way, it will be printed in full in the record. We do want to have an opportunity to ask questions of you.

STATEMENTS OF LEONARD WOODCOCK, PRESIDENT, UNITED AUTOMOBILE WORKERS; DR. ANDREW F. BRIMMER, VISITING PROFESSOR, HARVARD BUSINESS SCHOOL; AND DR. JAMES J. O'LEARY, U.S. TRUST CO., NEW YORK

Mr. Woodcock. Thank you, Mr. Chairman.
I welcome the opportunity to share with this committee the views and concerns of the UAW in matters affecting monetary policy.

We are convinced that one of the requirements for sound and responsive economic policies is that the elected representatives of the people play an important role in the management of monetary aggregates and in the allocation of credit.
It is now well established that the Federal Reserve Board greatly aggravated inflationary pressures in 1972 when it supplied a tooeasy flow of money and credit.

At the beginning of that year, it was apparent that the economy had started to recover from its dismal performance in 1970-71.

Yet, while the money supply-currency plus demand depositshad increased about 6.3 percent during the latter half of that period, in 1972-the year Nixon got reelected-its growth accelerated to 8.7 percent, encouraging speculation, the buildup of short- and inter-mediate-term consumer and business credit, and huge short-term capital outflows. Even a pro-business publication such as Fortune admitted later on that, "It was hard to come to a nonpolitical explanation of the Fed's actions during 1972."

In 1974, confronted with the accelerating inflationary spiral which it had helped to create, the Board took the opposite tack with the adoption of too restrictive policies.

From December 1973 to June 1974, the monev supply increased at an annual rate of 6 percent; from June to December 1974, its growth was slowed down further to an annual rate of 3.1 percent.

At the same time, the Consumer Price Index was soaring at rates of 12 percent.

At the trough quarter of the recession-the first quarter of 1975the money stock actually declined. while the unemplovment rate was on its way up to the highest level in the post-World War II period.

The last half of 1975 provided yet another striking example of misguided priorities in the conduct of monetary policy.

Worried about reigniting inflation even when the economy was trying to get back on its feet after the worst crisis in four decades, the Federal Reserve allowed the money stock to inch up at an extremely sluggish 2.3 -percent annual rate during the third and fourth quarters of 1975.

Federal Reserve analysts were probably as surprised as those outside of the System when GNP still increased at rather substantial rates throughout those two quarters. This came about as the Chairman has already noted, as an increase in the rate at which money changes hands; that is, its velocity accounted for a larger share of the increase in GNP-as measured in current dol-lars-than had been true at comparable stages of the last four postwar recessions.

Whether velocity will remain at a higher rate on average in the future than in the past is open to question. We cannot depend on that to offset overly restrictive actions by the Federal Reserve Board.

Although we have been encouraged by the increases in production, the strength of consumer demand and the abatement of inflation, the economy has a long way to go before it reaches an acceptable level of both manpower and capacity utilization, and the unemployment rate still stands higher than in any year since 1947.
The Full Employment and Balanced Growth Act of 1976, the Hum-phrey-Hawkins bill-which will provide a means of reducing unemployment among adults to 3 percent by 1980-is a viable alternative to the reactionary policies of the past 7 years.
While S. $50 /$ H.R. 50 is a most impressive step, it does not provide a full array of tools, especially with respect to the integration of monetary policy into overall planning.
Therefore, this committee will have a most important role in making the act a success. Matters which will become of particular concern to this committee in the future include the composition of the Federal Reserve Board and of the Open Market Committee, and the mechanisms through which the legislative and the executive branches could be assured of the Federal Reserve's cooperation toward the goals of economic policy and its responsiveness to changes in fundamental conditions.
There is now legislation before Congress which would change the term of the Chairman of the Board to coincide with that of the President of the United States, with a 6 -month lag. This would give each new President the opportunity to personally fill one of the key roles in the operation of the Nation's economic policies.

The President would also appoint (with the Senates approval) the presidents of the 12 regional Reserve banks who are now chosen by the commercial banks.

Along with seven Board members, five of the regional bank presidents serve on the Open Market Committee, the chief policymaking body within the Federal Reserve System.
In addition to Presidential appointment of the regional presidents, the regional boards would be required to include among their members a fair proportion of public members chosen without discrimination and with due consideration to the interests of labor, education and consumers.

These groups should also be represented, as well as industry and banking, on the Board of Governors of the Federal Reserve.

The terms of the governors, now extending for 14 years, should be abbreviated.
The UAW has no point-by-point blueprint for a national economic planning mechanism nor for the integration of monetary policy decisions into such mechanism.
However, we believe that the flow of responsibilities should proceed along the following lines: At the beginning of each year, the President would be required to present a program designed to achieve full employment, full use and growth of productive capacity, and higher and better distributed purchasing power, within a context of democratic priorities.
Having benefited from the input of the Chairman of the Federal Reserve Board in the capacity of a top economic adviser, as well as from the rest of the executive's chief advisers, this program would stipulate broad policies to ensure an adequate money supply and credit availability at reasonable interest rates.

A review by an appointed body in Congress would follow, and a national plan for full employment and balanced growth would be agreed upon, including appropriate monetary policy guidelines.

At this point, the Board of Governors of the Federal Reserve System would be mandated to carry out the concomitant monetary policies therein outlined for the year ahead.

The changes we advocate would totally alter the existing relationship between Congress, the executive and the Federal Reserve System in that the latter would become one of the crucial instruments utilized by the Federal Government in the pursuit of national economic goals, rather than an independent agency which as often obstructs as assists the achievement of these goals.

In conclusion, I urge the Congress to exercise close oversight of Federal Reserve activities, and to enact the legislative changes needed to assure that monetary policies will be consistent with the achievement of full employment and other national goals.
[The complete statement follows:]
Statement of Leonard Woodcock, Prebident, United Automobile, Aerospace and Agriculubal Implement Workers of America, UAW


#### Abstract

My name is Leonard Woodcock. I am President of the International Union, United Automobile, Aerospace and Agricultural Implement Workers of America, UAW. We represent $1,415,000$ UAW members, organized into 1,650 local unions.

I welcome the opportunity to share with this Committee the views and concerns of the UAW in matters affecting monetary policy. These quarterly hearings mandated by law since March 1975 provide a forum for the discussion of monetary policy and a means by which Congress can require the Federal Reserve Board to document policy goals and explain whatever shortfalls have occurred in its policies. The hearings are a step in the right direction, but additional mechanisms are needed. As I will explain later in my testimony we are convinced that one of the requirements for sound and responsive economic policies is that the elected representatives of the people play an important role in the management of monetary aggregates and in the allocation of credit.


## THE ECONOMIC SITUATION

The signiflcance of monetary policies is underscored by the events of the last few years. It is now well-established that the Federal Reserve Board greatly aggravated inflationary pressures in 1972 when it supplied a too easy flow of
money and credit. At the beginning of that year, it was apparent that the economy had started to recover from its dismal performance in 1970-71. Yet while the money supply (currency plus demand deposits) had increased about 6.3 percent during the latter half of that period, in 1972-the year Nixon got reelected-its growth accelerated to 8.7 percent encouraging speculation, the buildup of short- and intermediate-term consumer and business credit, and huge short-term capital outflows. Even a pro-business publication such as Fortune admitted later on that, "it was hard to come to a nonpolitical explanation of the Fed's actions during 1972."

In 1974, confronted with the accelerating inflationary spiral which it had helped to create, the Board took the opposite tack with the adoption of too restrictive policies. From December 1973 to June 1974, the money supply increased at an annual rate of 6.0 percent; from June to December 1974, its growth was slowed down further to an annual rate of 3.1 percent. At the same time, the Consumer Price Index was soaring at rates of 12 percent. At the trough quarter of the recession (the first quarter of 1975), the money stock actually declined, while the unemployment rate was on its way up to the highest level in the post-World War II period.

The last half of 1975 provided yet another striking example of misguided priorities in the conduct of monetary policy. Worried about reigniting inflation even when the economy was trying to get back on its feet after the worst crisis in four decades, the Federal Reserve allowed the money stock to inch up at an extremely sluggish 2.3 percent annual rate during the third and fourth quarters of 1975. Federal Reserve analysts were probably as surprised as those outside of the System when GNP still increased at rather substantial rates throughout those two quarters. This came about as an increase in the rate at which money changes hands-that is, its velocity-accounted for a larger share of the increase in GNP (as measured in current dollars) than had been true at comparable stages of the last four postwar recessions. In any event, it is clear that the Federal Reserve retarded rather than enhanced the recovery and that a much stronger upturn could have been achieved with an easier money supply during that period.

Whether velocity will remain at a higher rate on average in the future than in the past is open to question. We cannot depend on that to offest overly restrictive actions by the Federal Reserve Board.

At the time this statement was written we did not have the benefit of Chairman Burns' assessment as to the future course of monetary policy. In his testimony of last February under House Concurrent Resolution 133, he appeared ready to clamp down on the money supply again, stating that improved conditions in the economy and in financial markets warranted a lowering of the bottom end of the projected growth rate of the money supply from 5 to $41 / 2$ percent. And he concluded:
"As the economy returns to higher rates of resource utilization, it will eventually be necessary to reduce the rate of monetary and credit expansion.
"The Federal Reserve does not believe the time for such a step has ret arrived. But in view of the strong economic recovery that has been under way since last spring, we must be on our guard."

Although we have been encouraged by the increases in production, the strength of consumer demand and the abatement of inflation, the economy has a long way to go before it reaches an acceptable level of both manpower and capacity utilization. We are particularly concerned about the high rate of unemployment, especially among certain crucial groups in our labor force. such as the young and the minorities. All too often, we hear government and business spokesmen rejoicing about the developments in employment. increasingly forgetful of the fact that the unemployment rate still stands higher than in any vear since 1947.

Moreover, whatever progress has been achieved so far in bringing unemployment down will be harder to duplicate in the same time span as the recovery continues. Unless we are able to improve on the average past cyelical experience, the unemployment rate can be expected to drop only about 1.5 nercentage points in the year from October 1975. the month it began to decline. That would leave it at around $\mathbf{7 . 0}$ percent by next October, in line with most forecasts. The Congressional Budget Office (CBO), for example, has predicted an overall unemployment rate of 7.0 to 7.5 percent by the fourth quarter of this year and 6.4 to 6.9 percent by the fourth quarter of 1977. It is noteworthy
that their projections, appalling as they are, imply monetary growth rates above the ranges announced in February by the chairman of the Federal Reserve Board.

## NEED FOR FULL EMPLOYMENT POLICIES BY THE FEDERAL RESERVE BOARD

As pointed out by Congressional Budget Office director Alice Rivlin, ${ }^{1}$ these projections bring unemployment less than halfway from its current 7.5 percent rate to the long-term average of 4.9 percent. She went on to ask, "Can we do better than this unemployment forecast over the next two years? And can we do better than the long-term average over, say, the next 10 years? I believe that the answer to both questions is yes, but that dong better both requires departures from current policies and carries significant risks." I agree with this statement-and I would add that failure to do better is the biggest risk of all.

Congress does have an opportunity to act decisively on getting unemployment down to more tolerable levels. The Full Employment and Balanced Growth Act of 1976 (Humphrey-Hawkins bill)-which will provide a means of reducing unemployment among adults to 3 percent by 1980 -is a viable alternative to the reactionary policies of the past 7 years. This bill, one of the most significant pieces of legislation to appear in Congress since the New Deal, has become the focus around which the progressive forces of our nation are rallying. Not surprisingly, the bill has also become a target for President Ford, who recently accused it of being "a vast election year boondoggle" that he intends to veto if passed by the Congress. President Ford seems to take comfort in large numbers, especially when unemployment is concerned.

There are two main features of the Humphrey-Hawkins bill. First, the bill establishes that government shall provide jobs for all who are able to work and seek work but cannot obtain a job in the private sector. Second, the bill recognizes that the fiscal and monetary policies used to "fine tune" the economy in the past quarter century are not capable of doing the job anymore, and provides that they be supplemented by some measure of national economic planning involving the Administration, Congress and the Federal Reserve Board.

While S. $50 / \mathrm{H} . R$. 50 is a most impressive step, it does not provide a full array of tools, especially with respect to the integration of monetary policy into overall planning. Therefore, this Committee will have a most important role in making the Act of success: Matters which will become of particular concern to this Committee in the future include the composition of the Federal Reserve Board and of the Open Market Committee, and the mechanisms through which the legislative and the executive branches could be assured of the Federal Reserve's cooperation toward the goals of economic policy and its responsiveness to changes in fundamental conditions.

The Federal Reserve System has been traditionally independent from the executive and legislative branches. Its governors are granted unparalleled autonomy in the form of long terms of appointment and an independent source of operating funds. The decisions made by the Federal Open Market Committee in its closely-guarded monthly meetings have a major impact on every citizen's ability to obtain a mortgage and on the price he will pay for it; on the ease of borrowing money for buying a car; ultimately, on the likelihood of his finding and holding a job. Yet none of the members of the Federal Open Market Committee is an elected representative of the people, and over two-fifths of them have not even been presidentially appointed.

There is now legislation before Congress which would change the term of the chairman of the Board to coincide with that of the President of the United States, with a 6 -month lag. This would give each new President the opportunity to personally fill one of the key roles in the operation of the nation's economic policies. The President would also appoint (with the Senate's approval) the presidents of the 12 regional reserve banks who are now chosen by the commercial banks. Along with 7 Board members, 5 of the regional bank presidents (in rotation) serve on the Open Market Committee, the chief policymaking body within the Federal Reserve System. In addition to presidential appointment of the regional presidents, the regional boards would be required to include among their members a fair proportion of public members chosen

[^1]without discrimination and with due consideration to the interests of labor, education, and consumers. These groups should also be represented, as well as industry and banking, on the Board of Governors of the Federal Reserve. The governors are chosen by the President, who unless mandated to do otherwise, will most certainly continue to stock the Board with prominent representatives of the banks and the corporations. Currently, the Board boasts 6 bankers and 1 recently appointed manufacturing executive. The terms of the governors, now extending for 14 years, should be abbreviated. Measures such as those I have enumerated would make the Federal Reserve much less dependent on the narrow interests of the commercial banks who now exercise too much control over it.
As I indicated earlier in this testimony, the conduct of our monetary policy needs improvement and greater adherence to economic goals which will benefit the majority of the American people rather than the bankers and securities dealers. There is also a need for much greater accountability than is mandated by House Concurrent Resolution 133.

The UAW has no point-by-point blueprint for a national economic planning mechanism nor for the integration of monetary policy decisions into such mechanisms. However, we believe that the flow of responsibilities should proceed along the following lines. At the beginning of each year, the President would be required to present a program designed to achieve full employment, full use and growth of productive capacity, and higher and better distributed purchasing power, within a context of democratic priorities. Having benefited from the input of the chairman of the Federal Reserve Board in the capacity of a top economic adviser, as well as from the rest of the executive's chief advisers, this program would stipulate broad policies to ensure an adequate money supply and credit availability at reasonable interest rates. A review by an appointed body in Congress would follow, and a national plan for full employment and balanced growth would be agreed upon, including appropriate monetary policy guidelines.

At this point, the Board of Governors of the Federal Reserve System would be mandated to carry out the concomitant monetary policies therein outlined for the year ahead.

The practice of quarterly alternate hearings before the Senate and the House Banking Committees should continue, but these must provide an opportunity for Congress to direct the Board to change its actions if those Committees should find them to be at odds with the objectives of the national plan. They could also provide a mechanism to modify the specified monetary policies if that is required by changes in fundamental conditions.

Congress' informational demands should be well defined. No proper assessment of monetary conduct is possible unless the reporting framework refers to the same monetary and credit indicators in each quarterly hearing. The freedom to employ a wide range of instruments and indicators to interpret its policy intentions currently allows Chairman Burns to present its effects in a disingenuously favorable light. Moreover, a deliberately confusing report, compounded by the secrecy with which the Board and the Open Market Committee go about their business, makes it most diffcult for congressmen to maintain a grasp on the various issues in monetary policies and thereby inhibits their ability to deal effectively with such issues.

The changes we advocate would totally alter the existing relationship between Congress, the executive and the Federal Reserve System in that the latter would become one of the crucial instruments utilized by the federal government in the pursuit of national economic goals, rather than an independent agency which as often obstructs as assists the achievement of these goals. This pattern is quite common among industrialized nations of the Western world, where central banks operate as an integral part of the government, fully responsive to that government and its policies, and actively promote the economic and social goals of the nation through various financial mechanisms. For instance, a 1970 study by the House Committee on Banking and Currency showed that in Sweden the Sveriges Riksbank regulates private banks to channel funds in uccordance with the goals set by the national economic budgets. Housing, vital industries, and exports are emphasized. In addition, state banks provide loans for housing, agriculture and small business. The bank is headed by a seven member board of directors, six of whom (usually not bankers by profession) are elected by the Parliament from among its own members; the seventh is appointed by the government. In Japan, the Nihon

Ginko makes indirect loans to industrial firms through direct loans to commercial banks over which it has direct control, and provides loans to aid small businesses, exports, agriculture and housing. Other public financial agencies under its control include a government trust fund bureau which makes investments and loans in these areas as wel.

The study concludes that active participation in the allocation of credit is a constant running through the overwhelmingly majority of central banks outside of the U.S. In our country, the various chairmen of the Board have repeatedly asserted that the Federal Reserve has no responsibility toward individual sectors of the economy, its job being to administer monetary policy with a broad brush. However, in the actual application of this policy credit has been allocated unevenly with the more powerful and more affluent elements of society willing and able to outbid the needier sectors in the struggle for the available funds. As a result, essential areas of our economy such as housing and urban development have been starved for funds and scores of our fundamental social and economic needs remain unmet.

A fairly recent episode reveals how the Federal Reserve does indeed practice credit allocation while claiming to be neutral. In 1974, the Board told the commercial banks, through the regional Reserve banks, that they should be extremely sensitive to the credit needs of the real estate investment trusts (REITs). The commercial banks naturally responded. Similar actions by the Board were taken with respect to public utilities, and operators of cattle feed lots. Yet at the same time Chairman Burns was formally opposing a bill by Representative Reuss ${ }^{\text { }}$ which would have directed the Reserve to allocate credit through a system of supplement reserve requirements-subject to some public scrutiny.

Thus the choice is not whether we should have credit allocation or not-that is a moot question-but whether there should be some public guidelines to the process. I would have disagreed with saving the REITs and the cattle feeders over providing for low- and middle-Income housing. But the crucial issue is that, in agreement or not, neither I nor any of the 1.5 million UAW members had any impact on this choice through any of our elected representatives.

I would like to conclude with a quote by Professor Lester Thurow at hearings before the Subcommittee on Domestic Monetary Policy of the House Committee on Banking, Currency and Housing in February 1975. He very aptly put the question of economic choice in its proper institutional context:
". . . if you look at economic policies there are two central ingredients in any economic policy. One is the whole problem of technical economics, and the other problem is the problem of value judgments as to who ought to be hurt.
"Every economic policy hurts somebody in the sense of lowering his income.
"Now, . . . I think that you gentlemen and the President of the United States have been elected to make the value judgments as to who ought to be hurt by economic policies, and . . . the people of the Federal Reserve Board . . . are simply economic technicians, and we have not elected Mr. Burns or anybody else to make the value judgments about who ought to be hurt. We have elected you to make those value judgments, and therefore I think that Congress and the l'resident should be having the same type of influence on monetary policies as they have on fiscal policies, and budget policies. Because fiscal policies and monetary policies are both policies by which we help and hurt individuals, leaving the technical economics aside."

I urge the Congress to exercise close oversight of Federal Reserve activities, and to enact the legislative changes needed to assure that monetary policies will be consistent with the achievement of full employment and other national goals.

## The Chairman. Thank you. Mr. Brimmer.

Mr. Brimmer. Thank you, Mr. Chairman. I was asked specifically to give my views on monetary policy for the current year. I was also asked to share with the committee any observations I might have with respect to Congressional monitoring of Federal Reserve activities.

I propose to devote most of my comments in the time allotted me to this second request. However, I would like to pause briefly-

[^2]while asking that my statement be put in the record in its entiretyto make a few observations on the economic situation and the implications for monetary policy.
I will not take the committee's time to review in detail the contours of the national economy during 1976 and 1977. Many forecasters now agree that the economy is on the road to substantial expansion in the pace of economic activity. The forecast which I follow most closely is that produced by Data Resources, Inc. (DRI) in Massachusetts.

I have attached to my statement a table No. 1 (page 48) which summarizes DRI's forecast figures. That forecast was made before the first quarter figures were released recently by the U.S. Department of Commerce. Undoubtedly, it will be revised, but I think the basic thrust will remain essentially the same. There are several aspects of this forecast which $I$ think deserve some attention.

Clearly, the expansion will be uneven. Certain sectors will be growing much more rapidly than others. In particular, the consumer sector will be a major source of strength, and spending on automobiles will be quite strong.

The housing sector will remain weak for some time. This is especially so with respect to multifamily houses. This will be the case in spite of the increased availability of mortgage money.

As I look ahead into 1977, it is clear we will have another year of expansion-making the year as a whole. Nineteen seventy seven will probably give us some trouble because of the unevenness of the sources of expansion. I would expect 1976, for example, to show strength based mainly on consumer spending followed by rebuilding of inventories.

Then late in the year and early next year, increased spending on plant and equipment will follow. But that spending on plant and equipment may not sustain the expansion through all of 1977 at anything like the pace I would expect to see in the first half. So I would think year over year, 1977 might see real growth in the neighborhood of $51 / 2$ percent.
Nevertheless, the response of employment and unemployment to the growth of the economy will most likely be uneven. I would expect employment to grow more slowly from here on, and unemployment to decline somewhat more slowly.

So I would expect that some 7 million people or more might still be unemployed by the end of this year.

And if I were to look in some detail at the composition of that unemployment, I would be quite disturbed. Blacks and others will undoubtedly make up a much bigger share than is the case presently. This prospect for employment and labor force behavior is one reason why $I$ believe it is vital, a view I share with others, that special measures be undertaken (such as provision of an expanded number of public service jobs) to cope with the persistence of unemployment beyond a level that can be reasonablv expected to respond to the implementation of macroeconomic policy.

I want to stress that point, Mr. Chairman. I don't think we can reasonably expect to get substantial further reduction in unemployment in the next year or so simply by reliance on macroeconomic policy.

As I look ahead, I am also troubled by the prospect of renewed inflation. I do not think we should have any illusions about the United States. To a considerable extent, we have been beneficiaries sources of the recent improvement in the rate of inflation in the of the fortuitous reduction in food prices and legislated reductions in fuel prices.

These will not last. In my judgment, the basic rate of inflation in the United States today is probably in the neighborhood of 5 or 6 percent.

The rate of increase of industrial prices is even faster, and I see day by day additional indications of increases in industrial prices. I am troubled by that. I am also troubled because I don't think the published measures of capacity utilization in manufacturing are telling us the real story.

Recently I had conversations with members of the Federal Reserve Board staff, who compiled the figures (the most widely used series), but I got the impression that if they were to publish, if they had completed the revision they are now doing, Mr. Chairman, they would probably raise the operating rate of manufacturing by 4 or 5 percent.
This suggests that utilization rates are higher than the published data indicate, but they also suggest we still have a great deal of excess capacity for the time being.
When I reflect on the prospects of inflation, I am also troubled and concerned about the above-average settlements which are now emerging from labor negotiations.
I personally was troubled by the recently concluded Teamster agreement which seemed to result in an annual rate of increase of 10 percent or more. I expect the rubber workers to aim for a higher settlement. And later on in the year, the electrical workers and the United Automobile Workers will undoubtedly have strong proposals to make with respect to wages and benefits.
I want to make quite clear my posture to this, Mr. Chairman. The improvements being sought and those being gained are obviously of benefit to the unions and their members. The effort to remove the ceiling on cost of living increases is obviously a benefit as well. But when we set these beside the long-run objectives and goals of the economy as a whole, I think we ought to be concerned about the prospects of the possible recurrence of another round of wage-price, price-wage-induced inflation.
For that reason, I think it is vital that we have much more attention or focus on some kind of policy: I think it would be much better if the Administration were to get itself involved directly in these discussions-rather than standing by waiting to see the outcome without a strong expression of the public interest.

I have no concrete proposal to implement that, but I did want to register a concern.

Now, let me turn away from the real economy and instead look at credit demands and make a few comments on the outlook for monetary policy. Despite the strong increase in registrations of new securities issues (especially debt) in the last week or so, I think overall credit demands in the United States in 1976 will continue to be quite moderate. There will definitely not be any crowding out on the part
of the Treasury despite its near term financing difficulties with the recent rise in short rates, but I think on balance the corporate sector will continue to restructure its debt. So we will see a continuous flow of long term issues. Equity issues will probably also rise substantially.

But the restoration of liquidity in the corporate sector in the face of moderate expansion and equipment expenditures suggest that corporations will not make any excessive demands.
As I look at the Government budget deficits being projected I think the markets can handle that as well, especially with the very high savings rate in the household sector-and the substantial liquidity on the part of both nonfinancial corporations and financial institutions.

So I think the overall credit demands will not be very strong. I also believe short-term business financing requirements will pick up later this year. But these will not be excessive, and much of the financing will take place in the paper markets-rather than at commercial banks.

Against that background, what is the prospect for monetary policy? I will not take up the committee's time to review the way the Federal Reserve sets its targets. Chairman Burns was questioned yesterday, and he gave some new information. Let me say quickly thatas far as I am concerned-the recent behavior of short-term interest rates in response to what we now know-since yesterday-is a modification of the Federal Reserve targets for the monetary aggregates over the next year is not at all out of keeping with what one should expect at this juncture of the economic recovery.

A full year after the recovery got underway, there is no reason to expect short term interest rates to be essentially the same as they were a year ago, maybe only slightly higher. So I think the Federal Reserve's targets as published now-and looking out to the year ending in March of 1977-are not unreasonable.

Of course, I have always had trouble with the Federal Reserve's exposition of its goals in terms of the monetary aggregates without equal emphasis on credit conditions and interest rates as well.

But given the way they state them-and especially the wide latitude involved-I think that is an appropriate range.
I want to stress, Mr. Chairman, that we should expect over the rest of this year some steady but modest rises in short-term interest rates. It would be appropriate for the Federal Reserve to do that. It should be less accommodating than it has been over the last 4 or 5 months. That is what we should expect in a period of economic expansion since we do not want to see the Federal Reserve repeat this year what was done 4 years ago when the Federal Reserve obviously allowd money and credit conditions to remain too easy too long.

So we should expect some snugging up and should support them in it.

At the same time we should be cautious and the Fed should be cautious about moving too fast and too far. So I am suggesting some slight, steady rises in rates, and they ought not to be criticized for it.

Mr. Chairman, let me put that aside and address myself very quickly to the question of what to do about monitoring. My statement says essentially I do not know. But I do have certain suggestions which I would like to call to the committee's attention.

I personally think it is not sufficient for the Federal Reserve to put into the public domain four times a year these targets for the monetary aggregates extended 12 months hence with no comment on the economic implications of that monetary policy if they were to achieve it.
Given that prospect, I think the Congress ought to organize itself to monitor the Fed somewhat more closely. Essentially, I am suggesting that the Congress, especially the two banking committees, though this might apply to the Joint Economic Committee as well, the two banking committees ought to expand and strengthen their staffs so that they can do for monetary policy on behalf of the Congress what the budget office now does for fiscal policy on behalf of the Congress.
I have some specific suggestions as to how to go about this.
It amounts to asking the Federal Reserve to put its target in the public domain and then look to the Federal Reserve staff for the technical, analytical work which would suggest the implications of that monetary policy if successful.
Mr. Chairman, I have already gotten an adverse reaction to that. I am told essentially asking for a division between the Board and its staff. I recognize that people might confuse the staff's work with the Board's or the Open Market Committee's work.
But I think we ought to run that risk. After all, it is the Federal Reserve that shares the constitutional authority with the Congress to coin money and determine the value thereto.

On the assumption that the Board will in fact resist having its staff perform this analytical task of spelling out the implications of the stated monetary policy objectives, I think the congressional staff ought to do it.

They ought to do it in substantial detail similar to what I have suggested in table 1 of my testimony. Only when there is a technical capacity equalling that of the Fed or at least approximating that of the Fed will Congress be able to monitor the work of the Fed.

So, Mr. Chairman, I think it would be appropriate to pursue that course. I would be delighted to comment further on it if you wish.
The Chairman. Thank you very much, Mr. Brimmer.
[Mr. Brimmer's statement follows:]

## Monetary Policy and the Economic Outlook

## (Testimony by Andrew F. Brimmer ${ }^{1}$ )

I am delighted to appear before this Committee to give my views on the appropriate course for monetary policy during the coming year. I was also asked to share with the Committee any ideas I might have with respect to the Federal Reserve's periodic reporting to the Congress under Concurrent Resolution 133 introduced in the House of Representatives on March 24, 1975. I have devoted most of $m y$ effort to the latter request, but I will also comment briefly on the proper course for monetary policy. As background for that discussion, I will sketch briefly the main contours of the outlook for the national economy.

## GENERAL ECONOMIC OUTLOOK

By now, there should be no doubt in anyone's mind that economic recovery from the worst recession since the Great Depression is well established. If there were any lingering doubts, they should have been erased by the recently

[^3]released statistics on the growth and composition of the gross national product (GNP) for the first quarter. Moreover, the prospect is for further expansion well into 1977. At the same time, however, the prospects of renewed inflation cannot be entirely dismissed.

Many forecasts are available which suggest the course the American economy is most likely to follow during 1976 and on into 1977. The forecast which I follow most closely is that prepared by Data Resources, Inc. (DRI). The latest DRI forecast is summarized in Table 1, attached. This forecast was prepared before the preliminary figures for first-quarter GNP were released. On the basis of those most recent data, DRI is in the process of revising its forecast. However, the broad features of the economic outlook summarized in the table will probably not be changed very much.

According to the Bureau of Economic Analysis in the U.S. Department of Commerce, GNP (after correcting for price changes) rose at a seasonally adjusted annual rate of 7.5 per cent in the first quarter of this year. From the first quarter of 1975 through the first quarter of this year, real GNP expanded by 6.9 per cent. About half of the $\$ 22.2$ billion rise in real GNP during the first quarter represented final sales, and about half was accounted for by a rise in business inventories. A strong rise ( $\$ 14.3$ billion) was also registered by real consumer expenditures.
Looking ahead through the rest of this year, according to the DRI forecast made in early April, real GNP in 1976 might expand by about 61/2 per cent. The gain in total consumer spending (about 5.3 per cent in real terms) will be the main driving force behind the growth in real GNP. On the other hand, business spending for fixed investment may climb by just over 4 per cent-with real spending on equipment advancing by about 41/2 per cent and nonresidential construction registering just over a 3 per cent gain. Real expenditures by the Federal Government might rise about $31 / 2$ per cent, and outlays by State and local governments may expand by just under 3 per cent.
Among other major sectors of the economy, the prospects for housing continue to be mixed. During the first quarter, housing starts ran at a seasonally adjusted annual rate of 1.4 million units. The trend is expected to be upward throughout the year, but for 1976 as a whole, housing starts might average about 1.6 million units. But virtually all of this modest gain is expected to be accounted for by single family housing. Multi-family units are expected to continue to reflect the adverse impact of rising production costs in the face of rents that are moving up much more slowly. Only when builders see the prospect of realizing wider profit margins should we anticipate any noticeable quickening in the construction of multi-family units.
On the other hand, consumer spending for automobiles is expected to be very strong. The DRI forecast puts retail sales of new automobiles in the neighborhood of $\mathbf{1 0 . 7}$ million units for 1976. Moreover, American-makes are expected to account for a significant fraction of the gain over 1975.

Looking ahead to 1977, it appears that real GNP might rise by about $51 / 2$ per cent. A much larger fraction of the expansion next year will be accounted for by a stzable pickup in business outlays for fixed investment. By the fourth quarter of this year, business fixed investment might be rising at a seasonally adjusted annual rate of about 8 per cent; by the fourth quarter of next year, the rate of expansion might be 11.2 per cent. For 1977 as a whole, the gain in business fixed investment might be close to 10 per cent-compared with just over 4 per cent expected for 1976. These growth rates are in real terms. Inventory investment (in current dollars) might amount to about $\$ 17$ billion in 1977 compared with just under $\$ 12$ billion in 1976. In combination, these two trpes of snending suggest that the business sector will be an important source of economic growth in 1977. The contribution of consumers will also be significant. Currently, DRI is estimating that total consumer spending in real terms might expand by 5.1 per cent in 1977. In general. it seems that the econnmic recovery will continue through 1977 with little chance of interruption. However, several other features of the economic outlook are less comforting.

## EMPLOYMENT PROSPECTS

The strong expansion in production during the last several quarters has also led to a significant gain in jobs. By March of this year. employment was back to the pre-recession high of abont $861 / 2$ million jobs. This rebound in employment was clearly faster than a number of observers (including me) had ex-
pected. On the other hand, unemployment during the first quarter of this year averaged 7.6 per cent. This rate was nearly a full percentage point below the fourth quarter average of 8.5 per cent.

Nevertheless, about 7.1 million people are still unemployed. By the end of this year, the number may have declined to about 6.5 million. If so, this would represent an unemployment rate of 6.9 per cent. If the national economy follows the general contours sketched in the DRI forecast, about 5.9 million persons ( 6 per cent of the labor force) might be unemployed at the end of 1977.
Thus, reflecting the growth of the labor force-despite a continued rise in employment-the level of unemployment will decline slowly through the end of next year. It is for this reason that a number of observers (and I include myself among them) think it is vital for special measures to be undertakensuch as the provision of a greatly expanded number of public service jobs-to cope with the persistence of unemployment beyond the level that can be reasonably expected to respond to the implementation of macroeconomic policy.

## OUTLOOK FOR PRICES

During the first quarter of this year, the gross national product deflator (the most broadly based of all of the price indexes) rose at a seasonally adjusted annual rate of 3.7 per cent. During the first quarter, the consumer price index (CPI) rose at an annual rate of less than 3 per cent. To a considerable extent, this greatly reduced rate of inflation is fortuitous. Especially in the case of consumer prices, the index captured windfall gains represented by a temporary decline in food prices and legislated reductions in the price of fuels. There is no reason to expect that these highly favorable developments will continue for very long.

Instead, the basic rate of inflation in this country is probably in the range of 5 or 6 per cent. Industrial prices are rising at an even faster rate. Several factors are at work which suggest that the rate of inflation might accelerate somewhat during the rest of 1976 and into 1977.

One of these is the rising utilization rate in manufacturing. During the first quarter of 1976, the capacity utilization rate for all manufacturing was about 7.8 per cent. For major materials the rate was 80.6 per cent. However, as is generally known, these measures (published by the Federal Reserve Board) undoubtedly underestimate the actual utilization rate. The Federal Reserve Board staff is in the process of updating and improving their capacity utilization measures. Although this work still has some distance to go, enough has been done to suggest that the presently published estimate for the utilization rate in manufacturing ought to be raised by 4 or 5 percentage points. An increase of almost the same magnitude ought to be made in the case of the index for major materials. So, the actual utilization rate in manufacturing may be in the neighborhood of 75 per cent, and the rate for major materials may be approximately 85 per cent. While these measures would still show a considerable amount of excess capacity, the margin of unused resources is probably less than one might have estimated simply by looking at the capacity utilization rates as they are currently published.

I am also personally concerned about the above-average settlements which are now emerging from labor negotiations. The recently concluded Teamsters agreement resulted in an average annual rise of over 10 per cent. It is reported that the rubber workers (currently on strike) are aiming for annual increases in excess of 13 per cent. Contracts covering electrical workers are scheduled to expire in June and July, and those covering automobile workers will run out during the fall. In all of these cases, trade unions have sought-or will seekan uncapping of the cost of living clauses in an effort to protect their members from future inflation.

I can well understand why trade union negotiators feel implied to press for these objectives. After all, they undonbtedly feel that they have the responsibility to seek means of minimizing the adverse effects of inflation on their members. But, from the point of view of the national welfare, these develonments hold serious implications. If these patterns spread to the rest of the economy, before too long, we could again be caught un in a vicious circle of wage price-price wage inflation. Given this prospect, I think it is vital that
some form of incomes policy be readied for application before the situation gets so far out of hand that the nation would have to fall back on excessively restrictive monetary policy in an effort to moderate the worst effects of inflation.

## CREDTT DEMANDS: RECORD AND PROSPECTS

Overall credit demands in 1976 are likely to be rather moderate. In the first place, the demand for funds by the Federal Government is likely to be much less than was expected earlier. There is no reason to fear "crowding out" of private borrowers by the Federal Government in either 1976 or 1977. The high personal savings rate (near 8 per cent) and the stronger liquidity position of corporations and financial institutions will provide a strong market for U.S. Treasury issues. As economic expansion gathers strength, larger tax receipts and the slower expansion in Federal spending will reduce sharply Treasury needs for funds.

State and local governments will also make little net demand on the credit market. A slower growth in real outlays is to be anticipated. To some extent, this reflects the adverse effects of the New York City experience on the willingness of State and local officials to propose new spending plans to their citizens. But it is also reinforced by slower population growth and the reduced need to spend on schools and other educational facilities. State and local governments will also experience a recovery in revenue as their local economies expand. The net result of these developments should be a modest growth of State and local indebtedness.

In the case of the household sector, rising expenditures will undoubtedly lead to some expansion in individual loan demand. Consumer credit (reflecting demand for automobiles and other durables) is already rising rapidly. But personal savings are also strong. Given the weakness of spending on housing, the demand for mortgage will also remain sluggish-in the face of strong flows of funds to savings and loan associations and other institutions active in the mortgage field. Thus, on balance, I would not expect the household sector to exert a great deal of pressure on the credit market.

In the case of nonflnancial corporations, corporate liquidity has been restored to a remarkable degree. In fact, these firms have experienced the fastest rebuilding of liquidity since the Great Depression. It now appears that new issues of corporate bonds will drop sharply in 1976 compared with the volume sold a year ago. The reasons for this are also quite clear: they include the stronger internal liquidity position of the business sector; the completion of near-term debt restructuring, and a cautious attitude on the part of corporate executives toward the expansion of spending on plant and equipment. However, the demand for funds to finance a revival of investment outlays will boost bond financing in 1977.

In the short-term sector, corporate demand for commercial bank credit will remain weak through most of this year. In fact, even with the rebuilding of inventories that is clearly under way, commercial bank lending to business probably will not expand very much. Instead, firms will probably rely more heavily on the commercial paper market as a source of funds. The high prime rate which commercial banks charge even their best customers-compared with rates obtainable in the commercial paper market-will provide a strong incentive for businesses to seek alternatives to borrowing from commercial banks. Of course, commercial banks in turn have an incentive to maintain as wide a margin as possible between the cost of money to them and the rates they can get on loans. The differential is a major source upon which they are currently relying to rebuild their own equity capital.

## OBJECTIVES ÓF MONETARY POLICY

For about a year now the Federal Open Market Committee (FOMC) has been making public its long-range targets for the growth of the monetary aggregates. In the record of policy actions taken at each of its monthly meetings, the short-run targets are also set forth. The targets adopted at the FOMC meeting of February $17-18,1976$ (the last meeting for which the policy record has been made public) are summarized below.

Long-Term Targets : Fourth Quarter, 1975-Fourth Quarter, 1976
$M_{1}-41 / 2-71 / 2$ percent.
$M_{2}-71 / 2-101 / 2$ percent.
$\mathrm{M}_{3}-9-12$ percent.
Short-Term Targets: February-March, 1976
$\mathrm{M}_{1}-5-9$ percent
$M_{2}-9-13$ percent
RPD- $1 / 3-41 / 2$ percent
Federal Funds- $41 / 2-51 / 4$ percent
In Table 2, the behavior of the monetary and reserve aggregates through April 21 is also shown. Several features of these data should be noted. As of mid-April, the narrowly defined money stock ( $M_{1}$ ) showed a two-month seasonally adjusted rate of growth of 7.1 per cent. Over the last quarter, the rate grew at an annual rate of 6.3 per cent-about the mid-point of the range set as a long-run target. It was also in the boundaries established for the FebruaryMarch period. The growth rate for the more broadly based money stock ( $\mathbf{M}_{2}$ ) was 10 per cent over the last two months-also within the latest limit set by the FOMC. The accelerated expansion in the money supply over the last month has caused a great deal of nervousness in the money market. Observing the sharp rise, a number of market participants concluded-incorrectly in my opinion-that the Federal Reserve would shift its policy and begin to exert a significant degree of monetary restraint. Reflecting this conclusion, short-term interest rates began to move up noticeably toward the end of the third week in April. However, given the underlying conditions in the economy, there appears to be no obvious reason why the Federal Reserve should adopt a restrictive monetary policy at this time.

In Table 3, the recent behavior and outlook for selected interest rates are summarized. Several comments are in order. The federal funds rate (used as a guide by the Federal Reserve in its day-to-day conduct of open market operations) was in the neighborhood of 4.8 per cent on April 22. This was slightly above the midpoint of the $41 / 4$ to $51 / 4$ per cent range within which the central bank has been aiming-according to the latest published FOMC policy record. As the monetary aggregates grew sharply as April unfolded, a number of market observers began to anticipate an increase in the Federal Reserve's federal funds target rate. However, as explained above, the objective economic circumstances would not justify such a move.

Through the third week in April, high-grade industrial bonds declined sharply-while utility bond yields remained essentially unchanged. The same was true of yields on tax exempt obligations. As fears of an early return to monetary restraints permeated the market, bond yields also rose somewhat.
Despite these recent gyrations in interest rates, the prospective performance of the nation's economy suggests that one should not expect the Federal Reserve to adopt a significantly restrictive monetary policy in the near future. Instead, it appears that interest rates have reached the low point during the current business cycle. From now on, we should anticipate a rather gentle uptrend in interest rates through the summer of 1976. As the demand for funds rises later in the year, we should also expect a somewhat more noticeable rise in shortterm interest rates. The uptrend will probably continue through mid-1977.
This outlook for interest rates is clearly what one should anticipate during a period of economic recovery. Given the Federal Reserve's concern for infla-tion-a concern which all of us should share-it would be unwise for the central bank to seek to prevent the kind of uptrend in interest rates which an expanding economy can be expected to generate.

## CONGRESSIONAL ASSESSMENT OF MONETARY POLICY

At this point, I want to focus on ways in which the Congress can improve its monitoring of monetary policy. To this end, the following steps should be taken:

1. A joint House-Senate staff should be established to assess and monitor Federal Reserve monetary policy.
2. The Federal Reserve should be required to submit its Annual Renort to Congress by approximately the same period set for the President's Budget Message and Annual Economic Report.
3. As a basis for Congressional hearings, the Federal Reserve Board should be required to do the following:
(a) Present a review of its performance compared with the monetary policy objectives it had set for itself the previous year.
(b) Present a projection of the targets for the monetary aggregates adopted by the FOMC for the coming year.
4. Taking the FOMC's targets as given, the Federal Reserve Board's staff should be required to perform the following tasks:
(a) Develop projections (one year ahead) of output, employment, unemployment, and prices implied by the monetary policy the FOMC has adopted.
(b) Project the flows of funds in major sectors of the economy, implied by the staff's forecast.
(c) Discuss the range and configuration of interest rates implied by the staff's projections.
(d) This effort should result in a staff report to accompany the Board's report to Congress.
5. On the basis of the FOMC's monetary policy targets and the Federal Reserve Board's staff report, the joint House-Senate staff should provide its own assessment of material submitted by the Federal Reserve.
6. In making its assessment, the Congressional staff should interview in person each Member of FOMC.

Each of these recommendations can be amplified further.
Joint House-Senate Staff.-Members of Congress serving on the banking committees which oversee the Federal Reserve System (as well as members of the Joint Economic Committee) should have a professional staff with the resources and technical capacity to monitor monetary policy. In establishing the Congressional Budget Office, Congress took a vital-and long-needed-step to equip itself to understand and control the budget of the United States. No longer is the Congress heavily dependent on information and analyses submitted by the Executive Branch of the Federal Government. Such a move is also needed in the case of monetary policy. As matters stand now, the gap between the Congress and the Federal Reserve with respect to staff resources and technical capacity is wide indeed. Steps ought to be taken promptly to narrow the margin. To some extent, the present staffs are able to perform this task. However, a significant amount of strengthening is also needed.

Federal Reserve's Annual Report.-The Annual Report of the Federal Reserve Board should reach the Congress during the same period in which the President's Budget Message and Economic Report are submitted. The Congress needs to have all three documents in hand before it can make informed judgements with respect to the requirements of national economic policy. Currently the Budget Message and Economic Report are normally available by midFebruary. However, it may be April or May before the Federal Reserve's Annual Report is submitted to Congress. If the Board's entire Report is not available early in the year, a detailed accounting of its conduct of monetary policy and a general statement of its plans for the year ahead should be provided.
Statement of Monetary Policy Objectives.-For the last year-in response to Congressional mandate-the Chairman of the Federal Reserve Board has been appearing at six-month intervals before each of the Congressional oversight committees to explain the System's conduct of monetary policy. On these occasions, he has presented the range of targets set by the FOMC for the growth of selected monetary aggregates for four quarters ahead. These periodic reports contain a great deal of information on financial developments and the performance of the economy in recent quarters. (A quarterly report prepared by the Board's staff and presented to Congress contains an even greater amount of historical data.)
Yet, there is little or no expression of the expectations held by the Federal Reserve Board or the FOMC with respect to the economic outlook and prospective financial developments. This deficiency should be remedied.
To accomplish this end, I propose the following:

1. When the Chairman of the Federal Reserve Board appears before Congress early in the year, he should present a review of the FOMC's performance with regard to the monetary policy objectives it had set for itself the previous year. A full explanation should be given for any significant deviation of results from stated goals.
2. The Chairman should also present a projection of the targets for the monetary aggregates adopted by the FOMC for the coming year. These aggregates should include some measure of bank credit as well as of the money supply, however narrowly ( $\mathrm{M}_{1}$ ) or broadly ( $\mathrm{M}_{2}$ ) defined. Along with this projection, the Chairman should be asked to provide-on behalf of the FOMC -an exposition of the reasons why the targets adopted are thought to be adequate.
3. Taking the FOMC's targets as given, the Federal Reserve Board's staff should be required to spell out in some detail the technical implications of the monetary policy goals adopted by the FOMC. The Board's staff should concentrate on working out the economic and financial consequences which might be expected to follow-if the stated objectives were to be achieved. This task should include projections of output, employment/unemployment, and priceson a quarterly basis for at least one full year. Speciflcally, the projection should include most of the items shown in Table 1 describing the expected behavior of the economy in real terms. In addition, the staff should project the flows of funds (perhaps on a semi-annual basis) through the major sectors of the economy which may be associated with the contours of economic activity sketched below.

The staff projections discussed here are currently being done. While the results are not made public, economists outside the Federal Reserve are thoroughly familiar with the techniques employed by the Board's staff. In fact, many former staff members have been employed by private institutions (such as banks and brokerage firms as well as research organizations) with the specific purpose of tracking and interpreting Federal Reserve activity.

Finally, the Board's staff should discuss the range and configuration of interest rates implied by the staff's projections. This effort should result in a staff report to accompany the Board's Report to Congress.

Here it must be emphasized again that the Board's staff is being asked to undertake a technical and professional assignment. They are not being asked to make independent judgments regarding the proper role of monetary policy. Some observers might argue that it is difficult-if not impossible-to distinguish between the staff's analysis of the consequences of policy decisions and the giving of policy advice. I would not accept such an argument. The excellent performance of the staff of the Congressional Budget Office in this regard provides convincing evidence that it can be done. It might also be argued that the staff's analysis and conclusions will be taken as proxies for the judgments and expectations of the FOMC itself. I recognize this risk, but I believe it is worth taking.

After all, the Federal Reserve System does share-on a delegated basisthe Constitutional authority given to Congress to "coin money and regulate the value thereof." Thus, the Congress must look to the Federal Reserve for guidance as to the general consequences which might be expected to follow from the Board's exercise of that shared responsibility. Since the Board and the FOMC are reluctant to engage publicly in economic forecasting, it should be willing to have the staff present its professional judgments.
4. Once the Congress has received the FOMC's projection of its monetary nolicy targets-along with the Federal Reserve Board's staff report-the joint House-Senate staff (whose establishment is recommended) should provide for the Congress an independent assessment of the material submitted. Since the Congressional staff would have been monitoring monetary policy in any case, it should be able to perform this assessment without much delay. In making its assessment, the Congressional staff should interview in person each Member of the FOMC. These views of individual Members would then be a nart of the record available to the Congress when it undertakes its own review of the adequacy of monetary policy.

## CONCLUDING OBSERVATIONS

I realize that the reporting and monitoring procedures sketched here represent sharp divergencies from current practice. On the other hand, I believe the Congress needs a better way to keen track of the Federal Reserve's implementation of monetary policy and to judge the extent to which that policy is consistent with the nation's overall economic goals. In my opinion, the Congress is not being served well by the current arrangements under which the Federal

Reserve projects fairly broad ranges for the growth rates of a few monetary aggregates. Since these projections are not accompanied by a systematic exposition of the reasons why the Federal Reserve believes the indicated targets are appropriate, the Congress has no real basis for judging the efficacy of monetary policy. Moreover, the Federal Reserve-along with the Congressought to be concerned about the impact of its policies on a range of economic variables extending well beyond an array of monetary aggregates. There should be an equal amount-if not more-of interest in the prospective behavior of output and employment as well as prices. After all, it is on the trend of these factors that our true economic well-being depends.
table 1.-DATA RESOURCES FORECAST OF THE U.S. ECONOMY
[In billions of dollars-SAAR]

|  | 1976 |  |  |  | 1977 |  |  |  | Years |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | I | 11 | 111 | IV | I | 11 | III | IV | 1976 | 1977 | 1978 |
|  | CNP and its components |  |  |  |  |  |  |  |  |  |  |
| Total consumption. | 1,026.4 | 1,054.4 | 1,080.7 | 1,107.6 | 1,134.7 | 1,164.0 | 1,191.9 | 1,219.8 | 1,067.3 | 1,177.6 | 1,274.9 |
| Business fixed investment | 157.4 | 161.7 | 166.6 | 172. 2 | 179.1 | 186.7 | 194.9 | 1,203.0 | 164.5 | 190.9 | - 217.3 |
| Residential construction.. | 57.0 | 61.1 | 65.5 | 69.8 | 74.4 | 78.6 | 81.8 | 83.3 | 63.4 | 79.5 | 81.9 |
| Inventory investment... | 9.5 | 9.5 | 12.4 | 15.9 | 17.7 | 16.8 | 16.7 | 16.9 | 11.8 | 17.0 | 9.1 |
| Net exports .-.--.....- | 11.1 | 12.4 | 12.3 | 12.1 | 13.1 | 14.2 | 15.1 | 15.2 | 12.0 | 14.4 | 22.5 |
| Total Federal | 132.1 | 134.7 | 136.4 | 140. 5 | 141.9 | 143.8 | 145.5 | 149.4 | 135. 9 | 145.2 | 153.9 |
| State and local | 1219.3 | 223.9 | 228.8 | 233.9 | 1239.3 | 245.0 1850 | $\begin{array}{r}250.9 \\ \hline 898\end{array}$ | 256.8 | 226.5 | 248.0 | 271.7 |
| Gross national product- Real GNP (1972 dollars) | $1,614.3$ $1,233.9$ | $1,659.3$ 1,252 | $1,704.1$ $1,270.6$ | $1,753.4$ $1,289.0$ | $1,801.7$ $1,307.3$ | $1,850.6$ $1,324.9$ | $1,898.2$ $1,340.7$ | $1,946.0$ $1,354.6$ | $1,682.8$ $1,261.4$ | $1,874.1$ $1,331.9$ | $2,032.8$ $1,368.9$ |
| Prices and wages-Annual rates of change |  |  |  |  |  |  |  |  |  |  |  |
| Implicit price deflator. | 4.7 | 5.3 | 4.9 | 5.8 | 5.4 | 5.5 | 5.6 | 6.0 | 5.6 | 5.5 | 5.6 |
| Fixed weight deflator- | 5.5 | 5.3 | 4.9 | 5.9 | 5. 4 | 5.6 | 5. 6 | 6.1 | 5.8 | 5.5 | 5.6 |
| Consumer price index. | 4.4 | 4.5 | 4.7 | 5.2 | 5.2 | 5. 4 | 5. 6 | 5. 6 | 5.5 | 5.2 | 5.4 |
| Wholesale price index --..-.-.--- | $-1.4$ | 2.0 | 5.0 | 5.2 8.3 | 5.7 | 6.1 | 6. 4 | 6.0 | 4.0 | 5.5 | 5.4 |
| Adjusted average hourly earnings index. | 6.7 | 7.4 | 8.0 | 8.3 | 8.0 | 7.7 | 7.4 | 7.1 | 7.7 | 7.8 | 7.0 |
| Production and other key measures |  |  |  |  |  |  |  |  |  |  |  |
| Industrial production (67-1). | 1. 202 | 1.230 | 1. 258 | 1. 293 | 1.322 | 1. 346 | 1.365 | 1.382 | 1.246 | 1. 354 | 1. 389 |
| Annual rate of change-.--- | 9.2 | 9.8 | 9.3 | 11.6 | 9.3 | 7.4 | 5.9 | 4.9 | 9.8 | 8.7 | 2.6 |
| Housing starts (million units) | 1. 399 | 1. 504 | 1. 645 | 1.725 | 1.840 | 1.852 | 1.879 | 1.816 | 1.568 | 1. 847 | 1.691 |
| Retail unit car sales--total... | 10.3 | 10.5 | 10.8 | 11.0 | 11.1 | 11.3 | 11.6 | 11.5 | 10.7 | 11.4 | 10.8 |
| Unemployment rate (percent). | 7.6 | 7.3 | 7.1 | 6.9 | 6.6 | 6.4 | 6.2 | 6.0 | 7.2 | 6.3 | 6.1 |
| Federal budget surplus (NIA) | -76.1 | -74.8 | -64.4 | -57.4 | -51.3 | -47.1 | -39.5 | -37.1 | -68.2 | -43.7 | -34.9 |


|  | Money and interest rates |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 296.8 | 301.4 | 306.8 | 313.6 | 319.0 | 324.6 | 330.8 | 337.4 | 304.7 | 328.0 | 350.8 |
| Annual rate of change. | 2.9 | 6.4 | 7.3 | 9.1 | 7.1 | 7.2 | 7.9 | 8.1 | 5.2 | 7.6 | 7.0 |
| New AA corporation utility rate (percent). | 8.86 | 8.63 | 8.69 | 8.78 | 8.89 | 9.08 | 9.29 | 9. 39 | 8.74 | 9.16 | 8. 98 |
| New high-grade corporate bond rate (percent).... | 8.35 | 8. 30 | 8.37 | 8.49 | 8.58 | 8.76 | 8.96 | 9.05 | 8.38 | 8.84 | 8.65 |
| Federal funds rate (percent) .-...-.-......-- | 4.82 | 5.09 | 5.39 | 5. 76 | 6.20 | 6. 89 | 7.44 | 7.86 | 5.27 | 7.10 | 6.59 |
| Prime rate (percent) | 6.82 | 6.92 | 7.04 | 7.15 | 7.35 | 7.82 | 8. 19 | 8.56 | 6.98 | 7.98 | 7.73 |
|  | Incomes |  |  |  |  |  |  |  |  |  |  |
| Personal income | 1,326.6 | 1,366.1 | 1,400. 3 | 1,439.1 | 1,475.4 | 1,516.7 | 1,559.3 | 1,603.6 | 1,383.0 | 1,538.8 | 1,681.7 |
| Real disposable income. | 880.0 | 895.1 | 902.9 | 913.3 | 925.7 | 939.2 | 949.1 | 961.1 | 897.8 | 943.8 | 975.4 |
| Saving rate (percent). | 8.0 | 8.2 | 7.8 | 7.7 | 7.8 | 7.9 | 7.9 | 8. 1 | 7.9 | 8.0 | 8.2 |
| Profits before tax | 136.4 | 142.8 | 153.1 | 161.2 | 166.1 | 170.9 | 175.1 | 175.4 | 148.4 | 171.9 | 172.2 |
| Profits after tax | 83.0 | 86.9 | 93.2 | 98.1 | 101.1 | 104.1 | 106.6 | 106.8 | 90.3 | 104.6 | 104.9 |
| Fourth quarter percent change | 39.3 | 30.6 | 18.3 | 21.7 | 21.8 | 19.7 | 14.4 | 8.8 | 26.5 | 15.8 | 0.2 |
|  | Details of real GNP-Annual rates of change |  |  |  |  |  |  |  |  |  |  |
| Gross national product. | 6.0 | 6.1 | 6. 0 | 5.9 | 5.8 | 5. 5 | 4.8 | 4.2 | 6.4 | 5.6 | 2.8 |
| Total consumption-. | 5.8 | 6.4 | 5.4 | 5.1 | 5.0 | 5.5 | 4.5 | 4.3 | 5. 3 | 5.1 | 3.1 |
| Business fixed investment | 7.6 | 4.8 | 6. 6 | 8.0 | 10.6 | 11.7 | 12.3 | 11.2 | 4.2 | 9.7 | 8.0 |
| Equipment - | 4.0 | 5.6 3.2 | 7.8 | 9.5 5.0 | 13.9 | 16.5 | 17.1 | 15.2 | 4.5 3 3 | $\begin{array}{r}12.8 \\ 3 \\ \hline\end{array}$ | 10.9 |
| Residential construction.... | 14.4 | 21.7 | 21.3 | 19.2 | 20.4 | 15.5 | 2.3 | 0.7 | 24.1 | 16.6 | $-3.4$ |
| Exports. | $-14.0$ | 6.4 | 8.6 | 9.9 | 9.9 | 9.4 | 8.7 | 8.5 | 2.8 | 9.2 | 7.0 |
| Imports | 17.2 | 6.6 | 9.3 | 9.7 | 11.0 | 11.5 | 9.8 | 9.0 | 12.0 | 10.1 | 6.0 |
| Federal Government. | 0.6 | 5.3 | 3.1 | 0.5 | 1.7 | 3.4 | 2.0 | -0.4 | 3.5 | 2.1 | 1.4 |
| State and local..... | 2.5 | 2.4 | 2.2 | 2.3 | 2.5 | 2.6 | 2.5 | 2.6 | 2.9 | 2.4 | 2.5 |

Source: Data Resources, Inc.

TABLE 2.-MONETARY AND RESERVE AGGREGATES RECENT GROWTH RATES—PERCENT:
[Seasonally Adjusted Annual Rates]

| Category | Last month | Last 8 weeks | Last 13 weeks | Last 26 weeks | Last 52 weeks |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Monetary aggregates as of Apr. 14, 1976: |  |  |  |  |  |
|  | 9.3 | 7.1 | 6.3 | 4.6 | 5.3 |
| M2 | 10.8 | 10.0 | 12.1 | 9.7 | 9.6 |
| Adjusted bank credit proxy.- | 2.6 | 1.7 | 1.5 | 4.0 | 3.2 |
| Reserve aggregates as of Apr. 14, 1976 : |  |  |  |  |  |
| RPD's ${ }^{2}$--....-........ | 4.8 | --. ${ }^{-1}$ | -6.1 | -5.1 | -3.6 |
| Monetary base | 5.4 | 8.0 | 9.6 | 7.8 | 7.2 |
| Federal Reserve Credit. | 2.6 | 7.2 | 8.8 | 8.5 | 7.5 |

1 Percent change, simple annual rates: 4 -week average ending on date indicated from 4 -week average ending at the earlier period.
${ }_{2}$ Unadjusted for changes in reserve requirements.
Source: Calculated by Data Resources, Inc., from Federal Reserve System data.
TABLE 3.-SELECTED INTEREST RATES RECENT BEHAVIOR AND OUTLOOK
[In percent]

|  | $\begin{aligned} & \text { Latest quote: } \\ & \text { Thurs., } \\ & \text { Apr. 22, 1976.' } \end{aligned}$ | 4-week average ending Wed. Apr. 21, 1976 | 4-week average ending Wed. Mar. 24, 1976 | Forecast 3d quarter 1976 |
| :---: | :---: | :---: | :---: | :---: |
| Short-term rates: |  |  |  |  |
| Federal funds. | 4.81 | 4.78 | 4.84 | 5.39 |
| Treasury bills (3 mo) | 4.75 | 4.86 | 5.02 | 5.44 |
| Commercial paper (90-110 d) | 5.19 | 5.11 | 5.27 | 5.71 |
| Certificates of deposit ( 3 mo ). | 5.00 | 5.13 | 5.35 | 5.81 |
| Euro-dollars (3 mo)........ | 5.29 | 5.39 | 5.60 | 5.81 |
| Commercial bank prime loans. | 6.75 | 6.75 | 6.75 | 7.04 |
| Long-term rates: |  |  |  |  |
| New issues of high-grade corporate bonds: <br> AAA Equiv. Ind | 8.09 | 8.08 | 8.51 | 8.37 |
| AA utility | 8.73 | 8.77 | 8.92 | 8.69 |
| Municipals (bond buyer index) | 6.55 | 6.16 | 6.92 | 6.74 |
| U.S. Government securities (10 yr or more).- | 6.59 | 6.70 |  | 6.86 |
| U.S. Government agencies (10 yr or more).-- | 7.77 | 7.94 |  | 7.87 |

Source: Data Resources, Inc.
Dr. O'Leary.
Dr. O'Leary. Mr. Chairman, may I say first that is a great privilege to have the opportunity to appear here and at the risk of embarrassing you, I want to say you are doing a great public service, being so close to this whole issue of monetary policy and the matter of getting a good sustainable growth in the economy consistent with reducing inflation. This is to my way of thinking the real heart of public policy and it is great to see someone in your shoes doing the job you are doing.

I have been asked by the staff to focus my remarks on the institutional side of the money and capital markets and on interest rates.

But I can't do that, of course, without having something to say about Federal Reserve policy, so that I will have some comments on Federal Reserve policy too.

Let me start. I am going to summarize my rather lengthy paper. And do it in 10 minutes or so, don't be worried if it appears I am running on.

Let me say first that what has been happening in the last week shows the extreme sensitivity of the money and capital markets, including the stock market, to what the Fed is doing. There is today in the money capital markets a set of expectations based on what has
happened in the last 4 or 5 years that communicate to those markets in a much larger way even a small action by the Fed. I think this is very important to recognize because in effect a move by the Fed toward a less accommodating policy is discounted out to what its effects may be a year from now in terms of its impact on the market. So, that is a very important ingredient in this whole picture.
Now, in putting together my figures on sources and uses of funds or money flows I made certain assumptions about the economy this year. I limited myself to this year. I agree strongly with what Dr. Brimmer said about 1977. But in my assumptions about flows of funds, I have assumed that real GNP this year will increase about $61 / 4$ percent. That may turn out to be a little on the low side but it is not a bad figure to work with. I am assuming the unemployment rate for the year as a whole falls in the range of 7 to $71 / 2$ percent. We still have a relatively high unemployment rate, an unacceptabily high unemployment rate. I am assuming the GNP deflator increases 5 or $51 / 2$ percent for the year as a whole on the average but that it is rising somewhat in the latter part of the year.

In the case of money GNP, which affects demands for credit, I am assuming close to a 12 percent increase in money GNP. I am assuming corporate profits will increase about 26 percent after taxes. This is important in terms of cash flow to corporations and their need to borrow and so forth. It is an important ingredient in the picture.
After I have done the analysis I did in my statement on sources and uses of funds, I arrived at the following conclusions.

I expect short rates this year to raise gradually. I think we have seen the low in short-term rates. From here on out, particularly in the second half of the year, we will have a gradual, moderate rise of short rates. I would expect by yearend the general level of short rates will be up about 1 full percentage point, whether you take Treasury bills or any other short-term rate.

I expect the Fed to move toward a moderately less accommodative credit policy and I think it should. The Fed should not move vigorously this year toward restraint, but rather gradually and moderately. I think that is the proper prescription.

I expect a strengthening of private loan demand, although the way commercial-industrial loan demand at the banks has continued to stay weak casts some doubt on some of the figures I have estimated with my uses and sources of funds. I may have too large an increase in private loan demand.

I also exnect, and obviously we shall have a continued very large volume of Government financing, much of which will have to be in the short-term market.

So, in effect, I see short-term rates rising moderately and gradually as a product of the Federal Reserve policy and as the product of an expanding private loan demand against a background of continuing seasonal, very heavily Government financing burden, much of which will have to be done in the short-term area. I don't think short rates have to rise very much. I think they should not rise very much. I think it would be unfortunate if we did have much rise in short rates.

Now, on long rates, I have also analyzed the long-term market as best it can be separated from the short-term market. We finally broke
through on the down side of loan rates early last October and high rate bond yields got down, depending upon what particular quality rating you take, a full percentage point or percentage point and a half. Not much of a decline. They have been clinging at a very high level.

First the long-term market is reflecting the inflation rate. The basic inflation rate is still around 6 percent, and there is a conviction that the inflation rate is apt to accelerate at least moderately the second half of the year. That is an important ingredient in the long-term market.

Another force is Federal Reserve policy, and the rise of short rates. If short rates move up it is going to have an effect, already has had an effect on long rates. Whether that effect toward higher long-term rates in the last week is a lasting one, whether long rates will come back down again is difficult to say. I have tried in my prepared statement to analyze the supply and demand for long-term funds and I have to be impressed by a very strong supply of longterm funds relative to demand.
At this level of short rates the flow of funds into the savings institutions is very, very strong. I addition, the life insurance companies have had a definite moderation in their policy loans and are very aggressively putting money out into the long-term markets. So, if one just looked at the supply side, he would conclude that the prospects are for a further decline of long rates.

However, turning to the demand side of the picture, I think it is clear that there will be a lesser volume of corporate financing for this year for the reasons Dr. Brimmer indicated, which I tried to spell out. I am talking about nonfinancial corporations.
However, we are going to see, I think, as the vear goes on, quite an increase in debt financing bv financial institutions. We are going to see a big increase in equity financing, as I see the picture, so that one should not underestimate the volume of demand for long-term financing whether it be debt or equity by business firms.
There is also a very large volume of demand through the bond market by foreign borrowers, Canada, in particular. I have tried to crank that into all my estimates for uses of long term funds.

Moreover, this is going to be a big home mortgage financing year. That doesn't bother me. It doesn't indicate pressure on the mortgage rates because essentially it is the fact that the S . \& L.'s have a tremendous amount of money and are starting to put it out. There are areas of weakness, which are very important. One is the area of commercial mortgage, an area, for example, where savings banks and life insurance companies normally invest about half their money. That market is very, very dull, with very little new financing going on in that area.

The same thing is true with apartment houses.
So, one looks at the situation and has to be impressed with the fact that on a supply-demand basis there is a good case to be made for long-term rates moving to lower levels. One element in the situation that gives me pause is the fact that the Treasury now has the right to go out 10 years in the issuance of notes free of the interest ceiling. I think that is a very, very important develonment and one to be watched very carefully as a factor in these markets. The need
to extend average maturity of the Federal debt is very strong, it is now 2 years and 9 months. The constant rollover debt is definitely handicapping the Fed in its freedom to manage the money supply. So, looking at all these forces-at this whole situation-my feeling is that long-term rates will fluctuate as they always do, but my judgment is that long rates, high-grade bond yields, will tend to stay somewhere at the present level with fluctuations, with a modest firming up of long-term rates toward the end of the year.

Of key importance is the Fed and short-term interest rates. If the Fed should be more aggressive about its credit policy and short rates went up more sharply than I expect them to, the consequences would be a more marked rise in long-term rates. There is no doubt of that in my mind.

On Fed Reserve policy, I have some concluding comments which I am just going to crystallize in this way. Given the unemployment rate as high as it is, given the fact that we have made real progress on the inflation front, I do not think the Federal Reserve should do more than move gradually to a less accommodative credit policy in spite of the fact that the rate of expansion of the money aggregates is now up to the top of the ranges one should take into consideration also the fact that there has actually been an $\$ 8$-billion decline this year in commercial and industrial loans of the weekly reporting large commercial banks. The "credit proxy adjusted," another very important tool the Fed uses, has been increasing in the last 3 or 4 or 5 months at only a 2.9 percent rate. The burden of what I would say is that at this particular point of time, too rigorous an application, let us say, of monetary policy against an increase in the many aggregate is not justified. I think the Fed needs at this time to pay a lot of attention to where the economy stands in terms of the inflation rate, the unemployment rate. I feel that they are going to have to react to this high rate of expansion of monetary aggregates but I hope they will not overreact because if thev overreact or appear to to overreacting it will have a very serious implication on long term interest rates and for the rocovery.

That is essentially all I have.
[The complete statement follows:]
Statement by James J. O'Leary, Vice Chatrman, U.S. Truet Co.
FEDERAL RESERVE POLICY AND THE OUTLOOK FOR THE MONEY AND CAPITAL MARKETS AND INTEREST RATES

I am James J. O'Leary, Vice Chairman of the United States Trust Company of New York. I am pleased to have this opportunity to present my views on the outlook for the money and capital markets and for interest rates in the remainder of this year. The Federal Reserve plays a key role in this outlook so that I shall be concerned with monetary policy as well as other forces likely to influence the money and capital markets.

## Some Observations on the General Business Outlook

The behavior of interest rates is both a force influencing the course of general business activity and it is at the same time in part the product of what occurs in the economy as a whole. Clearly, the total demands for short- and long-term credit are a function of the strength of general business activity. Before turning to the outlook for interest rates, therefore, it would be helpful to review the prospects for general business activity.

First, I would like to make some general observations. The recovery which has now become about one-year old has many encouraging aspects about it.
among which are: (1) The basic inflation rate has been cut about in half since the peaks of 1974; (2) There has been a pronounced cyclical improvement in productivity-to be expected-but nonetheless impressive; (3) The unemployment rate has fallen from 8.9 percent to 7.6 percent; (4) Consumer and business confidence has strengthened markedly from the gloom and uncertainty of a year ago; (5) The general level of short-term interest rates has dropped to nearly one-half of what it was at the peaks of mid-1974, and longterm rates have fallen significantly since last fall; (6) Business liquidity and commercial bank liquidity have improved greatly ; (7) Corporate profits have risen and the stock market has made a strong recovery; and (8) Despite this bing a year divisible by four, monetary policy seems resolutely aimed at avoiding too strong a recovery at the cost of a new escalation of inflation.

Recent business statistics suggest that the pace of recovery is accelerating, so that it is pertinent to ask whether the rate of advance may become more vigorous in the months ahead and thus touch off another escalation of the inflation rate. This is a clear danger, but certain basic conditions in the economy suggest that we shall remain on a sustainable expansion path without any sharp escalation of the inflation rate: (1) Consumers are still showing a healthy caution in their spending and saving behavior, and the same can be said about business firms in their willingness to accumualte inventories or to strengthen capital spending; (2) Commercial banks and other lending institutions are more quality conscious about new loans after the loss experience of recent years; (3) In the face of the financial problems of New York City and State, as well as other state and local government units, the stimulus to general economic activity from spending by state and local government is bound to be less this year than on average in prior periods of business recovery; (4) Due to the fact that inflation has made many projects temporarily uneconomic, along with high financing costs and the need to charge high rents, the recovery of construction of apartment buildings and commercial projects is apt to lag for many months; (5) Business recovery in other major industrial countries, with the exception of West Germany, seems certain to run behind the U.S. expansion, thus tending to moderate our recovery, and (6) Monetary policy is determined to keep the pace of recovery gradual enough to avoid a new round of inflation.

Turning to a specific forecast for 1976, as shown in Table 1, we are estimating that real GNP will increase approximately 6.25 percent this year over last, that the unemployment rate will average between 7.0 and 7.5 percent, and that the GNP deflator will increase about 5.0-5.5 percent (compared with 8.8 percent in 1975). Thus, we are anticipating a good recovery but one which will leave the unemployment rate quite high. At the same time, on a year-to-year basis, we expect a distinct improvement in the inflation picture compared with last vear.

Table 2 presents estimates of GNP and its component parts in current dollars-that is, before correcting for inflation. We are expecting an 11.7 percent increase of GNP in these terms. with particularly strong gains in spending for durable consumer goods, residential construction, and producers' durable equipment.

Table 3 presents the quarterly pattern which we expect of some of the principal economic indicators. In general we anticipate a fairly steadr rate of expansion of real GNP and a fairly stable inflation rate in the 4-6 percent range, with some moderate escalation of inflation in the fourth quarter. As will be noted in Table 1, we estimate that after-tax corporate profits will increase about 26 percent this year.

## The Outlook for Short-Term Interest Rates

There has been, and still is, a great deal of agreement that short-term interest rates will rise this year, but there is considerable difference of oninion as to how soon and how much. At the end of February the Federal Reserve authorities created a flurry of excitement when they appeared (Chart 1) to have raised their target on the Federal funds rate from $43 / 4$ nercent to 5 percent or possibly a bit higher. Money market experts explained this anparent move on the grounds that money sumply ( $\mathrm{M}_{2}$-currency plus demand deposits plus time denosits of the commercial banks net of large certificates of denosits) was expanding at a rate near the top of the target range of the Federal Reserve and that the pace of business activity was auickening to the point that the authorities felt that they should move to a slightly less "accommodative"
credit policy. However, in subsequent weeks th monetary authorities permitted the Fed funds rate to come back down to the $43 / 4$ percent level in spite of the fact that $\mathrm{MM}_{2}$ has for the past quarter been increasing at. an annual rate near the top of the Fed's target range-and the business recovery continued to be quite strong. Perhaps this seeming reversal of the Fed's action may be explained by the fact that a rise of short rates in the U.S. at this time would help to strengthen an already strong dollar and thus would aggravate the recent turmoil in foreign exchange markets. The minutes of the Open Market Committee in mid-February contain no evidence of a change of policy.

As this testimony is being written, "Fed watchers" are debating once again whether the authorities have just moved to a less accommodative credit policy in the light of the recent surge of money supply. It is too early to be sure of this, but my own belief is that the authorities have not yet made any significant change.

What is likely to be the course of Federal Reserve policy in the weeks and months ahead? This is obviously a crucial question so far as the prospects for short-term rates are concerned. Monetary policy will be governed by the following forces, some of which are interrelated: (1) the rate of monetary expansion; (2) the strength of the business recovery and the Federal Reserve's expectation about it; (3) the inflation rate and the Fed's expectation about it and (4) conditions in the foreign exchange markets.

Given my own forecast of the prospects for business activity, I expect the Federal Reserve to move gradually and moderately to a less accommodative credit policy in the weeks and months ahead. I do not anticipate a vigorous move toward credit restraint until possibly in the final quarter of the year, if indeed it should come even then. However, the monetary authorities seem determined to seize this chance to knock out inflation so that I may be underestimating the force with which they may move toward restraint.

My "feel" of Federal Reserve policy and likely money market conditions in the period ahead suggests that the odds are high that we have pretty much seen the lows of short-term rates this year. By late spring, I expect short rates to rise gradually, especially as the business advance strengthens somewhat in the second half of the year generating rising private loan demands. It is very difficult to make a judgment on the extent of the rise, but I would estimate that by year-end the prime rate of the banks will have moved from the current $63 / 4$ percent level to $71 / 2-73 / 4$ percent. Consistent with this I would expect other short-term rates to move up about $9 / 4$ of one percent to a full percentage point.

What are the forces behind such a rise? As already noted, I expect Federal Reserve policy to become gradually less accommodative in the face of a continuing business recovery, a high rate of monetary expansion, and a tendency for the inflation rate to bottom out and perhaps to escalate a bit as the year goes on. As shown in Table 4, in which I have estimated total funds to be raised in various credit and equity markets this year (in each case the estimate measures the net increase in outstanding debt or equity issues), the recovery of business activity may be expected to increase private short-term loan demands markedly. For example, I am estimating that this year the total outstanding "bank loans not elsewhere classified" (essentially the commercial and industrial loans of the banks) will increase by $\$ 13$ billion, compared with a net decline of $\$ 12.6$ billion in 1975. Such an increase would be consistent with the net accumulation of $\$ 11$ billion of business inventories which we expect this year (compared with a net liquidation of $\$ 14.6$ billion in 1975) and with the improvement of housing and capital spending which we anticipate. Furthermore, I expect outstanding consumer credit to expand about $\$ 20$ billion this year, compared with only $\$ 5.3$ billion in 1975. Other areas of short-term credit such as commercial paper will show similar increases. Added to the sizeable increase in private short-term credit this year, as shown in Table 4, the Federal Government will have an estimated net new money requirement of about $\$ 77$ billion in 1976 and much of this financing will have to be done in short-term issues in competition with the rise of private shortterm financing. Added to direct U.S. Government issues, there will be a large amount of Federal agency issues, as estimated in Table 4.
As shown in Table 5, however, which provides estimates of total credit which will be advanced this year and the various sources of that credit, commercial banks are expected to increase their total loans and investments by about $\$ 66$ billion, compared with only $\$ 26.6$ billion last year. Much of this
increase will be in short-term loans and in short-term Government issues. Similarly, with greatly improved cash flow this year business firms will make large additions to their holdings of short-term liquid assets. I would also expect the savings institutions, with their very large net inflow of funds, to be adding to their holdings of short-term instruments, especially as short-term rates rise.

In general, then, the forces which may be expected to move short-term interest rates higher this year are a strengthening of private short-term loan demands as the recovery progresses, a continued heavy volume of Government short-term financing, especially in the second half of the year, and very importantly a gradual move by the Federal Reserve toward a less accommodative credit policy. As I have indicated, it is extremely difficult to assess the weight of these forces, but my judgment is that they will cause a moderate rather than a sharp increase of short-term rates. It is hard to say how much weight the instability of foreign exchange rates will have in Federal Reserve policy, but 1 should think it would work toward a more moderate rather than a sharp increase in our short-term rates.

What are the implications of a rise of short-term rates, even if the gradual and moderate character which I expect? First, it will lower the cost to investors of remaining in short-term liquid investments and reduce the pressure to move funds to long-term investments. Strictly on an arbitrage basis, therefore, it will tend to lessen the otherwise downward pressure on long-term interest rates. Secondly, the rise of short-term rates will tend to increase concern on the part of savings institutions that their current very strong net inflow of funds will be reduced and that ultimately another round of net outflow or "disintermediation" may be looming ahead. The effect of such a psychology would be to curtail the aggressiveness of savings institutions about committing funds to the mortgage or bond markets. Thirdly, the rise of short-term rates will strengthen the expectation that an increase of long-term rates may not be far ahead, and this will encourage savings institutions to remain in short-term outlets and to wait for the expected higher long-term rates. It will also induce borrowers to come to market for long-term loans before rates go higher. Moreover, rising short-term rates will make underwriters more cautious about bidding for corporate bond issues, and it will cause dealers to be more careful about accumulating inventories of bonds. Thus, the expected rise of short-term rates this year, even though it may be only gradual as I expect, will tend to keep long-term rates higher than would otherwise be the case.

## The Outlook for Long-Term Rates

Turning to long-term interest rates, there are wider differences of view about the outlook. As will be observed in Chart 2, there has been a significant decline since early last October in the yields on new issues of Aa-rated longterm utilities and industrial bonds. The yields on utilities have come down nearly $11 / 2$ percentage points and the industrials a full one percent. Similarly, since last fall there has been a comparable drop in rates on home mortgages, direct placements of corporate bonds, and mortgages on income properties such as apartments, shopping centers, and commercial properties generally. Some analysts expect long-term rates to fall further in the near-term, but there are wide differences of view on the extent of the decline and how long softness in long-term rates will last.

What are the forces in the long-term capital markets which are affecting vields and which are likely to affect vields in the remainder of the year? A hasic force is the rate of inflation and more importantly the expectation of lenders and borrowers about the future course of inflation. Both lenders and borrowers have undoubtedly been impressed by the downtrend of inflation during the past year. The distinct improvement in the inflation picture has nlaved a part in the decline of long-term rates. My discussions with many long-term investors and with a cross-section of long-term borrowers suggest. however, that the prevailing expectation is that the basic inflation rate is not apt to decline much further and that before year-end it is apt to be rising again. This expectation, if it is indeed the prevailing one. will tend to militate against a further large decline of long-term rates. It will tend to strengthen the belief that the Federal Reserve will become less accommodative and that short-term interest rates will rise. It will also make long-term investors more resistant to purchasing long-term bonds or mortgages at significantly lower yields.

As I have already noted, should short-term interest rates rise, this will tend to limit any further fall of long-term rates, and if short-term rates should rise sharply, it would be a significant force toward rising long-term rates-for reasons I have given earlier.
The belief that long-term rates will fall further in the months ahead rests firmly on current and prospective supply and demand conditions in the longterm capital markets. In Table 4 I have presented estimates of the principal areas of demand for long-term funds. As will be noted, I am estimating that this year the net increase of outstanding corporate bonds will be about $\$ 21.5$ billion, a much lower figure than the record $\$ 27.0$ billion in 1975. The logic behind this estimate is that corporations will have a much greater ability to finance themselves through retained earnings this year. We are estimating that corporate cash flow will increase 20 percent this year. At the same time, the record total of corporate bond financing last year contained a very large volume of funding of short-term debt in the long-term capital markets. The volume of funding of short-term debt should taper off this year, but at the same time the improved financial position of many firms which could not qualify for long-term bond financing in 1975 will permit such firms to float long-term issues this year. Moreover, the strengthening of capital spending which I expect this year will tend to add somewhat to the volume of new issues. In addition, there will undoubtedly continue to be large direct placements of issues in the energy area. For all of these reasons, I expect the net increase in corporate bond issues to be considerably smaller this year than last, but still a high figure. At the same time, however, net new issues of equities by nonfinancial corporations are likely to be very large this year. As shown in Table 4, I am estimating that the amount will increase to $\$ 13.5$ billion this year, compared with $\$ 9.5$ billion in 1975 . This estimate is in line with the increased volume of equity issues so far this year. It is based on the view that corporations are under pressure to strengthen their equity base and that the behavior of equity prices will be favorable enough to encourage equity financing.

It should also be noted that I am estimating that 1976 will witness another large net increase in bond financing by foreign issuers. In 1975, as shown in Table 4, the net increase in foreign bond issues jumped to $\$ 6.1$ billion, and it seems logical to expect at least a moderately higher figure ( $\$ 6.5$ billion) this vear if long-term rates in our markets are attractive, and the figure could be higher. Furthermore, as shown in Table 4, there is apt to be a significant increase this year in the net new issue of stocks and bonds by financial institutions such as commercial banks, finance companies, insurance companies, and other financial institutions. The need is particularly strong for the commercial banks to raise additional capital through the issuance of stocks and bonds and the banks already seem to be reflecting this need so far this year. As will be seen in Table 4, I am expecting a substantial increase this year in the net equities and bond issues by financial institutions. This will be especially true if long-term rates tend to decline.

Summarizing the demand to be expected this year by corporations in the long-term capital markets, it seems to me that the lesser volume of corporate bond financing by domestic non-financial corporations will be more than offset by a significantly higher volume of corporate bond financin gby financial corporations and a markedly higher volume of equity financing by both nonfinancial and financial firms.
Turning to other private sectors of the long-term capital market, it will be noted in Table 4 that I am estimating a much larger net increase ( $\$ 49.5$ billion) in single-family home mortgages this year than last. As the net inflow of funds to savings and loan associations has continued to run at record amounts, there has been a pronounced easing in the availability of home mortgage credit and in mortgage interest rates. Funds are flowing strongly into mortgage financing of existing homes and the greater ease in the sale of existing homes is beginning to be felt in better sales of new houses and in a stronger rate of housing starts. Housing is still being hampered by high prices, but I am becoming increasingly confident that the 1.8 million annual rate of starts (Table 3) which we are predicting for the fourth quarter will be realized. It should also be recognized that the inflation rate of $8-10$ percent in the cost of housing will be an important factor in the higher net increase of home mortgage credit. The significantly larger increase in outstanding home mortgage debt this year should not be interpreted to mean that upward pressures necessarily lie ahead for interest rates on home mortgages. Turning to

Table 5, it will be noted that I am estimating that the savings and loan associations will enjoy a record $\$ 49$ billion increase in their available funds this gradual, and that the net inflow of funds to the mutual savings banks will year, assuming that the rise of short-term interest rates is only moderate and also be very strong- $\$ 12.0$ billion versus $\$ 10.5$ billion last year. Thus, it is easy to see that the large increase in home mortgage credit can occur in a climate of some further decline of home mortgage interest rates at least in the near-term.
The areas of particular weakness of demand for long-term financing thts year seem certain to be the multifamily residential mortgage market and the commercial mortgage market. As will be noted in Table 4, I am estimating that the net increase in outstanding mortgage debt on multifamily projects will remain at the depressed level of about $\$ 3.5$ billion. As will be noted, this is far below the flgures in the period 1971-1974. The reasons for the only $\$ 3.6$ billion increase in 1975 were the excess of supply in many areas of the country of multifamily projects and the depressing effect of inflation upon the economic viability of multifamily' projects. Easing of credit will help this situation, but probably not appreciably this year. Similarly, it will be noted in Table 4 that $I$ am estimating a net increase of outstanding mortgage debt this year on commercial properties ( $\$ 8.0$ billion) even lower than the depressed figure in 1975. Again, it is significant to note how large the net increase of commercial mortgages was in the 1972-1974 period. When we turn presently to considering the supply of long-term funds, it is pertinent that mutual savings banks and life insurance companies normally place a high percentage of their investible funds in mortgages on income-producing properties. Weakness of demand in this market will force them to concentrate their investments in corporate bonds.

One other area of demand for long-term funds is the market for state and local government obligations. As will be noted in Table 4, I am estimating that the net increase in such obligations will, at $\$ 13$ billion, be somewhat lower than the $\$ 15.4$ billion in 1975. This seems consistent with the greater budgetary conservatism being forced on state and lower government units, as well as by the unwillingness of voters last fall to approve new capital projects.
Turning then to the total supply of long-term funds, as I noted earlier there has for many months been a vigorous net inflow of funds into the savings and loan associations due to the drop in short-term open-market rates and the consequent reintermediation of funds into the savings institutions. The rate of net inflow in the first quarter will probably be the highest for the year, but unless short-term rates rise more than I expect in the rest of the year the net inflow should exceed that of 1975. My estimate is that the net inflow for the savings and loan associations will be $\$ 49$ billion and $\$ 12$ billion for the mutual savings banks. These institutions have rebuilt their liquidity and are now more aggressively committing funds to mortgage and corporate bond investments. A rise of short-term rates will make them more liquidity conscious and will reduce their enthusiasm about committing funds to long-term investments, but the extent of the rise of short-term rates which I anticipate should not be too great a deterrent to long-term investments.

In many respects the life insurance companies will be the decisive influence this year in the long-term capital markets. As will be noted in Table 5. I am estimating a sizeable increase this year in the net new money flow of the life insurance companies. In addition to the larger net increase in available funds, as short-term rates have fallen, there has been a distinct lessening in the volume of policy loans which life companies are being asked to extend at the generally prevailing 5 percent contract rate, so that as a result a higher proportion of their funds is available for investment in corporate securities and mortgages. Unless short-term rates move up more sharply than I expect. there should be little escalation in policy loans this year. Moreover, as noted earlier, the weakness of demand for income-property mortgage financing will tend to force a much higher proportion of life companv funds into cornorate bond investments. An additional factor is that, while life insurance companies expect to disburse a substantial amount of their funds this vear to meet forward commitments to buy bonds and mortgages, the backlog of forward commitments, although large, is comparatively low relative to total cash flow expected this vear. All of this suggests that the life companies are ant under these circumstances to become more active in placing funds in direct placements of corporate bonds, which would mean that many firms which have thus far been unable to raise funds in the public bond market will be able to sell bonds directly to the life companies. Moreover, the life companies will undoubt-
edly continue to be active in providing long-term tax-exempt bond financing. With the pronounced improvement of life company investment earnings during the past decade, many life companies have moved to higher Federal income tax brackets so that the after-tax yield on tax-exempt bonds has become very attractive to many companies. It is noteworthy that the life companies were heavy buyers of the huge issues of tax-exempt bonds floated this year by the New York Power Authority and the State of Massachusetts.

As also shown in Table 5, I am estimating further increases in net funds available this year to the uninsured pension funds and the state and local government retirement funds. As will also be noted, it seems logical to expect a much larger net increase in funds from foreign investors, $\$ 13.0$ billion in my estimate, compared with $\$ 8.0$ billion in 1975. These funds will flow into equities, corporate bonds, Treasury securities and other short-term money market instruments.

Summarizing the total private demand-supply situation, it would seem to me that for the near-term future, possibly through much of this year, the weight of the private demand-supply forces is toward softening of long-term rates. There is, however, one powerful force affecting the long-term capital market which will work toward reducing the extent of any further decline of longterm rates. This is the fact that Congress recently enacted legislation authorizing the U.S. Treasury to sell notes with maturities as long as ten years. Previously, the Treasury had been limited to notes with a maximum maturity of seven years free of the interest rate ceiling of $41 / 4$ percent which applies to bond issues. Now the Treasury can sell notes as long as ten years in maturity without any interest rate ceiling. In addition, Congress gave the Treasury the authority to sell another $\$ 2$ billion of bonds free of the ceiling rate. The Treasury strongly urged this authority in view of the very low average maturity of the Federal debt-two years, nine months. With gross financing of the Treasury (new money plus rollover) now running at $\$ 270-\$ 280$ billion per annum, the short average maturity of the Federal debt makes it particularly difficult for the Federal Reserve to carry out an effective monetary policy. It may be assumed, therefore, that the Treasury will fully use its limited authority to sell long-term bonds. It may also be assumed that the Treasury will be aggressive about floating new issues in the 8-10 year maturity range. This would be particularly true if yields on intermediate and long-term Government bonds tended to decline. It would be logical for the Treasury to begin to make a major effort in its May refunding to sell securities in the $8-10$ year maturity range, as well as long-term bonds.

Should Treasury financing in the $8-10$ year maturities be heavy enough to restrict any sizeable decline of interest rates on U.S. Government obligations in these maturities, it would also restrict any decline of longer-term Treasury bond yields. The spread in yield between intermediate and longer-term Governments, on the one-hand, and high-grade corporate bonds of intermediate and long-term maturity, on the other, has become very narrow. There is keen competition between the high-grade corporate bond market and the market for Treasury bonds. It would seem to me, therefore, that the pressure of demand for Treasury financing in the 8-10 year maturity range will limit much further decline of Treasury yields in the intermediate and longer-term issues and that this will tend to put a high floor under the vield on comparable new issues of high-grade corporate bonds. The capital markets are faced with an indefinite volume of new issues of Treasury notes in the 8-10 year maturities, and this situation will introduce a high degree of caution among the underwriters and dealers about building inventories of bonds as they face the future. It is hard to assess the importance of the forces which I have described, but I think they will be powerful in the remainder of this year.

After the above appraisal of the various forces which will be influencing the long-term capital markets in the months ahead, what then can be concluded about the outlook for long-term interest rates? First, given the sensitivity of the long-term markets to Federal Reserve and Treasury debt management policies, it seems inevitable that high-grade corporate bond yields and other long-term rates will be subject to short-run fluctuations around a given level as they have been in recent years (Chart 2). My judgment is. however, that the fluctuations in yields on new issues of publicly-offered long term Aa-rated industrials, to take that important standard, is apt to center for much of the remainder of this year around the $81 / 4$ percent level, not far from the current rate. In other words, in terms of a general level, much if not all of the decline in publicly-offered high-grade corporate bond yields has probably already occurred. The recent sharp increase of corporate bond yields, pre-
cipitated by the market's interpretation that the Federal Reserve may be moving toward a less accommodative credit policy, illustrates the extreme sensitivity of bond yields to anticipated monetary policy.

At the same time, however, I do not expect a large rise in the level of high-grade bond yields during the remainder of the year, but there should be some gradual firming depending on the degree of increase of short-term rates. The public issues of lower-grade corporate bonds and direct placementsusually lower-rated-may experience somewhat more softening of yields than is true of the high-grade issues. Similarly, the interest rates on home mortgages and commercial mortgages will probably be softer than the yields on high-grade corporate bonds due to the compartmentalization of the long-term capital markets and the strong flow of funds into the savings institutions investing in these markets. Generally speaking, then, except for the inevitable short-term fluctuations, we are probably close to the bottom in the yields on publiclyissued high-grade corporate bonds, but there is probably somewhat more softness ahead in the yields on lower-grade public issues, direct placements of corporate bonds, and residential and commercial mortgages. This assumes, I should re-emphasize, only a moderate increase of short-term rates in the rest of the year.

## Concluding Comments

The behavior of both short-term and long-term interest rates which I have forecast is consistent with a gradual and moderate rate of general business expansion this year. Given the conditions which I expect, we should be able to get through another year without the huge Treasury demands for funds "crowding" private borrowers out of the market. However, accommodation of the Treasury's hugs demands this year without too great an expansion of money will be a close "fit" and will present the monetary authorities with very serious problems. Moreover, should the volume of Treasury new money financing remain high in 1977, along with a continuing business recovery and rising private loan demands, "crowding out" seems likely to emerge as a critical problem in financial markets.

The Federal Reserve authorities are now in the midst of an extremely diffcult policy situation, which might be outlined as follows:

1. Over the most recent three months, both $M_{1}$ and $M_{2}$ have increased at rates near the top of the target ranges which the Federal Reserve authorities have set as consistent with encouraging sustainable economic expansion and yet bringing inflation under control. Moreover, the rate of monetary expansion seems to be accelerating. This development suggests to many that the Federal Reserve must begin to shift to a less accommodative credit policy, although the rate of expansion of the monetary aggregates for a longer period, e.g., the past six months, is still below the top of the target ranges, especially for $M_{1}$. In addition, a great deal of the recent escalation of $M_{1}$ can be explained by the reduction in Treasury cash balances, which will tend to be reversed as the Treasury rebuilds its balances from tax collections.
2. Since the beginning of this year, commercial and industrial loan demand at the commercial banks has been weak. Since early January there has been an $\$ 8$ billion decline in outstanding commercial and industrial loans (seasonally adjusted) at the weekly reporting large commercial banks, or 6.6 percent. Moreover, since the middle of last November there has been only a 2.9 percent annual rate of increase in the "credit proxy adjusted", another measure which the Federal Reserve uses to judge the rate of credit expansion. The behavior of both loan demand and the "credit proxy adjusted" would suggest that it is premature for the monetary authorities to begin to pull in the reins of monetary expansion.
3. The first quarter showed a significant further decline in the inflation rate, with the GNP deflator increasing at only a 3.7 percent annual rate and the consumer price index at 4.4 percent annual rate. However, there is a general expectation that from here on during the rest of the year there will be a renewed escalation of the inflation rate, but probably only of moderate proportions. Generally speaking this would also suggest that it is premature to make any significant move toward a less accommodative credit policy, especially when it is coupled with the still high unemployment rate of 7.5 percent. It must be recognized, however, that expectations are a vital force in the economy and in the money and capital markets. Given the experience of recent years, if the markets come to believe that the Federal Reserve will be slow to react to a high rate of monetary expansion, the expectation of a return to a high
inflation rate will strengthen and interest rate increases will occur no matter how hard the Fed tries to prevent them from doing so.
4. At the same time, should the Federal Reserve now begin to move toward a less accommodative credit policy, this would lead to a set of expectations in the money and capital markets which could be damaging to the business recovery. My earlier discussion outlined how these expectations would develop. The rise of short-term rates would interrupt any further decline of long-term rates and could easily lead to a rise of long-term rates. The increase of interest rates could be damaging to the stock market, a very important barometer of consumer and business confidence. Thus, should Federal Reserve policy touch oft a significant increase of interest rates, it could easily take a lot of the bloom off the recovery.
Thus, the Federal Reserve authorities are faced with a serious dilemma which will require a high degree of skill in their policy actions. The current situation points out clearly why one should not be dogmatic about the criteria the Federal Reserve should use in setting policy-at least in the comparatively short-term. The authorities must consider a number of factors beyond money supply. I hope that my analysis shows why the Fed must take account of interest rates, loan demand, the credit proxy, the unemployment situation, and the direction of the inflation rate in setting policy. This is not the time, in my view, to let three months of a high rate of expansion of the money aggregates be the decisive force in the monetary policy decision. At the same time, we are close to the point at which the authorities should begin to be gradually and carefully less accommodative in their policy position.

TABLE 1.-HIGHLIGHTS

|  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | ---: | ---: | ---: |

1 Includes currency in circulation, demand and time deposits, and large certificates.
TABLE 2.-NATIONAL OUTPUT
[In billions of dollars]

|  |  |  |  |  |  |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |

[^4]$$
72-390-76-5
$$

TABLE 3.-QUARTERLY PATTERNS

|  | 1975 actual |  |  |  | 1976 estimate |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | I | 11 | III | IV |  | 11 | III | IV |
| Real GNP: |  |  |  |  |  |  |  |  |
| Billions of 1972 dollars...- Percent change | $1,159.0$ -9.2 | $1,168.0$ 3.3 | $\begin{array}{r} 1,202.0 \\ 11.9 \end{array}$ | 1,216.0 4.9 | 1,238.0 | 1,252.0 4.9 | $\begin{array}{r} 1,268.0 \\ 5.1 \end{array}$ | $1,284.0$ 5.0 |
| Inflation-annual rate (per- |  |  |  |  |  |  |  |  |
| cent): | 7.8 | 4.3 | 71 | 6.8 | 3.7 | 4.6 | 4.9 | 6.0 |
| Consumer price index. | 8.3 | 6.2 | 8.4 | 6.6 | 4.4 | 4.5 | 5.0 | 5.5 |
| Unemployment rate (percent)-- | 8.4 | 8.9 | 8.5 | 8.5 | 7.6 | 7.6 | 7.4 | 7.2 |
| Broadly defined money supply (percent change) | 7.6 | 5.8 | 5.8 | 6.6 | 5.4 | 8.0 | 10.0 | 10.0 |
| Current GNP (billions of dollars). | 1,434.0 | 1,461.0 | 1,529.0 | 1,573.0 | 1,616.0 | 1,652.0 | 1,694.0 | 1,740.0 |
| Aftertax corporate profits (billions of dollars) | 59.6 | 66.6 | 78.8 | 79.9 | 85.0 | 89.5 | 92.1 | 94.5 |
| Personal disposable income: Billions of dollars | 1,024.0 | 1,082.0 | 1,087.0 | 1,114.0 | 1,140.0 | 1,166.0 | 1,198.0 | 1,226.0 |
| Annual rate of change |  |  |  |  |  |  |  |  |
| Housing starts (millions of |  |  |  |  | 9.3 | 9.1 | 11.0 | 9.3 |
| units) ------------- | . 981 | 1.05 | 1.26 | 1.37 | 1.41 | 1.55 | 1.70 | 1.80 |
| Plant and equipment expenditures (bilitions of dollars)... | 114.6 | 112.5 | 112.2 | 111.8 | 118.5 | 122.5 | 127.5 | 133.5 |

TABLE 4.-TOTAL FUNDS RAISED IN CREDIT MARKETS
[In billions of dollars]

|  | 1970 | 1971 | 1972 | 1973 | 1974 | 19751 | 19762 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total funds raised in credit markets...... | 110.9 | 164.0 | 198.5 | 239.3 | 218.1 | 208.5 | 269.8 |
| By nonfinancial sectors......------- | 98.2 | 147.4 | 169.4 | 187.4 | 180.1 | 197.3 | 247.3 |
| U.S. Government: Public debt securities | 12.9 | 26.0 | 13.9 | 7.7 | 12.0 | 85.8 | 77.0 |
| Agency issues and mort- <br> gages. | -. 1 | -. 5 | 3.4 | 2.0 | (3) | -. 6 | -1.0 |
| Private domestic: Corporate equities | 5.7 |  |  |  |  |  |  |
| Corporate equities...er----- | 11.2 | 11.4 | 10.9 | 13.7 | 17.4 | 15.5 | 13.5 13.0 |
| Corporate bonds.-.-.-....- | 19.8 | 18.8 | 12.2 | 9.2 | 19.7 | 27.0 | 21.5 |
| Home mortgages .......-. | 12.8 | 26.1 | 39.6 | 43.3 | 31.7 | 35.9 | 49.5 |
| Multifamily residential | 5.8 | 8.8 | 10.3 | 8.4 | 7.8 | 3.6 | 3.5 |
| Commercial mortgages....-- | 5.3 | 10.0 | 14.8 | 17.0 | 11.5 | 8.4 | 8.0 |
| Farm mortgages .-.......- | 1.8 | 2.0 | 2.6 | 4.4 | 4.9 | 4.5 | 4.8 |
| Consumer credit. | 6.0 | 11.2 | 19.2 | 22.9 | 9.6 | 5.3 | 20.0 |
| Bank loans ${ }^{4}$ | 6.7 | 7.8 | 18.9 | 35.8 | 27.3 | -12.6 | 13.0 |
| Open-market paper......-- | 3.0 | $-1.2$ | -5.5 | -. 4 | 6.6 | -1.6 | 3.0 |
| Other---------------------- | 4.6 | 4.8 | 5.5 | 8.3 | 12.1 | 4.5 | 5.0 |
| Foreign: Corporate equities | . 1 | (3) | -. 4 | $-2$ | -. 3 | . 1 | . 5 |
| Bonds | .9 | ( . 9 | 1.0 | 1.0 | 2.2 | 6.1 | 6.5 |
| Bank loans 4-....-.-........- | $-3$ | 1.6 | 2.9 | 2.8 | 4.7 | 3.7 | 5.5 |
| Open-market paper | . 8 | 1.3 | -1.0 | 2.2 | 7.1 | $-.5$ | 2.0 |
| U.S. Government loans....- | 1.3 | 1.8 | 1.8 | 1.7 | 1.7 | 2.7 | 2.0 |
| By financial sectors.....-.-.-....-.- | 12.7 | 16.6 | 29.1 | 52.0 | 38.0 | 11.3 | 22.5 |
| Federally sponsored agencies..Private financial sectors: 5 | 8.2 | 3.8 | 6.2 | 19.6 | 22.1 | 10.3 | 8.0 |
| Corporate equities. | 4.7 | 3.4 | 2.6 | . 8 | 1.7 | 1.9 | 3.0 |
| Corporate bonds | 3.1 | 5. 1 | 7.0 | 2.3 | 1.4 | 1.3 | 5.0 |
| Mortgages ...--- | . 7 | 2.1 | 1.7 | -1.2 | -1.3 | 2.3 | 2.5 |
| Bank loans 4 | $-.5$ | 3.0 | 6.8 | 13.5 | 7.5 | -4.0 | 3.0 |
| Open-market paper and R.P.'s | $-5.0$ | 1.8 | 4.9 | 9.8 | $-1$ | 3.4 | 4.0 |
| Loans from FHLB's. | 1.3 | -2.7 | (3) | 7.2 | 6.7 | -3.9 | $-3.0$ |

1 Preliminary.
2 Estimated.
a Less than $\$ 50$ million.

- Not elsewhere classified.
* Banks, insurance companies, finance companies, otc.

Source: 1970-1974-Flow of Funds, Federal Reserve Bank.

TABLE 5.-TOTAL FUNDS ADVANCED IN CREDIT MARKETS
[In billions of dollars]

|  | 1970 | 1971 | 1972 | 1973 | 1974 | 19751 | 1976 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total funds advanced. | 110.9 | 164.0 | 198.5 | 239.3 | 218.1 | 208.5 | 269.8 |
| By private domestic nonfinancial sectors. | -4.1 | -8.4 | 8.5 | 31.2 | 30.8 | 39.8 | 34.7 |
|  | -2.7 | -14.2 | 1.3 | 21.6 | 22.1 | 11.8 | 10.0 |
| Nonfarm noncorp business | . 6 | . 7 | 1.1 | 1.3 | . 9 | 1.2 | 2.2 |
| Corporate business......- | -2.3 | 7.0 | 2.6 | 7.9 | 7.5 | 21.1 | 19.0 |
| State and local government | ${ }^{\circ} 3$ | $-2.0$ | 3.6 | 9.4 | 7.3 | 5.7 | 3.5 |
| By U.S. Government.......... | 2.8 | 3.2 | 2.6 | 3.0 | 7.4 | 10.6 | 11.0 |
| By financial institutions...--...-.-.-.-.-- | 101.3 | 142.0 | 176.7 | 201.7 | 167.8 | 150.1 | 211.1 |
| Federally sponsored credit agencies. - | 10.0 | 3.2 | 7.0 | 20.3 | 24.1 | 11.5 | 9.0 |
| Federal Reserve System. .-...-....- | 5.0 | 8.9 | 7.3 | 9.2 | 6.2 | 8.5 | 10.5 |
| Commercial banking---- | 35.2 | 50.6 | 70.7 | 86.7 | 64.6 | 26.6 | 66.0 |
| Savings and loan associations. | 11.6 | 29.2 | 36.4 | 27.1 | 21.0 | 40.6 | 49.0 |
| Mutual savings banks | 4.1 | 10.0 | 10.4 | 5.4 | 3.3 | 10.5 | 12.0 |
| Credit unions | 1.5 | 2.6 | 3.1 | 2.9 | 2.7 | 5.2 | 6.0 |
| Life insurance companies | 9.0 | 11.8 | 13.8 | 15.6 | 16. 1 | 17.6 | 19.5 |
| Uninsured pension funds | 6.9 | 7.4 | 6.5 | 7.2 | 8.1 | 12.4 | 14.5 |
| State and local gov't retirement funds. | 6.1 | 6.2 | 7.8 | 9.2 | 12.3 | 13.0 | 14.3 |
| Other insurance companies. | 4.9 | 6.2 | 6.6 | 5.0 | 4.5 | 5.7 | 5.8 |
| Finance companies........ | .7 | 4.1 | 10.8 | 10.1 | 4.0 | $-.3$ | 3.5 |
| REIT's..---.-.-. | 2.1 | 2.5 | 4.9 | 4.5 | . 9 | -2.6 | $-1.5$ |
| Open-end investment companies | 1.7 | . 4 | $-1.8$ | -2.5 | .9 | 1.4 | 1. 5 |
| Security brokers and dealers. .-. .-. | 2.4 | $-1.1$ |  |  | -12.9 | (3) | 1.0 |
|  | 11.0 | 27.3 | 10.7 | 3.5 | 12.1 | 8.0 | 13.0 |

[^5]Chart 1.
SELECTED SHORT-TERM INTEREST RATES


| 1978 | Ftoperk |  |  |  | LOMC-TERM Coverneit |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 4.95 4.86 4.77 4.79 4.84 4.73 4.77 4.78 | $\begin{aligned} & 5.20 \\ & 4: 99 \\ & 4: 98 \\ & 4: 87 \\ & 4: 97 \\ & 4: 91 \\ & 4: 80 \\ & 4.73 \end{aligned}$ | $\begin{aligned} & 5.98 \\ & 5.86 \\ & 5.82 \\ & 5: 87 \\ & 5: 76 \\ & 5: 79 \\ & 5.56 \\ & 5.41 \end{aligned}$ | $\begin{aligned} & 7.36 \\ & 7.30 \\ & 7.25 \\ & 7.14 \\ & 7.14 \\ & 7.04 \\ & 8.88 \\ & 6.87 \end{aligned}$ | $\begin{aligned} & 6.96 \\ & 6.91 \\ & 6.89 \\ & 6.80 \\ & 6.78 \\ & 6.72 \\ & 6.65 \\ & 6.68 \end{aligned}$ |


CUREENT DATA APPEAR IN THE BOARO OF GOVERNORS' K. ヨ RELEASE.
PREPARFO AY FFAFRAI MFSFAVF GANK OF ST. LOUIS

YIELDS ON NEW ISSUES OF CORPORATE BONDS
1974-1976


The Chairman. Thank you, gentlemen, for three very fine analyses, they are most helpful.

I would like to start off with the first point I raised in my opening remarks about the decision by the Fed yesterday to somewhat reduce the target, maximum target, at least, from $7 \frac{1}{2}$ down to 7 and to maintain that reduction in the lower level from 5 to $41 / 2$ percent.

Now, I get from both Dr. Brimmer and Dr. O'Leary an answer that this reduction is about right, that they think this is a wise course.

I didn't get a response on that from Mr. Woodcock. I would like to ask all of you gentlemen to respond to this fact.

If the economy undergoes a real growth which Dr. Burns and all you gentlemen seem to indicate is likely, I think Mr. Woodcock would like a bigger growth, but they assume we will have a growth of about 7 percent. Real growth of about 7 percent.

If we have an inflation rate of about 6 percent, which you seem to think is about what you might expect, you would need a 13 -percent greater availability of funds to accommodate this activity, in which you have real growth of 7 and inflation of 6 percent.

Now, if you have only about a 6-percent increase in the money supply, which is close to the midpoint of the $41 / 2$ to 7 , then you are going to have to have a very, very large increase in the velocity of money to give you that kind of growth.

Last year, it's true, we did have a big increase in the velocity, but as I say, all of our experience indicates that that peters out after about three or four quarters of recovery.

Therefore, we migh expect the velocity to slow down. If it slows down to its average, which is about a 3-percent increase in velocity, then we are going to have a really serious shortfall.

You are going to have an adverse effect on the recovery. We are going to have higher interest rates, we are going to have slower growth, we are going to have more unemployment or at least a lesser erduction in unemployment than we all expect.

Mr. Woodcock, would you respond to that?
How do you feel about Mr. Burns, Dr. Burns' announcement of yesterday?

Mr. Woodcock. Of course, Mr. Chairman, as you know, I am the amateur of the trio, so that I can simply say what my professional advisors have said to me. That is, if we are to have a real growth in GNP of 7 percent during the next four quarters, assuming an inflation rate in the range of $51 / 2$ to $61 / 2$, it would necessarily state a rate of increase in $M_{1}$ higher than $71 / 2$ percent, which is the top end of the present scales, unless velocity grows by $41 / 2$ to $51 / 2$ percent.

As you have just observed, in the last three quarters, it was 6.3. Only, I am told, in the recovery from the recession of 1949, also involved with the entry to the Korean war, did we have comparable rates?

We just don't believe that is going to happen.
The Chatrman. That's right. It's been 25 years since we had that kind of increase in velocity.
Mr. Woodcock. That's correct.
We are very much worried about a slowing down in the rate of growth, because we do have this troublesome problem of very high
unemployment. 7.5 percent, that was the peak of unemployment in the last worse recession prior to this one, that of 1958-59.

Of course, it's complicated by the very substantial change in the work force mix. We have some new problems out there that macroeconomic policies of the past are not going to meet.
The Chairman. Before I get to the other panelists, let me ask you, an intriguing point that you made in your paper, you didn't have a chance to discuss it in your oral statement, was that in the 1972 Presidential election, the Fed followed what you and I and many people construed as a political course, including Fortune magazine, as you point out. That is they increased the money supply at what many considered a reckless rate, around 8 or 9 percent, during much of that 1972 campaign, when unemployment was dropping, when inflation was a serious problem and the inflationary consequences were considerable.
This is 1976. Again we have a Republican President. Again we have a situation where many anticipated we were going to have a relatively easy monetary policy. We haven't had that, although you point to the 1972 experience, I think wisely and properly, and I have been concerned about that.
I must say that hasn't developed. Does that give you any notion that maybe in the next 6 or 7 months you might have the ease in monetary policy to accommodate the election and then after the election, look out for the flood?
Mr. Woodcock. I don't anticipate that, because I think if those steps were to be taken for political purposes they would have to be onstream at this juncture to have any visible effect.
So, I don't see that present in the-at the present time.
The Chairman. Dr. Brimmer, how do you defend what seems to me just offhand basic simple arithmetic, to be too tight a policy?
Dr. Brimmer. Mr. Chairman, I would want to explain why I believe the steps taken by the Federal Reserve recently are appropriate steps.
Before I do that, you asked Mr. Woodcock a question about 1972. The Chatrman. Yes, sir.
Dr. Brimmer. I was among the persons who voted for and conducted that policy of 1972 for most of the year.
In a followup letter to Fortune Magazine, I denied the truth of the assertion-

The Chairman. I recall that.
Dr. Brimmer. The policy was for different purposes.
I think the more we repeat that assertion, the more credence we give to it, so I am unhappy, Mr. Chairman, to see it come up.

The Chairman. It's awfully hard for me to avoid that, I must say. You see, it goes all the way back to the 1960 experience when Chairman Burns was very emphatic in his concern that a strict, stringent monetary policy probably cost President Nixon that very close election he lost to President Kennedy.
Dr. Brimmer. I am sure you mean Mr. Burns, who was then Mr. Burns, teaching at Columbia University and not associated with the Federal Reserve System.

But I agree that was the basis for much of the, if not suspicion, at least uncertainty about this whole thing. I will come back to that
if you give me chance, but let me address myself specifically to the question you raised about the appropriateness of the growth targets, for the balance of 1976, given the expected growth of the economy.

First, I would hope you, the committee and Congress, and the public at large would dismiss the sharp focus on $\mathbf{M}_{1}$, the narrowly defined money supply.

Unfortunately, most economists of the monetarist persuasion have succeeded only too well in teaching the public that that is an important variable to watch.

It is an unimportant variable, and it ought not to be watched so carefully.

The Chatrman. Then we are asking the Fed to come up and make the wrong report to us.
We asked them to report on $\mathbf{M}_{1}, \mathbf{M}_{2}, \mathbf{M}_{3}$ and the others. But we do concentrate on that, because, as you say, almost everybody, with a few exceptions, and a few very enlightened exceptions, like you say, that this is a an inadequate measure.

Dr. Brimmer. Mr. Chairman, something has happened to $\mathrm{M}_{1}$. I have not read Chairman Burns' testimony, but I have talked to some of the staff, and I know some of the work being done other places to examine the contents of $\mathrm{M}_{1}$ and its behavior over time.

Several things have happened.
First, there has been a sharp change in the public's demand for money, based partly on the technological factors the Chairman described, but also on basic public taste, changes in public taste.

After all, we have taught the public quite a lot about holding money balances. We say, "You ought to minimize them if they are idle," so there has been a significant drain out of currency and checking accounts into earning assets.
And, the existing measures of the money stock capture these only partially.

For example, $\mathbf{M}_{2}$ captures savings in commercial banks; $\mathbf{M}_{3}$ captures more in savings institutions.

But, when you have "now" accounts and other hybrids, how do we know what the situation is?

I would suggest, if you have a money stock measure, it ought to be one of the broader ones.

I do not know how to relate it to the real economy. I never did know. But I am more uncertain now than ever befor. So I would look more, as Dr. O'Leary suggested, to the behavior of credit, prospects for the growth of bank lending and other kinds of shortterm credit.

The Chatrman. Dr. Brimmer, you have got to have a simple indicator if you are going to get any attention from the Congress.

The fact is, you get too little attention now from the Congress on monetary policy, because you, not you, but the profession has made it so complicated and obscure that few can understand it. The result is that everybody drifts away from it.

Economists focus on the money supply. And I think maybe the best focus would be interest rates.

People understand that, they have to borrow money. They know what happens when they go to buy a home and the mortgage rate
is 9 percent. That means they don't buy the home, or they don't buy the car if financing costs are too high.

Dr. Brimmer. I agree with you.
The Chatrman. Perhaps we can deal with that one.
Dr. Brimmer. I agree, Mr. Chairman, that is why I based much of my comments this morning on the prospects for interest rates.

I deplored the behavior of market participants and other observers to short-run fluctuations in $\mathbf{M}_{1}$ in my statement. As I look ahead, and I will go beyond 1976 into early 1977, in some work I did to get a fix on the outlook for interest rates-I came up with the following: If you take the average for the second quarter of 1976 and look at the interest rate implications of the kind of economic forecast which DRI has put forward, you get the following contours for the second quarter of 1977. Say a year out.

I do not think it is unreasonable to think of that kind of horizon. This suggests that short rates-typified by Federal funds-might be up about 2 percentage points, from an average of just over 5 to an average of just over 7 .

A 7 percent Federal funds rate a year from now would not be unreasonable.

The Chatrman. Would not be unreasonable, you say?
Dr. Brimmer. It would not be, in my judgment, given the behavior of the economy.

I would expect high-grade corporate bond rates, a year from now, to be up perhaps 50 basis points, a half a percentage point, maybe a little more, maybe a little less.

I did not work out the implication for mortgage rates, but I would expect them to track along

The Chairman. Track along at a higher level?
Dr. Brimmer. I would expect mortgage rates to be up slightly, maybe not as much as half a percentage point, but up a little bit.

The Chatrman. This is bad news. Mortgage rates have been up so high, 1975 is the worst housing year we have ever had, ever. We actually produced more houses in 1947, when the country was much smaller. The reason was that interest rates are so high. If they are going to go higher, that is really bad news.

Furthermore, the effect of higher consumer interest rates on people who want to buy durables like automobiles and others, it is bound to have an adverse effect if that is going to go up, just bound to. So when you said, you used an adjective that indicated at least implicit approval of that. Did you mean that, that increased interest rates would be proper, acceptable in terms of what we need in the economy?

Dr. Brimmer. I think it would be quite appropriate if mortgage interest rates a year from now were up slightly. Notice I said less than a half percentage point. But we should not want to peg a particular sector of interest rates if other economic conditions would not warrant keeping those rates in that zone. Let me repeat. I said that if corporate bond rates are up about a half a percentage point, mortgage rates would probably be up some, but less than that. How much less I do not know, but I would expect them to be less. But I would not expect mortgage rates a year from now, with all other interest rates being up somewhat, to be unchanged.

The Chairman. If the farmer wants to buy his tractor, the businessman who wants to build an addition on to his plant and so forth, is going to be faced with that discouraging pricing factor on the availability of capital, he is going to have to pay more for it so he will be less inclined to go ahead. That will slow it down, won't it?
Dr. Brimmer. I did not forecast a significant reduction in the availability of credit. I suggested the price of credit might be up a little bit more than it is today.

The Chatrman. There has never been a time in history when you couldn't get credit if you would pay for it. Price is the name of the game, isn't it?

Dr. Brimmer. Mr. Chairman, the net position I am taking is that we should want money and credit policies to be consistent with the seeking of continuous economic expansion, while hedging a bit against the recreation of those conditions which will rekindle inflation. That is a compromise position. We should not advocate no change in interest rates over the next year. Which would mean 2 years in recovery and no change of rates. I think that would be unreasonable.
The Chairman. I would like to see change, but I would like to see them go the other way, go down.
Dr. O'Leary.
Dr. O'Leary. This line of discussion is very, very interesting. First, on the question of $\mathbf{M}_{\mathbf{1}}$, I feel very much the way Dr. Brimmer does, that if you had to select a particular measure of money, it should be one of the broadly defined ones, $\mathbf{M}_{2}$ or $\mathbf{M}_{3}$. I am in an institution that is very heavily involved in investment management. I can see in a practical sort of way, what this change in technology is. When you have short rates as high as they are even though they have come down some, there is a very, very definite reluctance to hold cash. One wants to put his money to work to take advantage of those higher rates. So, that, since the end of 1972. I believe, you will find very little increase in demand deposits. Most of the increase in money supply has been currency. The demand deposit situation has been quite flat and I think it is a function of the very high short-term rates and unwillingness of people to hold noninterest-bearing assets. They put them out into other instruments.

So, that I think you capture money supply better if you take account of the time deposit and use a broader definition of money supply.
The Chairman. Let me ask you, Dr. O'Leary, when you talk to your bank management people, you are the person they rely on for economic advice. What measure do you use? Don't you use $\mathbf{M}_{1}$, don't you use that as an important element in explaining what is happening to the financial markets and what then can expect?

Dr. O'Leary. We do use $M_{1}$ because of the fact that it is part of the process of thinking. In other words, there are enough people in the financial markets who are paying attention to $\mathbf{M}_{1}$ that, in setting our own strategy, let's say, investment strategy, we can't ignore $\mathbf{M}_{1}$ because it is part of the whole thinking process.
But in my own case, in trying to decide what the Fed will do, I would put infinitely more reliance on $\mathrm{M}_{2}$. because of the fact that thero has been a very strong change against holding demand de-
posits, with interest rates as high as they are. So, that one can't ignore $\mathrm{M}_{1}$ because that is what the monitors are using and presumably the Fed is paying attention to it.

But if you were to raise the question of whether the Fed has its target too low, I would say as you try to make that judgment, it would be better to take $\mathbf{M}_{2}$. If you assume an increase in the current dollar GNP of, say, 12 percent, we are closer in terms of the rate of expansion of $\mathbf{M}_{2}$ to that particular level and there is less in the way of an upward interest rate implication that if you use $\mathbf{M}_{1}$.

The Chairman. Supposing we get away from $\mathbf{M}_{1}, \mathbf{M}_{2}$ and $\mathbf{M}_{3}$ for awhile because as Dr. Brimmer and I were discussing, I think it is true most people understand interest rates better. Do you agree with Dr. Brimmer's point that interest rates are likely to increase and that that probably is correct at this stage of the economic situation?
Dr. O'Leary. Could I make one point on this?
First of all, I do agree thoroughly with the thought you suggested, that one of the targets that could be most easily understood, is the rate of interest. This is, I think, you will quickly recognize, anathema to the monetary theorists. But it seems one should look at interest rates very carefully. One of the problems, let's say that the S. \& L.'s would have today, or the savings banks, is that they know what they have been through in the last 3 or 4 years in short-term rates have risen. At the present moment, with short-term rates down, they are aggressively putting money out into home mortgages. If they get the impression short rates are on the way up, they are going to fear another round of "disintermediation." The events of the last 3 or 4 years will cast a shadow on the aggressiveness with which the S. \& L's put long-term money out. This takes the edge off the decline of long rates.
Right now, the life insurance companies have a very strong cash flow. But if they begin to think short rates are going to move up they are going to start worrying about policy loans and their aggressiveness right now about putting money out is going to be reduced. So, I don't underestimate the power of a change in interest rate. It works its way right through the whole system and is going to affect housing and everything else. So, that, this is a very critical point in time.

The Chatrman. I think everything you are saying, as I understand it, suggests that the rise in interest rates will have a depressing, unfortunate effect, if the $S$. \& L.'s expect rates to rise, they will be less inclined to be aggressive in seeking mortgages now. They will wait until the rates go up so they can earn more money. Therefore, it is very important it would seem to me to follow policies that do all we can to hold interest rates down, especially in view of the fact that certainly mortgage rates are historically at immensely high levels. There has never been a time in history when they have been consistently over 8 percent.

To say they are going up, that is really
Dr. O'Leary. Let me respond this way. I think it is important to have the markets recognize and understand that any rise in rates is going to be moderate. They ought not have the expectation that the rise will be sharp. I don't know how you can do that, but I think there are ways it can be done.

The other point I would like to make that shows how complicated this is that if the Federal Reserve, with the rate of monetary expansion currently at the upper end of the range, fails to react to the high rate of monetary expansion, by being less accommodative, that would feed the expectation that the authorities are going to make the same old mistake they made in 1972 and we would get rising rates anyway because a higher rate of inflation will be discounted.

The Chairman. What Dr. Burns said, and I think there is wisdom to it, is the way you get expectations on interest rates down and get a better behavior of interest rates is to develop some credibility on inflation.

If the assumption develops that you are going to have double-digit inflation again, it's going to be extremely hard to find any policy that is going to hold interest rates down.

On the other hand, I think you implied that in your statement.
Dr. O'Leary. Absolutely.
The Chairman. On the other hand, if you can adopt policies that will convince people that prices are not going to rise sharply, you have a good chance to win that aspect of the interest rate battle.

That brings us to a point I would like to ask you gentlemen about.
I want to start off with Mr. Woodcock, because he's done a lot of thinking on this, and a lot of work on it, he's been right in the forefront of it.

The Humphrey-Hawkins bill comes before this committee as I indicated, it's in the Labor Committee now, it will come to our committee before it goes to the floor.

That has an objective which I think most Americans thoroughly support, that all people ought to have a chance to work.

It does have a very strong inflationary implication, at least in the view of some people. The view is that if you reduce unemployment to 3 percent, even if you make it adult unemployment at 3 percent, on the basis of past experience, you may move into a situation which would be inflationary.

Dr. Burns' point is that if you do this by providing jobs in the public sector at wages which are comparable to the private sector, then you create a wage inflation situation which is very hard to resist.

In other words, there are millions and millions of people now who are making close to the minimum wage or even below it.

Now, if you are going to provide jobs of 9 and $\$ 10,000$ in the public sector, all of that pay increase is going to have to be translated some way or another, much of it into higher costs, higher prices.

And, then the inflationary effect therefore will be very great.
What is your response to that?
It seems to me that is the one prime weakness of the HumphreyHawkins bill. Maybe it's not enough to prevent its being passed, but I think it's a great vulnerability.

Mr. Woodcock. Mv response to that, Mr. Chairman, is that I don't think we can accomplish the purposes of Humphrey-Hawkins without a considerable degree of national economic planning.

If this nation commits itself, as I think it has, to commit itself to a national goal of a full employment economy, then the behavior of the American labor movement is going to have to change.

I think it would have the wisdom and the capacity to change. It would become part of the planning process.

I look at the Swedish model. Here is a nation that's had a social democratic government for 40 years, yet has a higher degree of private enterprise than does the United States.

Those that equate Britain and Sweden just haven't looked at those two nations. There, the blue collar trade union movement, the CO, the white collar. the Federation of Swedish Industries, the government itself, try and determine what is needed to be done to have the economy grow at a certain rate.

They work out on a central basis the general sharing of the pie. And then it goes down to the constituent unions to have that central predetermined policy implemented.

And the American labor movement could not continue in that kind of an economic climate to pursue a policy where each union has complete autonomy, just goes ahead and does its own thing and without regard to what the impact on other sectors, that would have to change.
I think that the movement would have the capacity and wisdom to change.

The Chatrman. Now perhaps the experience that we had in 1961 and 1962, when we had an income policy, wage price guideline, and labor agreed at that time to limit the wage increases to the longterm productivity increases, roughly, that the American economy enjoyed, that is, about 3 percent, that seemed to work for a while until it finally was fractured in the airlines strike about 4 or 5 years later.
But, it did work for some time.
Mr. Wooncock. Well, the automobile settlements of 1961 exceeded the 3 percent guideline. The one that got the great visibility was the airline mechanic settlement, because there had been an agreement worked out in the White House which was then rejected by the workers and a very substantial hike in that settlement was made.
That is where it got all the visibility.
The Chatrman. But you see, the difficulty here is that most of the wage determinations are not made in collective bargaining. Collective bargaining is very, very important but as you know, far better than I do, about 70 or 80 percent of the wage settlements are outside collective bargaining contracts.

When you create a situation where you are employing people at substantial pay, working for the government, one kind of public service job or another, it's going to be just necessary if you run a business, small or big, and want to employ people, you have got to pull them out of this public employment and maybe your job is less attractive, less dignified, tougher, meaner. You are just going to have to pay more than before.

In a way, that might be an improvement for the country, and a great improvement, enormous improvement for the people working.

But, it seems to me, it's hard to deny the inflationary effect of that.
Mr. Woodcock. Well, any policy that would say that wage and salary movements will be restricted to the long-term national or social productivity is an absolutely unworkable policy.

That is to say, that the working population must bear the full brunt of inflation and the rest of the economy just should have all that burden on to them. It can't work, it won't work.
When we look at the inflation of 1972 through 1974 , as I remember the numbers. the domestic figures on average was 6.9 percent, the imported inflation, was 21,22 percent. And the worst part of that inflation was outside our national reach, unless we begin to take more sensible policies regarding OPEC and the oil cartel.

The Chairman. Let me get into one other aspect, I know you have to leave at $11: 30$, there are so many things that I would like to question all of you gentlemen on, let me just ask you, Mr. Woodcock, on this point.
You talk about providing a different monetary structure, and you refer specifically to greater authority by the Congress and by the President over the Fed.

You would have the President appoint the Chairman of the Federal Reserve Board within 6 months after he takes office, for example.

And you would have the Congress confirm and the President appoint the Federal Reserve Bank presidents.
I think there is a lot to that.
I am somewhat concerned about, of course, I am all for, because of my position, I am all for giving the Congress greater authority and I think the Constitution would support that.

The Constitution makes the Fed a creature of the Congress. I am not so sure about the President. I think that is not in accordance with the Constitution. I am not sure that would serve the interest of good monetary policy.

The one reference that you made to Presidential interference particularly reenforces that, the 1972 experience.

If you had the President with greater control of the Fed, wouldn't there be a temptation on the part of the President to use the Federal Reserve Board for his own political purposes?

Wouldn't he be inclined to have an expansive situation just before the election?

Wouldn't that be a bad situation?
Mr. Woodcock. Well, obviously, that temptation could be there.
Let me say I am more concerned by making the Federal Reserve Board more responsive to the elected representatives of the people however that may be done.

The Chairman. On the other hand, in the last year it would seem on the basis of hindsight, and I was one of the critics of the Fed, I thought they ought to have a much more generous policy, an expansive policy, as were you and as were many others, yet on the basis of hindsight, it looks as if the Fed's policy worked out fairly well.
Not that it couldn't have been better, but we did have a reduction in prices, we did have a growth in the economy, we did have a diminution in unemployment.

I am not sure that we would have had policies that would have been that effective if we had had either Congress or the President more directly and explicitly running our monetary policy.

What would be your defense against the charge that elected officials are inclined to be inflationists, that they, favor rising wages,
rising profits, better conditions, they follow those policies, that lead most easily to economic expansion but those policies lead to inflation.
And if the elected officials had their finger on the monetary mechanism more securely than they do and directly than they do, it would have an inflationary effect?
Mr. Woodcock. During this period, there has been as much concern expressed about inflationary pressures in the Congress and in the executive as well, it's not just the prerogative of the Federal Reserve Board.

The Cbairmans. Do you think because the inflationary concern of the voters is just as real and emphatic as the concern about better economic growth that inflation wouldn't get out of hand?

Mr. Woodcock. I suspect that even though unemployment is very high, as long as it's trending down-when the unemployment rate is trending down, even though it's extremely high, those who are at work quit worrying about it.

And then you transfer their concern back again to the problem of inflation.
The Charrman. Then you talk about credit allocation and we already have, as you point out, a lot of credit allocation. There is no question about that. It is not a matter of whether we have it or don't have it. We have the Import-Export Bank, Farm Home Administration, SBA and regulations $Q$, we have the tandem plan for housing, we have the proposal by the administration of a $\$ 100-$ billion-energy-independence authority, a $\$ 100$ billion to finance various projects that the market won't take in the engineering area.

We have a $\$ 25$ million safety net proposal for providing funds for underdeveloped countries who are suffering from the effect of energy, high energy prices so we have allocations now.
But I wonder if we ought to make that credit allocation more comprehensive. It is true that the market makes efficient decisions in the area of credit. Why do you feel we should have even greater credit allocation in veiw of the fact that we now have credit allocation with respect to housing, small business, and some of these other social purposes plus emergency areas like energy?

Mr. Woodcock. Well, it could be at any given point in time there may be an expansion needed of what is in place. But with regard to the treal estate investment trusts, the Fed made a very strong suggestion that the commercial banks should be sensitive to their needs and given their power, that was the same as credit allocation. It seems to me in that atmosphere, there is not a proper weighing of social needs as against economic problems or needs.
The Chairman. Dr. Brimmer, you talked about having the staff of this committee question the staff of the Federal Reserve Board to develop information and better understanding of monetary policy.
My problem frankly is that right now the Members of Congress are being drowned with information. We get so much information now we can't begin to use it, we print reports nobody reads. We make a speech on the floor of the Senate that you and your staff work on for days, nobody is there to hear it. It might be in the Congressional Record, I doubt it. So it seems to me it's a matter of finding ways to make monetary policy information simple, clear, and relevant, so poeple feel it really counts, it really has an effect, they will pay attention.

It seems to me that is the question rather than developing a great deal more information than we have at the present time.

You have to find some way of getting the attention of the Congress and the public for this very important instrument of economic policy.
How do we do that?
Dr. Brimmer. Well, I share your view, Mr. Chairman. First I think you ought to throw out a great deal of the information you get and stop presenting it. That is the burden of what I am saying. I think, Mr. Chairman, that the four times a year appearance of the Chairman of the Federal Reserve before Congress is a legacy which ought not to be allowed to become a tradition.
The Chatranan. Well, we just started that, that is-at least when he comes up we get a little attention. We get some attention in the press, some attention by members. We get the opportunity to have you come in and comment on it, which you are doing today.

Dr. Brimmer. That may or may not be a good thing, Mr. Chairman.
The Chairman. I think it's a good thing, so far.
Dr. Brimmer. I am suggesting in this sketch of the scheme at the end of my comments that you have a good, hard focus on monetary policy early in the calendar year, along the same lines and roughly at the same time that the budget message is before the Congress and that the economic report is before the Congress. At that time we try to get a fix in substantial detail about monetary policy and its economic implications. And you let it run for a year.
I would hope you would stop encouraging the Fed to come up once every quarter and explain every little squiggle in the monetary aggregates.
Maybe once toward the middle of the year when there is sort of a reassessment of the economic outlook, at the same time that the Joint Economic Committees looks at it would be another good time to take a look, twice a year rather than four times. In that review you ought to be concerned with the kind of information that relates monetary policy to the real economy.

While bond dealers and others might be interested in day-to-day and month-to-month variations, and so on, the Congress ought not be concerned with that.

I would hope this committee would take the lead and deemphasize that kind of highly technical apparatus which I agree with you is more diverting than instructive.
The Chatrman. I think that is a very good point. What we ought to do is try to get this whole debate focussed as much as possible on jobs and prices, on interest rates, on profits, on things that really excite and concern people, and should.

Well, let's try that, then. Dr. O'Leary, you testified that the policies that the Fed is advocating are about right. Let me ask you, if they follow a more expansive policy, if they increase the money supply at a higher rate, do you think that would increase production and reduce unemplovment? And if so, what should we have to pay for that in terms of inflation?
Dr. O'Leary. If they followed a more expansive policy in the period immediately ahead. The general fear would be that this was the beginning of evidence of the same mistake.

The Chairman. Because unfortunately with the election coming up, I think you have a good point. This is May 4. Let's say they follow a moderate policy and then begin to follow a more expansive policy in November.

Dr. O'Leary. I look at what the Fed is doing as sort of a correction in their course at this particular point. They have a situation in which the psychology of the markets would expect them to be less accommodative but not strongly so. If they take that step it could very well be that you would have a repetition of what has occurred in the past. After all, they took a step in May and June of last year and then they were able to come back to an easier credit policy.
In February, the markets interpreted that the Fed was moving toward a less expansionary policy. It was undoubtedly a poor interpretation, and I think it was a rather salutary thing at the time.

To continue progress toward a lower inflation rate, a near-term move by the Fed toward a slightly less accommodative policy, which they seem to be doing, is a healthy thing and gives us better assurance that we can move through 1977 without the excesses. Do you see what I am driving at?
The Chairman. Yes, but Dr. O'Leary, you are an outstanding expert in this area. What can the Fed do? There are limitations on what they can achieve.
Sometimes we get the feeling they can achieve anything they wanted to. If they wanted to reduce unemployment to a very low level in a short time, people argue they could do it. Well, I think they couldn't. But I would like to have you tell us what they could achieve. Supposing they wanted a followup policy of putting people to work, not in the next few months because as you say that would have political implications that would be suspect. But many people are concerned about 1977. 1976, as Dr. Brimmer pointed out, looks pretty good, but 1977 doesn't look nearly as good for many reasons. What can they do to provide in 1977 a real drop in unemployment. Mr. Woodcock properly pointed out that it's disgraceful for us to accept a 7 percent unemployment level, and vou said it was much too high, or even $61 / 2$ percent or 6 percent. What can they do to really make inroads in the unemployment level, if anything?
Dr. O'Leary. I welcome that question. Coming out of what we have come out of in the last 3 or 4 years, it is highly important that we give top priority to convincing the public that we are going to get the inflation rate down and hold it down. We all agree to that. I don't know whether evervbody does, but I feel it is vital that we deal with the inflation problem. It's a very destructive process and it's got to be dealt with. At the same time, I do not accept the idea of running our economy with a lot of slack in it for a long period of time as the way of being sure you get down to a low inflation rate. It seems to me that one has got to recognize the destructive effects on our young people and on our minority groups of the fact that there aren't job opportunities.

So we have to recognize that. It's intolerable over any sustainable period of time to have a high unemployment rate as a price of keeping inflation down. Mv own feeling is that the Fed has an important but limited role. It can't do everything here. I think one

[^6]of the most encouraging things that has happened is the machinery that has been set up in the Congress in the area of the budget. It gives the promise for the first time that the budget at the congressional level is going to be brought within the framework of trying to so something about sustainable growth, full employment and consistent with price stability.

The Chairman. Dr. O'Leary, you see the problem is that you want to and I want to and I think all of us want to see the private sector move in in an expansive way. The one way monetary policy most devastatingly affects the private sector is in housing. Those high mortgage rates are just death in housing. There is no question we have had a housing slump every time there is a credit crunch. Interest rates go up, housing starts to go down. We can put 2 million people to work if we had the additional million housing starts that the 1968 Housing Act calls for. It calls for 2.6 million housing starts a year, we are going to have 1.6 million instead. The reason we don't have that, it seems to me the fundamental and prime reason, is the fact that interest rates on mortgages are too high. Isn't there some policy the Fed as the money manager in our economv or the Fed in conjunction with the Congress and President can follow in order to get housing going? This is the housing committee of the Congress. This is our responsibility.

Dr. O'Leary. Housing happens to be my greatest interest.
I would like to answer that, but I would like to just finish what I was going to say. That is, that I feel, as we look out 2 or 3 years, the most important thing, in terms of public policy is that we be openminded, because I don't think we yet have the policy tools that are going to permit us to encourage an expansion that gets down to the point where there are good job opportunities for everyone.

We can't do it, I don't think, through fiscal and monetary policy. We have got to be openminded about other ways to do it.
Now, Andy mentioned an incomes policy. An incomes policy is an anathema to labor, to most business people, I suppose, but I think we have to be openminded and recognize that this may have to be a tool we use effectively as sort of a third leg in public policy.

We have to be openminded. We shouldn't be scared by the use of the word planning. We are planning all the time already, as it is, it's just a question of doing it a little more effectively.

So, I see the most critical problem we have is how to get that unemployment rate down, but consistently with price stability at a lower level.

I think a 3 percent unemployment rate probably is too much of a pressure situation, but if you had other tools to go along with monetary policy and fiscal policy, you might be able to do it, and do it consistent with keeping the inflation rate down.
Now, in housing, my own feeling about housing is that the problem of housing at the present time is much more a problem of the impact of inflation, the high cost of housing and associated with it, the high interest rate.

But, more than just high interest rates, the price of housing.
I am told
The Chairman. Well, the price of housing, you take a $\$ 41,000$ house with a 30 -year mortgage at 9 percent, the fact is that interest
is $\$ 70,000$ on the house before you are through, and the cost of the house is $\$ 41,000$.

Cost of labor is about $\$ 6,000$, at least directly.
Dr. O'Leary. I am all for getting that rate down.
The reason I think the Fed should be very careful at this time about creating the expectation that short rates are going to go up very much, is that it's going to hurt the availability of home mortgage credit.

I think at this time we ought to have abundant availability of home mortgage credit. That is why I say, when one talks about money supply and so forth, he is overlooking the important impact of interest rates.

If interest rates are expected to go up sharply, you are going to have every saving and loan and every savings bank in the country running scared that disintermediation is not too far out in the future.

So, the sensitivity of interest rates and need for the Fed to be very careful about what they do at this stage of the game with still $71 / 2$ percent unemployment is still very great.

In reading Arthur Burns' testimony yesterday. I think he recognizes these things. I think the authorities are on the right track and one doesn't expect, one need not expect to have them overdo it.

As a result of what has happened in the money markets in the last week, I will bet you find that the Fanny Mae auctions will expand tremendously and the home builders and mortgage bankers are going to be into Fanny Mae to get commitments in large amounts and you are probably going to see even within a week. some stiffening of home mortgage rates as a reflection of what has happened already in the bond market.

Those markets are most sensitive. The mortgage bankers, home builders have gotten very, very sophisticated in seeing the connection between short-term money rates, the bond market and the mortgage market. They are going to react.

I can predict within 2 weeks
The Chairman. You are predicting higher mortgage rates.
Dr. O'Leary. What they will be saying in effect, is that if the Fed is going to move toward restraints, that short rates are going up, savings and loan's and savings banks are less aggressive and thev are going to be seeking protection from FNMA.
The Chairman. That is exactly what has me concerned.
I know you have to go.
I would like to ask one more question before you leave, just take another minute or two.
Mr. Woodcock, your testimony, I think, has been extremely helpful to us this morning. But I am still concerned about what we do about the inflation, which all of us agree is a serious problem, not only in itself, but in the effect it has in pricing people out of the market and in triggering recession.

Do you see any immediate practical action that can be taken?
For example, the wage price review board, another agency under this committee, it's been able to do a few useful things, but it didn't speak up with any effect on the increase in steel prices, for example.

It's been very understaffed, only has something like 25 professionals, only half of whom work on the whole private sector, inflation problems.
Do you see anything we can do to provide a more effective incomes policy in that area, practically, in the next year or so?
I realize you have these overall planning objectives which are constructive, but I am just talking about what we can do now.
Mr. Woodcock. Our experience with the 1971-72 wage price incomes policy was in general not good.

I personally opposed the legislation when it was proposed in 1970. I was down here on both sides. I got patted on the head by the republicans for speaking good common sense, but after August of 1971, they, of course. switched their field.

What is going on in Canada now is not very helpful as to how well this sort of thing can operate.
I don't think you can drop a policy in a relative vacuum. It's going to be part of-people have got to understand that what is involved here is the equity of the nation and their equity within that national equity.

If a significant segment of the economy thinks they are being picked on, they are going to find wavs to resist.

We talk about the rubber workers. They have to have a big settlement. Traditionally, rubber wages, auto wages went relatively together. They have a different system than we have. We have traditionally had modest annual increases, but protected by the cost of living clause.
That kind of wage policy is the only one that has a chance to work. It's after the event and over time it becomes increasingly less of a protection.
Rubber workers used to be getting an additional increase in the first year of their contract, they would catch up and maybe move a bit ahead.

But, because they have had no escalator whatsoever, their wages now on the production side are $\$ 1.25$ behind auto, in skilled trades thev are $\$ 1.65$ an hour behind auto.

They need that to catch un to their historic position. That simply catches them up, knowing that shortly thereafter, we will be back at the bargaining table.

There is no easy answer.
As I have said before this committee on many occasions, we would welcome a price/wage review board, which would go to the price dominated companies like General Motors and Ford in the automobile industry or any company that is the price leader, that dominates so much of the market.
If they propose to make changes in prices, that they be required under suibpoena to lay down all the facts so at least it gets to the public light of day.
If it's a unionized operation, the same thing with the union. Its demand would cause inflationary pressures, mandate price increases, that it all be laid out in the light of day.
There would be no more than, in our estimate, 100 such companies and let the light of public opinion shine upon these things.

When we had the price board, the General Motors Corp. came down here, Ford Motors came down here.

The rules said, if they wanted a price increase, they had to lay down the productivity of that enterprise. "Oh," they said, "we don't know what our productivity is."
They have been telling us that for 29 years. They don't know the productivity. They know the cost of a screw to the third decimal point, but not their productivity.

The price board let them get away with it. They turned to BLS and said "Give us simulated productivity figures for the auto industry."

BLS gave them 4.6 percent. They shouldn't have been able to get away with that.

American Motors gave productivity figures to back up their proposed price change. It's because of the-when you try to administer the whole system, unless you put a massive bureauracy in place, it just is not going to work.

So, I suggest that in a voluntary sense, we pick selected targets and let us see what the weight of public opinion can do with regard to this.

The Chatrman. Very good.
Well, I want to thank you very much, thank all of you gentlemen.
This has, as I say, has been extremely useful and interesting testimony.

The committee will stand in recess until tomorrow morning at 10 o'clock, when we hear further on this subject.
[Whereupon, at 11:39 a.m., the hearing was recessed to reconvene at 10 a.m., Wednesday, May 5, 1976.]

# THIRD MEETING ON THE CONDUCT OF MONETARY POLICY 

WEDNESDAY, MAY 5, 1976

## U.S. Senate, <br> Committee on Banking, Housing and Urban Affairs, Washington, D.C.

The committee was reconvened, pursuant to adjournment, at 10 a.m. in room 5302, Dirksen Senate Office Building, Senator William Proxmire (chairman of the committee) presiding.

Present: Senators Proxmire and Garn.
The Chairman. The committee will come to order.
We start off today with Prof. Gardner Ackley and Mr. Darryl Francis.

Gentlemen, we are very indebted to have you as two of the outstanding economists in the country particularly expert in the area of monetary policy. We have had 2 days of hearings as you may know. We had Dr. Arthur Burns testify on Monday and we had three distinguished economists testify yesterday.

We have a problem as I see it. The Chairman of the Federal Reserve Board announced that there would be a reduction in the upper range of the increase in money supply, $M_{1}$, from $71 / 2$ percent down to 7 . So we'd have a $41 / 2$ to 7 percent range. This raises the question as to whether or not this would be sufficient to provide the credit for a growth in the economy which seems to be generally anticipated in real terms of 7 percent and inflation of 6 percent. Arithmetic would indicate the need for about a 13 percent increase, much of which could be taken care of, of course, with velocity as it was last year. As many people understand, velocity is erratic and unpredictable, but the experience has been that last year's experience in velocity is unprecedented and it's been the first increase of that size in 25 years and it's been by and large a velocity increase which is identified with the first stages of recovery and the increase in money supply and the velocity I should say has been around 3 percent, not the 7 percent which would be required if you're going to be able to finance the kind of recovery that Dr. Burns expects with only an increase of around 6 percent or so in the money supply.

Well, that's one of the issues certainly that's before us.
Another is, who should run monetary policy? Whether or not the President and the Congress should have a greater voice in monetary policy than we have had before as elected officials. Also, what other economic policies are necessary to make monetary policy effective? What kind of fiscal policy we should have? The effect of the Humphrey-Hawkins bill which will be before this committee within
the next week or two for consideration, and which Dr. Burns very much opposes and some Members of the Congress are very enthusiastic in their support, the effect of credit policy such as the Rockefeller proposal for energy independence authority, a $\$ 100$ billion loan guarantee program over a period of 7 years or so, the safety net proposal made by Dr. Kissinger, a $\$ 25$ billion loan program. Obviously, these programs would affect monetary policy and the overall availability of credit.

We are concerned in this committee with the kind of housing policy which would be appropriate with monetary policy that the Fed is proposing and whether or not an incomes policy is practical and some degree of wage-price influence or control. All these issues are, of course, of great importance for our economy. You gentlemen are the experts. Dr. Modigliani will be here a little later I understand. He's been delayed

Professor Ackley, University of Michigan, was chairman of the Council of Economic Advisers under President Lyndon Johnson's administration; Mr. Darryl Francis, who recently retired from the position of President of the Federal Reserve Bank of St. Louis, are our witnesses who are here. We are going to ask Dr. Ackley to start off. Your full statement will be printed in the record and you may summarize in any way you wish but we would appreciate it if you could confine your statement to something like 10 minutes or so so we could have as many questions as possible. Go right ahead.

## STATEMENT OF PROF. GARDNER ACKLEY, UNIVERSITY OF MICHIGAN

Mr. Ackley. Mr. Chairman, my prepared statement is rather brief and by omitting several portions of it I think I can read it and still keep within your time limit, if I may.

It is a pleasure and honor to have been invited to participate in this fourth series of consultations on the conduct of monetary policy. The more extensive discussion of problems and issues which these consultations have facilitated can only be welcomed on all sides as a contribution to a better understanding of the appropriate role of monetary policy in our economy. It is in that spirit of promoting discussion that I intend to use this opportunity to make certain comments which may appear to some people to be unduly critical of the Federal Reserve, of the Congress, and of the ideas of some of my fellow economists.

I will omit page 2 of my statement, which deals with monetary policy-and fiscal policy too-during the recent recession. It concludes that both monetary and fiscal policies contributed-in my opinion, undesirably-to making this the deepest and longest recession in nearly 40 years.

Instead, however, I begin with a discussion of more recent monetary policies over the past year. I am highly critical of the response of the Federal Reserve to the blip in the growth of the money supply which was associated with the tax refunds and other special fiscal payments of May 1975. The Fed's response to this quite foreseeable and understandable blip led to a rise of 1 percent point or
more in most short-term interest rates-a bulge which, in most cases, took 6 months or more to unwind. Three-month Treasury bill yields-which had averaged 5.34 percent in June-climbed to 6.44 percent in August; 90 to 120 day commercial paper averaged 5.67 percent in June and rose to 6.79 percent in September; the banks' prime rate went from 7 percent in June to 8 percent on September 15. Even long-term rates rose by up to 50 basis points; and it was not until March of this year that the index of longterm Treasury bond yields returned to its level of last June.

I don't know how much or how long this unnecessary and unnatural bulge in interest rates moderated or delayed economic recovery. But if it delayed one young worker entering the labor force from finding his first real job, or postponed the return to work of one laid-off family breadwinner, its cost exceeded its benefits. The only excuse I have ever seen given for this strange affair is that the Fed knew that the bulge was meaningless but others might not; therefore, it had to tighten in order to prove its "machismo": to demonstrate its credentials as intrepid battler against inflation.

Since last fall, I have no serious complaint about the Fed's monetary policy. The open market committee appears to have no difficulty resisting any temptation to require interest rates to plunge to whatever lower levels would have been necessary in order to maintain the rate of growth of $\mathrm{M}_{1}$ or $\mathrm{M}_{2}$ within its own target ranges. From June to September, $\mathbf{M}_{1}$ grew at an anual rate of only 3.6 percent, and $M_{2}$ at 6.7 percent; from September to December the rates were 1.9 percent and 6.5 percent. I don't know how low the Fed would have had to push interest rates if it had desired to maintain monetary growth rates within its targets. But I don't criticize it for instead holding Federal funds at around $51 / 4$ percent in November and December, then sliding the rate down to $43 / 4$ percent to $47 / 8$ percent in January through April. To have pushed rates further sharply down in an effort to maintain the short-term growth of the money stock within the target range would have been just as quixotic as it was to chase the funds rate up to $61 / 2$ percent in August last year, in response to the temporary rise to a 10.1 percent growth rate of $\mathrm{M}_{1}$ and and of 12.9 percent in $\mathbf{M}_{\mathbf{2}}$ between March and May.

As you can see, $\mathbf{I}$ am no supporter of a steady growth of $\mathbf{M}_{1}$ or of $\mathbf{M}_{\mathbf{2}}$ or $\mathbf{M}_{5}$-as the key to prosperity, price stability, and human happiness. I have never believed that the demand for money is highly stable-or, if you prefer, that its reciprocal, "velocity" is stable. Factors which no one has been able fully to identify or explain caused velocity to speed up enormously last fall and winterjust as it has often done from time to time in the past. I saw no reason to reinforce that speed up of velocity with a faster rise in $M$ than actually occurred. Nor will I see any automatic and undebatable need to avoid a speed up in M growth of velocity again slows down-as I suppose and indeed I predict that it will one of these days.

As you can also see. I have no prejudice against stability of interest rates. Indeed, I believe that such stability contributes far more to the stability of business expectations than would a stability of money growth achieved by highly unstable interest rates. I would
not have objected-in fact, I would have liked it better--if the recent interest rate stability had been maintained at a level a percentage point no harm and could have done some good. But I welcome the stability, and I welcome even more the respite from pursuing the chimera of stable monetary growth. I only hope it lasts.

I guess I don't need to tell you that I am not a monetarist. Monetarists believe that velocity is highly stable, and therefore holds that only a stable growth of $M$ can produce stable-and somehow noninflationary-growth in GNP. Although the error of this belief has been often demonstrated, the experience of recent quarters again dramatizes it. The table which appears in my written statement shows rates of growth of $M_{1}$ and of $M_{1}$ velocity over recent quarters. Certainly, instead of the smooth 2 to 3 percent a year growth of velocity which monetarists usually describe, velocity has jumped around erratically during this period. If growth of $\mathbf{M}_{1}$ had been perfectly stabilized, growth of MV would still have been exceedingly erratic. Indeed, my guess is that if the growth of $\mathrm{M}_{1}$ had been completely stable the growth of velocity would have been even more erratic that it was.

I'm not sure how the Congress and its committees got converted to the monetarist, prescription of a stable growth of monetary aggregate. Yet you have been converted-at least to a degree. Resolution 133 insists on expressing the goals of monetary policy-(at least after the first half of 1975)-solely in terms of monetary growth rates, with no reference to the state of the economy, the distance from full-employment, the need to protect the housing industry from severe dislocation, the level of interest rates which will help to pre-vent-or will achieve-that dislocation, the actual and desired levels of business investment, and the strength of existing incentives thereto, and so on.

In my view, the rate of growth of the money supply-or of any one of the several money supplies-constitutes only one dimension of monetary policy; and monetary policy constitutes only one tool of total stabilization policy-and one that is by no means fully reliable. Preoccupation with this one dimension of this one tool is a denial of human intelligence and an enemy of economic stabilization.

You sent me, Senator Proxmire, a copy of H.R. 12934 which. among other things-most of which I don't care much about-would revise the charter for these consultations in a direction which I consider a distinct improvement over the language of H.R. 133. But I think that revision should go considerably further.

Basically, it seems to me that what Congress should be concerned with in these consultations is the same thing that the Fed should be concerned with in its internal deliberations. Both should be directing their attention, and the country's attention, not to past and future growth rates of monetary aggregates but to the past and future development of the total economy, and to ways in which monetary policy can better contribute to making that development what we want it to be, always recognizing that the best path of development can only compromise the many and competing goals of economic and social policy. The Federal Reserve and the Congress need to recognize what monetary policy can and what it cannot do-
and what total "demand-management" policy can and cannot do. And we need always to compare the benefits of what monetary policy can contribute toward achieving some goals with the costs of such policy in terms of other goals. The Fed should be encouraged to use the best economic forecasts and simulations that its own superb research staff can provide, to guide a flexible and discretionary policy. And it should be urged to stop being frightened by the monetarists.

Now, what do the above views imply about monetary policy for the year ahead? Given the prospect for the economy which, in broad terms, is held both by the administration and most private forecast-ers-and, I presume by the Fed, as well-what should policy now be? I believe that any appreciable tightening-either in terms of money growth or interest rates-would be quite premature, so long as this economic prospect appears to be working out more or less as anticipated. To be sure, if growth of velocity should slow down sharpty for several quarters, so that it takes substantially faster rates of monetary growth to stabilize interest rates at around or slightly above present levels, I would probably let interest rates rise a bit. thereby to slow down the growth of M. But not otherwise. And I would in no case allow monetary policy seriously to interfere with housing activity, unless there were signs of inflationary pressures originating in housing construction or of imminent residential over-building-neither of which now seems likely this year.

Thus, I very much regret that Chairman Burns told this committee on Monday that the Fed has reduced, even though slightly, the upper limits for its targets of monetary growth over the next year. If velocity should continue to grow very rapidly, the lower targets might pose no problem. But if growth of velocity should slow downas it seems to me very possible, even probable that it will-the new targets could pose significant problems. Indeed, so could the old ones. Please note that an autonomous slowing down of velocity growth can in no conceivable sense be interpreted as a sign that spending for goods and services is about to take off or that inflation is more likely, or that anything is happening that calls for a tightening of policy.

I would prefer not to have targets for monetary growth, but if we are to have them, the notion that right now is the time to reduce them seems to me quite without justification.
The Chairman. Thank you, Dr. Ackley.
[Complete statement follows:]

## Statement of Gardner Ackley, The University of Michigan

It is a pleasure and honor to have been invited to participate in this fourth series of consultations between the Congress and the Federal Reserve System on the conduct of monetary policy. The more extensive discussion of problems and issues which these consultations have facilitated can only be welcomed on all sides as a contribution to a better understanding of the appropriate role of monetary policy in our economy. It is in that spirit of promoting discussion that I intend to use this opportunity to make certain comments which may appear to some to be unduly critical : of the Federal Reserve, of the Congress, and of the ideas of some of my fellow economists.

Although I have often been a critic of Federal Reserve policies, I have also often supported them. In particular, I recall how, as Chairman of the Council of Economic Advisers under President Johnson, I (along with many others)
worked very hard to secure the President's tolerance, at least in public, for the sharp tightening of monetary policy which the Federal Reserve very properly initiated in 1966. This was an occasion, you will recall, when fiscal policy was creating a clearly inappropriate and excessive growth of aggregate demand. I am sure that most of you know that Lyndon Johnson's instinctive approach to interest rates and bankers, and particularly to central bankers, strongly resembled that of his fellow-Texan, the late Congressman Wright Patman. But we succeeded; and LBJ remained quiet.

Today, however, I want to discuss more recent policies of the Federal Reserve System. I was and remain highly critical of the Fed's policy during 1974 and the first half of $\mathbf{1 9 7 5}$. I regard it as nearly inexcusable that monetary policy remained in a posture of extreme tightness-on any and every definitionthroughout almost the entire period of the recession that began in late 1973 and ended in the first quarter of 1975. The fact that inflation was running at a very high rate during this period seems to me no excuse at all. With economic activity collapsing-which was certainly evident by mid-1974 even to outsiders without access to the Federal Reserve's remarkable informational resourcesthe Fed surely knew that the inflation had absolutely nothing to do with current aggregate demand or money supply.
Indeed, the inflation-whatever its complex origins-strengthened the case for a sharp increase in monetary growth rates in 1974. Instead, during the 12 months from December 1973 to December 1974, nominal M ${ }_{1}$ brew by only $4.7 \%$; and the real money supply ( $M_{1}$ deflated by the GNP price index) was allowed -or made-to decline by nearly $6 \%$. Most interest rates, already at record levels, continued to rise at least until fall of 1974 -and then declined mainly because the economy was so weak. And the "signal" of a discount rate reduction (from the unprecedented $8 \%$ level) was withheld until December 1974; nor was there a reduction in reserve requirements until February 29, 1975.

I may add that I am equally critical of fiscal policy during the recession. As measured by the budgetary surplus at any constant unemployment level, fiscal policy was allowed to become steadily and substantially tighter throughout the entire recession period: it switched toward ease only after the recession had already ended. ${ }^{1}$ I believe that this was the first time in any postwar recession when neither fiscal nor monetary policy was used to moderate and shorten the decline. Always before, one or even both policies turned toward ease-sometimes within a few months following the peak. The failure of either to do so this time has to be at least one reason why this recession was the deenest and longest in nearly forty years.

Nor am I favorably impressed by the response of the Federal Reserve to the blip in the money supply that was associated with the tax refunds and other special fiscal payments of May 1975. The Fed's response to this quite foreseeable and understandable blip led to a rise of one percentage point or more in most short-term interest rates-a bulge which, in most cases, took six months or more to unwind. Three-month Treasury bill yields-which had averaged $5.34 \%$ in June-climbed to $6.44 \%$ in August; 90 to 120 day commercial paper averaged $5.67 \%$ in June and rose to $6.79 \%$ in September; the banks' prime rate went from $7 \%$ in June to $8 \%$ on September 15. Even long-term rates rose by up to 50 basis points; and it was not until March of this year that the index of long-term Treasury bond yields returned to its level of last June.

I don't know how much or how long this unnecessary and unnatural bulge in interest rates moderated or delayed economic recovery. But if it delayed one young worker entering the labor force from finding his first real job, or postponed the return to work of one laid-off family breadwinner, its cost exceeded its benefits. The only excuse I have ever seen given for this strange affair is that the Fed knew that the bulge was meaningless but others might not; therefore, it had to tighten in order to prove its "machismo": to demonstrate its credentials as intrepid battler against inflation.

Since last fall, I have no serious complaint about the Fed's monetary policy. The Open Market Committee appears to have had no difficulty resisting any temptation to require interest rates to plunge to whatever lower levels would have been necessary in order to maintain the rate of growth of $M_{1}$ or $M_{2}$ within its own target ranges. From June to September, $\mathbf{M}_{\mathbf{1}}$ grew at an annual rate

[^7]of only $3.6 \%$, and $\mathrm{M}_{2}$ at $6.7 \%$; from September to December the rates were $1.9 \%$ and $6.5 \%$. I don't know how long the Fed would have had to push interest rates if it had desired to maintain monetary growth rates within its targets. But I don't criticize it for instead holding Federal Funds at around $51 / 4 \%$ in November and December, then sliding the ratio down to $43 \%$ to $4 \% \%$ in January through April. To have pushed rates further sharply down in an effort to maintain the short-term growth of the money stock within the target range would have been just as quixotic as it was to chase the Funds rate up to $61 / 2 \%$ in August last year, in response to the temporary rise to a $\mathbf{1 0 . 1 \%}$ growth rate of $\mathrm{M}_{1}$ and of $\mathbf{1 2 . 9 \%}$ in $\mathrm{M}_{\mathbf{2}}$ between March and May.

As you can see, I am no supporter of a steady growth of $\mathrm{M}_{1}$ (or of $\mathrm{M}_{\text {3 }}$ or $\mathrm{M}_{5}$ ) as the key to prosperity, price stability, and human happiness. I have never believed that the demand for money is highly stable (or, if you prefer, that its reciprocal, "velocity", is stable). Factors which no one has been able fully to Identify' or explain caused velocity to speed up enormously last fall and winter-just as it has often done from time to time in the past. I saw no reason to reinforce that speed-up velocity with a faster rise in M than actually occurred. Nor will I see any automatic and undebatable need to avoid a speed-up in M growth when growth of velocity against slows down-as I suppose that it will one of these days.

As you can also see, I have no prejudice against stability of interest rates. Indeed, I believe that such stability contributes far more to the stability of business expectations than would a stability of money growth achieved by unstable interest rates. I would not have objected-in fact, I would have liked it better-if the recent interest-rate stability had been maintained at a level a percentage point lower than the level we have experienced. It would have done no harm, and could have done some good. But I welcome the stability, and I welcome even more the respite from pursuing the chimera of stable monetary growth. I only hope it lasts.
I guess I don't need to tell you that I am not a Monetarist. Monetarism is the doctrine which believes that velocity is highly stable, and therefore holds that only a stable growth of $M$ can produce stable (and somehow noninflationary) growth in GNP. Although the error of this belief has been often demonstrated, the experience of recent quarters again dramatizes it. The table which follows shows rates of growth of $M_{1}$ and of $M_{1}$ velocity over recent quarters. Certainly, instead of the smooth 2 to $3 \%$ a year growth of velocity which Monetarists usually describe, velocity has jumped around erratically during this period. If growth of Mi had been perfectly stabilized, growth of MV would still have been exceedingly erratic.

| Year | Quarter | Percentage growth at annual rate |  |
| :---: | :---: | :---: | :---: |
|  |  | $\mathrm{m}_{1}$ | Velocity of $M_{1}$ |
| 1974. | IV. | 4.1 | 0.6 |
| 1975. |  | . 6 | -2.6 |
|  | 1 | 7.6 | $1{ }^{2} 8$ |
|  | 11. | 7.2 | 11.8 |
|  | 1 V |  | 9.4 8.6 |
| 1976. |  | 2.7 | 8.6 |

Note.- $\mathrm{M}_{1}$ growth based on monthly averages of daily data; data for 1976 partly estimated.
I don't know why, when, or how the Banking and other Committees of the Congress got converted to the Monetarist prescription of a stable growth of monetary aggregates as the test for a correct monetary policy. Perhaps it was merely through the loud shouting and sincere missionary zeal of Monetarism's high priests. Yet you have been converted-or at least half-converted. For example, House Concurrent Resolution 133 insists on expressing the goals of monetary policy (at least after the first half of 1975) solely in terms of monetary growth rates, with no reference to the state of the economy, the distance from fun-employment, the need to protect the housing industry from severe dislocation, the level of interest rates which will help to prevent (or will achieve) that dislocation, the actual and desired levels of business investment, and the strength of existing incentives thereto, and so on.

In my view, the rate of growth of the money supply (or of any one of the several money supplies) constitutes only one dimension of monetary policy:
and monetary policy constitutes only one tool of a total stabilization policyand one that is by no means fully reliable. Preoccupation with this one dimension of this one tool is a denial of human intelligence, and an enemy of economic stabilization.

I often disagree with Chairman Burns. But at least he is not a Monetarist. He understands that short-term fluctuations of money growth associated with fluctuations in money demand have no real meaning; that fiscal policy is at least as important a tool as monetary policy; that interest-rate levels have something to do with economic growth (perhaps even more than with short-run stabilization) ; that housing can't be forever the football of stabilization policy; that structural reforms and incomes policy (weak as they may be) must be part of the arsenal against inflation. And he repeatedly reminds us that we cannot be satisfled so long as there are any workers involuntarily unemployed. Chairman Burns needs your protection-and that of your Committee and of the Congress-from the zealots of the "Shodaw Open Market Committee" and their journalist friends.
Senator Proxmire sent me a copy of H.R. 12934, which, among other things (most of which I don't care much about) would revise the charter for these consultations in a direction which I consider a distinct improvement over the language of HR 133. But I think that version should go considerably further.

Basically, it seems to me that what Congress should be concerned with in these consultations is the same thing that the Fed should be concerned with in its internal deliberations. Both should be directing their attention, and the country's attention, not to past and future growth rates of monetary aggregates but to the past and future development of the total economy, and to ways in which monetary policy can better contribute to making that development what we want it to be, always recognizing that the best path of development can only compromise the many and competing goals of economic and social policy. The Federal Reserve and the Congress need to recognize what monetary policy can and what it cannot do-and what total "demand-management" policy can and cannot do. And we need always to compare the benefits of what monetary policy can contribute toward achieving some goals with the costs of such policy in terms of other goals. The Fed should be encouraged to use the best economic forecasts and simulations that its own superb research staff can provide, to guide a flexible and discretionary policy. And it should be urged to stop being frightened by the Monetarists.

I have not said what I expect the economy to do in the year ahead, and what that should mean for monetary policy, and I hesitate to do so. You have access to considerably better forecasts than I am able to provide, since I am neither the proprietor of a large econometric model, nor able to spend much time sifting the tea leaves of the latest economic data. I assume, however, that-given extension of the tax cuts that would otherwise expire at midyear, and given expenditures in the range which the Senate and House Budget Committees are proposing-the recovery will continue at a rate averaging between $51 / 2$ and $71 \frac{1}{2} \%$ a year in real GNP, and that the rate of inflation will be whatever it will be (and that rate quite independent of this year's fiscal and monetary policies). I said last fall that I though the inflation rate would be between 4 and $8 \%$ this year, and I haven't changed my opinion. (Incidentally, I don't think that in present circumstances anyone should pretend to predict the inflation rate within a narrower band of uncertainty than 4 percentage points.)
Given this prospect-for what it is worth-what would I propose for monetary policy? I believe that any appreciable tightening (either in terms of money growth or interest rates) would be quite premature, so long as the above economic prospect appears to be roughly correct. If growth of velocity slows sharply for several quarters so that it takes substantially faster rates of monetary growth to stabilize interest rates around or slightly above present leevls, I would let interest rates rise a bit, and try to slow down the growth of M. But not otherwise. I would not let monetary policy seriously interfere with housing activity in 1976 unless there are signs of inflationary pressures originating in housing construction or of imminent residential over-buildingneither of which now seems likely.

But judgments like these can and should be continually made and revisedby the Fed, the Administration, and the Congress-as we go along, and as new data become available. What we need to avoid is locking policy into any mechanical rule, but instead start using the best analysis of the best economists,
seasoned by the good sense of those who must administer the policies, and ever guided by a vision of the needs of our economy and our society, and, above all, of the needs and wants of the individuals who compose them.
The Chatrman. Mr. Francis.

## STATEMENT OF DARRYL FRANCIS, RETIRED PRESIDENT OF THE FEDERAL RESERVE BANK OF ST. LOUIS

Mr. Francis. Mr. Chairman, I appreciate the opportunity of spending some time with you and your associates here this morning. My paper is brief but I will attempt to summarize it and leave parts of it for the record.
I would like to begin with my view of monetary policy in 1975 and I think the performance of the Federal Reserve System in 1975 was about like I would like to have seen. On average, the growth in the narrowly defined money supply came out to around 5 percent and that is a figure that seemed reasonable to me at the beginning of the year and does now.

I think, also, that the ranges that have been proposed from time to time by the Chairman of the Board are within reason, particularly when viewed from the perspective of midrange of what he's talking about. I therefore admit that I differ with the previous speaker in that I would not like to see us move to the upward limits of that range because in my view of our historical experience, when we have had monetary expansion at those levels we have been unable to sustain the economy and have wound up with more inflation than at least some of us would like to have.

For that reason, a good part of my paper this morning was devoted to a bit of historical look by time periods mainly since World War II of the impacts of stabilization policy, the combination of fiscal and monetary actions by different time periods, and how the economy has performed during those different time periods. I simply selected two major periods, one beginning in 1952 and running through the third quarter of '61, then picking up there and following on through all of 1974.

I think it's rather interesting that for the first period of 1952 through late 1961 the government was operating in such a fashion in terms of spending that the Treasury was required to increase the privately held debt by only about $\$ 21$ billion or a little over $\$ 2$ billion per year. I think it's interesting also that the Fed during that period provided sufficient reserves to the banking system to permit a growth in the money stock of about $\$ 23.5$ billion. It's rather interesting, Mr. Chairman, to observe that the growth in the money stock was sufficient to completely accommodate the new requirements of the Treasury with some excess.
Now in terms of the performance of the economy for the period as a whole-and we have some ups and downs within both of these periods-but for the period as a whole, we saw money stock growth at an average of $1.8 \%$ per year, real output moved ahead at 2.6 annual rate.
The Chatrman. What period are you discussing now?
Mr. Francts. This is 1952 through the third quarter of 1961.
The Crairman. Thank you.

Mr. Francrs. And prices were rising at approximately 2 percent and I think it's interesting that on average for the period unemployment averaged out at 4.9 percent.
Now moving on to the second period, beginning. with the last quarter of 1961 and carrying throughout 1974, a period in which I think we saw substantially more in the way of governmental activism in terms of programs designed, as I interpret it, to improve our ability to increase production, to reduce unemployment and bring about a more equitable distribution of income between the various income groups in this country. Now for that period as a whole, Federal spending stepped up rather substantially. We had numerous fiscal actions, a tax decrease early in the period, followed shortly by an escalation of the Vietnam activity, the creation of the Great Society, later on the tax increase which gradually wound out and finally another experiment with wage and price control. These programs were brought on-line in the main without increasing taxes to even partially pay for their cost, without selling to the public securities that had to be paid in a given time by the taxpayer, but rather, by the process of creating sufficient new money to cover the entire cost of the programs. During that period the Treasury came to the market and raised something over $\$ 109$ billion from the private sector. The Federal Reserve permitted an increase, absolute, in the money supply, narrowly defined, of $\$ 136.5$ billion and not again that sufficient new money was created and injected into the economic system to completely accommodate the total requirements for new money of the Treasury plus a substantial amount in addition.

The money stock increased on average during the period over 5 percent per year, real output did move up to 3.6 percent a year on average; but I would point out some of that perhaps was related to the Vietnam activity. The price level rose on average at an annual rate of 4.1 percent and the unemployment rate averaged out for the period at 4.8 percent, almost identical to the previous period.

Then rather quickly, I'd like to pull out the last 5 years of the latter period, 1969 through 1974. The Treasury came to the public for new money of roughly $\$ 64.5$ billion. The Fed provided enough reserves for an addition of something over $\$ 72$ billion to the money supply and again I'd point out a sufficient amount to fully accommodate the new needs of the Treasury with some excess.

The performance of the economy shows money supply growing over 6 percent at annual rate, real output dropped back to 2.5 percent, prices were growing on average for the five year period at near 6 percent, and the unemployment level averaged out at 5.4 percent.
Now I recognize that you could point out very quickly that the 5 -year period covered parts of two recessions, but it also covered one of the highest levels of production we have had and one of the lowest levels of unemployment.

Now it seems to me that on the record for this period of time that all of the activities that we have indulged in to increase production and decrease unemployment haven't worked out very well. As I study these time periods and the period as a whole, it seems to me that with the rather massively increased spending of the Federal Government and an equally massive expansion by the monetary authority, we have not proved that we were able to increase the production po-
tential in this country or that we were able to reduce the level of unemployment. Indeed, the outstanding accomplishment that comes out of it is the much higher level of inflation, and I question that that was a healthy development as far as the country is concerned.
In terms of the redistribution of income, I think it's interesting to note that in 1974 the lower 20 percent of earners in this country were getting about 5.1 percent of the income stream and by 1974 after all of the efforts that had been made they were still getting only about 5.4 percent. The top 20 percent of the earners portion dropped about 2 percent during the period and, on balance, 1 would say that in the process of increased spending, increased borrowing and increased monetary expansion, there was no significant change in the distribution of income between the various levels of income earners in this country.

Now I would like to proceed with just a few more figures, if I may, of more recent vintage. I think it's rather interesting to note that for the period of 1970 to mid- 1973 when the Treasury added about $\$ 60$ billion to the publicly held debt, the money supply was increased by $\$ 51$ billion or at an average rate of something over 7 percent, and given the autonomous reduction in output, inflation moved into the double digit level.

Then the later period of equal length, from mid-1973 through 1975 , the Treasury added approximately $\$ 92$ billion to the publichly held debt, but the money supply was permitted to increase by only $\$ 33$ billion, or at the annual rate we mentioned earlier of 5 percent, and I'm inclined to believe that if such a policy is continued by the Federal Reserve it's reasonable to expect that inflation will decline to significantly lower levels and, indeed, current data indicates that the process is already underway.

In a period of almost unprecedented high spending and debt increase inflation is winding down, in my view because of more modest additions to the money stock.

I would like to say a word, Mr. Chairman, with reference to some of the proposals that have been surfaced about changes in the Federal Reserve System. I would simply express the view that I think that the structure of the system as originally conceived and modified later, is all right and I would not like to see the general structure of the Federal Reserve System changed by legislative action. I think the regional nature has been good. Rather than seeing it weakened, I would like to see it improved or strengthened because it seems to me that the regionally selected presidents of the Federal Reserve banks do bring to the policy formulation table viewpoints garnered from business and community leadership that would be painfully absent if they were not there.

Now, as to the concurrent resolution of the last year, it seems to me that it has brought about an improved dialogue between the Congress and the Federal Reserve System and I consider it a good first step. The provisions for the Chairman of the Board of Governors for regular discussion with the banking committees of both houses of Congress with respect to the long-range goals of the System was, to my view, a healthy development and I would like to see it continued.

While it is true that information is available from week to week on short-term movements of the monetary aggregates, it is my view, Mr. Chairman, that one further step could improve not only congressional understanding and overview, but also the process of business budgeting as well, since the rate of monetary expansion has an important impact on the success of forward projections. I hold the view that the 45 -day lag in reporting the short-term goals of the System should be eliminated. In its place, I would suggest a press conference by the Chairman of the Board of Govenors at 4 p.m. eastern time following the conclusion of each Federal Open Market Committee meeting, at which he would lay out the actions of the committee for the public to know.
Now in making this suggestion, I am well aware of the probable outcry on the part of many that if the short-range objectives of the System were known the smart players in the game in the market would realize some handsome gains. I would counter that view with the suggestion that most of the market participants that I have observed have well trained "Fed watchers" who do a rather good iob of decoding in a relatively short time what the Fed is doing, and I believe if the short-run objectives were made immediately available after their formulation everybody involved in market participation would be on a more equal basis than could possibly be the case under the cloud of secrecy which now exists for the 45 -day lag period. This additional change in the reporting of the Federal Open Market Committee actions would seem to me to provide most of the information needed by the Congress and I believe could lead to improve policy formulation.

By way of summary, I am confident that the ultimate objective for long-run sustainable growth, stability of prices, and effective full employment depends on a rapid movement by the Federal Government to balanced budgets and a rate of monetary expansion that does not exceed the potential long-run rate of growth of real product.

Thank you very much.
The Charrman. Thank you very much, Mr. Francis.
[Complete statement follows:]

## Statement of Darbyl R. Francis

Mr. Chairman and members of the committee, I am delighted with the opportunity you have given me to discuss some of the provisions expressed as the sense of Congress in the concurrent resolution about a year ago. I think it would be useful in the beginning for me to lay out a few basic beliefs I have developed over the years with reference to the economic system in this country and its performance. I believe strongly that the free enterprise system we have developed has been the most successful of all the various systems pursued throughout the world and I believe that it has provided for all the American people a standard of living that has been enjoyed by not other society in our history. It is my bellef that the economic system that has developed in this country is basically a stable one, but I would hasten to add that it is subject to the destabilizing impacts of stabilization policy.

I am convinced that government spending, in and of itself, has very hittle and very short-run influence on economic activity. I feel equally certain that government spending and the deficit it so frequently brings about, in and of itself, is non-inflationary. The impact government spending has on our economy depends on the way it is financed. Spending financed by taxing simply represents a transfer of purchasing power from the private to the publie sector. The same can be said for spending financed by bonds sold to the public which ultimately must be paid by the taxpayer. But over the years, since World War

II, we have fallen into a pattern in this country of supporting increased government spending not by taxing, not by sale of bonds to the public, but rather by a process of financing it with newiy created money. This process indeed does have an impact on economic activity, employment and prices. Furiher, I am confident that the trend growth rate of monetary expansion determines the level of prices or the rate of inflation. Further, it is quite evident to me that significant deviations around the monetary growth rate has an impact on production and employment and contributes significantly to the business cycle. As a result, over a long period of observance, 1 am convinced that a balanced federal budget and a moderate rate of monetary expansion is an absolute necessity to the long-run best interest of this country.
With those statements of general belief, I would like, for a while, to review some modern economic history of this country and the performance that has emanated from the many attempts to create higher production and lower unemployment through stepped up levels of government spending and money creation. I should like to review two major periods of time since World War II. The first period begins with 1952 and continues through the third quarter of 1981. This period represents, I think, a time of relative stability. The second period begins with the fourth quarter of 1961 and runs through all of 1974. Then, I think it is of interest to take the last five years of the second period for further review.

During the period of 1952 through the third quarter of 1961, the federal government required the Treasury to borrow from the public approximately 21 billion dollars or roughly 2.2 billion dollars per year. The Federal Reserve System bought sufficient securities in the open market to provide reserves to the banking system that permitted an increase in the narrowly defined money stock of approximately 23.5 billion dollars. Please note that for the period as a whole, there was sufficient newly created money injected into the economic system to completely accommodate the needs of the Treasury with some excess. In terms of the performance of the economy for the period as a whole, the moner stock grew at $1.8 \%$ per year, real out-put advanced at the annual rate of $2.6 \%$. prices rose at a $2 \%$ annual rate and on average for the entire period. unemployment was $4.9 \%$.

The second period which began under the buttle cry of 'let's get this country going' represents a period of a high degree of governmental activism and influence in the economic process. During the period from late 1961 throngh 19:4. we experienced many efforts to nse various fiscal actions and government controls to accomplish the goals of higher production, lower unemployment and a more equitable distribution of income between all levels of earners. We experienced a tax decrease, an escalation in the Vietnam activitr, the creation of the great society, a tax increase which was subsequently wound-ont and the in fated experiment with wage and price controls. For the period as a whole. governmental spending was stepmed-up substantialig as new legislation hroumht new nrograms on line. The Treasury was refuired to increase the publicly held debt of the federal government by over 109 hillion dollars. The Federal Reserve provided sufficient reserves to the banking srstem to increase the money supply bv about 136.5 billion dollars. Again. please note that for the perind as a whole, enough newly created money was injected into the economic system to fullv acrnmmodnte the entire needs of the Treasury with a gondly number of billinns of dollars in addition. Inoking at the nerformance during the perind. we see a rate of growth in the money stock that averaged out at $5.1 \%$. real nrodert indred moved up to $3.6 \%$. prices advanced on average at $4.1 \%$ and unemplosment averaged mut at $4.8 \%$. almost identical to the nrevions neriod.

Pulling out the last five vears of the second nerind. 1969 through 1974. tha Treasury was oblicated to raise from the puhlic new debt of annrovimatele 64.5 hillinn dollars. The Federal Reserve hought securities in the nem market in a sufficiont amount to nermit an increase in the moner sumply of orer 72 billion dollars and once again. please note that the amount of newly created moner put into the oronomic srstem mas snfficient to fillt accommonato the entire noeds of the Treasury with snme expess. The nerformanes for thic firn vear period was an average growth rate in the monev stork of $82 \%$, a rate of increase in real prodnct that fell back to $25 \%$. an averace annual rate of
 atare that one conld mickly moint out that during this five rear nerion we
 period we were at the highest level of production in our history and reachod
one of the lowest levels of unemployment. Therefore, I think the conclusion that one can take from each of these periods in relation to the other is valid.

If we review this mass of data, three things clearly stand out. First, increasing levels of government spending financed by large deficits paid for in effect, through the money creation process did not result over the long run in an increase in our ability to produce. Second, it is equally evident that the process did not result in any evidence of its ability to reduce unemployment. Third, and perhaps most important, it is quite evident that out of the increased spending and deficit financing, along with equally massive creation of money emerged a devastatingly higher level of inflation and a tremendous increase in the Federal Debt which will be a drain on taxpayers for as far as one can see ahead.

Another interesting result or perhaps failure of the experience has to do with income redistribution. In 1947, the lower $20 \%$ of earners in this country received about $5.1 \%$ of the income stream. In 1974, that share had increased to only $5.4 \%$, hardly a significant accomplishment. In terms of the top $20 \%$ of earners, the share of the income stream was reduced by about $2 \%$ and as one looks at the structure of income, no significant change resulted from the massive programs and the equally massive expenditures to bring them about. It seems to me that as one studies the activities in which government has involved itself and the resulting performance of the economy in succeeding periods, one must support the conclusion set out at the beginning of this testimony.

Turning to the Congressional overview of the Federal Reserve System, it seems clear to me that over the period since World War II, there is no evidence of lack of support by the Federal Reserve of the governmental programs put on line at great cost. Indeed if my view that inflation is a monetary phenomenon holds true, as I believe it does, the evidence would say that the Federal Reserve has been overly responsive to the needs of the Treasury and further that the lack of accomplishment of the efforts involved in increased spending since World War II failed as they did for reasons other than a lack of supportive role on the part of the Federal Reserve System.

Simply stated, increased spending and enlarged debt, fully accommodated by expansion of the money supply by the addition of newly created reserves to the banking system, feeds additional income to all levels of earners with no significant shift from one group to another. Excessive utilization of this combination of actions raises all levels of income more than otherwise because of its attendant inflation.

It is true the real incomes of all levels of earners since World War II have increased almost proportionately but mainly as a consequence of our ongoing growth in resources and not because of governmental spending actions thought by some to bring the same results.

Now a few more statistics to support my contention that government spending is inflationary only to the extent it is supported by monetary expansion. From 1970 to mid 1973, the Treasury added about 60 billion dollars to the publicly held debt. The money supply increased by about 51 billion dollars or at an average rate of over $7 \%$. Given the autonomous reduction in output, inflation moved into the double digit level. Then from mid 1973 to the end of 1975, the Treasury added over 92 billion dollars to the publicly held debt but the money supply was permitted to increase by only 33 billion dollars or at an annual rate of about $5 \%$. If such policy is continued it is reasonable to expect that inflation will decline to significantly lower levels over the years ahead. As a matter of fact, current data indicates that this process is under way. In a period of almost unprecedented high spending and deficits inflation is winding down because of more modest additions to the money stock.

Recently, we have been aware of legislative proposals which would bring about changes in the structure and operations of the Federal Reserve System. The most significant proposed changes would appear to be designed to politicize the system and weaken its regional representation. It would be my fervent hope that these proposals do not find their way into legislative action. While I have said that I believe the Federal Reserve System has permitted too much monetary expansion, particularly during the last 15 vears, I still believe the basic structure of the ssistem to he somond and I wonld hope that its structure and operation in gencral would continue along the lines set forth in the original act and its later modification. I am confident that independent regional input into the monetary policy formulation process is a very essential element
to better policy in the years ahead. Regionally selected and fully briefed regional bank presidents bring to the federal open market committee an understanding of current economic developments gleaned from business and community leadership that would be painfully lacking if their participation were eliminated from the deliberation. As a matter of fact I would urge the Congress to consider strengthening rather than weakening the regional structure of the system. As a final note on this subject, it is my belief that the most important contribution the Congress could make to greater soundness of future monetary policy actions would be a dedicated move to a balanced budget, thus removing the pressure on the Federal Reserve for excessive monetary expansion.

As to the concurrent resolution of last year, it seems to me that it has brought about an improved dialogue between the Congress and the Federal Reserve System. There may be some inconsistencies in the substance of the resolution but I consider it a good first step. The provisions for the Chairman of the Board of Governors for regular discussion with the banking committees of both Houses of Congress with respect to the long range goals of the system was, to my view, a healthy development and should be continued. While it is true that information is available from week to week on short term movements of the monetary aggregates, it is my view that one further step could improve not only Congressional understanding but also the process of business budgeting as well, since the rate of monetary expansion has such an important impact on the success of forward projections. I hold the view that the 45 day lag in reporting the short term goals of the system should be eliminated. In its place, I would suggest a press conference by the Chairman of the Board of Governors at 4:00 P.M. Eastern Time following the conclusion of each federal open market committee at which he would lay out the short range objectives of the committee as developed in the meeting. In making this suggestion, I am well aware of the probable out-cry that if market participants knew what the Fed was doing in the short run, the smart players in the game could realize handsome gains. I would counter that with a suggestion that most of the market participants that I have observed have well trained Fed watchers who do a rather good job of decoding in a relatively short time what the Fed is doing. I would believe that if the short run objectives were made available immediately after their formulation, everyone involved in market participation would be on a more equal basis than can possibly be the case under the cloud of secrecy which now exists for the 45 day period. This additional change in the reporting of federal open market committee actions, it seems to me, would provide most of the information needed by the Congress.
In summary, I am confident that the ultimate objectives for long run growth, stability of prices and effective full employment depends on a rapid movement by the federal government to balanced budgets and a rate of monetary expansion that does not exceed the potential long run rate of growth of real product.

The Chatrman. Our final witness this morning is the distinguished president of the American Economic Association. We are happy to have you, President Modigliani.

## STATEMENT OF PROF. FRANCO MODIGLIANI, MASSACHUSETTS INSTITUTE OF TECHNOLOGY

Mr. Modigliani. Thank you.
The Chatrman. We don't have a copy of your statement. How long a statement is it, sir?

Mr. Modigitani. I will make it rather brief, Mr. Chairman. Unfortunately, I have been unable to see the statement of Mr. Burns. It was supposed to reach me in Boston, but didn't get there until after I left. So I have only seen an account of Mr. Burns' statement in the New York Times and have been unable to prepare a statement.

The Chairman. Fine You go right ahead. We would appreciate it if you could limit your remarks to 10 minutes and the balance of your statement will be printed in full in the record.

Mr. Modightani. I certainly will. Needless to say, while I am the president of the American Economic Association, I speak entirely on my behalf and in no way commit the rest of the Association. I am not speaking for Mr. Friedman, for instance, I'm sure, as you no doubt know.

Let me say first of all that having just come in at this point and heard the statement of Mr. Francis, that I wish we had time to discuss that in greater detail and perhaps we might have it during the question period. I found it quite interesting how one could look at the same record and reach directly opposite results. I have looked at the same record recently in a published paper published by the Federal Reserve Bank of Boston and my conclusions differ greatly.

Since 1970 the money supply has been growing at a fairly rather stable rate while before 1970 it grew very haphazardly as the record shows. The record further shows that as long as it grew in a way to accommodate the economy the economy was considerably more stable than since 1970 when we have had a stable growth of the money supply and we just expected the economy as it were to bounce around to accommodate the money supply.

Perhaps I might submit for your inspection a copy of a chart in that paper which makes the picture I think very clear (see p.111).
However, our first point is to comment on Mr. Burns' statement and by and large I find myself in agreement with what I heard Mr. Ackley to say; namely, that what Mr. Burns has announced in terms of his money growth for the coming vear is slightly disquieting, though it may not necessarily be highly disquieting. I think we probably have an agreement that in 1975 Federal Reserve policy turned out to be generally satisfactory. That is, berause monetarists looking at the money supply figures were satisfied with the low rate of growth of money while nonmonetarists have been satisfied that interest rates, have been kept at levels which are appropriate for a speedy recovery of the economy. They were kept within the 5 percent range except for the unnecessary bulge in the summer months. Julv, August, and September, when thev were allowed to rise by 150 basis points, that bulge was totally unneressary and I'm afraid did a little harm. hut for a short time a deviation cannot do large harm. But by and large, except for that. policy was fine and it fitted certainly what manv people have asked be done.

The fact that money supply grew slowly is somewhat of a mystery, given those low interest rates and given the very large rise in real output and money income. One would have expected money growth on the order of 10 to 11 nercent which was the kind of figure which many of us had suggested was appropriate of produce those interest rates. And. in my view there is no other nurpose in proposing a growth of money supply except in terms of the interest rates they generate.

Now Mr. Burns has pointed out that the verv slow growth of the money supply-which undonbtedly surprised the Fer also because of the time the monev growth was actually lower than the lower targets-has causes which we partly understand; namely, new developments at financial institutions.
There is a series of developments, all of which by the way stem from a continued maintenance of prohibition of interest on demand deposits. Because of that provision, there is more and more tendency
for substitutes to money to be created which we do not count as money because of the rigidity of definitions we need in measuring things. We can only measure a variable by defining it first. We hare defined money as currency plus the demand deposits liability of commercial banks. When a checkable account is issued by a savings bank or when a time deposit becomes checkable, then we clon't call it money, although indeed it is money. So we have a variety of reasons why velocity has quickened.

There have been other such development which are well known. To the best of my knowledge, and according to all or nearly all of the numerous studies which have been carried out in the last year to understand why the velocity has risen or why the demand for money has declined, it would look like these new developments do not fully account for what we have observed. It's hard to tell because some of these developments are hard to measure. The information is scanty and what-not, but it does look like there is some residual element beyond financial innovation which contributed to this year's development.
The reason I'm stressing this point is because I'm trying to evaluate Mr. Burns' proposal to slightly reduce the range of growth of money for next year, reducing the upper bound from $71 / 2$ down to 7 percent.

One can raise the question as to whether this is a range that is likely to fulfill the real requirements of the economy. Here again, Mr. Chairman, as you know, I have already expressed the view that one cannot formulate monetary policy, one cannot talk about ranges for money supply or interest rates, without first specifying what our real targets are, what are we aiming for in terms of real output, employment, and in terms of what rate of inflation may reasonably be expected to go with those targets.

It seems to me that there is no reason-or at least I have had no reason to change the targets I have held for a while, which is that we want to try to return to 6 percent unemployment by the end of 1977: The reason for 6 percent as an interim target, as I have indicated in previous testimony is because it's a very safe target. All the evidence suggests that as long as unemployment is not below 6 percent we can be quite confident that inflation will be continuing to abate. And since I don't expect to have zero inflation by fheñ, I want an interim target which insures a continued reduction of inflation.

Now to get the 6 percent in a matter of about a year and a half. it is mo judgment that we still need to prescrue a growth of real output between 7 and 8 percent for the rest of this vear and then decline somewhat beginning next year. Now this output growth of 7 to 8 percent will also be accompanied. to the best of $m y$ jumpment -and I think there is fairly good agreement on this-by inflation rate in the order of 5 percent. We may have a little luck and get a little lower, or less luck and get a little higher inflation. but. we will not be very far away from that. Let's say that 7 and 5 is 12 or 8 and 5 is 13 , so we are talking about a rate of growth of monev income, a desirable rate of growth of monev income of $12 ;$ perhaps 13 or even 14 percent, something in that order of magnitude.
Now one can raise the question whether a growth of the money supply of no more than 7 percent will be sufficient. If you go by last
year's experience, the answer is clearly positive, because we got that much growth over the last four quarters with around 5 percent increase in money supply. So if we go by last year's experience, that's fine. But if you go by a longer historical experience, the situation is less clear. There are really three possibilities. One is that the financial improvements which have been at work last year, and the other factor that increased velocity continue to work, in which case 5 percent would be sufficient. There's next the possibility that these developments which have gone on last year will come to a stop. The moment those developments stop, the money stock will be lower than it would be otherwise be, but its growth thereafter will go back to historical levels. In that case, I would think that a growth of the money supply, somewhere between 8 and 10 , or around 9 percent, would be needed to finance that growth.

Finally, there is a possibility that some of the reduction in money demands last year was due to sporadic events which could reverse themselves, and in that we might require an even larger growth rate than that.

The reason I think all this is important is not that we need to say that we will raise the money supply at 12 percent. It's fine to say now that, as far as we can tell, on the basis of recent trends, a $41 / 2$ to 7 percent growth of $M_{1}$ may be enough as long as we make it very clear-and I think it's very important for the Federal Reserve to make it very clear that there may be a strong need and a strong case for a much larger growth of the money supply. There may be a perfectly valid case for the money supply to rise not at 7 but 9 percent but for some periods even more. T think it's important to do it now before it happens becanse if it's done at the last moment on the spur of interest rates threatening to rise very much, and the Federal Reserve responds at the last moment, then there is a case for thinking that the Federal Reserve is out of control and therefore that the rise in the money supply should generate inflationary expectations. We should therefore make it clear now that 9 percent may be needed to maintain the level of interest rates which are needed to insure the growth of money income, real income, and prices which we want.

So the first point is that I doubt that it was a good idea for Mr. Burns to cut down the range, but that the most important thing is to make it clear right now that that range may be insufficient.

Now how would we know it's sufficient or not? By having a clear plan as to what we are aiming at in real terms and what interest rates will be required to bring that about. Once we know what those interest rates are, we have to let the money supply accommodate those interest rates. We should. of course, change those interest rates if there is evidence that real income is rising faster than we expected or that inflation is higher than expected for a given income.

So there are circumstances under which we can change those plans but not merely because the money demand is higher. That's not a good reason for changing that plan.

This, Mr. Chairman, leads me to the next issue which I would like to address for the next 5 minutes, which is the problem of the reform of the Federal Reserve System.

There is legislation pending to this effect and I would very much like to urge the Senate to cooperate with the House in promptly passing legislation with several items of reform. I personally disagree with Mr. Francis on the notion that we should maintain the present system. I think the proposal in the legislation before the House Banking Committee proposing that the Presidents should be appointed by the President of the United States with advice and consent of the Senate is a sound idea and I'm sorry that that legislation was temporarily defeated in committee. I think it's a good idea because I don't think it's at all inconsistent with Mr. Francis' request or idea that presidents of the banks should be people from the place, deeply rooted in that place. That seems to be fully consistent with the fact that we make it clear that these people are not managing some private interests. They are managing the Federal Reserve which is serving the public interests and since it's serving the public interests it is a part of the government in the broad sense and it seems to me only appropriate that these people should be so appointed.

However, I do regard this as a very minor issue and I would be quite willing to compromise with Mr. Francis if he went along with me on the other things like what should the Fed from now on do in terms of its relations with the House and the Senate. I do believe that you should make it statutory for the Federal Reserve Board to report on the same frequency in which it has recently. So far it's based on a congressional resolution. I think it should become a law for the Federal Reserve to report to Congress, essentially on the same frequency which has applied so far. I think everybody agrees that this system so far has worked quite well as far as it has gone. I don't think, however, it has gone far enough and I would again like to urge that in the legislation it should be made clear that the chairman of the Board of Governors should report to Congress not only on the issue of the growth of money aggregates, which I believe to be a purely technical affair. First of all, it should report on other financial targets, and secondly, it should report on real targets. It seems to me that the present set up is somewhat akin to Congress running a ship and asking the crew how much pressure it had on the boilers-asking a little technical detail-instead of asking where are you headed for, or even what speed are you going. It seems to me that's the kind of technical information you're getting from the Fed when they give you the rate of growth of money aggregates. It's no more than the steam pressure in the engine. I think we need very much to know other dimensions, such as short-term interest rates ranges. I don't think we should insist on long-term interest rates because those the Federal Reserve cannot control.
Mostly what we need to know is what are the real targets for which those tools will be used? Now Mr. Burns in his testimony before the House and I think perhaps also before the Senate has frequently given a number of reasons why he should not be asked to give such figures. He says that there are no such figures, that the figures or forecast that which exist are subiect to error and so on. It seems to me all this is really not a sufficient reason. He's also indicated, that after all, he's not the only one that makes aggregate policy and, therefore, he cannot on his own announce targets.
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Now it seems to me that this second proposition is largely disappearing because Congress-the other major force making and influencing aggregate demand-is now engaged in a process, in a budgeting process which will provide presumably reliable information and commitments about tax rates and about expenditures which are the other major component of a stabilization policy. With this information, the Fed wields the only remaining important control and, therefore, it ought to indicate what it is going to use these controls for.

It seems to me that the need for such information which has always been present has become dramatically apparent since 1974, because 1974 was one year in which the Federal Reserve by its policy of not letting the money supply rise any further and driving interest rates to incredible levels caused the deep depression of late 1974 and early 1975. The economy was already sliding down. They just gave us a further powerful push as we were going down.
Now the trouble is that we don't seem to know to date whether the Federal Reserve did that with high interest rates at the time because it wanted 9 percent unemployment, or whether it did not want 9 percent unemployment, but it overtightened and thereby produced much more serious slide than intended. Now it seems to me that makes a great deal of difference because if it failed we ought to know. The failure can be excused-especially in view of the difficult moment - but it should be recognized and serve as a lesson.

If, on the other hand, they were aiming at 9 percent unemployment, then it seems to me that was a very serious matter because they had no business of aiming at 9 percent unemployment without a clearance of Congress and a discussion around the country. And in this context it seems to be to be very worrisome that when Mr. Burns was asked by the House Banking Committtee whether he had any regrets about the policy in 1974 he told them that one regret he had was that the money supply grew a little fast in the first half of 1974. I must interpret this to mean that Mr. Burns thinks and felt that 9 percent unemployment was not high enough, that we really should have had 10 percent.
Well, if thats' what he was trying to do and now has regrets he didn't get 10 percent, it seems to me he has no business deciding what unemployment is to be in this country. He has a business to enforce a program which has been reached by the Congress and the administration. He can share in its formulation, and argue against it if he feels it is not in the best interest of the country. He can make his case against it, but once it's been agreed, he must accept the program and enforce it and, therefore, he should explain in his statement how his policy is going to contribute to realize this program.
So I do hope that the legislation will require the Chairman to tell about real targets, not just about money aggregates.

The Charrman. Well, thank you very much, Dr. Modigliani. I want to thank all you gentlemen for a fascinating analysis of our monetary policy.

Let me start out by pointing out to both Dr. Ackley and Dr. Modigliani that whereas the resolution may not specify that the Chairman should report to us not simply in terms of how the money
supply should increase, $\mathrm{M}_{1}$, and any other indicator, but the relationship of that to the state of the economy. Dr. Ackley particularly criticized. I think, the Congress for not requiring that, and Dr. Modigliani indicated that the Fed should report on it. Well, the fact is, the Fed did. I guess it may not have been as clear in the statement of Dr. Arthur Burns, but it was brought out very clearly in the dialog.

For example, Dr. Burns gave us the following targets: the following expectations as the consequences of monetary and fiscal policy for the coming year: overall national economic growth, about 7 percent; unemployment, about 7 percent; price increase, 6 percent; interest rates for federal funds $41 / 4$ to $51 / 4$, short-term rate, $41 / 2$ to $51 / 4$. That's pretty specific.
I don't like those goals. I think we can do better, but he did respond to the committee and we have that on record. So we are relating monetary policy to the state of the economy and I would agree wholeheatedly with Dr. Ackley's criticism that this should be our objective.

Now I'd like to ask Dr. Ackley, to begin with, I started out in my opening statement as you may have observed in pointing out that it would seem that the Fed is relying on an extraordinary continuation of a high velocity of money to permit the 7 percent growth the Chairman foresees with only about a 6 percent increase in the money supply, recognizing that we're going to have inflation of 6 percent. The arithmetic just isn't there unless you have a very, very big velocity increase.
I'd like to ask you, Dr. Ackley, while you say the velocity is erratic, isn't it true that we have had an average velocity increase of about 3 percent, that the enormous increase in velocity we have enjoyed for the last year has been unprecedented, the first increase of that size in 25 years, and that the velocity increase by and large has been associated with the first stages of a recovery and, therefore, it's unwise to expect that it would continue in the coming year?

Mr. Ackley. Mr. Chairman, I tried very hard to make it clear that I thought this was a very unusual behavior of velocity; while some elements of it can be explained, others cannot. In addition to the elements which are explainable, both those changes that relate systematically to interest rates and those that relate to changes in the structure of the financial apparatus of the country, there have been erratic changes. Such changes have occurred in the past and will again occur in the future; therefore, it would be exceedingly unwise to count continuously merely on the continued further growth in the velocity of money. I agree with you that the arithmetic doesn't add up; and I associate myself full with Dr. Modigliani's comments about the need to warn people now that if this unusual and probably unsustainable trend of sharply increasing velocity does not continue, the increase in monetary aggregates will have to be greater than it has been and greater than the Fed's target.

The Chatrman. I got the impression from you that you thought this exercise of having the Chairman of the Federal Reserve come before us was not a constructive exercise. Did I misunderstand you? Because you seem to be alone in that. The Chairman now thinks it's good, although he lobbied very hard against it, and most of the witnesses that have appeared not just this time but over the
last year have said they think it's a good approach, and both of your colleagues on the panel today seem to think it's useful.

Mr. Ackley. I'm sorry if I misled you. I think it has been useful. I think it ought to be continued. The thing that I criticized and obviously not very clearly was the notion that the hearings should center on the growth of monetary aggregates. That, I thought, was not a proper focus for the discussion. And, indeed it has not been, as you point out, the exclusive realm of your exploration nor even to some extent of Chairman Burns' response.

The Chamman. I'd like to ask you, Mr. Francis, you gave us some fascinating statistics on this contrast in the period 1952 to 1961 and 1962 to 1974 and you seemed to argue that a low moderate increase in the money supply, 1.8 percent I think was the figure you gave for the first ptriod, gave us a little better performance than in the later period; is that right?
Mr. Francis. Mr. Chairman, actually, when you look at the performance of the first period against the last 5 years, they are very close except that inflation is much higher and unemployment is somewhat higher. The interim period-

The Charrman. I want to come to that in a minute, but before I do that, because I think there are some other very decisive elements, particularly the explosion of energy costs that have nothing whatsoever to do with monetary policy that account for much of what happened in 1970 to 1974, but let's go back to 1952 to 1961 and 1962 to $1974 . \mathrm{M}_{1}$ increased in the first period of roughly a decade by 1.8 percent; in the second by 5.1 percent. What was the result? The result was I think a rather dramatic difference in output. In the first period there was an increase of 2.6 percent in real terms and in the second 3.6 percent. Now with a $\$ 1$-trillion economy, that's a difference of $\$ 10$ billion. Now it's true price has increased more. Unemployment was lower in the second period than in the first, but the price increase I think we could say may have been associated with the kind of adjustment that takes place in wartime and we were in the Vietnam war. As a matter of fact, I don't think in the American economic history we have had a war in which we haven't had a tremendous inflationary effect, usually bigger than the Vietnam war, and that was a big war. It involved a great deal of our resources.

So that it would seem to me if we compare those two periods and rely as you seem to very largely on money supply as an indicaator of or an influence on economic results, it would seem that the more generous increase in the money supply got better results.

Mr. Francis. Well, I don't read the story that way. The better results of 3.6 to what extent that was influenced by production in connection with the Vietnam war, I don't know; but I would think it would be an influence, but then after the end of the Vietnam conflict and during the last 5 years of that period we actually fell back to a level of production comparable to the earlier period.
The Chairman. Yes, but again, monetary policy may have been swamped by these other elements. When you have something that is as prevailing as energy costs which goes into everything we buy, our food. our clothing, our durables, as well as the gasoline and heating oil, this goes throughout the economy and you have that increasing
two- or threefold, you're just bound to have a situation in which you have not only inflation but a pricing of people out of the market with a corresponding unemployment.
Mr. Francis. That part of the problem, of course, came on right at the end of the last period I was talking about, as you well know.

The Chatrman. 1973-74 was hitting awfully hard.
Mr. Francis. Yes. So I don't think you could really argue that those impacts, while they were important, were the major impacts on the period.
The Chairman. The major inflation and the major unemployment came at the end.
Mr. Francis. The inflation rate, as reported and as we know, got into 12 or 14 percent at one time and there are various guesses as to how much of that was the result of those exogenous impacts of what I call one-shot impacts to the price level developing-oil, the anchovies, the wheat, you name it-which did have some effect on the price level. I think we all know that. Some people who have studied the thing come out with a guess that maybe the ongoing rate of inflation during that peak level of price increases may have been in the vicinity of 9 percent and I don't know if anybody really knows the actual results of those other factors, but I think it's very evident that we had a fairly strong ongoing increase in the price level or ongoing inflation through that period.

The Charrman. Well, how do you answer Dr. Modigliani's point that a steady growth in the money supply advocated by you and other outstanding monetarists economists was accompanied by an erratice performance of the economy?

Mr. Francis. Well, the steady growth which he referred to, I believe, of 1970 through 1975, I don't know what statistics he is observing because I have a memory that we had in a period of 15 or 18 months money growing at over 7 percent in the 1972 period and indeed up to close to 9 percent at a time. Then later on, in about a 7 -month period in later 1974, it flattened out literally to zero and it seems to me like there was a wider range of money growth in terms of quarters or two quarters or three, whatever you want, during that period of time than any of the other historical periods that I covered. So I'm a little lost with the steady growth designation for 1970-75. I don't think we had it.
Mr. Modraliant. Could I answer that, Mr. Chairman?
The Chatrman. Yes.
Mr. Modtglanns. First, I'm very puzzled by Mr. Francis' division of time up to 1962 and thereafter when it seems to me that any man from the moon looking at the data and trying to find division points would find that division point at around 1966. Up to that point we enjoyed reasonable stability, perhaps a little too much unemployment in the early sixties but certainly very stable prices and very slow growth rate of money. It's only in 1966 that we get into a phase of rising inflation that goes up to 1970 , due to excess demand pressure from the Vietnam war and overambitious government programs. I don't want to deny that for a moment. There certainly were a lot of things.

My analysis is based on quarterly changes from 1 year ago. So it's this quarter compared to the same quarter 1 year ago. I think looking
at any 1 month as in the chart exhibited on the podium is a grave mistage. I would suggest that you hide that chart because anybody who knows anything about the monetary statistics-and I have been a member of the committee which has worked on that subject-can tell you that in 1 month the error is so large that if you take the difference between 2 months even at a distance of 1 year you get a lot of noise. So I have chosen four quarter changes-the change between one quarter and the same quarter 1 year earlier. If you take an average of 3 months instead of a single month as the initial and terminal point, you get the results shown in my chart. (The data underlying this chart have been recently revised, but without changing the broad picture.)

The Chairman. That chart has the percentage changes in money supply 1965 to 1975 on a monthly basis in the corresponding month.
Mr. Modigliani. Right. Only 1 month, which really is not helpful.
The Chairman. I'm told by Mr. Weintraub that this is annual because it's adjacent years.

Mr. Modiglinan. But it's 1 month over the same month last year, and I say keep away from such a short base. If you do it for 1 week or 1 day you will see what happens: it will exhibit even wilder fluctuations, but those fluctuations have little meaning. If you look at my picture which is based on annual changes of quarterly aver-ages-so it's one quarter compared with the same quarter of the year before-you will find that the growth of money was rather stable from 1970 to the middle of 1974 , around $61 / 2$ percent-I don't say it was $61 / 2$ percent exact. Of course not. You can't do that if you tried. But it is within a narrow range.

Now there are within that period a couple of quarters in which it goes a little over eight and one quarter in which it dips below six, but it is rather stable compared with previous history.
Mr. Francis. Down to zero?
Mr. Modigliant. Nothing ever fell below five and a half up to the middle of 1974. At the end of 1974 , indeed, the money supply grew very slowly.

Mr. Francis. The last 6 months of 1974 it went to zero.
Mr. Modigliant. I'm going up to the middle of 1974. That is the period I'm choosing. Thereafter, there was indeed a sharp decline in money supply, but not until that point. Now, what I'm comparing are essentially those quarterly changes from 1970 to mid 1974. I'm saying that in this period money growth was not absolutely constant -but it was a lot more stable than it was in other periods.

It seems to me that the chairman is quite right in pointing out that you're mixing quite different periods and what happens in 1973 is incomparable with other periods.

The Chairman. Let's see if I understand what you're doing, Dr. Modigliani. What this chart does, it takes one month and compares the average with that month with the corresponding month. What you did

Mr. Modigliant. Three months or one quarter.
The Chatrman. And compared it to the same quarter the year before. With that, you say you get a rather steady increase.
Mr. Modicliant. I didn't bring them with me. I thought I had, but I think I left it.

The Chatrman. You say what that does show is an increase at a steady rate. Now how do you answer that, Mr. Francis?
Mr. Francis. Well, I agree that I much prefer to look at quarterly averages and they are more meaningful than weekly or monthly averages, but I would still argue that in that period from 1970 through 1975 that we had some very substantial changes in the level of money growth and, again in the period from late 1971 through the first quarter of 1973 it was quite high, even comparing quarter by quarter. Then we dropped off some and finally, in 1974, we had a period-I believe it was 7 months in all, when there was virtually no growth in the money supply.

The Charrman. Now let me ask you, Mr. Francis, to get onto another issue, you argue, as I understand it, that the increase in the money supply should be at a somewhat slower rate than it has been and I just wonder how a lower money growth rate could help, as you say, to wind down inflation without aggravating unemployment.

Mr. Francis. All right. I said that I thought the experience of 1975 was quite good at 5 percent. I also would say that I would like to see the expansion of money held at about that level through this year and 1977.

The Chatrman. This year and 1977?
Mr. Francis. Yes, and by historical standards, Mr. Chairman, that's a fairly high rate of monetary expansion.

The Chatrman. If you're going to have your eye on the target of growth and on the target of unemployment, as well as prices, shouldn't you recognize as you go along what the velocity is and what results you're actually getting?
What I'm concerned about, again, I return to that arithmetic which may be much too simple, but I cant's escape it

Mr. Francis. I think you're putting the finger right on the problem. If we attempt in the future, as we have to a degree in the past, to try to use monetary policy in a fine-tuning effort over the short period, I think we're going to continue these periods of rapid growth, drops in unemployment levels, followed when the inflation sets in by the slowup and an uptake in the unemployment level.
The Chatrman. Let's assume you're right and you may well be right. What it means, doesn't it, is that the people who have to bear the brunt of coping with inflation are those who are out of work, the unemployed, which will increase?

Mr. Francis. I agree, Mr. Chairman, that if we would discontinue our efforts at what I call fine-tuning which hasn't worked because of the lags involved in monetary actions, I think you would find that the business cycle would be less severe than we have experienced in the past. I think we have contributed to it by attempting to move the economy too fast at some times and attempting to slow it down too much at other times.

The Chairman. You argue that we have fine-tuning now, that we have had fine-tuning by the present Federal Reserve Board?
Mr. Francis. I would say we have had an element of it, yes.
The Chamman. Would you move back then to the policy we had in the 1930's?
Mr. Francis. Well, we actually didn't have much policy in the 1930's, as you well know. Let me point out-

The Chatranan. That's it. We had no policy of fine-tuning. We had a policy that was more or less of a laissez faire policy or reliance on the

Mr. Francis. Well, you didn't have the same mechanism and I would have to believe, Mr. Chairman, that had we had the Federal open market committee functioning then as it is today, that at least you wouldn't have seen the money supply drop by roughly a third during that great depression. So I think it's kind of difficult to compare the policy formulation process during that period with what we have now.
The Charrman. Well, let me ask you and the other gentlemen, because Dr. Burns did comment on it and this bill comes before this committee for consideration, the Humphrey-Hawkins bill. This is a bill which as you know would change the Employment Act to provide a goal for unemployment at 3 percent but it has been modified to provide 3 percent for adults and would charge the President and the Congress with adopting policies to achieve that goal.

I take it, Mr. Francis, from what you have said to us so far, you think that would be a bad bill, as does Dr. Burns. Is that right?
Mr. Francis. I rather think it would be. I think you might possibly achieve that goal on a very short run, but unless you're also willing to accept a high and escalating level of inflation there's no way you can maintain it.
The Charrman. Let's put it this way. Dr. Burns, himself, in a speech in Georgia, as you may recall, 6 months ago, said the Government could be an employer of last resort provided the wages are low enough. He argued that the wages would have to be below the minimum wage, making it politically impossible, but it would be possible to have a compromise, perhaps, at the level of unemployment compensation or something of that kind, and at least people would be working instead of idle on unemployment compensation and welfare.
Let me ask you, Dr. Ackley, what is your view on the HumphreyHawkins bill?
Mr. Ackley. I have not studied the bill carefully. In fact, I do not have a copy either of the original nor of the amended bill, although I think I understand its basic thrust. As a political statement of an ambitious target for public policy, I welcome the 3 percent unemployment target. It seems to me we ought to have ambitious targets, and that part is fine. And I also agree the bill-and with Chairman Burns-that some form of residual public employment, at low wage rates, modest wage rates-is an appropriate method of handling residual unemployment, once you have accomplished what you can through general measures of economic policy. But I do fear that the mechanisms in the bill are quite inadequate to achieve these very ambitious objectives without running severe dangers of overdoing stimulus to the economy through monetary and fiscal policy.

The Chatrman. Do you have any amendments that you would like to suggest? I have great respect for your experience and your judgment as a former Chairman of the Council of Economic Advisers. You're an extraordinarily able, practical economist who's worked in the Government and understands these problems very well. How would you feel we could modify this, or could we?

Mr. AcEilèry. As I say, I have not seen the bill. I have not studied it. I have nöt tried to write an alternative bill. I believe, however, that the price level should somehow get into the bill, which I understand it is not now, and that it should be recognized that if you want to achieve these ambitious targets of unemployment you're going to have to do some other things on the price side to avoid inflation.

The Chairman. You say the price levels. Would you condition it on some kind of wage-price control or some kind of wage-price jawboning or through influence?

Mr. Ackley. I would certainly include some elements of both important structural reforms to try to get some of the price rising biases out of our economic structure, as well as some kind of a serious income policy.
The Chatraisn. Dr. Burns suggested that we have a policy of exemptions from the minimum wage for young people.

Mr. Acieley. I support that.
The Chatriman. And a policy of trying to find a way of providing funds at lower wages.
Mr. Aċ̈lury. I was a little amused by Chairman Burns' suggestion that he wouild favor a program of residual public employment if we had a constitutional amendment-that's literally what he said, a constitutional amendment-requiring that the wages under such a program should never exceed the minimum wage. Although I don't believe the Constitution is the place for such things. I am sympathetic with his basic objective. As I understand it the HumphreyHawkins bill requires payment of the prevailing level of wages, defined as the highest of any of these : the national minimum wage, the State or local minimum wage, the prevailing wage in State and local government, or the prevailing wage as indicated by the DavisBacon Act. Well, the Davis-Bacon Act is one of the worst possible things we should be using as a standard. It ought to be repealed. In effect, the act requires payment of the highest union wages to all workers in the construction industrv. A standard like that for residential employment just doesn't make sense.
The Chatrman. I disagree with you on the Davis-Bacon Act. The Davis-Bacon Act is a necessary act and I think it's been badly abused. It's not really as restrictive as some people argue. However, I would agree that to apply that same principle to overall employment policy would be-without anv kind of wage-price controls, would just be a sure prescrintion for inflation and a very big inflation.

Dr. Modigliani, how do vou feel about this?
Mr. Modigliani. I would just like to make first one comment in connection with Mr. Francis. I think it would be very interesting if we could get Mr. Francis to tell us whether he, assuming that Mr. Burns' forecast is within a desirable range, 7 percent real growth and 6 percent prices, which means roughly a 13 percent growth of money income-whether he believes that a 5 percent money supply growth would be sufficient to finance that. And if he doesn't believe it, whether he in fact would like to see a lower rate of growth of income.

The Chatrman. You asked the question much better than I could.
Mr. Francis. I believe that the 5 percent money rate of money growth would handle it, and in adding numbers you automatically build in an escalating inflation rate.

Mr. Modigliant. We're agreeing on 13 percent. We all agree on the target, but then the question will be, suppose that 5 percent will not give us that 13 percent. Would you be willing to see the money supply grow faster if more than 5 percent is needed to finance 13 percent? That's the fundamental question, having agreed on a target of 13 percent. I think in fact 6 percent inflation is a little pessimistic, maybe 12 percent will do. But the question is, I'm extremely uncertain that 5 percent money supply growth will finance it. You say it's possible but I have grave doubts. I think it's rather unlikely, thought not impossible.
The Chatrman. I think Mr. Francis has made it clear that he would not increase that 5 percent even if you don't get the 7 or 8 percent velocity that you want to get, that you would have to hunker down and take it for a while.

Mr. Modialiani. It really fits the picture that I said before, deciding on the money growth and let the economy bounce around until it fits the monetary aggregates. This is exactly what I think describes the position. And my graph actually suggests that during this period in which we let the money supply bounce around, contrary to what Mr. Francis believes, it actually turns out that output, employment, and prices are less variable than they are thereafter with a stable growth of money. So the bouncing around of money stabilizes the economy and not vice versa.

I will, if I may, insert that chart in my testimony.
The Chairman. Yes, without objection, that will be inserted.
[The following charts were received for the record:]

Figure *
STABILITY OF SOME ECONOMIC INDICATORS OVER SELECTED PERIODS *
A. FINANCIAL INDICATORS



Source: Nationa! Bureau of Economic Research Data Bank

Mr. Modigliani. Now you raised the question about the Hum-phrey-Hawkins bill. I think that my answer is very similar to the: one that you have received from Mr. Ackley. First, because I also* have not studied the bill carefully and I did not expect there to be: discussion about it here. I have not prepared myself adequately on: the subject. I have talked to people who have studied it, but not: studied it on my own. But from all I know about it, I think it was very well described by Mr. Ackley, that it has a sound motivation. It states targets which we ought to try to specify and try to aim for, but that as it is formulated at present I would not be at all prepared to support it because I believe there's a strong danger of it being very inflationary. I have grave doubts that one can fix un-employment target numbers by legislation, like 3 percent, no matter what comes. I think past experience has indicated that the composition of the labor force changing does affect what amount of unemployment is consistent with stable prices. So I would certainly hate to have in the law a statement as to what unemployment should be.

On the other hand. I think its general purposes are sound and the idea of a public employment program as an employer of last resort; which is an alternative to unemployment compensation, strikes me as a very sound idea. At the same time, I also wish that more emphasis and more attention were given in that bill to the need for other manpower policies. I think we can improve the function of the labor market by a variety of manpower policies and I think we have done so far very much below par in terms of starting those policies, having funds available for starting them and trying to apply them.

The Chatrman. I think that's right. but I do think it is very, very difficult. My colleague, Gaylord Nelson, is chairman of the Manpower Subcommittee and I have talked to him about this and he's tried hard and sometimes he has difficulty with the administration, but there's a fundamentally different problem here. You train people for jobs and unless those jobs are available at the time they go through the discipline and pain of training-and there's nothing there. It's very disillusioning. It can be destructive of people. So that's hard. It's very, very hard to have a manpower program that isn't based on more and more jobs being available. The best trainer is usually the person in the private sector who's going to hire the person and you learn by doing.

Mr. Modigliani. Certainly manpower policies are not a substitute for aggregate demand management. If you don't have active management you can have people trained to the hilt and perfectly well distributed-you may have exactly 3 men for every job, and they are still unemployed.

The Chamman. One of the best examples is in Detroit in World War II where they were able to train field hands who had no experience in working in industry and they trained them very well, very quickly, and they were able to adopt and produce and increase their productivity.
Mr. Modigliani. Right. They do have to go together, but the problem is when we use aggregate demand tools we do tend to reach a limit on unemployment which now seems to be rather high. My
estimate of 6 percent is probably overly pessimistic, but not very far from what we could afford now. If we had better policies we would be able to push that limit down.

The Chairman. Let me see if I can get from each of you, because I don't want to overlook it-it's a very, very stimulating discussion -where you approve or disapprove of the $M_{1}$ target that the-and $\mathbf{M}_{2}$ and $\mathbf{M}_{3}$ of course if you'd like to give us that-that Dr. Burns proposed and whether you agree or disagree with what you think are his goals, whether you think those are realistic or whether those are appropriate. Start off with Mr. Ackley.

Mr. Ackley. I regret the lowering of the upper range of the target figures, and I agree with Dr. Modigliani that it ought to be made very clear that this is based on the assumption that velocity will continue to increase rapidly and that if that fails to occur these targets will need to be revised.

The Charrman. Now how about the prospects for unemployment and prices?
Mr. Acklex. I'm not clear what Mr. Burns may have said about the prospects. I assume that his view of the outlook is rather like that which seems to be generally shared these days, of a rather good 7 to $71 / 2$ percent expansion of real output and somewhere between 4 and 8 percent increase in prices.

The Chairman. And yesterday Dr. O'Leary and Dr. Brimmer both indicated they thought interest rates would rise in the coming year and they thought that would be appropriate. They didn't think they would rise very much. They thought there would be a moderate increase in the level of short-term rates. Do you think that's appropriate or inappropriate?
Mr. Ackley. I think that would be highly appropriate if longterms rates remain where they are now during the rest of the year, so long as this economic prospect we have just described continues to be realized.

The Chairman. Mr. Francis?
Mr. Francis. As I have already stated, I think that the ranges are all right and I'm not concerned about the small lowering of the top range and I would have to fit into the general consensus I guess that we should look forward to something like a 7 percent give or take a little real growth in the remainder of this year and prices-inflation somewhere in the 6 percent range.

The Charman. How about unemployment?
Mr. Francis. Unemployment, 7 percent, possibly dropping a little below.
The Chatrman. Do you think that's about the best we can do with responsible policy?

Mr. Francis. I think that if we do that it will be very good. I would be concerned if we tried to force it very much faster than that because we would run the very real risk of getting into something that was not sustainable, and I would like for once to see us come out of one of these recessionary periods in a manner where we reach reasonable full production and hold it and not go through this wringing out again. I think there's a possibility that we can do that and this is what I started to say earlier when I said I'd like to see the 5 percent maintained through 1977 and then slowly winding
it down a little further to wring some more inflation out of this economy. I think that she can be done with reasonably full employment, reasonably full utilization of resources.

The Chairman. Before I move to Professor Modigliani, Dr. Ackley, would you agree that that's about the best we can do and that we should settle for that?
Mr. Ackley. You're talking about 1976 There's not a thing we can do now that will make any difference.

The Chatrman. Well, 1976-77, of course. You're right. There's a lag.
Mr. Acrief. Yes, I think we could do better in 1977 in terms of real growth, but I think that's a reasonable target and could be achieved.

Mr. Modigliani. Mr. Chairman, I think I would have to ask you first for a clarification. Mr. Burns' figures were given for the next calendar year, or for the next year beginning in the first quarter? What are they; 7 percent from when to when?

The Chatrman. 12 months from now.
Mr. Modigliant. In other words, first quarter to first quarter roughly?

The Chairman. May 1 to May 1, yes.
Mr. Modigliani. And unemployment figure is to the end of the period to May of 1977?
The Chatrman. I think that's correct. You're right to question me on that. It could be a misunderstanding. It could be that the average unemployment during calendar year would be 7 percent or it could be ending at 7 . It would be quite a difference.

Mr. Modigilant. Quite an enormous difference. Well, let me first say that I find the target a shade below what I would advocate. I would have preferred $71 / 2$ percent as a target as a pronouncement, somewhere between 7 and 8 , so 7 percent does not leave me too unhappy. For the next three quarters, I would say for the next four quarters, to the end of the first quarter. At that point I do agreeand I'm glad there is a point of strong agreement with Mr. Francis -that we should slow down because we want to get to 6 percent unemployment moving not much faster than 3 to 4 percent per year which is the long run sustainable growth rate, and I do completely agree with Mr. Francis that every one of the previous occasions we have gone through the point we should have aimed for at great speed. And that's been a terrible mistake and I have been concerned with that every time it happened. I have been concerned with that in 1966 and I have been concerned again in 1972-73 which we did the same thing, and I would hope this time we would manage to avoid that mistake. So in terms of output, I think the 7 percent growth will still give us by the end of the period somewhere just a shade below 7 percent unemployment. That would be my judgment. This still leaves a substantial unemployment margin, so things would turn out all right even if we were to exceed somewhat that 7 percent per year up to that point. But from that point on we ought to start slowing down and that's why I also agree with Mr. Francis that we will need eventually a lower rate of growth of money supply.

The only question is what we need now by way of monetary growth. There, I think we disagree, even if we do agree that we should slow down later.

Finally, I have no disagreement with the inflation forecast. This is the thing we control least closely and we have to hope for the best. However, that 6 percent does seem reasonable at this point.
Now what does that imply first about the aggregates and then about interest rates? Let me first make one more remark about unemployment. There is one special problem with unemployment that I want to point out to you, Mr. Chairman, namely that I am very unhappy with the seasonal adjustment which has been introduced this year. I think those adjustments distort the picture. I believe they went in the wrong direction and I believe they make the unemployment decline in the first months of the year measurably larger than it really was.
The Charrman. I went into that in great detail with Mr. Shiskin when he appeared before the Joint Economic Committee and he gave us not one but gave us literally 10 , maybe that many, seasonal options, and there was some difference but the difference wasn't really very great.
Mr. Modialiani. Well, it is my definite forecast that toward the end of the year unemployment will show very little decline and might even rise because of the seasonal adjustment. My expectation is that some of the large drop reported from December to January and February will be lost in the second half of the year. That's my impression. However, if we keep the some seasonal adjustments, and we're talking about May to May I think that will wash out.
What is implied for the aggregates? There I will summarize my previous views by saying that I see extreme uncertainty in the rate of growth of the money aggregates that is needed to accommodate the target growth, great uncertainty related to financial detelopments which we know of and related to some other forces which we do not know. Under the circumstances, I think that reliance on $\mathbf{M}_{1}$ in particular is extremely dangerous. I think $\mathbf{M}_{\mathbf{2}}$ is a lot better, but $\mathrm{M}_{1}$ is an extremely dangerous tool to rely on. I would say it's conceivable that we will get by with 5 percent or $41 / 2$ percent. I assess the chances as being very low and I think there's a fair chance that we may need more than 7 percent to get there. I'm sure the Federal Reserve will be aware of this and will change its targets if need comes, and that is connected with the question of interest rates.

It is my view that Mr. Burns was answering about short-term interest rates, tomorrow or maybe next month and maybe next quarter. I personally have great questions that come the beginning of next year interest rates can be as low as $51 / 4$. I would have expected them to move out of that range and I expect by that time if the economy is going the way it is and we are beginning to think of slowing down, then we will need higher interest rate than that. But I do agree with Mr. Ackley that it's a little premature. We have time to think about that later but we should be prepared to see higher rates then.
The Chatrman. All right. Now I want to apologize to you for taking so long. I do have a few other questions I'd like to ask and maybe we can handle those briefly.

Mr. Francis, you're not alone, because I'm sure there are many people who share your philosophy with you, but among many of the economists who have spoken out you appear to be alone, at least before this panel, on $\mathbf{M}_{1}$ as a satisfactory measure.

Now I like it because it's simple, because it's one measure and I know that that's not a very good answer for economists, but it's so hard to get the Congress to stand still or the public to stand still for any kind of discussion on monetary policy. It's so complicated now. We lose our colleagues when we go on the floor to speak on it. They kind of drift away. It's not that exciting a subject and they don't think it's that pertinent, and if you begin to talk about $\mathrm{M}_{1}$, $\mathbf{M}_{2}, \mathbf{M}_{3}$ and explain the differences you really lose them.

So I'd like very much for that reason to attach myself to $\mathbf{M}_{1}$. At the same time, not only the two gentlemen who flank you today but Chairman Burns and others are skeptical of it.
Mr. Francis. Well, I think we may have to live a while longer before we are sure that there's been any real change in the validity of $M_{1}$ vis-a-vis the other M's. Now some think that because of the regulatory change making certain types of corporate savings deposits available that this might lower the level of $M_{1}$ that would get a given result as we might have gotten at half a percentage. point or something higher, and this may well work out. I'm still perfectly willing to work with $M_{1} . M_{2}$ has been good except for those years when the interest ceilings impinge on it and cause outflows and make it erratic. If you could remove the interest rate ceiling, then I would be perfectly happy with $\mathbf{M}_{2}$.

But finally, the monetary base is pretty good to watch while we make up our mind what if anything bas happened to $M_{1}$. But in answer to your question, I'm perfectly willing to follow $\mathbf{M}_{1}$ a while longer before I give up that it is any less reliable.

Now, obviously, if you could build an $\mathbf{M}_{25}$, you would have something that would more closely track GNP than $\mathbf{M}_{1}$ or $\mathbf{M}_{2} \mathrm{I}$ suppose, but if you're going to use these things as goals or objectives you've got to have something over which you can exercise some control and in $M_{1}$ and $M_{2}$ you can do that. When you get beyond that I have some question whether they are usable objectives of policy.
The Chatrman. Thank you. Now, Dr. Ackley, your other two colleagues on the panel have indicated their opinion on who should run the monetary policy and whether or not Congress and the President should have a bigger voice. There's been no comment from anybody on whether or not the President should be empowered to appoint the Chairman of the Federal Reserve to serve for a period of 4 years as Chairman within 6 months of his accession to office. I'd like your comment on that and also your comment on the observations made by Professor Modigliani with respect to Federal Reserve Presidents being appointed and confirmed, if you would give your opinion on these sources to us, because you're very interested in monetary policy and I know you have been frustrated sometimes.

Mr. Ackler. I certainly agree with the recommendation that the term of the Chairman ought to be 4 years and ought to expire shortly after the President's term. I think that's a reform which, so far as I know, everybody favors or has at some time in the past,

[^8]Beyond that, my views about the organization of the Federal Reserve System are really quite unorthodox and probably completely impractical and of no interest to the committee. However, if you're going to start reorganizing the Federal Reserve in a serious way, I would have some ideas about things you ought to do.

The Chairman. Well, briefly, what are they?
Mr. Acklex. I don't know that I can be very brief. The Federal Reserve as it now exists is, of course, a historical anomaly. It's the way it is because of a long history which began with ideas about its role that bears no resemblance to the present concept of a central bank. In the first place, I think that a central bank is an agency of Government and it ought to be made absolutely clear that it's like any other Government agency. We ought to abolish the private ownership of the Fed's stock. We ought to put its employees under the same civil service, and its budget under the same appropriations procedures as any other Government agency. It's not that I believe the Federal Reserve is dominated by the private bankers. But just because there's no sense in having a different organization for this part of Government policy making than for others.

The Chairman. You don't buy the notion that the impulse and the political pressures on Congress and the President are such that we could follow rather foolish inflationary policies if it were politically run instead of run by people who are more insulated from the politics?
Mr. Ackley. Of course, we make foolish mistakes. Our political process is not without its failings; but should we say that money, of all the subjects with which our political process deals, is the most sensitive and delicate one that can't be trusted to political decision? It's all right to allow the political process to decide our foreign policy and our defense policy and our fiscal policy, and every other aspect; but in this area we can't allow the possible mistakes of political decisions. Well, it makes absolutely no sense to me. The whole business of the independence of the central bank, and the notion that it's subject matter has to be protected from political control because the politicians make mistakes, is an argument which if you applied it across the board says get rid of democracy.

The Chatrman. What it's really based upon is that these other things can be exciting and interesting. This is something that's dull, complex, mysterious, and the result is that people aren't that interested in getting involved in it. So they leave it to these bankers.

Mr. Ackley. Well, maybe so. I told you you wouldn't like my answer.

The Chairman. No; I like it. I agree with you it's impractical. I don't think we'll be able to do much with it, at least not soon, but it's very logical. I agree with you that the defense policy and foreign policy is something you can say that can be taken out of politics with much more force than you can money policy, but it's not, because that's something that we get excited about, interested in, and you can make a speech on that and not put people to sleep.

Mr. Francis. I was just going to say something I may have omitted in this historical bit I was working on. One of the things I was trying to demonstrate is that, in my view, during our modern history, İ see
no evidence where the Federal Reserve System has been unsupportive or unaccommodative of the political process. We have gone through these periods with spending moving up without increasing taxes comparably and the necessity to borrow has been fully accommodated all the way through by the Federal Reserve. So I think the indication is that the Federal Reserve has had a pretty accommodating policy through the years.

The Charman. Aren't you making Dr. Ackley's point? If you're right, if it is accommodated now with the political process, what difference does it make if we make it directly?

Mr. Francis. All I can say is that the history I had plotted since 1952 indicates a very cooperative central bank.
Mr. Ackiey. You would rather it wouldn't be quite so cooperative?
Mr. Francis. Right. I'd like to see it less cooperative.
Mr. Modiglani. One brief comment on this. It seems to me the one period where we do not know to what extent the Federal Reserve was involved is precisely the middle of 1974, and the reason is Water-gate-we were all riveted to our TV's looking at what was going on about Watergate. Even within the Government there wasn't a clear picture of how to handle the crisis. And I think they have made those decisions on their own. But I think it's true that the record indicates generally that the Federal Reserve will go along and, after all, the Chairman knows he ought to resign if he cannot pursue a policy consistent with that of the administration. But that's always true even if the Chairman was like a Cabinet member. If he disagrees with the President on inflation policies or deflation policies, he can of course always resign, and I think in some way the public understands the message. So I don't think there really would be any great consequences from Mr. Ackley's suggestion.

The Chairman. There were some very sharp differences between President Johnson and Mr. Martin and there have undoubtedly been some differences between Dr. Burns and President Nixon. I do think it's partly because the Chairman of the Federal Reserve Board, at least in recent years, have been met of great stature whose views have been accepted by Presidents. This is especially true of Dr. Burns, even though the President may have initially disagreed, they tend to be swayed. I think they feel that monetary policy really isn't their area of expertise. I doubt if we will ever have a President that has an area of expertise that could possibly approach that of the Chairman of the Federal Reserve.
Mr. Ackiex. We never will as long as he can say: "Monetary policy is the responsibility of those guys over there. Whatever happens is their fault." And the monetary authority can say: "Whatever happens to fiscal policy is the fault of the stupid blokes in Congress and the Administration". All you get is buckpassing. You'd have a much better and more responsible attitude toward monetary policy in the administration and the Congress if they felt they had to take the blame for it. And I think you would get a better fiscal policy if the Federal Reserve was a part of the Government and couldn't blame the Congress and President for the mistakes of fiscal policy. I think it makes no sense, and it does indeed lead to long periods of severe dispute and going off in opposite directions in policy objectives
between the monetary authority and the administration and the Congress. Although basically, in the end the Fed, may finally have accommodated whatever happened, they might not have had merely to "accommodate" it, if they had been part of the Government, and monetary considerations had been taken into account in the very process making fiscal policy. Actually, fiscal and monetary policy are separate policies only because they are administered by different parts of the Government. If you had a single authority responsible for first deciding what the surpluses and deficits in the budget should be, and at the same time how they are going to be financed-and these decisions do have to be made simultaneously, one way or an-other-they could be made in an integrated way in which you think about both sides of the question as you approach it.

The Chairman. Gentlemen, thank you very, very much for yourmost helpful testimony. Thank you.

The committee will stand adjourned.
[Whereupon, at $11: 55 \mathrm{a} . \mathrm{m}$., the hearing was adjourned.]

# APPENDIX 

## Chairman of the Board of Governors, <br> Federal Reserve System, <br> Washington, D.C., January 12, 1976.

Hon. William Proxmire, Chairman, Committee on Banking, Housing and Urban Affairs, U.S. Senate, Washington, D.C.

Dear Mr. Chairman: In response to your letter of November 14, 1975, I asked our staff to evaluate carefully Professor Friedman's various arguments, as advanced in his recent testimony before your Committee, with regard to present and alternative procedures for controlling the money stock. The staff analysis is enclosed.

Please let me know if we can be of further assistance to you on any matter that involves our mutual interest in improving the effectiveness of monetary policy.

Sincerely yours,

Arthur F. Burns.

## Federal Reserve Staff Comments on Prof. Friedman's Statement Before Senate Committee on Banking, Housing, and Urban Affairs (Nov. 6, 1975)

Senator Proxmire has asked for comment on the sections of Professor Friedman's recent testimony before the Senate Committee on Banking, Housing, and Urban Affairs that pertain to present and alternative operating procedures for controlling monetary aggregates. The issues involved are highly technical and detailed. While several of them have been widely debated, though not yet fully resolved, in scholarly journals and within the Federal Reserve System, othersfor example, Friedman's staggered reserve settlement period proposal or a proposal for reversing the lag in reserve accounting-have scarcely been examined by economists outside the Federal Reserve.

Friedman's various specific suggestions and comments with regard to monetary control relate to two fundamental recommendations:

1. That the Federal Reserve should attempt to maintain a steady rate of growth-even over short periods-in the money supply measure it takes as a target. The Open Market Trading Desk of the Federal Reserve Bank of New York should be instructed to conduct open market operations solely in order to increase the monetary base by the amount prior forecasts suggest is most likely to produce the targeted money growth. The Federal Reserve should dispense with a Federal funds rate operating range altogether and accept whatever variation in short term interest rates is produced by the proposed control procedure.
2. That the Federal Reserve should substantially revise certain banking regulations to facilitate monetary control. The proposed revisions include establishing a single reserve reauirement for all member banks on all bank liabilities, eliminating lagged required reserve accounting, and adopting staggered reserve settlement perinds for all member banks.

The points Friedman makes throughnut his testimony that serve as supnorting evidence for one or the other of these recommendations will be examined in this context.

## 1. DEGIRABILITY OH EEPLACING A FEDERAL FUNDS RATE OPERATING TABGET WITE A MONETARY BASE OPERATING TABGET

In order to achieve closer control of the monetary aggregates and to reduce the variability in monetary growth rates, Professor Friedman suggests utilizing the monetary base (essentially currency plus bank reserves) as an operating target, rather than the Federal funds rate. In evaluating this proposal, this section of the paper discusses measures of recent monetary growth rates, the economic justification for a certain amount of variability in growth rates, the role of the Federal funds rate in monetary operations, and evidence with respect to the relationship between the monetary base and the money supply.

## Variations in money growth rates

Friedman contends that recent money growth rates have been substantially more variable than the Federal Reserve actually intended, and have adversely affected the economy. As background for judging the actual variability of money growth rates, Table 1 shows alternative measures of the variability of $M_{1}$ and $\mathrm{M}_{3}$ growth over the 1970-75 period that Friedman examines. These summary statistics give the average and maximum deviation (without regard to sign) of $M_{1}$ and $M_{2}$ from their average growth rates over this period. As may be seen, the degree of variability diminishes significantly as the time unit lengthens, with the average deviation much larger for monthly than for quarterly data, and also larger for quarterly than for semi-annual data.

TABLE 1.-DEVIATIONS IN ANNUALIZED SEASONALLY ADJUSTED RATES OF GROWTH OF $M_{1}$ AND $M_{2}$ FROM THEIR average rate of growth, 1970 through september 1975

| Form of data | Annual rates of change |  | Ms <br> Annual rates of change |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Mean deviation | Maximum deviation | Mean deviation | Maximum deviation |
| Monthly. | 4.0 | 17.7 | 2.9 | 11.2 |
| Quarterly: |  |  |  |  |
| End month. | 3.0 | 5. 5 | 2.4 | 7.4 |
| Average | 1.6 | 6.4 | 1.7 | 5.3 |
| Semiannual: |  |  |  |  |
| End month | 1.8 | 3.5 | 1.9 | 5.2 |
| End quarterly average. | 1.4 | 2.5 | 1.6 | 4.9 |
| Average | 1.1 | 3.1 | 1.2 | 3.8 |

The variability in growth rates shown by Friedman in the table on page 2 of this testimony depends heavily on the choice of months that he uses as beginning- and end-points for his periods. In view of the relatively large deviations from trend of growth rates for particular months, swings in money growth over short periods, including periods of six months or so, can easily be exaggerated by aberrant beginning- and/or end-points of the measurement period. Friedman's figures for recent periods overstate the amount of volatility in monetary growth because his choice of periods places great weight on exceptional months. ${ }^{1}$ The maximum monthly deviation in $\mathrm{M}_{1}$ growth from its average rate of growth during the past five years occurred in January 1975, which is one of Friedman's end-points for measuring recent growth rates.

[^9]Table 2 presents money growth rates during various intervals from 1973 to 1975, and compares Friedman's intervals of variable length with other intervals with the end-points slightly changed. It can be seen that alteration of his end-points leads to a rather different picture. The second panel of the table shows semi-annual periods (except for the last period); these periods change Friedman's end-points in the last half of 1974 and in 1975 by only one month. Less variability in monetary growth is clearly evident in the second panel. And even less variability is demonstrated in the third panel, where growth rates are based on quarterly average end points, which put less weight on individual months. In only one instance in the data shown in the third panel of Table 2 ( $\mathrm{M}_{2}$ in the second half of 1974) did the semi-annual acceleration or deceleration of money growth reach three percentage points-in contrast to variations of as much as 7.7 percentage points over similar periods in Friedman's table.

TABLE 2.-RATES OF MONETARY GROWTH, 1973-75
[Seasonally adjusted annual rates]

| Friedman's table | $M_{1}$ |  | Semiannual periods |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Mz | Based on last month of half year 1 | M | M ${ }_{2}$ | Based on quarterly averages | $\mathrm{m}_{1}$ | $\mathrm{m}_{2}$ |
| June 1973 to June 1974 | 5.6 | 8.7 | December 1972 to June | 7.4 | 9.1 | 4th quarter 1972 to 2d | 7.1 | 9.0 |
|  |  |  | 1973. <br> June 1973 to December | 4.7 | 8.3 | 2d quarter 1973. 1973 to 4th | 5.3 | 8.4 |
|  |  |  | 1973. |  | 8.7 | 4th quarter 1973.3 to 2 d | 6.6 | 9.1 |
|  |  |  | December 1973 to Jun 1974. | 6.3 | 8.7 | 4th quarter 1973 to 2d quarter 1974. | 6.6 | 9.1 |
| June 1974 to January 1975. | . 9 | 5.1 | June 1974 to December 1974. | 3.1 | 5.5 | 2d quarter 1974 to 4th quarter 1974. | 3.7 | 6.1 |
| January 1975 to July | 8.6 | 12.0 | December 1974 to June | 6.1 | 10.6 | 4th quarter 1974 to 2d | 4.2 | 8.5 |
| July 1975 to 4 weeks ending Oct. 15, 1975. | . 3 | 4.4 | June 1975 to 4 weeks ending Nov. 12, 1975. | 2.0 | 6.2 | 2 d quarter 1975 to 4 th quarter 1975. | 24.6 | 28.4 |

[^10]
## Reasons for variability in growth rates

A certain amount of variability in monetary growth rates can be expected in a dynamic and complex economy. The Federal Reserve does not view its annual targets for the monetary aggregates as objectives to be adhered to rigidly month-by-month, quarter-by-quarter, or even half-year by half year. Experience demonstrates that the public's demand for money and related assets is not stable over the short-run. It would be counter-productive to attempt to adhere to a pre-conceived, steady increase in the money supply under the circumstances. To do so would induce sharp short-term variations of interest rates.

The short-run behavior of interest rates is much more likely to affect attitudes of businesses, consumers, and financial institutions than are short-run variations in money growth. For example, if the Federal Reserve had attempted to keep growth in the narrowly defined money supply ( $M_{1}$ ) within a 5 to $71 / 2$ per cent, annual rate, band last May and June, when disbursements of tax rebate and social security checks temporarily raised growth to about a 15 per cent annual rate, interest rates would have risen very sharply. There would have been a sharp diversion of funds away from thrift instittuions; mortgage commitments would been greatly curtailed; asset values of financial institutions and market participants would have been severely eroded in a period when economic recovery was barely under way and many institutions were just beginning to recover from the impact of the recession. Consumers and businesses would probably have reduced current spending in face of tighter credit conditions and a weakened financial position. Subsequently, of course, interest rates would have dropped sharply as efforts were made to maintain money growth in later months, but by then financial institutions would have been concentrating on restoring their damaged liquity rather than on making loans, and consumer and business spending probably still would have been adversely affected by uncertainty as to the underlying financial outlook.

These undesirable effects of a rigid monetaristic approach were avoided in the conduct of monetary policy last spring and summer. The Federal Reserve permitted a sizable acceleration in money supply growth in May and June, but also accepted a modest tightening of the money market so as to help ensure that rapid monetary growth would not be too long sustained. As the pace of monetary expansion slowed in the summer months, the Federal Reserve encouraged an easing of the money market, so as to help sustain growth in the monetary aggregates. On average over the spring and summer, $M_{1}$ increased at a satisfactory rate, and this was accomplished without the adverse effects on the economy that would probably have been generated by sharp interest rate swings.

In general, there appears to be little evidence that short-run fluctuations in money growth have significant impacts on economic activity and prices. To be sure, relatively rapid or slow growth that is sustained over a period of 6 months to a year may well begin to influence the economy. But even this is by no means certain. If there has been a structural shift in the same direction in the demand for money relative to GNP, the relatively rapid or slow growth may simply represent an adaptation to newly emerging preferences on the part of the public for the forms in which they hold liquid assets or to the need for cash balances in light of changes in financial technology.

Thus, in assessing what money growth rates are appropriate, the monetary authorities must take account of demand shifts or other factors affecting changes in the velocity, or turnover, of money. The velocity of money can change considerably in short periods. For example, velocity tends to increase rather sharply in the early stages of a business recovery as the public's confidence in the economy is restored and consumers and businesses become increasingly willing to spend out of existing money balances. As the economy moved strongly forward in the third and fourth quarters of 1975, the increase in velocity was especially rapid.

Shifts among money and money-substitutes also affect the velocity of money. For instance, business firms have recently been given permission to hold balances up to $\$ 150.000$ in savings accounts at commercial banks. As a result, they have apparently transferred sizable amounts from demand deposits to savings accounts, since the funds are in practice a vailable on demand and interest is often paid from day of deposit to day of withdrawal. Such a shift in deposit balances would, of course, increase the turnover of the narrowly defined money supnly ( $\mathrm{M}_{1}$ ).

When the public shows increased willingness to use cash balances more efficiently, as manifested by an increase in velocity, there is less need for additional cash balances. Thus, the amount of monetary growth required by the economy will vary depending on how such factors as public psychology and financial innovation are influencing the velocity of money under given credit market conditions.

## Role of Federal funds rate

Use of the Federal funds rate as one important guide for day-to-day open market operations helps ensure that the central bank's operations are conducted in such a way as to foster orderly credit market adjustments and to take account of short-run variations in the demand for reserves and money. In undertaking open market operations, the Trading Desk at the Federal Reserve Bank of New York is instructed each month to keep the Federal funds rate within the tolerance range estimated to be consistent with the tolerance ranges for monetary growth also specified each month. The Federal funds rate, of course, varies in the course of the month and does change sharply over a period of months in response to altered economic conditions and longer-run changes in demand pressures on bank reserves and money relative to the a vailable supply.

If money growth is persistently slower or more rapid than desired, the Federal Reserve would begin altering reserve availability to effect changes in the Federal funds rate. This would begin to counteract the shortfall or overshoot in money growth that had been occurring. In this process movements in the funds rate may be relatively gradual because past experience demonstrates that overshoots or shortfalls in money growth can often be self-reversing in the sense that the public willingly readjusts its cash balances to more normal levels. However, the funds rate has moved widely over relatively short periods of three to six months as the Federal Reserve has sought to keep money
growth over the longer-run within desired bounds in the face of a persistingly strong or weak demand for money on the part of the public.

Friedman advises the Federal Reserve to attempt to eliminate short-run disparities between actual monetary growth and its announced longer-run objectives by renouncing its objective of moderating short-run interest rate movements. He defends this view primarily by arguing that a concern for stabilizing short-run interest rates movements will actually result in more unstable interest rate movements in the long run and self-reinforcing deviations in money growth from targets.

He argues that at the onset of a recession, for example, when interest rates tend to fall, a funds rate operating target lowered too slowly would lower monetary growth below the desired ranged. Were this lower growth sustained, it might be expected to begin further reducing economic activity significantly in about six months' time. The associated decline in loan demand at that point would then place additional downward pressure on interest rates. The funds rate would again tend to fall below the operating target, and, if this tendency were resisted by central bank action, the process would cause still lower monetary growth, and so on.

While this scenario is theoretically possible, the empirical evidence does not suggest that there have been self-reinforcing deviations in money growth over successive six-month periods. During the past three years, monetary growth has not been steadily low or high. Instead, as may be seen from the last two panels of Table 2, money growth rates have varied moderately in opposite directions. Thus, there has been no cumulative tendency for money growth to be relatively high or relatively low from one six-month period to another, as would be the case if the mechanism Friedman outlines had any practical significance.

Friedman, however, asserts that the familiar interval of six to nine months between a change is money growth and its impact on spending, loan demand and interest rates "has shortened drastically as the market has come to understand the process." This statement represents a departure from the conventional wisdom of both Keynesian and monetarist strands of macroeconomic thought. It requires careful empirical examination and verification before it can be accepted as valid either by the economics profession or by policy makers.

It is likely, though, that the lag between movements in money growth and movements of interest rates has been reduced through expectational forces. In this case, a decline in money growth could lead relatively promptly to a drop in interest rates as, for example, investor expectations of inflation are reduced. Or interest rates may decline because market participants anticipate that there will be a near-term easing of the money market caused by Federal Reserve efforts to encourage faster money growth. The economic implications of such a process are far from clear, though. For example, a drop in market rates occasioned by slow money growth might conceivably encourage economic ac-tivity-assuming the expected longer-run rate of return on capital has not changed-and thereby set in motion forces that will lead to an offsetting more rapid money growth. In that case, there would not be a self-reinforcing tendency for money to decline.

The Federal Reserve staff is continuing to examine the empirical evidence concerning relationships between money supply variables, interest rates, and economic activity-including specific questions connected with the use of the Federal funds rate as a day-to-day operating instrument for monetary policy. Perhaps the results of future research will suggest that typical changes in the Federal funds rate-which on average in absolute terms were almost $1 / 4$ of a percentage point per week from January 1973 through October 1975-have been too gradual. Or, on the other hand, such studies may suggest that reserve aggregates might provide a more efficient basis for conducting day-to-day open market operations, either alone or in conjunction with a Federal funds rate constraint. The Federal Reserve has in the past experimented with reserve targets, such as total reserves and reserves available to support private deposits (RPD). The continuing review of evidence and experience has led in the past-and can be expected to lead in the future-to changes in Federal Reserve operating procedures when justified in light of the whole array of objectives and responsibilities of the System.

Friedman's proposal is to scrap the tolerance range for the Federal funds rate altogether, to ignore interest rate movements completely, and to move to
the monetary base as the sole operating target. He believes that the monetary base is more predictably related to the money stock than is the Federal funds rate.

## Evaluation of monetary base

The relationship between the monetary base and the monetary aggregates is neither constant, mechanical, nor perfectly predictable. For example, in one recent period of slow money growth, the last half of $1974, \mathrm{M}_{1}$ grew by 3.1 per cent, $\mathrm{M}_{2}$ at 5.5 per cent, while the monetary base grew at 8.7 per cent. Over this six-month period, the multiplier for $\mathrm{M}_{1}$ thus declined by 5.6 per cent, admittedly a rarity for such a long period.

For monthly data, the multiplier consistently demonstrates significant variability. For example, over the period Friedman cites as exhibiting particularly erratic monetary growth-June 1974 to September 1975-the average monthly per cent change in the $M_{1}$ multiplier at an annual rate (without regard to sign) was 5.1 per cent, and the maximum single change was 10.5 per cent. As Friedman suggests, to the extent that the changes in the multiplier could be forecast a month ahead of time, monetary control using a monetary base operating target would be improved.

Friedman refers to two procedures for predicting the change in next month's multiplier. The first, analyzed by William Dewald, ${ }^{2}$ is to assume next month's multiplier will equal this month's multiplier (calculated from preliminary data). In other words, this naive method always predicts a zero change in the multiplier for the following month. By the second procedure, "a more sophisticated version of this method of operation," Friedman appears to mean the one proposed and examined by Albert Burger and others in various articles in Federal Reserve publications cited by Friedman. Under this approach, the prediction of next month's multiplier depends on an equation relating it to a three-month moving average of the current and lagged monthly multipliers (calculated from partially preliminary data) and the current month's per cent change in the Treasury bill rate. Burger recently published an analysis ${ }^{3}$ of how this technique would have performed from June 1974 to August 1975. It turns out that the naive prediction of no change in the multiplier was just as accurate on average as the prediction with the Burger approach over this period. ${ }^{4}$ In short, the more sophisticated model had no more predictive power than did the naive method over this interval.

Burger's results suggest that had the Federal Reserve attempted to stay along the target path for $\mathbf{M}_{1}$ each month, using his methodology, the divergences over six-month periods of actual and targeted growth rates of $\mathrm{M}_{1}$ would have averaged about one percentage point. However, the individual monthly errors are sizable; the average monthly divergence between the targeted and the controlled $M_{1}$ (without regard to sign) was $\$ 1.3$ billion, with a maximum deviation of $\$ 4.3$ billion. Expressed at annual rates of growth these average and maximum deviations are 5.5 and 17.9 percentage points, respectively.

The Board staff peformed the identical experiment with the more naive approach. Its performance was not significantly different from Burger's approach for this fifteen-month period, both over six-month intervals and over monthly intervals. The average absolute and maximum monthly deviations were $\$ 1.4$ billion and $-\$ 2.9$ billion, respectively for dollar figures, and 5.9 and -11.9 percentage points, respectively for annualized growth rates.

Both these studies, however, make simplifying assumptions which bias the results in a way that reduces the average errors for both long and short periods. Had the Federal Reserve actually been pursuing Burger's procedure over this period, the estimated equations in all probability would have deteriorated significantly. Particularly in view of the large monthly variations in $\mathrm{M}_{1}$ growth, which the Federal Reserve is assumed to attempt to offset fully in the next month in order to remain on a fixed target path, the growth rate of the monetary base would have had to vary substantially more than it actually did over the period studied. Substantially more variable interest rates would have been implied which, together with lagged bank responses in chang-

[^11]ing deposits, would have produced much more variability in the multiplier than actually occurred. Thus, the predicted multiplier-which is based in part on an average of past multipliers-would likely have been less accurate on average. Larger misses of monetary growth targets than the studies indicate are therefore highly probable. In general, the question of exactly how closely the Federal Reserve could attain its announced money growth targets over short periods under Friedman's proposal is still open.

Friedman does recognize that sizable week-to-week and month-to-month errors will occur under his proposed operating procedure. But because under his procedure the Federal Reserve attempts to compensate entirely in the next month for a miss in the current month, he believes that the danger of successive misses in the same direction will be significantly reduced and that "it is literally inconceivable that if the Fed had followed this procedure during 1974 and 1975, it could have departed as far as it did" from its announced monetary growth targets. This would be the case, however, only if short-run movements in interest rates of much larger dimensions than have occurred in the past were permitted.

In any event, it is by no means obvious that it is economically desirable to severely limit shorter-run variations in money growth, or that it is possible to specify the most appropriate money growth for a particular periodespecially a relatively short period-in advance. Appropriate short-run money growth depends to a great extent on shifting, and often random, money flows and demands. Since these factors cannot be predicted in advance the monetary environment in the short-run that best serves the public interest may be more nearly approximated through a funds rate operating range than through a monetary base objective.

Two final problems with the monetary base as an operating target are that it includes member bank borrowing and currency in the hands of the non-bank public. This presents control problems for the Trading Desk because banks can offset the changes in the monetary base intended by the Federal Reserve by changing their borrowing. Changes in currency holdings by the non-bank public, while they need not affect the monetary base, do affect bank reserves and thus affect both market interest rates and the multiplier that relates the base to money. Alternatives to Friedman's proposal would be to replace the monetary base by the nonborrowed monetary base or by nonborrowed reserves. Over recent years, these magnitudes have been almost as closely related to monetary aggregates as the monetary base. ${ }^{\text {b }}$

A comment on the behavior and use of the Board's monthly money market model is in order. Friedman's remarks leave the distinct impression that the Federal Reserve relies on this model exclusively in formulating the forecasts which provide the basis for the operating strategy of the Trading Desk. But this model is only one of many forecasting techniques, including judgment, that the Federal Reserve employs to determine projections of interest rates, reserve aggregates, and the money supply.
Moreover, Friedman's contention that the monthly model's one month ahead prediction of next month's Treasury bill rate is inferior to the naive prediction that it will equal this month's level is not correct over either the January 1969 to December 1974 period of the most recent model fit or the post-sample period in 1975. Over either period the monthly model's predictions of the Treasury bill rate-which depend in part upon the last, current, and next month's Federal funds rate-were closer on average than those of Friedman's naive model. The superior performance of the monthly model was even more marked for the commercial paper rate, which is the rate, rather than the Treasury bill rate, which appears with other rates in the model's money demand and borrowed reserves equations.

In general, empirical evidence appears to indicate that it is difficult to control the money supply no matter whether most emphasis is placed on interest rates or most emphasis is placed on bank reserves (or the monetary base). When the Federal funds rate rather than reserve aggregates is taken as the primary guide for day-to-day open market operations, reliance has to be placed on knowledge of factors - such as income and other interest rates-that influence the public's demand for money to hold in order to achieve control over the quantity of money. These relationships have been the subject of considerable

[^12]empirical research, which provides a basis for operating procedures that emphasize the funds rate. Nevertheless, the relationships have not proved to be highly predictable, particularly in the short-run.

Control of money from the supply side involves an ability to control reserve aggregates (or the monetary base) and to be able to predict the multiplier relationship between such aggregates and the stock money. These relationships, too, are not highly predicable. The multiplier can vary-unpredictably and erratically-for a large number of reasons. The public can switch readily between deposits that have high reserve requirements and those that hare relatively low requirements; these shifts often depend on the level of interest rates, which is in turn affected by the behavior of the economy. A growing fraction of the public's deposits is also held at institutions that are not subject to reserve requirements set by the Federal Reserve. Finally, banks' demands for excess reserves and borrowing from the Federal Reserve can shift in response to credit demands on them or changes in bank lending attitudes and expectations.

Friedman's regulatory proposals are designed to reduce uncertainties affecting relationships between the quantities of reserves supplied and the moner stock. The Federal Reserve has proposals before Congress (such as applying reserve requirements set by the Federal Reserve to nonmember banks) with the same objective in mind. The various Friedman proposals will be discussed in the next section.

Before doing so, it should be pointed out that while there is value in reducing the potential slippage between reserves and money, it does not follow that the Federal Reserve should adhere to a fixed, predetermined rate of growth in reserves and/or money in conducting open market operations. As noted in earlier parts of this paper, there are good economic reasons for permitting variations in money growth and for accommodating, at least in part, short-run changes in deposit flows and money demand.

## II. THE DESIRABILITY OF REVISION IN CERTAIN BANKING REGULATIONS

Friedman first recommends the elimination of the two-week lag in reserve requirements, whereby fequired reserves are based on deposits two weeks aro, and the re-establishment of contemporaneous required reserve accounting. The Federal Reserve has been studying the impact of lagged reserve accounting in order to appraise the benefits to banks through simplification of reserve management as against the possible costs of lessened monetary control. Lagged reserve accounting in and of itself would appear to have little, if any, adverse effect on monetary control if the Federal funds rate is the day-to-day target for open market operations, because the control mechanism then depends primarily on ability to predict the relationship between the public's willingness to hold money and short-term interest rates-and not on the relationship between a given reserve level and the money stock. Even if reserve aggregates were given more emphasis as an operating target for monetary policy, the lag in reserve accounting would present only a minor problem. It does appear to limit the precision of monetary control through reserves in the very short-run. but a two-week lag poses no real impediment to monetary control over a more relevant longer period of three to six months.

Friedman also suggests a reverse lag reserve accounting proposal develnped by Laurent as a passible improvement over contemporaneous accounting. In Laurent's proposal, the reserves available to meet this week's required reserves would be the total reserves held in a previous priod, say. one week earlier. Thus. banks would be required in a current week to adjust assets, "net demand deposits," ${ }^{6}$ and required reserves to conform to total reserves of the previous

[^13]week, and/or to have adjusted their total reserves of the previous week to conform to anticipated deposits and required reserves in the current week. The proposal appears to enhance the risk of disruptive market adjustments by banks or, on the other hand, it could lead to excessively conservative reserve management, such as the practice of holding large amounts of excess reserves, as banks attempt to ensure the availability of reserves to meet any unexpected build-up in deposits in the period ahead. Friedman rightly considers this a "radical" proposal, which certainly requires much more professional discussion and evaluation before its implications can be fully understood.
Friedman further suggests establishing five reserve settlement periods, each ending on a different day of the week, Monday through Friday, and assigning one-fifth of the banks (or banks with roughly one-fifth of deposits) to each reserve period. Such a scheme of staggering reserve periods would permit a bank to obtain reserves for settlement purposes not only by borrowing from the Federal Reserve or from other settling banks but also by borrowing Federal funds from non-settling banks. He believes the latter alternative would help smooth interest rate movements and require fewer "defensive" open market operations by the Federal Reserve.

It is by no means clear, however, that staggering reserve settlement periods would smooth interest rate fluctuations. As banks settling in the first period attempt to adjust to monetary policy changes--for example, a tightening that reduces reserve availability-they would tend to throw the burden of adjustment onto other banks either by borrowing Federal funds or by selling assets that are acquired by customers of other banks. Banks that settle in the next period would then find that they have an even larger adjustment problem in consequence of the adjustments made by banks settling in the initial period. The process of adjustment would reverberate from one group of settling banks to another, and might well involve an oscillatory process of alternative overand under-adjustments in deposits and fluctuations in interest rates. The possibility that the adjustment process might develop along these lines raises serious questions as to the practical desirability of Friedman's proposal. ${ }^{7}$

Friedman's suggestion for establishing the same required reserve ratios on all bank liabilities is puzzling. If short-run money control were the sole criterion for assessing the reserve requirement structure, it might be argued instead that reserve requirements should be equalized for deposit liabilittes entering the money supply and that reserve requirements on other bank liabilities should be eliminated. Equal reserve requirements on money supply liabilities and a zero requirement on non-money liabilities would make it easier to forecast the multiplier between reserves and money. The particular liabilities subject to reserves would then degend on the definition of money to be controlled.

If $M_{1}$ were the principal aggregate to be controlled, such an approach would involve placing reserve requirements only on private demand deposits (at both member and nonmember banks), with the level of requirements the same regardless of the size of the individual bank's deposit. If $M_{2}$ were the aggregate to be controlled, the relevant liabilities on which to apply equalized reserve requirements would be demand deposits and time and savings deposits (other than large negotiable CD's) at commercial banks. The reserve requirement would be eliminated on such liabilities as CD's, U.S. Government deposits and interbank deposits that are not considered part of the money supply. And if $\mathrm{M}_{3}$ were the aggregate to be controlled, equal reserve requirements would need to be extended to time and savings deposits at savings and loan associations and mutual savings banks.

Reserve ratios also serve other important functions besides facilitating money control, however. The present reserve requirement structure, while it may be improved in a number of respects, does help ensure sound banking practices by requiring higher reserve ratios for volatile demand deposits, provides for competitive balance through lower ratios for small member banks, and encourages banks to manage their liabilities more prudently by skewing the time deposit reserve requirement structure toward lower requirements on longerterm time deposits.

[^14]
## U.S. Senate, <br> Committee on Banking, Housing and Urban affaits, <br> Washington, D.C., February 1s, 1976.

Prof. Milton Friedman,
Department of Economics,
University of Chicago,
Chicago, Ill.
Dear Professor Frimbman: Following your testimony before the Senate Banking Committee on November 7, 1975, I asked the Chairman of the Federal Reserve Board to respond to your specific suggestions for improving the conditions of monetary policy.

Enclosed for your information is a letter from Chairman Burns transmitting an analysis of your proposals prepared by the Federal Reserve staff. I plan to include the Federal Reserve's comments in our next hearing on monetary policy together with any additional comments you may care to make. These hearings are now expected to occur early in May.

I would appreciate receiving for the record any additional comments you may have regarding the Federal Reserve's analysis.

Sincerely,

## William Pboxmire, <br> Chairman.

Rejoinder by Milton Friedman to "Federal Reserve Staff Comments on Prof. Friedman's Statement Before Senate Committee on Banking, Housing, and Urban Affairs (Nov. 6, 1975)"

I appreciate the opportunity to respond to the comments by the Federal Reserve staff on my testimony before your committee on November 6, 1975.

As a long-time student of the published statements of the Federal Reserve System over the past sixty years, I can testify that this comment is vintage Federal Reservese: Everything the Federal Reserve did was the most effective possible response to events impinging on the economy and the System from outside; and unfortunate results were the consequence of events outside the Fed's control and the outcome would have been worse but for the prompt, sensitive, and well-informed reaction of the Fed, based not on any simple "model" but on "many forecasting techniques, including judgment"; critics of the Fed's policies sometimes have a point, but they are insensitive to the qualifications and subtleties that the Fed takes into account; and, finally, repeated assertion that "facts" and "experience" support the Fed are presented as a substitute for hard evidence. Above all, there is no objective quantitative criterion by which to judge Federal Reserve performance. In short, trust the Fed, since "the continuing review of evidence and experience has led in the past-and can be expected to lead in the future-to changes in Federal Reserve operating procedures when justified in light of the whole array of objectives and responsibilities of the System."

The quoted passages are from the present staff comment, but my paraphrase, and these passages, apply just as well to the Federal Reserve's annual reports for 1932 and 1933, when the monetary system collapsed as a clear and direct result of Federal Reserve mismanagement. The present apologia too should be taken with a shaker's-full of salt.

To turn to more specific points, which I shall discuss under the successive headings used in the staff memorandum.

## VARLATIONS IN MONEY GROWTH RATES

The staff objects that I have overstated "the amount of volatility because [my] choice of periods places great weight on exceptional months." There is some merit to this objection but the alternative procedures the staff suggests are even more defective in the opposite direction. I have used months, rather than days or weeks, in order to avoid overstating volatility. But whatever unit of time is used, it is essential not to use a fixed set of end points, as the staff does in its Table 2. Those dates need not correspond to shift in Fed policy. For example, suppose the Fed increased the quantity of money very rapidly from March to September, then decreased it very rapidly from September to

March. Measuring changes only from December to June and from June to December, as the staff does in its Table 2, might show perfect stability!

As it happens, for the period covered by the staff's Table 2, the fixed dates are only off by a month or so from the actual turning points in Fed policy, so the growth rates computed from the final month of the half-year for semiannual periods in the staff's Table 2 only fudge a bit the variability shown by my own calculations from months of turn; in the main, they tell essentially the same story. Combining arbitrary dates with the use of quarterly averages fudges even more, and though it does not completely eliminate the variability, it certainly reduces it drastically. But these figures do real violence to the actual situation-they are reminiscent of the six-foot man who drowned crossing a creek that he had been assured averaged only five feet in depth.

Incidentally, it is amusing to compare the staff's discussion here, which plays down month-to-month variability, with its discussion later on where it stresses that "individual monthly errors are sizable." In each case, it takes that side of the issue which it regards as opposed to the particular argument of mine that it is criticizing-without recognizing that that puts it on both sides of the fence.

## REASONS FOR VARIABILITY IN GROWTH RATES

The one significant reason given why variability in money growth rates is desirable is that constant monetary growth would "induce sharp short-run variations in interest rates." Two questions arise: Would it? And if so, would that be harmful?

On the first question, the staff repeats several times the assertion that steadier monetary growth would mean more variable interest rates, yet it offers not a scintilla of evidence to support that assertion. In my testimony, I referred to this assertion, said "I have long believed that it [steady monetary growth] would have precisely the opposite effect" (i.e., mean stabler interest rates) and referred to a recent paper by Professor William Poole that reaches the same conclusion. The Fed staff neither offers additional evidence to support its assertion nor refers to, much less answers, Professor Poole's paper.

Surely it is not too much to ask that the Fed present carefully analyzed evidence to support an assertion that is absolutely basic to its whole position.

On the second point, the interest rates that are important for housing and investment are long-term rates. These tend to be highly stable despite sharp variations in short-term rates. It is hard to see any significant harm that would be done by short-term variations in short-term rates.

Note that in practice short-term rates have been highly variable. If the Fed has indeed deliberately accepted variability in monetary growth to avoid variability in rates, it has gotten very little in return. The end result has been nether stable monetary growth nor stable rates.

In fact, as I argued in my testimony, I believe that the talk about interest rate variability is rationalization pure and simple, designed to put the best face possible on variation in monetary growth arising from the Fed's stubborn insistence on sticking to obsolete procedures of operation.

The other justification which the Fed gives for variability in monetary growth is to offset variations in the demand for money (by which they mean "demand schedule"). This would be a valid reason if the Fed could detect shifts in demand. But that is a big if. Time and again, the Fed has referred to a shift in demand to excuse abnormally rapid or slow monetary growth. Time and again, subsequent evidence has failed to confirm such a shift. A recent episode, explored in detail by Michael Hamburger of the Federal Reserve Bank of New York, was in 1971. Dr. Hamburger concluded in an article published recently that there had in fact been no such shift as the Fed had proclaimed to justify its monetary policy. Perhaps this time is different. But where is the evidence?

ROLE OF FEDERAL FUNDS RATE
This section mostly simply repeats my own description of the way the Fed now conducts policy. However, in one respect it misinterprets my position. In referring to the self-reinforcing deviations in monetary growth that would result from reliance on the Fed funds rate, I said that while the initial effect of
higher than targeted monetary growth would be to hold down interest rates, after an interval, which in the past has been about six months but seems now to be markedly shorter, the effect would be to raise interest rates, thereby forcing the Fed to increase money growth even more. The Fed interprets this as referring to "successive six-month periods" and then offers utterly irrelevant evidence for such periods. Let there be a six-month delay. The effect could show up in a monetary explosion in the next three months, countered by a belated jump in Federal funds targets, which might produce a reversal in monetary growth, so that no effect would be present for a six-month period as a whole. This is roughly what happened from, say, April or May 1975 to October or November 1975.

In this connection, the Fed has argued that "it is likely . . . that the lag between movements in money growth and movements of interest rates has been reduced through expectational forces," thereby granting one of my main points and rendering somewhat questionable its own answer to my criticism.

## EVALUATION OF MONETARY BASE

In my testimony, I stressed that the relation between the monetary base and monetary aggregates is not precise, so for the most part the staff agrees in this section with my analysis.

It gives a somewhat different impression first, as I noted earlier, by here putting emphasis on month-to-month variability, and second, by asserting, without any evidence whatsoever, that "had the Federal Reserve actually been pursuing Burger's procedure over this period, the estimated equations in all probability would have deteriorated significantly." My own belief is precisely the opposite. But neither the Fed's assertion nor my impression is a substitute for the kind of trial of the alternative procedure that I have been urging on the Fed for nearly a decade.

The Fed's other objections to the monetary base as an operating target seem to me either trivial or wrong. In any event, they apply just as much to current procedure, since, insofar as they are valid, they introduce errors in the Fed's estimates of the Federal funds rate required to achieve a specified monetary target.

## DESIRABILITY OF REVISION IN CERTAIN BANKING REGULATIONS

The one point here that requires comment is the Fed's discussion of staggered reserve settlement periods. I first proposed this to the Fed some ten or a dozen years ago. At the time, the Fed made precisely the same objection that it does now. I replied, giving a theoretical analysis that I thought persuasively demonstrated that fears of an "oscillating process of alternative over- and underadjustments" were illusory and that the analysis leading to these fears was faulty. I have yet to receive a reply indicating where I was wrong. Apparently, the Fed did not consult its files. Faced with the same proposal, its standard. condtioned reflex operated-find some objection, however far-fetched, to any argument suggesting that the way the Fed now operates is not the best of all possible worlds.


[^0]:    72-390-76-2

[^1]:    ${ }^{1}$ Congressional testimony on H.R. 50, 4/8/76.

[^2]:    2 The bill was patterned after an earlier one introduced by Senator Proxmire.

[^3]:    ${ }^{1}$ Dr. Brimmer is Thomas Henry Carroll-Ford Fonndation Visiting Professor in the Graduate School of Business Administration at Harvard University. From March. 1966 throngh August, 1974, he was a Member of the Board of Governors of the Federai Reserve System.

[^4]:    ${ }^{1}$ Includes military expenditures،

[^5]:    1 Preliminary.
    ${ }^{2}$ Estimated.
    3 Less than $\$ 50$ million.
    Source: 1970-1974-Flow of Funds, Federal Reserve Bank.

[^6]:    72-390-76-6

[^7]:    1 The first quarter of recovery was 1975 . II; the fiscal policy changes which became effective late in that quarter may account for the turn, but $I$ doubt it. Their main effect was felt later on.

[^8]:    72-390-76-9

[^9]:    ${ }^{1}$ When looking at month-to-month growth rates, it is important to recognize that the monetary aggregates are subject to a varlety of short-term transitory variations or impulses. These transitory variations are independent of seasonal and basic longer-term movements. They arise because of fluctuating payments among the public. the banks and the Treasury; cash items in the process of collection; reporting and tabulating errors; and so forth. Such phenomena may impart a transitory variation in the monetary aggregates which will be seen as a temporary (upward or downward) movement in daily or weekly deposit data. Though such transitory variations are short-term phenoma and largely unrelated to ongoing private spending decisions, their impact on month-to-month measured growth rates may be substantial. Indeed a 95 per cent confldence interval for the systematic (non-transitory) growth rate for Mi has beed estimated as plus or minus five percentage points. Thus, for example, if the underlying growth rate were 6 per cent, one would observe month-to-month changes about $81 / 2$ per cent or below $31 / 2$ per cent about one third of the time, and above 11 or below 1 per cent about 5 per cent of the time.

[^10]:    1 The last period shown terminates with the 4 weeks ended November 12 in order to show the effect of an additional month of data relafive to the last period for which Friedman had figures.
    ${ }^{2}$ Preliminary.

[^11]:    ${ }^{2}$ William G. Dewald, "Monetary Control and the Distribution of Money, Ph.D. dissertation, University of Minnesota, 1963.
    s Álbert Burger, "The Relationship Between Monetary Base and Money : How Close?" Review, Federal Reserve Bank of St. Louis (October, 1975).
    *The root mean squared errors in predicting monthly annualized per cent changes in the Mi multiplier were 6.8 percentage points for the naive method and $\mathbf{7 . 3}$ percentage points for the Burger approach.

[^12]:    ${ }_{5}$ The Federal Reserve staff is continuing to study a variety of reserve measures and their multiplier relationships to money supply in an effort to determine which measures and which multiplier forecasting techniques, including structural modeling and judgment, might best play a role in monetary policy operations.

[^13]:    ${ }^{6}$ In order to increase banks' control over their required reserves and to reduce the impact on their required reserves of factors outside their control, Laurent also proposes a change in the definition of net demand deposits, upon which required reserves are calculated. Under the proposal, a bank's net clearings-the value of checks depnsited at the Federal Reserve minus the value of checks drawn against the bank in the settlempnt perion-would create an equal amount of interbank deposits "due to" other banks when negative and "due from" other banks when positive. Deposits "due to other banks increase net demand deposits while denosits "due from" other hanks decrease net demand deposits. Hence, depositor initiated flows of demand deposits between banks would leave individual banks with unchanged required reserves in this week's settlement perion. But if a bank sells earning assets, for example, its deposits "due from" other banks would rise as the buyer's check is credited to the bank's account at the Federal Reserve and its net demand deposits would fall by the same amount in the current settlement period. The bank's required reserves would thus fall by a fraction of that amount.

[^14]:    Friedman does not indicate whether his proposal also involves basing the reserve pertod on five working days rather than seven days, as is current practice. A five working day reserve settlement period has the additional problem of probably introducing an intra-weekly fluctuation in money market rates, since it would be desirahle for banks to avoid holding reserves over the week-end when they serve no purpose for sumporting deposits.

