

# FEDERAL RESERVE'S FIRST MONETARY POLICY REPORT FOR 1979

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HEARINGS  
BEFORE THE  
COMMITTEE ON  
BANKING, HOUSING, AND URBAN AFFAIRS  
UNITED STATES SENATE  
NINETY-SIXTH CONGRESS  
FIRST SESSION  
ON  
OVERSIGHT ON MONETARY POLICY REPORT TO CONGRESS  
PURSUANT TO THE FULL EMPLOYMENT AND BALANCED  
GROWTH ACT OF 1978

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FEBRUARY 20 AND 23, 1979

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# FEDERAL RESERVE'S FIRST MONETARY POLICY REPORT FOR 1979

TUESDAY, FEBRUARY 20, 1979

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

The committee met at 10:05 a.m. in room 5302, Dirksen Senate Office Building, Senator William Proxmire (chairman of the committee) presiding.

## OPENING STATEMENT OF CHAIRMAN PROXMIRE

The CHAIRMAN. The committee will come to order.

Chairman Miller, I want to tell you how much I admire the fact that you showed up this morning. There's every reason to expect in this weather that it would be very hard to get through and I think it's to your great credit that you do appear. Most hearings have been canceled around the Hill and both Members of Congress and witnesses just haven't been able to make it, so I am delighted that you are here today and I'm looking forward to your testimony and I think it is historic.

Today we begin consideration of the monetary policy plans, and objectives of the Federal Reserve Board for the calendar year 1979. The Federal Reserve Board has sent the Congress its report on monetary policy as required by the Humphrey-Hawkins Act. This is the very first time that's been done, of course, because the Humphrey-Hawkins Act has just gone into effect in the last few months. We are pleased to have Federal Reserve Chairman G. William Miller with us today to explain those intended policies and how they relate to the economic goals that President Carter has set forth in his economic report.

These hearings and the committee's consideration of the Federal Reserve monetary policies for 1979 mark a historic occasion.

For the first time, the Banking Committees of both the Senate and the House of Representatives are required by law to report their views and recommendations with regard to the Federal Reserve's intended policies to their respective Houses of the Congress. The committee will want to analyze whether and to what extent those policies will foster the achievement of the short-term economic goals—the goals for employment, unemployment, production, productivity, real income, and prices—that have been established for calendar years 1979 and 1980. The Humphrey-Hawkins Act also requires that monetary and fiscal policy be coordinated and that they work in tandem, rather than separately and at odds, to foster the desired economic conditions.

you expected interest rates to remain at high levels for an extended period of time and also that the United States would continue to fight inflation by practicing tight monetary policy. I support the conclusion that monetary policy should be restrictive until significant progress is made in reversing the rate of inflation. That was the major conclusion of this committee, as you know, in its last report on the conduct of monetary policy following the hearings which were held last November. The report also indicated that the monetary aggregate growth rate targets should be gradually lowered and that actual growth should be kept within the bounds that are specified.

I think that's critically important and I personally would also like to see those money growth rate ranges narrowed. The Federal Reserve's job is to bring the growth of money and credit down gradually. If monetary growth is too restrictive so that the aggregates are growing at rates below the bounds you have specified the potential economic consequences could be serious and the economic dislocations dramatic.

Chairman Miller, I look forward to your report and your explanation as to where monetary policy is going to take the economy this year.

I apologize for the lengthy opening statement in view of the fact that you have been standing and not comfortably seated. I hope that indicates you don't have a bad back.

Mr. MILLER. No, Mr. Chairman. I just thought I would experiment with standing. I think there's a certain amount of advantage to me in being able to respond to members of the committee from this position. At least, I'd like to experiment, if it's all right with you, to see if this would be more comfortable.

The CHAIRMAN. That raises you to a level so our eye levels are about the same.

Mr. MILLER. That's true to a degree. But I'm sure I'll never get raised to the level of the committee members.

#### STATEMENT OF G. WILLIAM MILLER, CHAIRMAN, BOARD OF GOVERNORS, FEDERAL RESERVE SYSTEM

Mr. MILLER. Mr. Chairman, I appreciate your holding this hearing today because I was fearful that it might be postponed. As you know, all great events must be marked by natural phenomenon. Nature has a way, I believe—if something is important enough—of calling it to our attention, and certainly all of us can write in our diaries that the first hearings on monetary policy under the Humphrey-Hawkins Act took place at the time of the great snowstorm of 1979.

The CHAIRMAN. And in spite of it.

Mr. MILLER. And in spite of it. When I was a youngster in Texas, we thought the great snowstorms were wonderful. We always hiked to school and, because fewer students were there, we always had a lot more fun; I hope we will enjoy today. Snowstorms don't try men's souls, but they try our perseverance and our patience, and I hope that our perseverance in the face of this weather is typical of the perseverance we will have with the economic policies we face.

Mr. Chairman, this is our first experiment in responding to the mandate of the Humphrey-Hawkins Act to make semiannual re-

ports to the Congress. We apologize for the fact that our report, which was finished in draft on Friday and was to be reproduced over the weekend, was not delivered to you earlier because of the snowstorm. We certainly hope that such delays don't occur in the future.

We have organized our report into three chapters that correspond to the three particular mandates to us that are contained in Humphrey-Hawkins. We hope that this method of presentation is beneficial and illuminating, and that we will have your comments and suggestions on how we can improve future reports.

We have not prepared any testimony separate from the report because it seems that the real purpose today is to review this report, which considers, first, recent economic and financial developments; second, objectives and plans of the Federal Reserve for the current calendar year; and, third, the relationship of those objectives and plans to the administration's short-term goals.

It would be our hope that this report normally could be filed enough in advance to be studied by members of the committee so that less time need be spent in reviewing it here and more time could be spent responding to questions. Because it has just been delivered I thought I might hit the high spots and then file it with the committee for the record. I would particularly like to spend a little time on the last two chapters, where we discuss the future rather than the past.

You have given, in your opening statement, Mr. Chairman, a partial overview of past and more recent developments in the economy that are important. The overview given on the first page of our report is also worth noting.

The main thing to point out is that we are about to enter the fifth year of economic expansion, and that, in terms of longevity, it is a very durable expansion. We started that expansion from a very low trough, because of the great recession of 1974-75, so that the gains from that trough have been rather substantial.

Rather than try to cover the text, perhaps it would be helpful to go through some of the charts and then come back to any part of the report that is of interest.

The CHAIRMAN. Yes. It might be helpful if you would refer to the page.<sup>1</sup>

Mr. MILLER. Certainly. The upper panel of the chart on page 5 shows the performance of the current economic cycle compared to prior cycles. This cycle looks very much like the others except that toward the end of the fourth year it seems to be on an upswing and has momentum, rather than the tendency to tail off as was typical of prior economic cycles.

The bottom panel shows over the same 4 years—actually over one quarter short of 4 years, because our figures only go through the fourth quarter of 1978—that real GNP has grown at an average annual rate of 5.1 percent. Housing expenditures have the greatest expansion in terms of relative change; but since these began from depressionary levels, a 14-plus percent average annual increase in housing expenditures is a bit misleading. Business fixed investment has grown at an average annual rate of 5.4 percent;

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<sup>1</sup> References are to the prepared statement of Mr. Miller which begins at page 33.

personal consumption at 5 percent; and Government purchases at just over 2 percent.

On page 7, looking at the white bar in the upper panel, we see that real personal consumption expenditures have generally continued very strong, running, for much of the period, ahead of real disposable income. As a result, savings rates—shown in the center panel—have gone down; consumers have maintained their level of purchases by lowering their savings rates and increasing their credit, which is shown in the bottom panel.

As a result, we have had a stronger than average contribution to the economic upswing from consumer spending .

The chart on page 10 shows why housing has been a particularly strong component. From the end of 1972, through the 2 years 1973-74, housing virtually collapsed. It was only to be expected that it would recover from that very low level at a relatively higher rate than other components of the economy.

It is worth noting, however, that over 1978 housing leveled off; it did not continue to expand beyond capacity. As we know, part of that leveling off, at a high rate, is related to demographics—the relationship of the age of the population to needs for shelter. It is also related to the buying of housing as a hedge against inflation, as well as the decision of the regulatory agencies to authorize money market certificates that allow thrifts, and thus the housing industry, to compete with other sectors for funds. So the housing sector has been maintained.

On page 13, we can see, in the upper panel, the growth of Federal Government expenditures in nominal terms and in real terms. You can see the erratic pattern; but, nonetheless, Federal spending was a sustaining element during this cycle. In the lower panel, we see the trend in State and local government purchases of goods and services in 1972 dollars.

Labor market developments have been rather critical during this time.

On the chart on page 15, we see that the growth of the labor force has been quite rapid; greater than in any prior cycles, for several reasons: demographics again; plus social change that has brought more women into the labor force; plus the fact that families have, in the face of inflation, tended to add more household members to the labor force.

Employment, which dipped rather dramatically in the 1974-75 recession, has gained just as dramatically in this expansion. A very high rate of job creation—a record rate—has existed during this period, so that we have seen the unemployment rate drop down its the present 5.8 percent. It is particularly worth noting—in the bottom panel—that the civilian employment population ratio has risen to record levels; 60 percent of the adult population is now actually employed. This is rather encouraging.

Page 18 breaks the unemployment rates down, showing that for adults, the unemployment rate is now 4.1 percent; and for skilled blue-collar workers, 4.6 percent. These are very near to where they were at prior peaks of activity. But we haven't made that kind of improvement in the unemployment rate for teenagers; it is still high.

However, if we recomputed unemployment today using the age-sex composition of the labor force of the midfifties—that is, without the enlarged proportion of teenagers who have a higher rate of unemployment until they gain experience—we would find that the unemployment rate would actually be about 1 percentage point below its present level. So the employment outlook has at least been encouraging.

If we look at the chart on productivity, on page 21, we see a different story: a very disturbing trend of lower output per man-hour in the nonfarm business sector. From 1947 through 1967, the annual rate of increase was 2½ percent; since 1973, it's only been 1.2 percent—recently, as you know, even worse. This is quite disturbing. High compensation gains have been made as employees seek higher income to make up for inflation, and the combination of high compensation gains with low productivity gains has increased unit costs and contributed to inflation.

The chart on page 23 shows part of the reason for this drop in productivity, and that is that the ratio of capital stock to labor force has just not kept up. Capital stock has fallen below the trend line. The bottom panel shows that the average annual growth of capital stock has been declining, from 5.1 percent in 1962-67, to only 2.9 percent in the last 5 years. That is one of our difficulties.

On page 26, comparing our investment to the rest of the world, we can see that on a real basis—I sometimes use nominal figures, so I hope you will excuse me if in this case I use real figures—the United States is obviously spending less on investment than other major industrial countries: 13.5 percent in the 1966-76 period compared to 26.4 percent for Japan, for example, and to higher rates in all the other countries shown.

I would hasten to point out that a direct comparison must be made cautiously, but there is a significant lag in U.S. investment that is not accounted by differences in the structure of our economy as compared to other industrial nations.

Looking at the chart on the international sector briefly—page 28—we are all aware of the ups and downs of our trade balances over this decade: First going into a deficit, then recovering to a surplus, and more recently going into a larger deficit. As shown in the upper panel, both the trade and the current account balances have shown significant deficits. But, of course, during the year 1978 there was a narrowing of the trade deficit and a narrowing of the current account deficit, so that the outlook now is for significant improvement in these components.

If you look on page 30, you can see a few of the reasons for this. Nonagricultural exports have been growing in value, partially because of relatively higher growth rates abroad and also because of the improved competitiveness of American products. The value of these exports has gone up even more than the volume. On the other hand, one of our major imports is oil; there, volume has been trending down and value has stabilized for a while, although we know with the situation in Iran that is vulnerable and could be a difficulty for us.

The chart on page 32 tracks the exchange value of the dollar over the last few years, and the relative consumer prices, foreign to United States as the dollar has declined.

Mr. Chairman, before coming to prices, let me repeat something I mentioned earlier that's shown on page 37. With compensation per hour—the upper panel—rising rapidly in recent years (almost 10 percent if we include fringe benefits), and output per hour—the center panel—dropping, unit labor costs have skyrocketed. Hence, one of the difficulties we have with inflation.

Page 38 looks at labor costs and various components of prices. Food price rises, of course, have been rapid in the last couple of years for many reasons, including a beef cycle which has caused substantial increases in beef prices. Energy has continued to be a substantial component of inflation and will be so again in 1979 with OPEC price increases and the uncertainty in Iran. The bottom panel shows the total price situation. As we know, on a GNP deflator basis, the inflation rate last year was 8¾ percent, far higher than I would have predicted when I first appeared before this committee.

On financial markets, page 41, just a word. We know that with the acceleration of inflation and the trend of monetary restraint begun in 1977, we have seen short-term interest rates go up 3 to 4 percent in the last year. Long-term rates, generally have gone up about 1 percentage point reflecting the pattern that this kind of restraint produces.

With restraint applied, the monetary aggregates, as you pointed out, have begun to moderate. For 1978,  $M_1$  grew at a 7.3-percent annual rate as compared with about an 8-percent rate in 1977. A great deal of that decline in growth came in the fourth quarter; in the fourth quarter, the rate of growth of  $M_1$  was 4.4 percent. But we must take account of the impact of the new automatic transfer service. We believe, from our data, that to allow for that development about 1 percent would be added to  $M_1$ . So one would say that the fourth quarter showed about a 5.4-percent growth rate for  $M_1$  which does reflect the moderation that we have been endeavoring to accomplish.

Greater of  $M_2$  slowed in 1978 to an annual growth rate of 8.5-percent. No allowance need be made for ATS because any shift from demand into savings accounts would show up in  $M_2$ . The slowing is therefore from about 9.8-percent in 1977 to 8.5 percent in 1978.

$M_3$  growth slowed from a rate of 11.7 percent in 1977 to 9.8-percent in 1978.

I mentioned the money market certificates. The chart on page 46 shows how we have avoided disintermediation in this cycle by the authorization of the new money market certificates. As of the end of January, there was a total of about \$105 billion in money market certificates. While not all of this represents new funds, it does represent the holding of funds that otherwise in all likelihood would flow out. So deposit growth of thrift institutions has been maintained in better condition, and this has helped maintain the housing industry.

A word about overall financial demands. If you just look at the total funds raised by domestic nonfinancial sectors you will see there has actually been a leveling off in overall demand for credit in 1978, more or less at the level of 1977. You will notice there was an expansion in demand from the private sector, which is a trend

that we have been encouraging so that we can shift to more activity in the private sector, less in the Federal, and attenuate the overall demand for finance and credit.

In the credit area—page 50—we do know that one phenomenon has been the rapid growth in consumer credit such that the amount of disposable personal income required to meet repayments of household debt has gone up to a high level. Part of this may be from a demographic shift, with more younger families who are at a stage when they need more credit. But certainly it's a worrisome development and one that we need to watch carefully. So far, repayment schedules have been met, and delinquency rates have not risen, but we would be concerned if there were a slow-down in the economy, that there might be somewhat more difficulty in handling these repayments.

Corporations, in the face of inflation and higher interest rates have generally preferred to finance their needs with short-term liabilities. Hence the ratios of liquid assets short-term liabilities have dropped off somewhat, similar to prior patterns where corporations postpone longer term borrowing because of current rates of interest.

That, more or less, in a summary way meets the first mandate of the Humphrey-Hawkins Act, which is to review and analyze recent economic developments in the Nation.

I would like to turn to chapter 2. The Full Employment and Balanced Growth Act of 1978 requires next that we report to you the objectives and plans of the Board of Governors and the Federal Open Market Committee with respect to the ranges of growth or diminution of the monetary and credit aggregates for the calendar year during which the report is transmitted, taking account of past and prospective developments in employment, unemployment, production, investment, real income, productivity, international trade and payments, and prices. This is what we have endeavored to do.

The objective of the Federal Reserve is to foster financial conditions conducive to a continued, but more moderate, economic expansion during 1979 that would permit a gradual winding down of inflation and the maintenance of the stronger position of the dollar in international exchange markets.

Given the limited margin of unutilized labor and industrial resources remaining in the economy, it is critically important to avoid strong aggregate demand pressures that would aggravate our already serious inflation problem. At the same time, the current condition of general balance in the economy suggests that it should be possible to continue restraint to relieve inflationary pressures without triggering a recession.

Mr. Chairman, the specific targets that the FOMC has set are reflected in the text of chapter 2 and, perhaps, can be most easily seen if we look at the charts beginning on page 59.

For this calendar year, the growth range for  $M_1$  adopted at the recent FOMC meeting is between 1.5 and 4.5 percent. You have pointed out from time to time that you would like to see us narrow these ranges. I call to your attention that this range involves a 3-percent spread. We are conscious of your counsel in this regard, but we felt that with uncertain conditions—and particularly with the unknown effects of automatic transfer and other changes in

the way deposits are held and used—it was only prudent to have an adequate range, yet one we believe to be consistent with our overall objective of moderation.

It is our estimate that the effect of automatic transfers could reduce the growth of  $M_1$  by as much as 3 percent from what it otherwise would have been. However, that's a very uncertain figure, and so we have set ranges that would create tolerance for a greater shift to ATS or a lesser one. We realize that this is imperfect, but we believe it's a range that is consistent with our objectives and one that can be met.

As to  $M_2$ , you will recall that for some time the range of growth for  $M_2$  has been established at a rate of 6½ to 9 percent. The range that has now been adopted for 1979 is lower—5 to 8 percent. Once again, with the many uncertainties in the way that money is behaving, we have widened the range to 3 percent, but we have reduced the level so that we would expect even further moderation in the growth of  $M_2$ .

Mr. Chairman, I should point out that, while it is not an objective of the FOMC, it is my intention to keep track of the midpoints of these ranges which I think will give us a better gage of how well we're doing.

For  $M_3$ , the growth range previously established was 7.5 to 10 percent; this has been lowered to 6 to 9 percent consistent with our objectives.

As for bank credit, the range established for this year is 7.5 to 10.5 percent.

These ranges have been set in view of the past performance of the economy, which we have discussed, and, in view of the projected outlook for the economy in the current year.

One of the elements that would appear to indicate a sustaining of economic activity in a moderate way is shown in the upper left panel of the chart on p. 64. There is a significant base of orders for maintaining business fixed investment spending. Surveys indicate there will be a continued increase in business investment but at a more moderate pace, so this component of the GNP should be expected to continue to grow.

The upper right panel relates to construction contracts that are involved in business investment; they have been rather strong in relation to overall investment. The bottom panel shows nominal and real rates of increase in plant and equipment expenditures.

The chart on the top of page 66 shows, the growth of Federal outlays. In 1979, the expectation is for a 9.4-percent growth in Federal outlays; as you know, the budget report contemplates a 7.7-percent growth in 1980.

The middle panel indicates a growth in Federal receipts from about 12.3 percent in 1978, in nominal terms, to 13.4 percent in 1979, and down to 10.2 percent in 1980. This affects the Federal deficit shown in the bottom panel: A change from about \$49 billion in 1978, to \$37 billion plus in 1979, to a proposed \$29 billion deficit in 1980.

I would be pleased to go into further detail, but in order to complete my oral presentation I might just move on to the last chapter, the report to this committee on the relationship of the

Federal Reserve's objectives and plans to the short-term goals set forth in the most recent economic report of the President.

I'd like to call your attention to a few figures on the table on page 69 on the goals set forth in the President's economic report. One is the level of unemployment; for the fourth quarter of 1979, the goal is 6.2 percent; for fourth quarter 1980, also 6.2 percent. On consumer prices, the goal for fourth quarter 1978 to fourth quarter 1979 is 7.5 percent; and for 1980, it's 6.4 percent. Real GNP is to increase by 2.2 percent in 1979, much more moderate than the 4 percent in 1978, and by 3.2 percent in 1980.

These figures would indicate nominal GNP growth in 1979 and 1980 of about 9¼ percent. The ranges for the monetary aggregates that have been adopted by the Federal Reserve will be consistent with achieving that level of nominal GNP.

It would perhaps be worth noting that the recent reports on early activities this year—the slowdown in personal income, housing, and retail sales in January, which, Mr. Chairman, you noted, but which may be seasonally affected; coupled with the very disappointing performance of the Consumer Price Index in January—would indicate that it's going to be difficult to achieve the price objectives of the administration program. After all, this data is new; at the time the President's goals were established the data was not as up to date.

We believe that the rates we have established for the growth of the monetary aggregates are consistent with accomplishing the President's goals. This is because of the trend toward higher velocity of  $M_1$  in the face of monetary restraint, higher interest rates, and the tendency of individuals and businesses to go to great extents to minimize their non-interest-bearing deposits. As a result some additional velocity increase can be expected.

Recognizing that there is some risk and uncertainty in this situation, we do believe the administration's 1980 forecast can serve as an appropriate goal for Congress as it considers its budgetary plan for fiscal 1980. If inflationary pressures subsequently prove stronger than the administration has projected, then the prudent course for Government policy would be to exercise a substantial degree of restraint even if it risks less real growth in 1980 than the 3.2-percent goal. Such a policy would lay the foundation for balanced economic growth over the years ahead and help us to maintain the integrity of the dollar.

Mr. Chairman, I appreciate your attention. I hope that my statement has not been too lengthy, but it is our first experiment with this particular format.

The CHAIRMAN. Well, Mr. Chairman, I want to thank you for—if you'd feel more comfortable sitting down, please do that.

Mr. MILLER. I may do that.

The CHAIRMAN. Whenever you feel like it, go right ahead and do that.

I think that your review of recent economic developments has been outstandingly good, an excellent objective report on the developments we have had in these areas, and it was not easy because this was the first time the Board has had to do this and I think that you and the Federal Reserve Board staff deserve a lot of credit for a splendid review.

Mr. MILLER. The staff deserves the credit, Mr. Chairman.

The CHAIRMAN. Well, after all, you edit it. You could throw it out or include it or whatever. You have to take the blame for it too, so you deserve a great deal of credit.

Now let me just start off by saying that when we come to the prognosis for the future, the difficulty is that it's hard to know whether or not the Federal Reserve Board is going to be able to do the things it indicates it intends to do. I realize that many things are outside of your grasp. Certainly the level of inflation and employment is something you can influence, but you could hardly be held completely accountable for it. On the other hand, as we get down to the monetary aggregates, the feeling is that the Federal Reserve Board does have a great deal more responsibility.

In 1978, the old targets were for  $M_3$ , which is a broader measure of money than  $M_1$  or  $M_2$ , 7.5 to 10 percent. You have just said that we might take a midpoint as a way of finding where you really are aiming. On that basis, the midpoint was 8.25 roughly, and actually in 1978  $M_3$  increased 9.4. When you come to  $M_2$ , a little narrower definition of money, the midpoint was 7.4 for your targets, and you hit 8.5. That was well above the midpoint. And then for  $M_1$ , it was really a disaster. You had a broad range of 2 to 6 percent and the actual increase in  $M_1$  was 7.3. Now this, at a time when the No. 1 problem facing the country was inflation, and when monetary policy does play an important part in inflation, it seems that the Fed was just unable to do the job that it intended to do and unable by a very large margin—the difference between the midpoint of 2 to 6, which is 4 percent, and the 7.3 percent you realized is about 85 percent. It's a miss which is about as wide as I can imagine.

What's your reaction to that?

Mr. MILLER. Mr. Chairman, I would like to react to all those things, but I would just make one slight correction first. For the year 1978 as a whole, the goal for  $M_1$  was 4 to 6.5 percent; 2 to 6 percent was set only for the third quarter of 1978 to the third quarter of 1979 after the ATS went into effect.

My comment is that the degree of monetary restraint necessary to bring the aggregates down to the midpoint of their ranges proved to be more difficult and more tasking than had been expected. For much of the year 1978,  $M_1$  was above the ranges and it ended up the year slightly above the upper range of 6.5 percent.  $M_2$  and  $M_3$  were within the established range.

I can only suggest that, given the lag effects of monetary restraint, we were able to make up for some of the earlier overshoot by reducing the rates of growth of  $M_1$  in the fourth quarter when, as I pointed out,  $M_1$  was, even adjusted for ATS effects, back at the midpoint of our ranges.

The CHAIRMAN. I appreciate that, but nevertheless, the fact is that it was an inability of the Federal Reserve Board to achieve anything like the targets you set. You're right, of course, in correcting me, in pointing out that your range was 4 to 6.5 percent for most of 1978, except for the last quarter, and you missed the top part of that broad range by a considerable amount.

Mr. MILLER. That's correct.

The CHAIRMAN. In view of the fact that the overall increase was 7.3 percent. Unfortunately, I presume that this may be one of the

reasons why we have a more serious inflation problem than we might otherwise have, because it affects people's expectations. Of course, there would have been other consequences. You would have slowed the economy a little more. We would have had higher interest rates than we had, but the prime objective of reducing inflationary pressures would have been better achieved if you had been successful in achieving your goals; is that correct in your view?

Mr. MILLER. There's no question that we should endeavor to stay within the ranges we set. We did not accomplish that in 1978 as to  $M_1$ . What we must be careful about now is not to drift off from our objectives in 1979; now that we have got ourselves onto moderating growth we must make sure that we do achieve our targets.

Mr. Chairman, you are correct, we had an overriding consideration in how we achieved the monetary aggregates. For example, while we were staying within the ranges on  $M_2$  and  $M_3$ , and we were not in  $M_1$ , it was our judgment that the best way to get within the range on  $M_1$  was through a progressive application of restraint on a smooth basis rather than by creating a sudden dramatic change that would create a shock in the economy and have other destabilizing influences.

So we chose between getting within the range earlier and getting there later through a smoother process that avoided dislocations.

The CHAIRMAN. Now your new targets are decisively lower. 1.5 percent to 4.5 percent at the midpoint is around 3 percent for  $M_1$ . That would be a sharp reduction from the change of 7.3 in 1978, a very sharp reduction, and I wonder if that's consistent with your last remark that what you want to do is do this gradually. Is it realistic to expect that you could have a reduction in your  $M_1$  in the coming year to 3 percent?

Mr. MILLER. Chairman Proxmire, we have to take account of the effect in  $M_1$  of the new automatic transfer service. Our estimate is that that could effect as much as a 3-percent reduction in growth. The midpoint of our present range is 3 percent; if you had a 3-percent reduction from ATS—

The CHAIRMAN. May I just interrupt. Can you give us the basis for that 3-percent projection?

Mr. MILLER. It's based upon an analysis of what shifts occurred, first, with NOW accounts in areas where they were in effect, and the tracking of what has happened to date with ATS, which seems to be consistent. Our midpoint of 3 percent would actually be 6 percent under a system without ATS; and 6 percent is an appropriate adjustment downward from the 7.3 percent in 1978.

The CHAIRMAN. So what you're saying is you would presume you would have an increase in  $M_1$  adjusted for the changes?

Mr. MILLER. Of 6 percent midpoint.

The CHAIRMAN. Of an increase of 6 percent?

Mr. MILLER. If the 3 percent is correct.

The CHAIRMAN. Can you give us for the record the detailed analysis behind that figure of 3 percent?

Mr. MILLER. We will submit that.

[Chairman Miller subsequently submitted the following information for inclusion in the record of the hearing:]

Based on reported data, it is estimated that automatic transfer service accounts (ATS) and NOW accounts in New York State, introduced in November 1978, reduced  $M_1$  growth, on average, over the November 1978-January 1979 period by about 3 percentage points. Beginning in early November the Federal Reserve System and the Federal Deposit Insurance Corporation collected weekly ATS and NOW accounts data from a stratified random sample of about 350 commercial banks. Early in the period data were also collected from a sample of mutual savings banks but these institutions contributed less than \$50 million to total ATS and NOW accounts outstanding, and this survey was discontinued at the end of the year.

Table 1 shows weekly universe estimates of ATS and NOW accounts deposits at all commercial banks, as derived from the weekly sample, through the end of January 1979. The table also shows monthly average levels and the estimated impact of these accounts on monthly  $M_1$  growth rates. Employing information from sample bank respondents, the Board staff estimated that roughly 60 percent of total ATS and NOW accounts reflected shifts from demand deposits included in  $M_1$ .

In early February, the Board staff estimated that ATS and NOW accounts would reduce  $M_1$  growth between QIV 1978 and QIV 1979 by about 3 percentage points. This estimate reflected not only the experience of the preceding 3 months, but also an analysis of the experience in the New England states when NOW accounts were authorized. The staff estimated that, in the first year that NOW accounts were offered in Connecticut, Maine, Rhode Island, and Vermont, about 20 percent of eligible household demand deposits shifted to NOW accounts. In that NOW account episode, both commercial banks and thrift institutions were permitted to offer the new service; because only commercial banks are able to offer ATS, it has been assumed that shifts out of demand accounts into ATS and NOW accounts during the year ending next November will only amount to between 10 and 15 percent of outstanding eligible deposits. Employing data from the Federal Reserve's survey of demand deposit ownership to identify the amount of deposits eligible for shifting to ATS accounts—roughly one-fourth of all  $M_1$  balances—this 10 to 15 percent shift translates into about a 3 percent reduction in  $M_1$  over the year.<sup>1</sup>

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<sup>1</sup> It has been assumed that payment order accounts, if authorized by the Federal Home Loan Bank Board, will have only a minor impact on  $M_1$ .

Table 1

Estimated Impact of ATS and NOW Accounts in New York State  
(Millions of dollars, not seasonally adjusted)

Date	ATS accounts	NOW accounts	Total	Monthly average <sup>1/</sup>	Estimated impact on M-1 <sup>2/</sup>	Impact on M-1 monthly per cent annual rate of growth
<u>1978</u>						
November 8	770	-	770			
15	1360	5	1365			
22	1720	10	1730	1480	890	-2.8
29	2005	50	2055			
December 6	2475	125	2600			
13	2835	190	3025			
20	3125	270	3395	3140	1885	-3.1
27	3245	295	3540			
<u>1979</u>						
January 3	3760	470	4230			
10	4025	630	4655			
17	4310	695	4940	4795	2875	-3.1
24	4215	790	5005			
31	4305	830	5135			

<sup>1/</sup> Average of weeks in the month.

<sup>2/</sup> 60 per cent of total ATS and NOW accounts.

The CHAIRMAN. We would like to have that.

As you indicate, and you indicate properly, one difficulty here is that when you get 1.5 to 4.5 percent or whatever, it makes it appear that we are likely to be more precise in these areas than we are likely to be and that we are really guessing. This is a very, very broad measure and as you indicate it's undergoing a very big change and we don't know how to interpret it. So I take it that there's somewhat more reliance than maybe in the past on interest rates and the level of interest rates and what interest rates tell us about monetary policy and how successful you have been there.

When you appeared before the Joint Economic Committee, I asked you, as I have often in the past, about the level of interest rates and you argued that we have to recognize that interest rates accommodate to inflation and that there's an inflation premium in the rates of interest.

A recent comment by Mr. Robert Dowling of Business Week I'd like to call to your attention because I think it's a remarkably acute analysis of the problem here. I'd like your reaction because he puts it in very simple, understandable terms. He says,

The Miller and Carter administration officials, along with Charles Schultze, Chairman of the Council of Economic Advisers, have become so deeply committed to preaching the virtues of measuring real rather than nominal interest rates in recent weeks that they could qualify for the 1979 "Cheap Money Oscar." To hear Miller and Carter's gurus is to believe banks are having fire sales on money and the Citibank chairman, Walter Riston, has become Robin Hood. Miller proudly tells Congress that real interest rates on mortgages now are the lowest they have been in 5 years and that current interest rates leveling are not extraordinary after allowance is made for prevailing levels of inflationary expectations. Borrowers are willing to pay those rates because they expect inflation to continue escalating. Indeed, with the administration likely to be announcing soon that inflation zipped up to a 12-percent annual rate in January, borrowers would be crazy, by Miller's standards, not to be taking down all the credit they could get their hands on, for by that logic the Fed has given the country absolutely free money. No one, of course, believes bankers are giving away money, but the argument Miller is using is to buy time for the Fed while it waits for its high interest rates to have an impact \* \* \* if Miller is even half right in diverting attention to inflation adjusted interest rates and pocket-book rates, the best that could be said for Fed policy is that its huge 3- to 4-percent increase in market rates so far has been real spending that has barely kept money costs even with inflation \* \* \* investors expect worse, not better conditions of inflation in coming months and this has to be measured by what investors expectations will be in months ahead.

What's your response to that criticism?

Mr. MILLER. I'm not sure I got the drift, except that it sounded to be rather of a journalistic style in its overuse of adjectives. It seemed to be fairly correct, if what it said is that interest rates are made up of two components; and that while we have been trying to exercise restraint, a lot of people have been willing to take on more debt because they expect inflation to continue.

The CHAIRMAN. You see, what this also indicates is that if that's the situation, you don't really have a restraining monetary policy at all. Interest rates at this level are encouraging people to go out and borrow and with inflation as high as it is the mortgage rates are the lowest they have been in 5 years—if that's the case, there's no bite here. There's no restraint on the part of the Federal Reserve Board. Is that right?

Mr. MILLER. Mortgage rates are now affected more by usury limits, I would think, than by monetary restraints. You could do as we did in 1973-74, and that is deny credit to the housing industry by not allowing rates adequate to attract deposits, in which case there would be no money available for housing. Instead, we have allowed market rates to be paid on 6-month certificates. But the fact is that households begin to get to a point where their disposable income can't service the debt; and in some States you have a usury ceiling. So there is some restraint in housing already showing up, as we expected, in the attitudes of thrift institutions about making mortgage commitments, the attitudes of individuals about taking on this debt. The fact is that housing starts are beginning to slow down, so I think we see the effect of restraint.

The argument we get, of course, is that we are somehow crunching the economy by allowing rates to come up to this level. Our claim is that we are not crunching the economy. On the other hand, we agree that we are retarding aggregate demand, which is showing up, in our opinion, in the current figures; and that reduction in aggregate demand will contribute to allowing the economy to begin to wind down from inflation.

The CHAIRMAN. Mr. Chairman, you can't have it both ways. You can't have a situation in which you argue that interest rates can be

fully explained and then some by inflation, and that they are really low, and then say you're also restraining the economy and restraining inflation. It's one way or the other. Either these interest rates now are high enough so it's some restraint or they are not really having any effect in retarding the economy. Which is it?

Mr. MILLER. It's both, if I may say so. I think that the real interest rate is not as high as we have seen it in the past. On the other hand, you can look at the nominal situation; households do pay their bills out of nominal income. As I pointed out, households are nearing 23 percent of disposable income in debt repayment; that is causing restraint. A shift of liquidity at banks, the fact that in order to maintain loanable funds banks have reduced their investment portfolios—all of these things have begun to have an impact on demand. At the same time, we have not had to crunch the economy up to real interest rates that might do far more damage and might push us into a recession.

Now the balance we are seeking is moderation, a slow growth philosophy for a period of time to get inflation down; we are not seeking a recession.

The CHAIRMAN. You see my problem with your response, Mr. Chairman, is that, again, you just seem to be having it both ways. As this article says, the biggest problem in the Miller real rate focus, of course, is that he's asking everybody to believe that monetary policy is restrictive at the same time he's telling Congress it really is not. It seems to me we have got to make up our minds. Is this a restrictive policy or isn't it? You're saying it is and it isn't. It's both things at once. I don't see how it can be.

Mr. MILLER. It's restrictive enough to bring down the growth rate of the economy, but not restrictive enough to—

The CHAIRMAN. You're guessing. You don't know that.

Mr. MILLER. I would say we must rely upon our best judgment, and it seems to coincide with the outlook in the President's economic report for a growth rate in 1979 below the trend. Now if there are those who prefer a more restrictive policy and produce a recession, I would argue with them that they are wrong. A recession is not going to cure inflation. The restraints that are put on demand during periods like this, Mr. Chairman, come not only from nominal interest rates, but from the fact that much of the buying and incurring of debt, at least for households, relates to durables or to housing. Inflation drives up the price of these particular goods for a double impact: higher cost housing, plus a higher interest rate to carry it and therefore a higher percentage of disposable income to repay it. And, therefore, there is restraint. There's no question in my mind or that of any forecaster I know that housing is going to come down 15 percent to something like 1.6 to 1.7 million starts in 1979.

The CHAIRMAN. That's the expectation. We don't know. As to the start figures in January, and what they are likely to be in February in view of what's happening here in the East, it will be probably 3 or 4 months before we can tell.

Mr. MILLER. Mr. Chairman, we are always in a dilemma. We have to make our best estimate, and our best estimate is for a 15-percent decline in housing. If we're wrong, and housing continues

strong, then we should have been more restrictive. If we're wrong and housing goes deeper, we have been too restrictive. So we have to pay our money and take our chances.

The CHAIRMAN. If we compare current interest rates to a weighted average of inflation over the last 3 years, we get a little different picture because I think we are comparing it with an immediate inflation which is one thing. It depends on what inflation level we take. If we do that, then inflation adjusted bond rates now are closer to 3 percent against 2.5 percent in the 1974 credit crunch and real mortgage interest rates are 2.68 percent against a negative rate in 1974. In other words, in 1974, you had a situation where inflation was so high that your nominal—your actual rate of interest, allowing fully for inflation, was less than zero. So I think it's very hard to take an adjustment for inflation on interest rates into full consideration because it's a very slippery kind of a concept and it's a conclusion that doesn't really lend itself very well because, of course, I suppose what you are really trying to get at is the expectation of what interest rates are likely to be during the life of the loan. Obviously, if people have confidence that the Government is going to get a grip on inflation and if inflation is going to come down, then they won't be willing to pay these high rates of interest.

On the other hand, if they assume inflation is going to remain at a high level, then it is like free money.

Mr. MILLER. I think you're right, Mr. Chairman, that you can't take just one point in time—1 month, one quarter—and make absolute comparisons about interest rates. One of the reasons, in my view, that long-term interest rates have only increased about a percentage point over the past year is that looking at it from a longer term point of view—I'm talking about long-term rates other than mortgages—there is not an expectation of inflation rates like that in 1978 for the term of the outstanding debt. I think this is true. But in terms of current purchases, where there will be quick repayment, it's true that many consumers have not been inhibited by the rates of interest, but rather have been influenced by both nominal interest rates plus their expectations that prices will be higher; we have had anticipatory buying.

The CHAIRMAN. Mr. Chairman, the 1980 budget presented by President Carter has interest rate projections for 1979 and 1980. According to the budget figures, the 1980 Treasury bill rate is expected to average 8.8 percent in 1979 and 7.6 percent in 1980. Two questions.

First, do you view these forecasts as accurate; and second, how do they square with your inflation outlook?

Mr. MILLER. As I understand, those figures are not intended as forecasts, but as calculations based upon the interrelation between inflation and interest rates in Government securities. As I understand it, the administration feels that if inflation is expected to come down and, therefore, Government revenues to be less than they would be at a higher inflation rate, then it's reasonable to make a parallel adjustment in interest rates on Government security.

The CHAIRMAN. Now you're dead right in that these are not forecasts in the sense they predicted them so people would have

something to look at. They did it because they have to do it as part of the budget projections. They have to determine what the service costs and the debt will be and so forth. Nevertheless, they are assumptions as to what's going to happen. You can call them forecasts or not. I just wonder whether or not the Federal Reserve Board should be making these estimates rather than the Treasury, rather than the administration. This is your field. You have the competence.

Mr. MILLER. We do not make such projections, but you asked me how I would feel about it, and I can give you my own personal reaction. My own personal reaction is that, based on what we have seen happen so far this year and therefore what is more likely to happen than was known at the time the economic report was put together, the inflation outlook is slightly optimistic; and if it's optimistic, then the assumed interest rate would be slightly optimistic.

The CHAIRMAN. That means the deficit would be somewhat deeper?

Mr. MILLER. If there's higher inflation, there could be higher revenues because you get corresponding—

The CHAIRMAN. As far as the interest costs that would add to the deficit, but you say the revenue would be higher?

Mr. MILLER. The revenue might be higher.

The CHAIRMAN. Now there's a study for the National Bureau for Economic Research by two Princeton economists, Blinder and Newton, that shows that the 1971-74 Nixon control program had a temporary beneficial effect on inflation—very temporary—1.7 percent for a couple years, but that was lost quickly once the program was over and that there was a permanent increase in inflation of 1 percent above what it would have been.

Now what their conclusion of this is, is that the administration ought to promptly get rid of its guideline policy. We should keep in place the fiscal and monetary policy, of course. They argue that the guideline policy is likely to be harmful and for these two reasons: first, they argue that controls discourage business from adding to plant and equipment for fear of not recouping its investment and results in inadequate productive capacity reducing the potential output of the economy and reducing productivity. Second, inflation does not hit all goods equally. Some prices move up sharply while others move up moderately or not at all and thus create an imbalance in relative prices of different goods. Once controls are lifted, prices usually skyrocket and tend to overshoot in an attempt to restore the equilibrium in relative prices and their conclusion therefore is that part of the inflation program is counterproductive in the long run and we should end it.

Now I notice in one of the last pages of your presentation here you attribute some utility to that part of the anti-inflation program. You have a paragraph on it in which you say it's helpful and in your judgment it makes monetary and fiscal policy somewhat easier.

Mr. MILLER. Chairman Proxmire, I would not agree with that analysis for a couple reasons. If mandatory controls were in force, you might get different behavioral patterns on the past business

than you would from voluntary restraints; that's the first point. But even with mandatory controls, in my own business experience, we accelerated our capital spending in order to cut our costs to maintain our profits within the——

The CHAIRMAN. Do you think your experience was typical?

Mr. MILLER. Perhaps not, but I'm saying there are different reactions.

Second, I would say that it depends upon the parallel fiscal and monetary policy. In hindsight, one might say that during the period of controls, fiscal and monetary policies were too stimulative so that the economy, perhaps, was supporting too heavy a demand; that may have been the problem, rather than the philosophy of controls.

The very purpose of this oversight hearing is to judge our policies and to make sure that they do not become overaccommodative in the case that we have massive compliance with the voluntary standards. We don't have massive compliance holding down our figures yet. I hope we will have. When we do, I hope we will have the discipline not to take that as an excuse for a monetary or fiscal policy that would be unduly stimulative at a time when we need, above all, to moderate demand, to maintain a more or less low growth philosophy, until we work out these inflationary pressures.

So I wouldn't discard the incomes policy and the fact that it can contribute and buy time and help us in this very difficult task of trying to get our economy to grow at a far more moderate rate than we have been used to in the past or liked in the past. Over time, this will achieve the greatest good for the most number of people.

The CHAIRMAN. Now there's one other development that gives me great pause as to the guideline policy. That's the experience that Canada is having. As you know, they had a wage-price control program and they rolled back the wage limit 6 percent annually. They kept it in effect for a while. Unfortunately, inflation increased by 8.5 percent and now the unions are steaming mad. They are insisting on much higher settlements than before and it appears that while there was a temporary holdback, that 8.5-percent inflation might have been worse if they hadn't been able to hold down wages, that now they are really in great difficulty, and I'm concerned that that same kind of situation could confront us if we have a wage holddown, continued inflation, and especially if we don't get the wage—I should say the tax rebate proposal that the administration is making. Absent that—and, of course, that's only a 50-50 shot, unfortunately, right now, maybe less than 50-50—if we don't get that rebate, unions are going to be very hesitant and you wouldn't expect them to hold the line on 7 percent if they can anticipate an 8.5-percent or 9-, or 10-percent inflation, and no basis for expecting that they can be made whole.

So doesn't that Canadian experience suggest that in the event we do not get the rebate through the Congress that in that event we might drop the guideline policy and rely on monetary and fiscal policy?

Mr. MILLER. The Canadian program, as I recall—I had a little experience with it personally—was a mandatory program.

The CHAIRMAN. That's right.

Mr. MILLER. I would think, again, that the voluntary program has a great deal of merit in that if there is—

The CHAIRMAN. Of course, the labor people say there's no difference as far as they're concerned because you've got 5 million enforcers. Every employer is going to enforce that guideline.

Mr. MILLER. I would say this, Mr. Chairman: That implementation of an idea is as important as the idea. If we were to try to put on a wage-price standard that was unduly low, and we did enforce it by whatever means—voluntary or otherwise—and in doing so we aggravated a situation of undercompensation for a period of time, we, too, would have pressures as you see in Canada and England. I don't think the 7-percent standard, coupled with real wage insurance, represents the kind of buildup or differential of wage demands that would create that pressure. I think this is a moderate program. If we had a wage standard this year of 4 percent, what you're talking about could well happen. If we got people to accept it for 1 year, they would want to make the difference up later. But with 7 percent, particularly with real wage insurance—which as you know I don't think is critical, but I think it is desirable to try to see if it will contribute—

The CHAIRMAN. You don't think it's critical?

Mr. MILLER. Pardon me?

The CHAIRMAN. You don't think it's critical?

Mr. MILLER. I do think it's worth—

The CHAIRMAN. Worth trying?

Mr. MILLER. Worth trying for 1 year.

The CHAIRMAN. But you don't think it's critical to the program?

Mr. MILLER. I think that if we didn't have it we could still make progress. I think with it there's a chance, as you point out, that with real wage insurance more bargaining units may be willing to accept a standard.

The CHAIRMAN. You already have now the UAW Union that supported the rebate saying that they can't go along with it due to the price increases in January. They may very well have to come in and ask for a 9- or 10-percent wage increase. So if that wage rebate doesn't make it—I have been talking to union people around my State in the last couple weeks, as other Members of Congress have during the recess, and it seems to me we need everything we can get if we can get their cooperation, including that rebate. If we can't get it, I think it's going to be extremely hard for this program to have more than a very temporary beneficial effect.

Mr. MILLER. You may well be right.

The CHAIRMAN. Now the Humphrey-Hawkins Act requires the Federal Reserve discuss the relationship of its policies from short-term goals of employment, unemployment, production, real goals, and productivity.

How will the policies you announced this morning lead to the achievement of 4-percent unemployment by 1983 which, of course, is in the minds of most Americans, most Members of Congress, the principal goal of Humphrey-Hawkins? You do indicate in your presentation that you expect unemployment to be about the same in the coming years as it is now, around 6 percent, as I understand it.

Mr. MILLER. Yes; that's correct. By the end of the year, as distinguished from the average unemployment rate over the year, I would expect unemployment to be slightly higher. I could see it—

The CHAIRMAN. Higher?

Mr. MILLER. Higher than it is now; certainly a little over 6 percent. For the whole year, I have said that the unemployment rate average for 1979 might be not significantly different from 1978; 1978 started a little higher and came down. We may see it start lower and go up a little in 1979. It may average out the same.

I think it's going to be extremely difficult to achieve a 4-percent unemployment rate by 1983, unless we make tremendous progress in curing inflation. Without that, I think the prospect for absorbing additions to the labor force is going to be extremely difficult.

The CHAIRMAN. Aren't these two things contradictory? Can you achieve 4 percent unemployment in 1983 and make progress against inflation at the same time?

Mr. MILLER. In that short timetable, I think it's unlikely.

The CHAIRMAN. The answer is something you stressed often, over and over again, perhaps more than anybody in Government or private business, in arguing for efforts to do something about structural unemployment and provide training for unskilled people and provide opportunities for those who have little opportunity now and motivation to those who—

Mr. MILLER. We mentioned that in this report; it seems the way to go is not to depend upon macropolicies but to make a far more targeted effort in those areas you just noted than we have done so far.

I hope the private sector initiative that is awaiting funding will be funded by Congress. There is a supplemental appropriation for \$400 million, and that is something, despite our need for austerity, that should be stressed. It is the best way to break the unemployment cycle for those coming to the labor force who don't have appropriate skills, who haven't had the opportunity to gain work experience, and who are therefore sort of in limbo for far too long a period.

The CHAIRMAN. The fact private forecasters think we will have more inflation in 1979 than the administration is really disconcerting.

Humphrey-Hawkins, as we just said, established a 3-percent inflation goal and a 4-percent unemployment goal for 1983.

If we are going to reach those goals, we have to get inflation under control as quickly as possible.

We are going to have to see evidence that fiscal and monetary policy are all working to reduce inflation. Fiscal policy has been fixed for fiscal year 1979. The budget for fiscal year 1980 has a \$29 billion deficit, with spending at \$532 billion.

It seems that the only way spending is likely to go is up. That may happen to the supplemental appropriations. Receipts may also fall short of the targeted level if the economy slows.

In brief, it looks to me that fiscal policy will not be restrictive enough—will not be restrictive enough this year, and for fiscal 1980, we have a \$29 billion deficit recommended.

That's far too large at this stage in the business cycle. Your chart shows big deficits during this whole period of recovery. The burden of restraint will probably fall upon monetary policy.

How restrictive will your policies be? For example, in the area of homebuilding and construction, will there be housing starts in the area of 1.6 or 1.7 or less?

Mr. MILLER. I think 1.6 or 1.7 million would be correct.

The CHAIRMAN. What about business investment? Do you see any improvement there?

Mr. MILLER. Yes; a slight improvement in real terms. It appears that it will be quite moderate, unless businesses are encouraged, by better prospects for curbing inflation, to step up their investment.

The CHAIRMAN. The President's budget in fiscal year 1980 projects a 7.7-percent increase in outlays over 1979 and a \$29 billion deficit. Some have questioned whether this budget is tight enough to convince the private sector that the Government is sufficiently determined to arrest inflation.

What would be the offset, or I should say, what would be the effect on inflation and employment if Congress were to cut spending by, say, an additional \$10 billion?

Mr. MILLER. Mr. Chairman, I have been looking very carefully at the Congressional Budget Office report on various alternate strategies. Certainly, one strategy that is possible is to cut more deeply than is proposed, which would indicate another dilemma; that is, that inflation under that scenario would be much lower in the next few years than otherwise, but the Congressional Budget Office at least feels that unemployment would also be much higher.

So, the dilemma we face is the rate at which Federal spending can be cut as we accomplish our twin goals of balancing our actions so as not to increase the unemployment rate as we reduce the inflation rate.

I have felt that the \$29 billion deficit is not ideal, but certainly is in the right range.

My present personal estimate—and it is probably too early to have a good estimate on this—but I suspect the deficit in fiscal year 1979 will be slightly lower than the \$38 billion that was in the budget resolution. If it does come in at, let's say, \$35 billion, which is a likely figure, it would seem to me then that we could get that \$29 billion deficit proposed for 1980 down even further. I don't know that we can reduce it by \$10 billion, but I think even half of \$10 billion would be helpful in this balance between how fast we can come down so as not to increase unemployment, yet keep on our path of fiscal discipline so as to reduce inflation.

The CHAIRMAN. You are in a very difficult position. Of course, I don't mean to make it tougher than it is, but Dr. Bosworth, when he appeared before this committee 10 days ago or so, said that, frankly, what you have to face is if you are going to get on top of inflation, you have to recognize you have to have higher levels of unemployment. People have to be thrown out of work.

That is just it. That's the sad, unfortunate fact that we have to face. Nobody wants to admit it, because whether you are a Member of Congress or a member of the administration or Federal Reserve Board member, you just don't like to spell out the pains that have to be achieved.

The most vexing economic problem facing our economy today is inflation. The primary stabilization tools that must be counted on to reduce and eventually eliminate our inflation are fiscal and monetary policy. Without moderation in both Federal spending and the growth of money credit, inflation will not be reduced. Since 1974 the cumulative deficits in the Federal budget have totaled over \$218 billion. If you add to that the very large amount of Federal off-budget financing and loan guarantees, the demand that the Federal Government sector has placed on the money credit markets is simply incredible. There is little wonder that the monetary aggregates have grown so rapidly over the past 3 years. If the Federal Reserve had clamped down to fully offset the Government's demand for credit, other sectors of the economy would not have gotten as much credit as they desire and interest rates would be much higher than they are now. A major question that we face is just how restrictive monetary policy should be, given current fiscal policy, to slow the economy enough to have a significant impact on inflation, but not so much as to put us into a recession.

To date, there have been only a few signs that the restrictive monetary policies pursued by the Federal Reserve last year were enough to slow the economy down. Real GNP increased at a 6.4 percent annual rate during the fourth quarter of 1978, which is much too fast if inflation is going to be reduced. During that quarter growth in the monetary aggregates, as they are currently measured, moderated substantially. But it is not all clear how much of that deceleration in money growth was due to Federal Reserve policy and how much resulted from shifts of funds in response to the newly created automatic transfer accounts and the new 6-month money market certificates. Our main indicators of monetary policy—growth in the monetary aggregates—are much more difficult to understand at this point than I think they have been at any time in my memory. I would hope that the Federal Reserve has begun to develop better indicators and that they will begin to use them as soon as they possibly can.

The latest economic data are just beginning to show signs of somewhat more sluggish economic performance. Industrial output rose by only one-tenth of 1 percent in January, which is the smallest amount in over a year. Retail spending increased by only four-tenths of 1 percent in January, the smallest gain since last summer. Personal income rose by only four-tenths of 1 percent last month, and housing starts, which is one of our key indicators, dropped to 1.6 million in January, a decline of 19.7 percent, and also the lowest level for housing starts in 2 years. All these variables indicate that the economy may have slowed. However, in view of the severe weather, which we are just getting in the East now, and which the Midwest suffered in January in extremis, these may not be indicative of the course of the economy. Not only are they monthly observations, but also, as I say, we did have extremely bad weather in the Midwest. So we should not rush to any conclusions that economic conditions have changed dramatically. I hope that Chairman Miller will help us understand the meaning of these events and what they portend for the future.

Chairman Miller, last week you made a comment in a speech before the Conference Board about interest rates. You said that

But inflation is so menacing and in the long run likely to be so destructive of employment opportunities, that it would seem we are just going to have to grit our teeth and pay a higher price in unemployment.

Would you agree with that?

Mr. MILLER. No, sir. I really don't think so. I think that it's possible to continue on a course that moderates the social damage of unemployment. The other side is that if we achieve reductions in inflation that are more dramatic than otherwise possible at the expense of high unemployment, we may have other outcomes to our society that would be just as damaging as inflation. I think we have to keep a better perspective; a better balance.

I have claimed only that we should be reducing inflation initially, about three-quarters of 1 percent a year. As we get down that slope on reducing it, we can accelerate.

I have pointed out that it's going to take 5 to 7 years to wash inflation out. If you try to wash it out faster, you accelerate unemployment, and other consequences will flow that will be just as damaging to the country as inflation.

If we get inflation going in the right direction, I think our own confidence will build, and our progress will be quite adequate toward the overall goals that we want. We may reach them later than 1983, but we can reach them if we are persistent and stick with it; we can do it.

The CHAIRMAN. One of the things that has kept the housing industry going is the 6-month money market certificate authorized last June. Thus far, through December about \$75 billion of these have been issued.

What percentage of that money has actually gone into mortgages? The reason I ask is, we hear persistent rumors a significant share is not going into housing but has been invested by savings banks in bank investments.

Do you have any information on that?

Mr. MILLER. Mr. Chairman, you asked me that question, as I recall, in November. At that time I said our evidence was that most of it was going into mortgages or being held for mortgage commitments.

Since November, I would say an increasing amount of it is being invested and is not being targeted into mortgages, but merely held in liquid investments, as you indicate.

I don't know if I can give you a precise number now. Perhaps I can send up a number.

The CHAIRMAN. Fine.

[Chairman Miller subsequently submitted the following information for the record:]

It is impossible to determine precisely how money market certificates (MMC) proceeds have been invested by thrift institutions; balance sheet data do not allow the specific source of asset flows to be traced. However, such data do suggest that savings and loans and mutual savings banks initially increased their holdings of liquid assets following the introduction of the MMC, in part to repair the damage done earlier in the year to their liquidity positions, but also as a temporary measure reflecting the normal lagged response between changes in deposit flows and mortgage lending. In November and December, both S. & L.'s and MSB's actually drew down their cash and investment security holdings. Moreover, over the same period,

mortgage lending accounted for about 91 percent of the change in assets at S. & L.'s and 97 percent of the change at MSB's. As of year-end 1978, 60.2 percent of MSB assets was invested in mortgages, a slightly larger proportion than recorded 1 year earlier. At S. & L.'s, mortgage holdings represented 82.7 percent of assets as of the end of December, about in line with the proportion in the previous year. In consequence, it appears that thrift institutions have not significantly altered their typical investment practices because of the MMC; S. & L.'s and MSB's apparently continue to invest the bulk of deposit flows—from all sources—in mortgages.

Mr. MILLER. It has gone that way. The reason is——

The CHAIRMAN. I would like to know.

Mr. MILLER [continuing]. That more and more these institutions are fearful of the rollover rates they would be paying and are not showing themselves as willing to put these funds into mortgage commitments, as they were earlier.

The CHAIRMAN. We want to see the pattern.

Mr. MILLER. We do want to see the pattern. As you know, the percent of deposits, particularly at S. & L.'s, held in these certificates has gone up quite a bit; not as much at banks. That's been noted in this report. So that percentage of deposits not going to mortgages becomes more and more of a concern to us, too.

It is a pattern we want to watch carefully.

The CHAIRMAN. When you appeared before the Joint Economic Committee, I asked you about the ceiling that we have on regulation Q and the gross unfairness that represents now with the high interest rates. You agreed, as I understand it, with the proposal I introduced to gradually increase regulation Q over a period of time at a rate of, I think, one-quarter of 1 percent every 6 months.

So that the small saver wouldn't be discriminated against as grossly as he is at the present time.

As I recall, you supported that. Do you support that position?

Mr. MILLER. Yes, I do, Mr. Chairman.

The CHAIRMAN. Your support is very important. I think it will be extremely hard to get that done. The resistance in the institutions is great. They are maintaining a beautiful profit margin. At the same time I think the public interest is certainly in favor of modifying that.

I think your support would be very helpful.

Mr. MILLER. There's no question that equity would require adjustment. I said that a sudden removal of that ceiling would be disruptive. The added costs of the deposit would be destabilizing. If you do something, like what you suggest, phase an increase in, so that on another cycle you won't repeat the mistakes of this cycle, that would be healthy.

My feeling is that if there had been no ceiling at all, the adjustment would have been much easier over this cycle. There would have been competition for small savings earlier by the offering of higher rates. It probably would have meant that mortgage rates might have gone up a little earlier, and that the general process of spreading demand out over a more appropriate period might have worked even better.

I think it's a proper direction to go.

The CHAIRMAN. How about the CD's from \$10,000 to \$1,000?

Mr. MILLER. Again, philosophically, that's a correct way to go. In terms of present disruptions of markets, I think it would really

squeeze the profits of mutual savings banks and S. & L.'s. It would be a difficult thing for them to absorb right now. For banks, it's not so much of a problem.

The CHAIRMAN. Do you favor it on balance or oppose it?

Mr. MILLER. I favor the concept. I think the timing is not too propitious.

The CHAIRMAN. What timing do you suggest?

Mr. MILLER. I would hope that that might be something that could come later this year or perhaps a year from now. It should be considered only when we are over this cycle of interest rates, when we are seeing less pressure on the earnings of thrift institutions.

Banks could probably absorb it better; mutual savings banks, particularly, I think, would be heavily hit, as would some S. & L.'s whose profitability is not as great—

The CHAIRMAN. How about gradually reducing it from—instead of making it overnight from \$10,000 to \$1,000, reducing it over a period of months?

Mr. MILLER. That's a possibility.

The CHAIRMAN. Now in your speech to the Conference Board last week you said you expected interest rates to remain at high levels for an extended period of time.

How does that statement reflect your perception about the future cost of inflation? If inflation were to be brought under control, going down, there would be no need for high interest rates, would there?

Mr. MILLER. Mr. Chairman, I am not sure that I remember what I said at the Board in that context.

I thought I indicated that there should be no immediate expectation of any letup in monetary restraint; or it was premature to judge some of the lower interest rates recently as a signal for generally lower rates.

I don't recall that I indicated an "extended period of time." The Federal Reserve posture, now, is that of trying to maintain a balance. Many people are arguing that it's time for less restraint; others continue to indicate that we need to show more restraint.

We have felt, just as we felt all during 1978, that the bias is in favor of maintaining adequate restraint, and that there should be no expectation of any early relenting in that regard.

I hope I didn't speak out of turn or improperly in indicating an extended period of time.

This could all change in months, if we find economic indicators confirming January's figures, although I tend to believe the economy is somewhat stronger than the January figures indicate.

The CHAIRMAN. At any rate, then you would reaffirm your notion that interest rates pretty much rise with inflation? That in the event we get a reduction in the rate of inflation, then we will get a corresponding reduction in the level of interest rates?

Mr. MILLER. I would think that, with a constant degree of restraint, interest rates would go up or down with inflation. The degree of restraint that might—

The CHAIRMAN. Is that the degree of inflation or the degree of inflation expectation?

Mr. MILLER. It's an interaction of both, I think. Rates are influenced not only by the current day's inflation, but by the expectation of what's going to happen in the next quarter. We see that when we get spurts, like in the second quarter of last year. I don't think interest rates behaved based just on the numbers for the second quarter. They were looking—

The CHAIRMAN. It's very interesting. I think few people have really tried to key that in with the behavior of the stock market. I suppose one of the reasons the stock market which presumably should rise with inflationary expectations, inasmuch as it's presumed to be a hedge, falls and one of the reasons, I suppose, is because interest rates rise. Of course, that's bad news, because of alternative investment opportunities. Instead of putting it in the stock market, where you get a lower yield, you can put it into fixed investment with interest rates rising.

You do much better. If inflation goes up, interest rates go up; therefore, the stock market will go down.

Mr. MILLER. It's interesting. Last week I somewhat jokingly pointed out that some of my acquaintances in heavy capital industries told me they thought interest rates were too high while those in corporations with excess cash told me they thought interest rates were too low.

I guess it depends on where you are, whether you are a borrower or a lender; Polonius said you should be neither.

The CHAIRMAN. Polonius was living in a much simpler time. He wasn't living at all. It was a much simpler time in Shakespeare's imagination.

Mr. MILLER. The Muslim religion has a simpler answer. You don't have interest rates; you have fees. Then you can talk about whether fees are related to inflation.

The CHAIRMAN. Well, that's one solution. [Laughter.]

Mr. MILLER. At least we can change the words.

The CHAIRMAN. Let me ask. Interest rates rose dramatically from March to December last year. Was that the result of monetary policy action taken by the Federal Reserve or because of inflation accelerating?

Mr. MILLER. I think both. The monetary action of the Federal Reserve was to restrain credit, and this was having its impact, but I think there was also heavy demand for some types of credit because of anticipatory buying from those trying to beat inflation. There was an interaction of the two.

The CHAIRMAN. Many private sector economic forecasters expect a recession to occur this year. The administration doesn't think so. I believe you have said you don't think we will have a recession. Is that correct?

Mr. MILLER. That's correct. I have felt, and continue to feel to this day, that there are no economic indicators that signal a recession in 1979. I have pointed out that, in case there is not a return to significant production in Iran, there could be an increase in the price of oil and that could increase the risk of a recession. But even that situation doesn't shape up to predict a recession at the moment.

My analysis is very simple: while consumer debt is high, the number of employees coming into the labor force and the general growth of compensation will keep consumer spending, even with higher savings, as a positive force. Business fixed investment is going to go up slightly in real terms; that is a positive force. Government spending will not, in the aggregate, be a negative force. The only negative factor, probably, is that housing will be down somewhat. I also point out that inventories are in very good balance.

The CHAIRMAN. How about consumer psychology? The Michigan survey, which was supposed to be the best, indicates that people are extremely pessimistic. As you point out in your charts, there was a sharp drop in savings which could easily be reversed. People could save more and spend less. Wouldn't that have a depressing effect?

Mr. MILLER. Yes. Things would shift if consumers did change their actual spending patterns, but I say, so far we don't see that. We expect moderation, but we don't see the sharp dropoff that would be necessary to trigger a recession. It could happen, but it certainly is not evident at the moment and has not been evident even with the various dislocations and shocks we have seen in recent months.

The CHAIRMAN. Now, let's assume just for a minute we do have a recession. Certainly there's—in spite of the optimism on your part and the administration's part, there is a strong chance there will be this year. The normal tendency would be for Congress to fight it through a combination of more spending and tax reduction. If that could be avoided, it might be far better to have a fiscal policy that remained firm, but to have some relief come through a more accommodating monetary policy. Do you agree with that view?

Mr. MILLER. I do agree with that. If there is a recession—even though we don't now expect one—the Federal deficit will widen in any case. It is a self-adjusting process: revenues will drop as less people are employed and incomes go down; and there is automatic spending and transfer payments that will go up with higher unemployment. So there's an automatic increase in the Federal fiscal stimulus. I think Congress would be wise not to contribute more to that.

You might say, Mr. Chairman, there's also an automatic adjustment as to monetary policy. If we have a recession, the demand for credit will drop. As a result, interest rates will tend to drop in a cyclical fashion, so there will be some easing. I think we ought to accommodate more through monetary policy and not have the tendency to become too stimulative in fiscal policy. I am just supporting your analysis, and filling in a few of the gaps.

The CHAIRMAN. Now, you as the Chairman of the Federal Reserve Board, and this committee as the Banking Committee, both have a very serious responsibility with respect to the Nation's banks.

The Council on Wage and Price Stability has been struggling for weeks to come up with a profit standard for commercial banks and other financial intermediaries. They seem to be left out of the guidelines almost entirely except for the wage part.

According to The New York Times this past Sunday, administration officials put it this way. How does the Government control the price of the banks making commodity money without affecting interest charged by banks and incurring market dislocations? Profits at banks were tremendous during the fourth quarter of last year, very sharp increases. I noticed virtually all the big bank holding companies had increases from 25, 35, 45 percent. A spread between the prime rate and the rate paid on commercial paper is wide, especially if you look back before 1974.

Why shouldn't banks be asked to narrow their spread to help fight inflation? If they did, wouldn't that negate monetary restraint?

The problem is that if we are successful in jawboning banks, and the Chairmen of the Federal Reserve Board, Presidents, others have been successful in the past in doing so, so that they slowed down their rates on business loans, what happens to your monetary policy?

Mr. MILLER. It goes out the window; you just don't have the restraint on demand that you need to fight inflation, so that works against you.

The CHAIRMAN. I don't know what we can go about that. Of course, they could ration their credit or impose nonprice terms. Nobody proposes that. It seems to me we are in a dilemma here.

Mr. MILLER. We are in a dilemma, but let's hope that we will get out of it in due course by fighting inflation and bringing things back to normal.

The CHAIRMAN. Of course, if we do something about regulation Q and so forth, that will help some?

Mr. MILLER. Yes.

The CHAIRMAN. In 1974, when the price of oil quadrupled, the Federal Reserve response was to restrict money and credit and drive inflation to an all time high.

Interest rates to an all time high to offset those increases. Monetary policy usually is not effective in controlling inflation from the supply side. It's not at all clear tight monetary policy in 1974 helped. However, it did contribute to the recession that ensued. What would be your response now to a situation where oil prices rise, perhaps dramatically, because of the political unrest and the new government in Iran?

Mr. MILLER. Mr. Chairman, I don't see, even through withdrawal of the Iranian oil supply, the magnitude of change that took place after the 1973 boycott. I would think that our problem will be less severe now than it was seen to be by the Federal Reserve in 1974. I do think that one has to adapt monetary policy to exogenous circumstances and not wreck the economy by following some mechanistic formula. I am not sure how we will respond. We are talking about a hypothetical situation in which the choice will relate to the condition of the economy when the event occurs, to what other challenges are there.

In general, I think we have to be adaptive and not just doctrinaire.

The CHAIRMAN. Let's assume we do have a sharp increase in prices. It's certainly possible now with the situation—the supply

situation in the world seems to be moving in that direction in the short term anyway.

Mr. MILLER. I don't think we should rely on monetary policy to handle that. I think we should be pursuing a more forceful conservation policy; that would be the only way to solve the problem.

The CHAIRMAN. If necessary, rationing?

Mr. MILLER. If necessary, there are a number of things that could be done. It's still rather disappointing to me, frankly, that with the Iranian situation we have not seen a burst of enthusiasm by businesses—although businesses have been doing fairly well in adapting their industrial plants—by individuals and by the population generally to conserve their use of energy. I maintain that we all, everyone in this room, everyone in the United States, could use 15 percent less gasoline this year. Yet we don't get very enthusiastic about that.

The CHAIRMAN. One way is to run to work.

Mr. MILLER. Exactly. I'm not sure, though; that may burn up more energy.

The CHAIRMAN. Well, not gas, anyway. There's been growing concern about resolutions approved by 24 States calling for a constitutional convention in order to get an amendment to the Constitution requiring a balanced budget. Many economists have opposed this approach. You said when you appeared before the Joint Economic Committee that you did oppose this. The point that cannot be passed off is that people want Government spending held down. They want the deficits reduced. They want tax burdens lightened. These things are difficult to do in normal times and doubly difficult when the economy is weak and inflation is high.

The Government has to have the same discipline we have asked from the private sector.

I think we have been helped in a technical sense but spending has continued to grow and deficits have continued to mount.

Would you support stronger constraints on Government deficit spending such as the establishment of a goal to reduce federal outlays as a proportion of GNP to 20 percent or less by 1983?

Mr. MILLER. Mr. Chairman, I would, if they were statutory. I really think it would be inappropriate to put these restraints into the Constitution.

The CHAIRMAN. You would support them if they are statutory?

Mr. MILLER. Yes, statutory.

I would point out, on the constitutional issue, that I think this country would make a terrible mistake by trying to put into the Constitution what is really a legislative matter.

The CHAIRMAN. Now, I have another statute. That's one statutory proposal I am making before the committee. I am hopeful we can incorporate it into the Council on Wage and Price Stabilization. In addition to that, I proposed a bill that has a wide sponsorship in the Senate that would require that the President submit a budget that would be in balance whenever the real growth of the economy is 3 percent or better. If we had that, we would have had instead of 16 deficits and one small surplus in the last 17 years, we would have had 12 surpluses and only 5 deficits. It would have meant that we would have had a far smaller national debt; spending there alone would have been billions of dollars less.

We certainly would have had less inflation from Government activity. What would be your reaction to that as a statutory proposal, and with an escape clause, of course, if Congress by a two-thirds vote could set it aside?

Mr. MILLER. Philosophically, Mr. Chairman, I'm for it, but I guess I have a little trouble with how it would work. Right now, Congress is addressing the deficit issue for fiscal year 1980, which begins next October 1 and ends, you know, a long time from now. It seems to me that your spending and your deficit decisions ought to be made concurrently.

The CHAIRMAN. That's the beauty of this proposal. What it would do is put into effect a budget which would be in balance and in the event you have growth of 3 percent or more, surplus. But if you don't have that—you can't predict what you are going to have—you would have the deficit you should have.

Mr. MILLER. So you have flexibility? I see; that could have merit. But let me point out that even your proposition to reduce spending to a certain percentage of GNP becomes permanent. I would have hated to have Congress lock in, for all times, spending as a percentage of GNP in 1900 when the country was entirely different.

The CHAIRMAN. It would be statutory. The Congress by a majority vote could change it.

Mr. MILLER. The proposal probably should have limited horizons, so it could be looked at over a few years.

The CHAIRMAN. Run a sunset on it.

Mr. MILLER. Yes, I think so.

The CHAIRMAN. During 1978 consumer credit expanded at a rapid rate. Questions have been raised about whether consumers can expand their holdings in 1979. Some observers are convinced some form of credit controls have to be used. Your table would show that very dramatically. How significant a problem is the large volume of consumer debt in terms of stability of the economy?

Mr. MILLER. At the moment, as I pointed out, part of that picture may be demographic; it may just reflect a period of family formation or young families who have higher demands for credit than normal.

Part of the expansion may be due to the increasing use of credit cards to handle transactions; credit card debt gets counted in here, and there may be some technical changes to consider. I would think that the amount of debt burden will be a restraining force on continued growth of demand in the economy. However, because of the new factors, I am not yet prepared to say, that we have a serious problem. Delinquencies, as I mentioned, have been, if anything, going down. Households have had the capacity to service debt so far.

If there is an economic slowdown, however, and if there were a recession, I would think repayments would be somewhat more difficult.

The CHAIRMAN. Do you contemplate the use of any type of credit control?

Mr. MILLER. No, sir. It seems to me we are better off to get ourselves back into a mode where the highest and best use of purchasing power is determined by those who make the decisions

to spend their money. But we should keep an overall restraint, so that the deferrable, less necessary, less meritorious decisions and purchases are put off by consumers or businesses themselves, rather than determined by a Federal regulator. The greater degree to which we can operate with more market freedom, let prices be the mechanism for determining purchases rather than allocation, is, I think, a healthy sign.

The CHAIRMAN. Well, Mr. Chairman, I want to thank you very much. As usual, you did a splendid job. You are extremely articulate and persuasive.

I do feel, however, that we are now confronted with a situation in which the Federal Reserve and the Congress, too, in contemplating monetary policy has the very difficult problem of trying to cope with monetary aggregates which are in a period of transition which are anything but explicit. Having missed our targets by a wide margin last year, and then we we turn to interest rates as a guide, we find again it's based on a relationship between interest rates and inflation which is a very slippery concept, very hard to pin down; and for a while, it was a situation in which you could kind of look to the Federal Reserve Board because most of us know so little about monetary policy. It was kind of in the land of the blind the one-eyed man is king; but now I am not sure that any of us have eyes to see.

The situation is about as difficult to establish any real confidence, it seems to me, on the part of Congress as any I have seen. I don't mean that to be any derogation of your fine ability or the people who serve with you, the capability on the Board and your outstanding staff which is as fine an economic staff as I think there is in the Government.

Thank you very much for your appearance.

Mr. MILLER. Thank you, Mr. Chairman. If we have only one eye, we will try to make it all-seeing and try to do better.

[Whereupon, at 11:48 a.m., the hearing was adjourned, to reconvene at 10:00, Friday, February 23, 1979.]

[Complete statement received from Mr. Miller and an additional letter received for the record follows:]

Board of Governors of the Federal Reserve System



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

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**February 20, 1979**

**Letter of Transmittal**

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BOARD OF GOVERNORS OF THE  
FEDERAL RESERVE SYSTEM  
Washington, D.C., February 20, 1979

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

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

Sincerely,  
G. William Miller, *Chairman*

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CHAPTER 1

"a review and analysis of recent developments  
affecting economic trends in the nation"

Section 108(a) Full Employment and  
Balanced Growth Act of 1978

Section 1. Overview

The current economic expansion is about to enter its fifth year. It thus outranks in longevity every prior cyclical upswing of the postwar era with the exception of that in the 1960s. Yet it has maintained considerable vigor, with real gross national product rising more than 4 percent during the past year. The attendant increases in employment and industrial capacity utilization have reduced considerably the margin of unutilized productive resources in the economy.

The narrowing of the gap between actual and potential output implies that a tighter hold on the Nation's aggregate demand for goods and services is necessary if inflationary forces are to be contained. The urgency of such restraint is reinforced by the fact that there has already been an acceleration in the rise of wages and prices. Aggregate measures of unit labor costs and prices advanced around 9 percent in 1978, appreciably more than in the preceding years of this economic expansion.

Apart from the hardship that this large and generally unanticipated surge in inflation created for many families and business enterprises, the behavior of prices deepened concerns around the world regarding the stability of the U.S. economy and the soundness of the dollar. The value of the dollar on foreign exchange markets declined through most of 1978, exacerbating domestic inflationary pressures in the process. To prevent a serious disruption of the international financial system, a broad program of corrective actions was initiated last November. The dollar has since strengthened, but remains vulnerable to shifts in sentiment among exchange market participants.

The longer-range strength of the U.S. economy and of the dollar depends greatly on our success in retarding inflation. This was recognized during the past year in actions taken to reduce the size of the Federal budget deficit, in the establishment of voluntary wage-price standards, and in efforts to curtail the inflationary impact of Federal regulation. In the monetary sphere, too, there was movement toward moderation of aggregate demand growth and restraint of inflation as the Federal Reserve acted to prevent excessive growth of money and credit.

Section 2. Aggregate Economic Activity

The current economic upswing, which began in the spring of 1975, ranks among the most durable in this Nation's history. In the period since World War II, only the expansion of the 1960s was longer, and it was marked by massive increases in military outlays associated with the Vietnam War.

The past four years have seen sizable gains in production and employment. Between the first quarter of 1975 and the fourth quarter of 1978, real gross national product rose more than 20 percent. By last month, industrial production had increased about 35 percent and nonfarm payroll employment more than 14 percent from their levels at the cyclical trough in March 1975.

The momentum of expansion, furthermore, has been well maintained. Real GNP increased 4.3 percent from the fourth quarter of 1977 to the fourth quarter of 1978--a bit slower than the average pace over the earlier part of the expansion, but still well above the trend growth of potential output in the economy. The persistent strength of aggregate demand was demonstrated by the surge in activity during the final quarter of last year, when GNP grew at an annual rate in excess of 6 percent. Available indicators suggest that the economy has remained generally strong in the opening months of 1979.

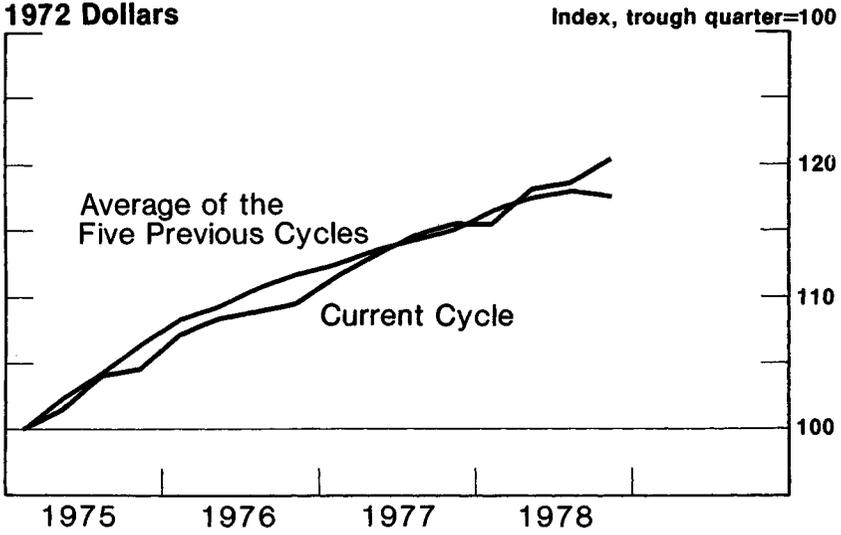
Residential construction, which provided a good deal of impetus to the early recovery, stayed on a high plateau last year in the face of rising interest rates and a continued rapid escalation in building costs. Household demands for shelter have been bolstered by demographic trends as well as by an inflation-hedging

motive. The sustained advance in economic activity also has been fostered in good part by strength in consumer spending. A marked turnaround in the willingness of consumers to spend--reflected in a sharp drop in the personal savings rate--provided much of the impetus to over-all expansion in the early stages of the economic recovery, and consumption expenditures have remained unusually robust throughout the upswing.

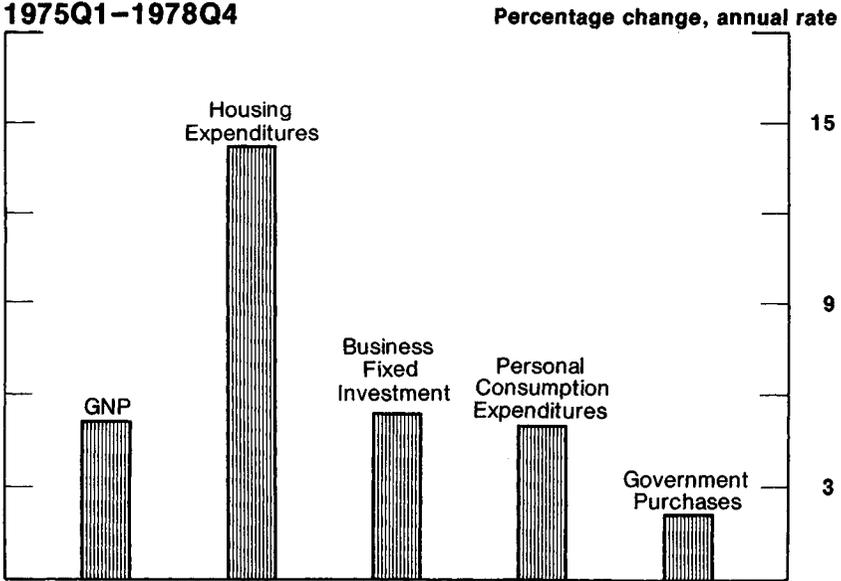
In the business sector, spending on new plant and equipment has continued to rise, but there have not as yet been the large increases seen in some earlier cycles. Business fixed investment actually declined during the initial quarters of the economic expansion, as firms concentrated on the repair of strained financial positions in an environment of low capacity utilization. Capital spending policies have continued to be characterized by considerable caution, and it was not until mid-1978 that the previous peak level of real outlays was reattained. Firms also have exercised caution in managing their inventory positions, and stocks generally have remained lean relative to sales.

Government purchases of goods and services rose briskly at both the Federal and State and local levels during the second half of 1978, but have been a moderating influence on over-all activity during most of the cyclical upswing. The over-all budgetary position of the Government sector, including transfer payments and revenues, has remained stimulative throughout the expansion, albeit in diminishing degree. An improving net export position contributed to the expansion of GNP during the early recovery phase, but deterioration in the

**REAL GNP**  
1972 Dollars



**REAL GNP AND MAJOR SECTORS**  
1975Q1-1978Q4

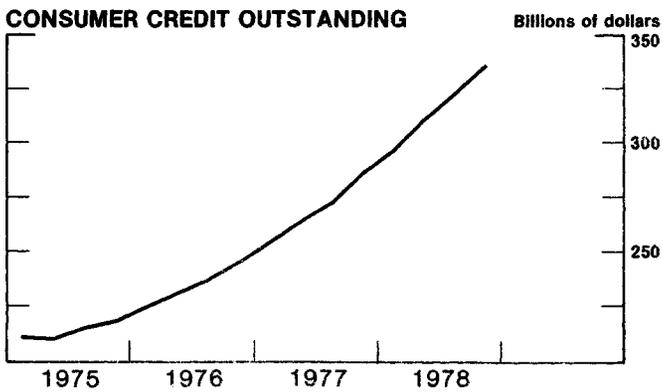
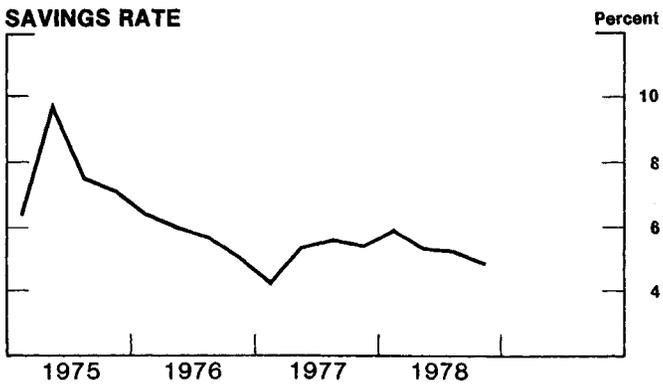
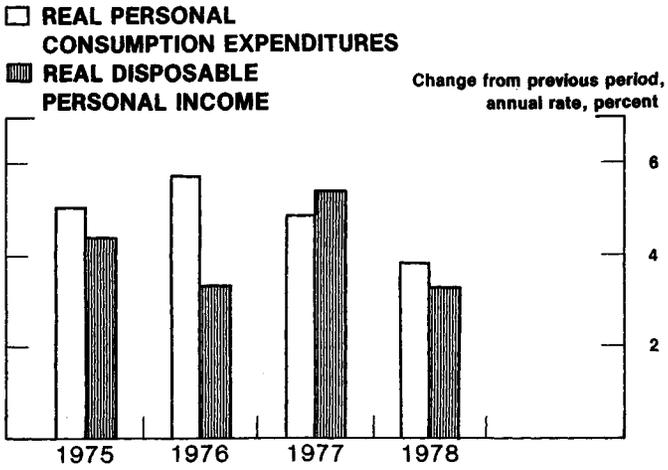


trade balance was a decidedly negative factor from 1976 to early 1978. The U.S. trade deficit did narrow over the course of 1978, however, owing in part to the strengthening of economic expansion in other major industrial countries.

#### Personal Consumption Expenditures

Consumer outlays grew 3.8 percent over 1978 after averaging 5-1/2 percent, at an annual rate, earlier in the economic recovery and expansion. The slower growth of spending reflected relatively smaller recent gains in real disposable income; increases in real personal income were eroded by larger tax burdens related to higher contributions for social security and the interaction of inflation and a progressive tax system.

The proportion of consumption in gross national product has held at a high level over the course of this upswing. In prior cycles this share typically fell as the expansion matured. In particular, household spending for durable goods has hovered at around 10 percent of GNP throughout the past three years, while during other economic expansions it accounted, on average, for about 7-1/2 percent. This exceptional strength in consumption and the associated rapid increase in instalment credit and low savings rates can be attributed, in part, to the higher relative number of younger households. But it also appears to be in some degree a reaction of households to persistently high inflation rates. For example, opinion surveys suggest that many consumers have been buying durable goods in anticipation of price increases.



### Business Fixed Investment

Real business fixed investment rose 8-1/4 percent over 1978. This was nearly the same pace of advance as in the two previous years and almost twice the rate of expansion in aggregate activity. Recently, nonresidential construction activity has become an important source of business investment growth. In 1978, real spending for such structures increased 12-3/4 percent as outlays for commercial and industrial buildings showed particularly impressive gains. On the other hand, investment in producers' durable equipment grew about 6-1/2 percent in real terms during 1978 compared with increases of more than 10 percent in each of the previous two years. Demands for motor vehicles, which were exceptionally strong earlier in the expansion, began to tail off in 1978, while machinery outlays continued to advance at about the same moderate pace experienced since early 1976.

### Inventory Investment

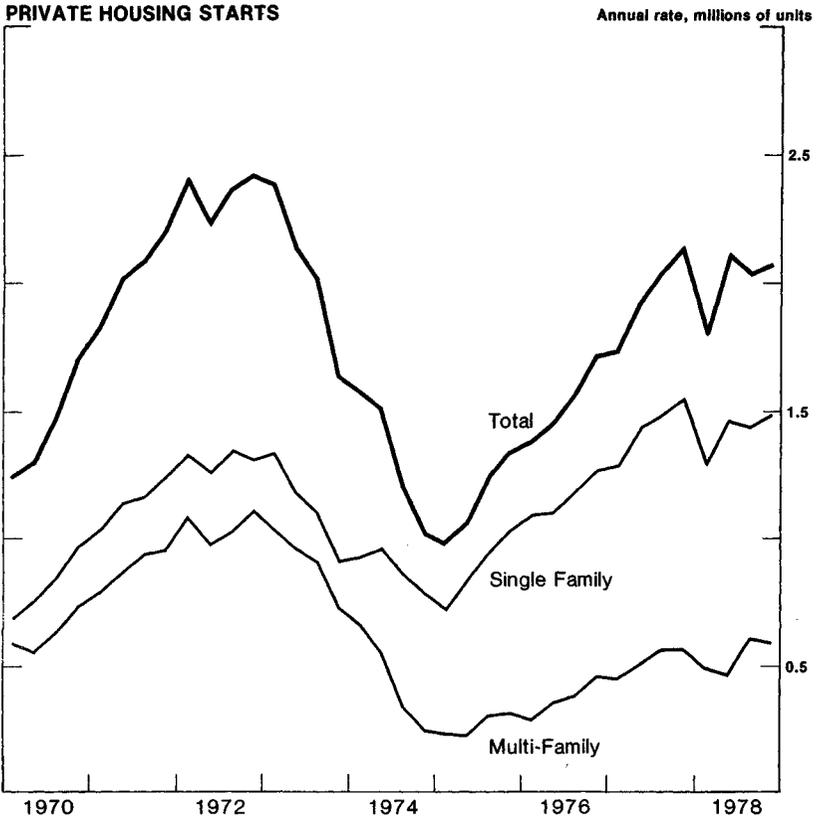
Investment in business inventories was characterized by caution in 1978, as it generally was in the three previous years. As a result, aggregate inventory-sales ratios remained at or below historical averages. This caution, which can be traced back to the severe inventory cycle of 1974-75, appears to have been responsible for the avoidance of the types of overhangs that preceded several prior cyclical downturns. Incipient build-ups of stocks have been met with prompt increases in sales promotion or curtailments of orders and production. Most recently, overhangs that developed at general merchandise retail outlets in the fall apparently were corrected by the sharp rise in

sales during the holiday season and a slowing of production of durable home goods.

#### Residential Construction

The rate of private housing starts advanced briskly during the 1975-77 period and in 1978 they were sustained at the high annual rate of 2 million units. Spending for residential construction in real terms increased at an average annual rate of 21 percent from the 1975 trough before leveling off in 1978. In addition to production capacity constraints, the recent developments in housing activity reflect the tightening in financial markets. Interest rates on both construction loans and long-term mortgages rose appreciably in 1978 and by year-end they had reached usury ceilings in a number of states and record postwar highs in many other areas. Even so, the variable-ceiling six-month time accounts introduced in June of last year buoyed deposit growth at key mortgage lenders and helped maintain the high rate of housing construction.

Within the housing sector, the rise in single-family starts led activity early in the recovery. More recently, multi-family starts--supported by an increase in Federally subsidized rental units--have increased while single-family starts have remained above their 1972-73 peak levels. Indeed, in the fourth quarter of 1978, total housing starts averaged an annual rate of 2.1 million units, the same as a year earlier.



### International Trade

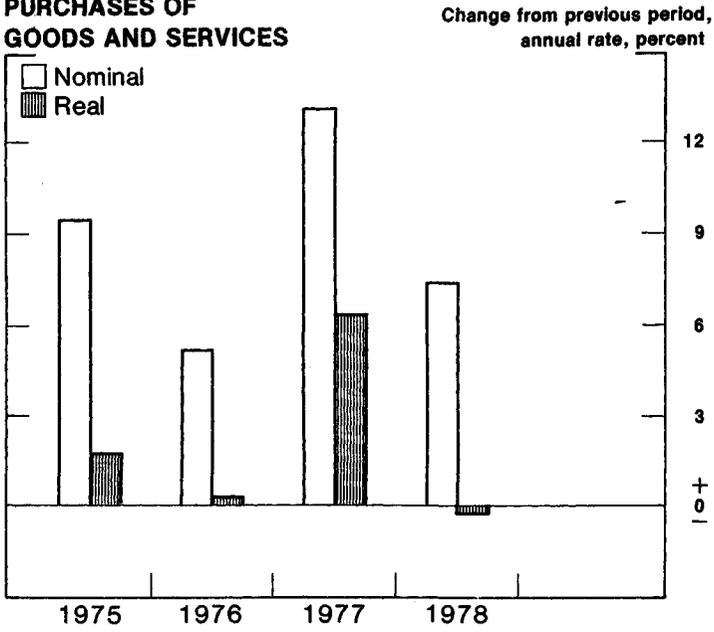
After providing some initial stimulus to economic growth during the early recovery period in 1975, the U.S. balance of trade began deteriorating. In large part this reflected the relatively stronger rate of economic expansion in the United States compared with our major trading partners. The deficit in net exports narrowed during 1978, however, as activity abroad picked up in contrast to the moderation in the U.S. expansion. In addition, the more favorable trade balance reflected a 20 percent rise in agricultural exports last year, associated with unusually poor harvests of wheat and soybeans in the Southern Hemisphere.

### Government

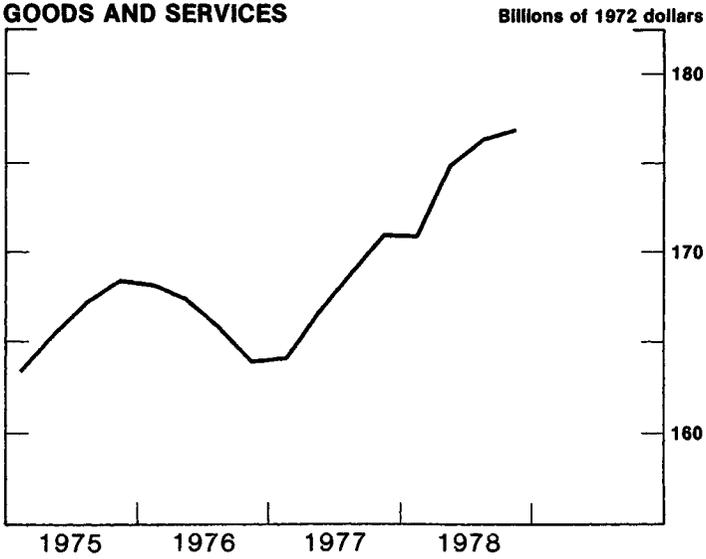
Growth of purchases by the Federal Government has been uneven in this expansion. In real terms, such purchases increased little during 1975 and 1976, rose substantially in 1977, and then--despite a surge in the second half of the year--declined slightly in 1978. Total expenditures, however, have risen consistently, reflecting increased grants to State and local governments and transfers to individuals for Social Security, food stamps, and retirement benefits. Revenues have increased even more than outlays over the past several years, so that the Federal budget deficit has declined from \$66.4 billion in fiscal year 1976 to a projected \$37 billion for the current fiscal that ends next September.

State and local government purchases also have grown irregularly over the past four years. In real terms, outlays by this sector for goods and services expanded at a 2-1/4 percent annual rate during the second half of 1978, matching the average pace over the expansion as a whole. This is well below the trend rate of increase experienced during the 1960s and early 1970s. The slowing of growth reflects changing requirements for services, associated with demographic developments, and a degree of fiscal conservatism prompted partly by the financial difficulties encountered by some communities in recent years. In 1978, however, a tendency toward tax relief--occasioned in part by voter preferences expressed in California's Proposition 13 and like measures elsewhere--outweighed the impact of spending economies on budgets. As a result, although the aggregate operating surplus of State and local governments totaled \$6 billion for the year, this was only half the size of the 1977 surplus.

**GROWTH OF FEDERAL GOVERNMENT PURCHASES OF GOODS AND SERVICES**



**STATE AND LOCAL GOVERNMENT PURCHASES OF GOODS AND SERVICES**



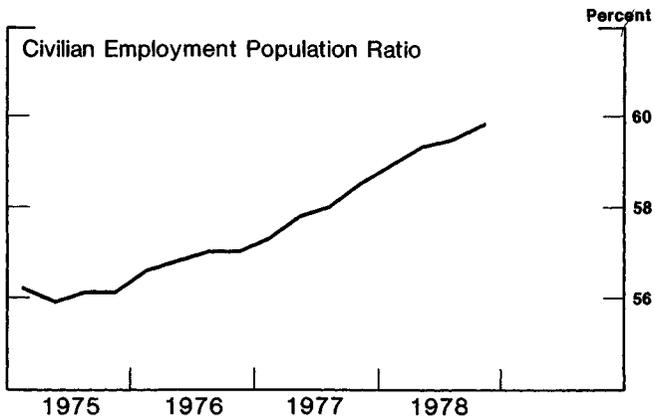
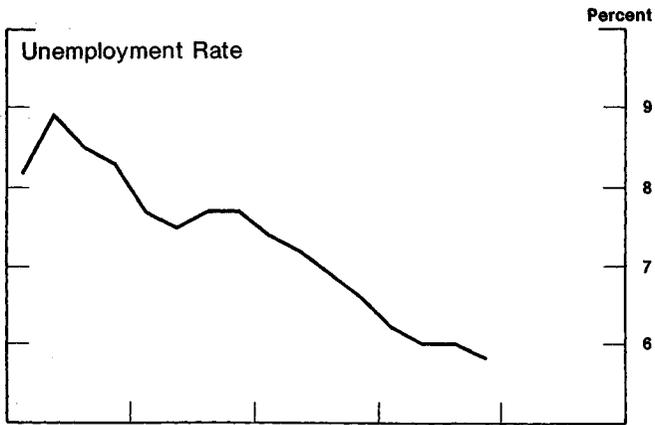
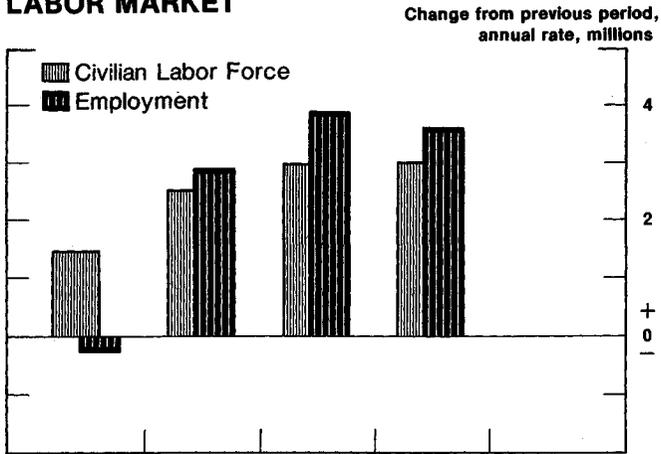
Section 3. Labor Markets

Labor demand has been strong throughout the current economic expansion. During the three years following the cyclical trough in early 1975, nonfarm payroll employment advanced at an average annual rate of 3.7 percent--compared with a 2.8 percent median rate of gain during the five previous postwar expansions. During the past year--at a stage when in earlier cycles employment levels had begun to level off or even fall--payroll employment has continued to advance at a 4.2 percent annual rate. Over the almost four years of expansion, employment has increased by 12 million, and today the ratio of employment to total civilian population aged 16 and over stands at the highest level on record.

Employment in the goods-producing sector of the economy rose rather slowly early in this recovery, reflecting in part the sluggish behavior of business fixed investment. It was not until late 1978--as a result of large hiring increases in the hard goods industries--that factory employment reached its pre-recession peak. Similarly, construction hiring showed only small increases for nearly three years after the trough. During 1978, however, employment in contract construction surged ahead to record levels.

In the private service-producing sector, employment dipped only briefly in early 1975 and has been on a steady uptrend since then--far exceeding the gains of previous expansions. The trade and service industries have continued to grow faster than other sectors, and by the end of 1978 they accounted for more than 4 of every 10

**LABOR MARKET**



jobs in nonfarm establishments. In contrast to the private sector, Government hiring has been modest. Federal Government civilian employment has been fairly stable at around 2-3/4 million over the past 4 years, about the same level that has prevailed since the late 1960s. State and local government employment has risen, but growth has slowed substantially in recent years as a consequence of reduced needs for education personnel and fiscal retrenchment by many units.

The reduction in educational labor demand reflects the shift in the age structure of the population that has been affecting not only school enrollments, but also the size of the work force. Growth of the teenage population (ages 16 to 19) in the late 1960s and early 1970s was exceedingly large, reflecting the attainment of working age by the postwar baby boom cohort. At the same time, labor force participation rates for teens rose sharply. In the mid-1970s, growth of the 16 to 19 age group slowed, and in 1978 the teenage population actually began to contract. Nonetheless, with participation rates still rising rapidly, the teenage labor force continued to grow at a rapid pace (up 3.2 percent in 1978 compared to 1.6 percent on average in the preceding four years).

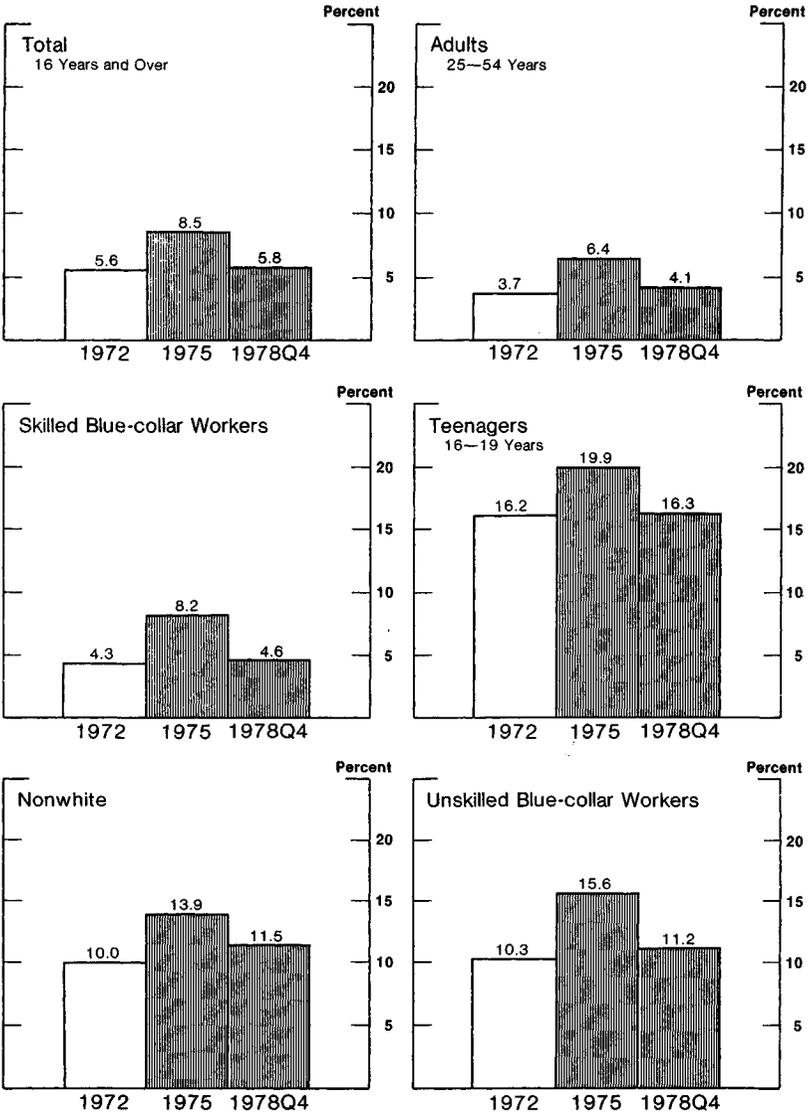
An even more significant factor in the expansion of the work force has been the continued rise in the participation rates of adult women. The longer-run trend, which reflected low birth rates as well as changing attitudes and social trends, apparently was augmented in the 1970s by a desire of families to maintain their material living standards in the face of rapid inflation. As a

result of these participation rate patterns, the total civilian labor force grew 3 percent during 1978--about the same as in 1977, but up considerably from the 2-1/4 percent annual rate during preceding years of the decade.

With the growth of employment outstripping even the large increase in the size of the labor force, the unemployment rate fell one-half percentage point over the course of 1978 to just under 6 percent. Labor market conditions improved significantly for most groups of skilled and experienced workers. For example, unemployment rates for workers 25 to 54 years old, skilled blue collar workers, and workers seeking full-time employment all were at or near the levels reached in 1972 when labor and product markets were beginning to tighten noticeably. While there was as yet no general shortage of skilled workers during 1978, many firms reportedly were finding it increasingly difficult to fill certain job vacancies at prevailing wage rates.

The improvement in employment conditions during the current expansion has not been uniform. Despite the gains made by many groups, unemployment rates for younger workers, minorities, and the unskilled were still very high at the end of 1978. For example, the unemployment rate for teenagers at the end of 1978 was 16-1/4 percent, more than four times the rate for workers 25 to 54 years old; for minority youth the rate was over 35 percent. Younger workers between 16 and 24 years of age accounted for about one-half of all joblessness in the fourth quarter of 1978.

**UNEMPLOYMENT RATES**



The enlarged proportion of the labor force accounted for by teenagers and women means that the over-all unemployment rate does not imply the same degree of labor force pressure that it would have in past years. These groups tend to have relatively high rates of joblessness for a number of reasons, including generally more limited training and work experience. As a rough adjustment for such structural influences, the average unemployment rate can be recomputed using the age-sex composition of the labor force in the mid-1950s. The result of such a calculation is an unemployment rate about one percentage point below its current level, which vividly illustrates that the level of labor utilization consistent with price stability may change considerably over time. To enhance the possibility of simultaneously achieving low unemployment and price stability, it may be necessary to augment monetary and fiscal policies with carefully focused programs to facilitate job placement and to provide skill-training.

#### Section 4. Productivity

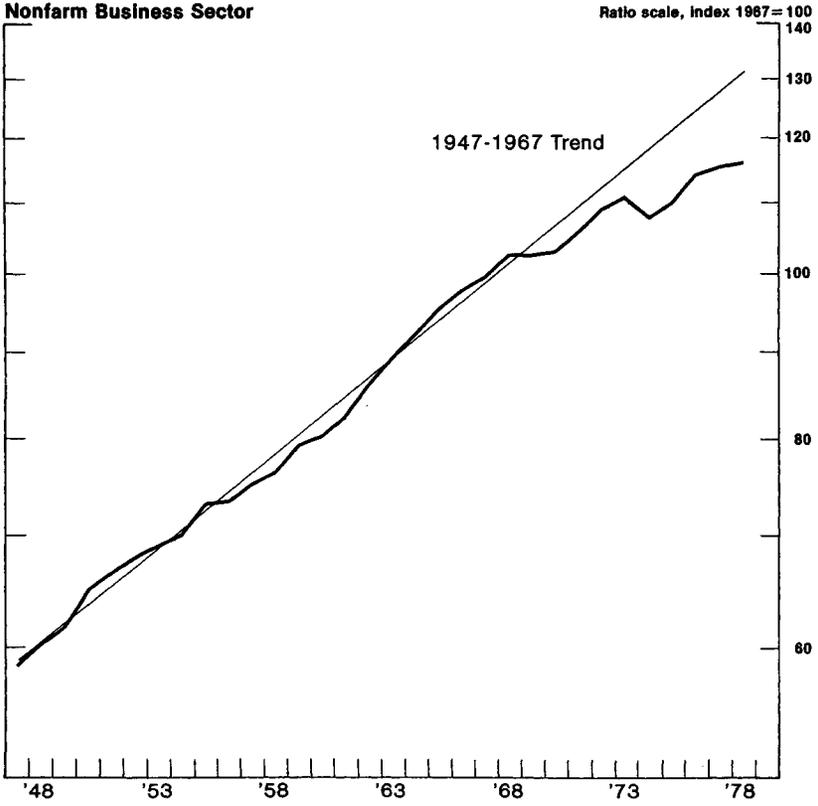
The 3.5 million increase in payroll employment during 1978 was much larger than would have been expected on the basis of the historical relationships between output changes and labor demand. Although real GNP growth decelerated from 5-1/2 percent in 1977 to 4-1/4 percent in 1978, businesses added to their payrolls at almost the same rate. Output per hour of work rose only slightly over the four quarters of 1978.

Much of the slowdown in productivity growth last year occurred outside the manufacturing sector; output per hour in manufacturing increased 3-1/2 percent during 1978. Normally productivity growth slows as labor markets tighten and capacity constraints are approached, but the fall-off in productivity gains in the past two years has been particularly sharp.

This poor performance of labor productivity continues a trend toward slower growth evident since the late 1960s. During the period from 1947 to 1967, productivity in the nonfarm business sector rose on average by 2-2/3 percent per annum, and accounted for almost 70 percent of the gain in output for this sector. Since 1967, the rise in output per hour has slowed, with average annual gains of only 1.2 percent recorded since 1973. As a result, less than 50 percent of output growth over the last five years can be attributed to gains in efficiency.

The deterioration of productivity performance in recent years is a complex phenomenon that is not completely understood. It

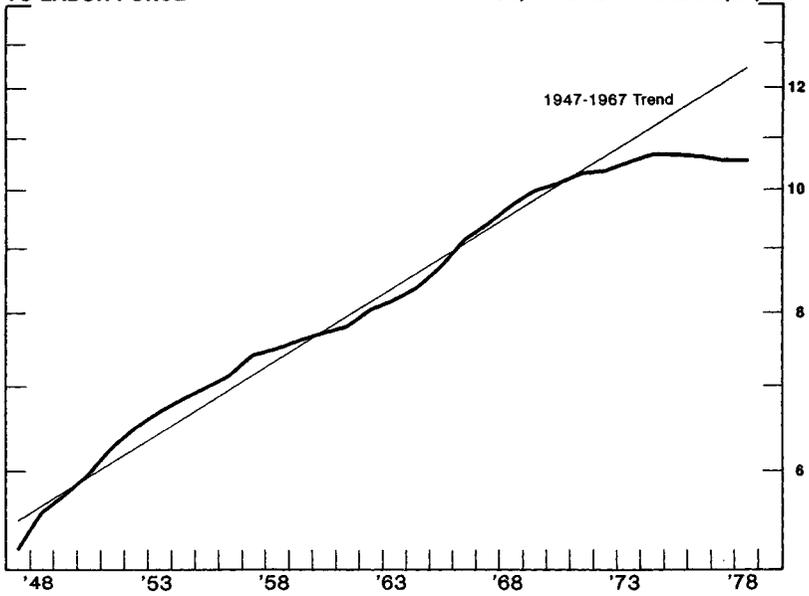
**OUTPUT PER HOUR  
Nonfarm Business Sector**



appears, however, that a crucial factor has been the failure to maintain an adequate rate of capital formation. Indeed, the Nation's stock of capital has shown little growth relative to the size of the labor force over the past decade; in contrast, the capital-labor ratio trended upward rapidly in the preceding 20 years. Other factors that may have contributed to reduced productivity growth in recent years are the influence of environmental and safety regulations that divert resources to uses not measured in the National Income and Product Accounts, and the increase in the proportion of young and inexperienced workers in the labor force.

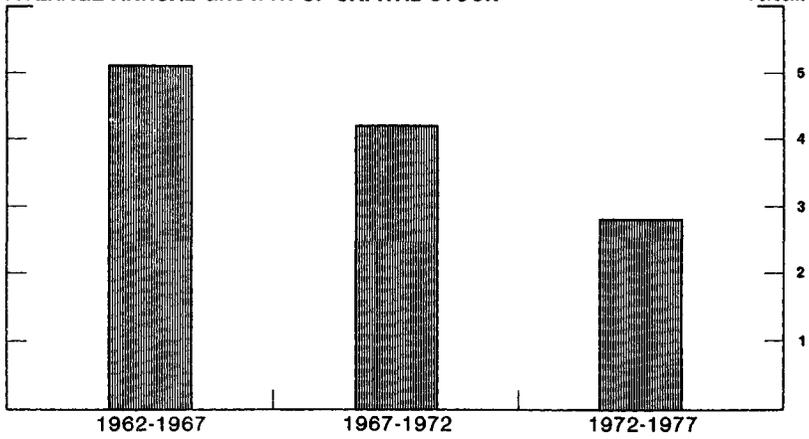
**RATIO OF CAPITAL STOCK  
TO LABOR FORCE**

Ratio scale, thousands of 1972 dollars per person



**AVERAGE ANNUAL GROWTH OF CAPITAL STOCK\***

Percent



\*Private nonresidential net capital stock measured in constant dollars

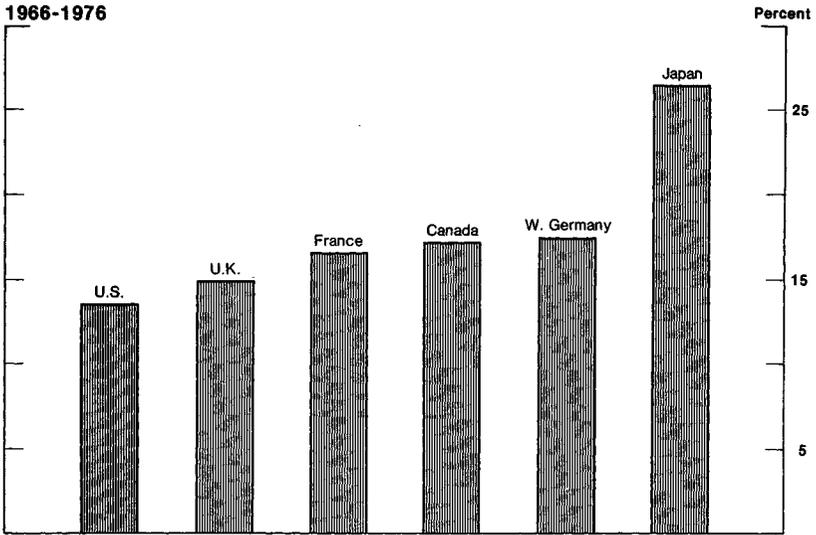
Section 5. Investment

Since the early 1960s, there has been a marked trend toward slower growth of the stock of business capital in the United States. Although real gross business fixed investment last year surpassed the 1973 record, still stronger investment activity will be needed if there is to be a sustained reversal of this trend. In part this merely reflects the arithmetic truth that unchanged absolute amounts of investment translate into declining percentage increases in a growing stock of plant and equipment. Also important, however, is the fact that it is net investment--that is, gross investment less the depreciation of existing capital goods--that adds to the capital stock, and real net investment has yet to reach its previous peak level. Because the fraction of the capital stock in the form of relatively short-lived equipment has been increasing in recent years, a higher level of gross investment is now needed simply to maintain the existing capital stock.

It also must be noted that even the figures for net investment probably overstate the contribution that capital outlays have been making recently to the expansion of productive capacity. A significant share of plant and equipment spending has been undertaken to meet Government pollution, health, and safety regulations. During the past several years roughly 5 percent of total capital spending has been for the purpose of pollution abatement, and some estimates suggest that perhaps an additional 2 percent of investment has been for improvements in health and safety conditions. Although

these outlays may well yield important benefits to society, they do not directly enhance productive capacity.

When an economy is near full employment, the commitment of additional resources to capital formation will require some near-term sacrifice of consumption by individuals or Government. However, there is ample evidence that higher levels of investment effort can enhance long-range economic growth and raise living standards. The increase in U.S. capital spending last year raised the ratio of real gross business fixed investment to GNP to 10.2 percent--the first time since 1974 that it reached the 10 percent level, but still somewhat below the average of the late 1960s and early 1970s. Although international comparisons must be made with caution, owing to differences in accounting and other technical problems, it is clear that other major industrial nations have allocated greater shares of GNP to investment and, as a result, have enjoyed substantially faster increases in productivity and output. While this does not lead to the conclusion that the United States should attempt to achieve the same investment-to-GNP ratios as prevail elsewhere, it tends to confirm the proposition that this Nation would benefit from higher proportions of capital spending to GNP than have been experienced in recent years.

**INTERNATIONAL COMPARISON OF INVESTMENT SHARES\*  
1966-1976**

\* Real nonresidential fixed investment as percent of real gross domestic product; OECD data.  
Includes Government purchases of capital goods.  
Data for France cover the period 1970-75.

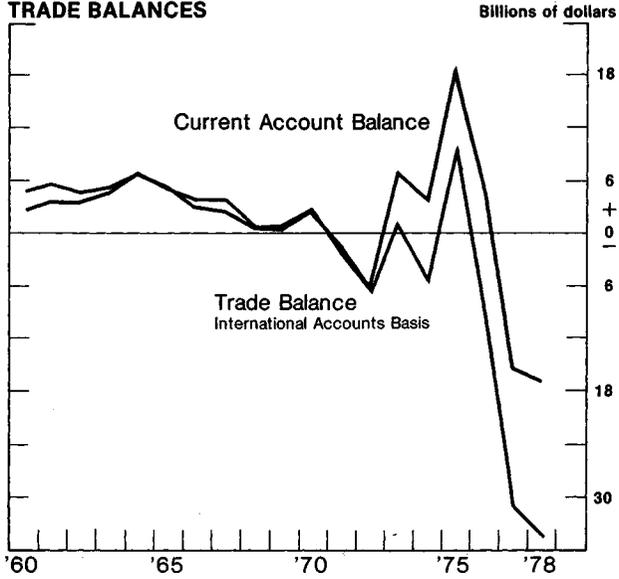
Section 6. International Trade and Payments

From the mid-1960s through the early 1970s, the U.S. merchandise trade balance moved gradually from surplus to deficit. Then, during the 1974-75 worldwide economic slowdown the United States a suffered disproportionately sharp contraction, so that--despite an enormous increase in our outlays for imported oil--the U.S. trade balance swung into surplus in 1975. The surplus proved temporary, however; the subsequent economic recovery was stronger here than abroad, and this played a major role in the steep increase of our trade deficit from 1976 through early 1978.

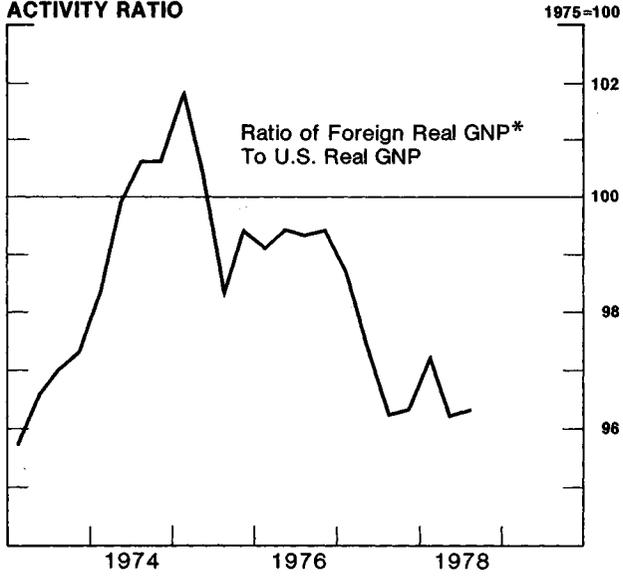
The trade deficit in 1978 was \$34 billion, slightly larger than in 1977. But the deficit peaked at an annual rate of \$45 billion in the first quarter of 1978, and developments in both exports and imports contributed to a narrowing of the imbalance to a rate of about \$30 billion in each of the subsequent quarters.

The growth of exports accelerated in the second quarter. The step-up was partly attributable to temporary causes--for example, demand for U.S. agricultural commodities was stimulated by poor Southern Hemisphere harvests. More important, however, was a strengthening of economic activity abroad and the improved competitiveness of U.S. goods resulting from the substantial depreciation of the U.S. dollar that began in the fall of 1977. The real volume of non-agricultural exports increased 6 percent in 1978, and growth picked up strongly in the second half of the year. Prices of exports increased in line with the general pace of domestic inflation,

**U.S. CURRENT ACCOUNT AND TRADE BALANCES**



**ACTIVITY RATIO**



\*Weighted average of G-10 countries plus Switzerland  
using total 1972-1976 average trade of these countries

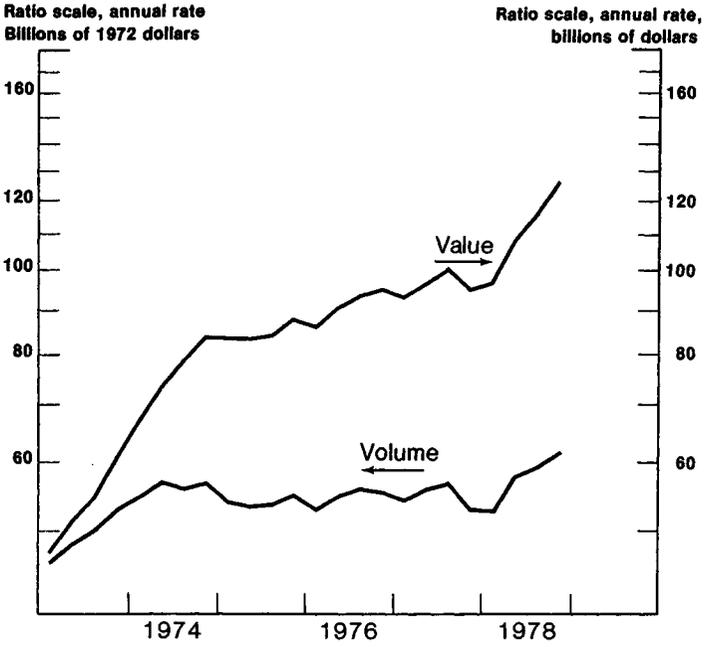
and the total value of merchandise exports rose 17 percent from 1977.

The relatively moderate rise in the volume of imports in 1978, following two years of very large increases, resulted primarily from a slower increase in nonoil imports, but it was reinforced by some decline in petroleum imports. Although total U.S. petroleum consumption is estimated to have increased 3 percent, the higher demand was more than met by increased Alaskan production and by a drawing down of inventories from unusually high levels. The total value of imports increased 16 percent in 1978 with the gain spread over most major commodity categories. Almost half of this increase was in volume terms as imports responded to the continuing strength in U.S. economic activity. Prices of nonoil imports were boosted by the decline in the international value of the dollar.

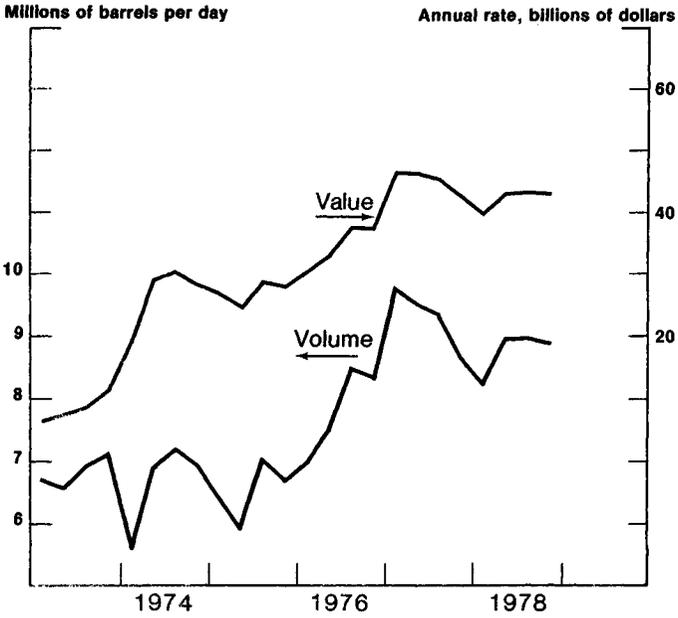
The current account deficit in 1978, estimated at \$17 billion, was slightly larger than in 1977. As in other recent years, net receipts from service transactions provided a substantial offset to the merchandise trade deficit. Earnings, fees, and royalties from foreign direct investments have shown a strong uptrend during the 1970s.

In the period between the onset of generalized floating of currencies in March 1973 and September 1977, the exchange value of the dollar went through several phases of appreciation and depreciation. The average value of the dollar increased sharply (nearly 15 percent) from October 1973 to January 1974, despite large sales of dollars by foreign central banks. Continued large sales of dollars

**NON-AGRICULTURAL EXPORTS**



**OIL IMPORTS**

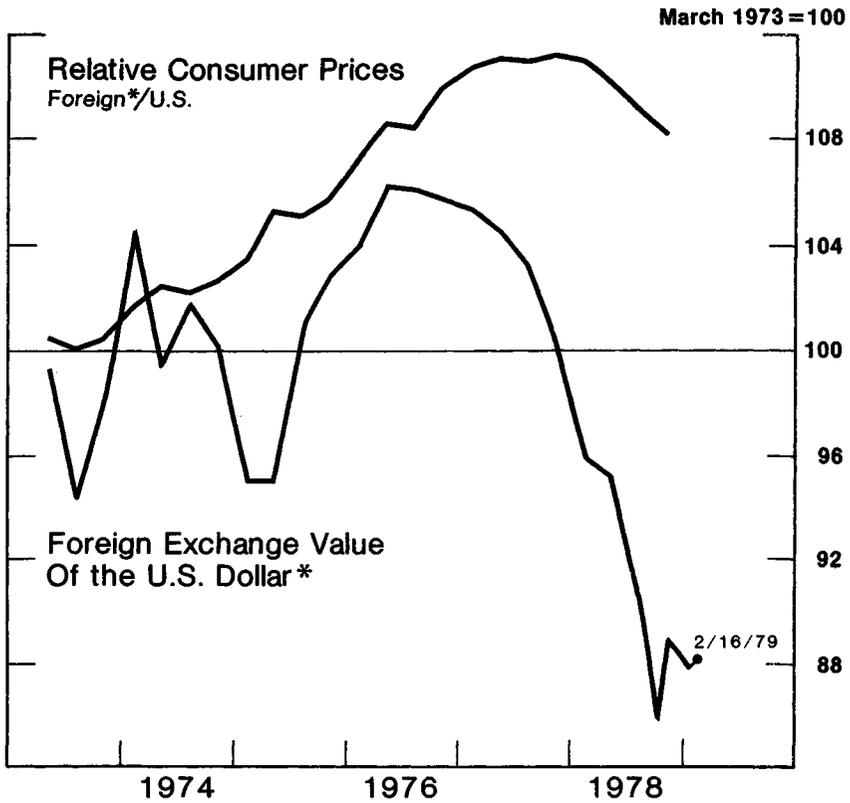


by foreign central banks in 1974, later reinforced by the easing of domestic interest rates associated with the U.S. recession, contributed to a decline in the dollar that began in the first quarter of 1974 and did not end until the spring of 1975. Thereafter, the emergence of a large current-account surplus and a relative firming of U.S. interest rates led to a substantial appreciation of the dollar until the spring of 1976. The dollar subsequently held relatively steady until the fall of 1977.

The dollar began to depreciate markedly against most major foreign currencies in late September 1977 as forecasts for 1978 suggested that the U.S. trade deficit would be no smaller than in 1977. The decline continued through the end of 1977, despite large intervention purchases of dollars by foreign central banks. An announcement in January 1978 that the U.S. Treasury would join the Federal Reserve in exchange market intervention in German marks, followed by an increase in the discount rate, improved market sentiment only temporarily, and by early April the dollar had declined about 10 percent on a weighted-average basis. Between early April and mid-May, a relative firming of U.S. interest rates contributed to a recovery, but the dollar declined fairly steadily thereafter in response to continuing concerns about the size of the U.S. trade deficit and increasing fears that U.S. price performance was deteriorating.

Although some depreciation of the dollar was justified by the need to restore external balance in the face of differential growth rates in the United States and major foreign economies and

## U.S. INTERNATIONAL PRICE COMPETITIVENESS



\* Weighted average against other G-10 countries plus Switzerland using total 1972-1976 average trade of these countries

a relative worsening of U.S. inflation, by midsummer it was clear that the dollar's decline was becoming excessive in trading that was increasingly disorderly. Consequently, in August the Federal Reserve announced a 1/2 percentage point increase in the discount rate and reduced to zero reserve requirements on borrowings by member banks from the Eurodollar market. The Treasury subsequently announced that it would increase the size of its regular monthly gold auctions. These measures produced a brief rally and then a few weeks of stability for the dollar. However, the dollar's slide soon resumed. After the President announced his wage-price program on October 24, the decline steepened alarmingly, threatening to undercut the anti-inflation effort at home and to lead to further erosion of confidence abroad. By late October, the dollar had fallen 21 percent from its September 1977 level.

Under these circumstances, more forceful action was required. On November 1, the Federal Reserve increased the discount rate by 1 percentage point and imposed a 2 percentage point supplementary reserve requirement on large time deposits. To increase the availability of foreign currencies for exchange market intervention, enlarged swap lines were arranged with the central banks of Germany, Japan, and Switzerland. The U.S. Treasury simultaneously announced its intention to draw on its reserve position in the IMF, to sell SDRs, and to issue foreign currency denominated securities. In addition, the Treasury announced a doubling in its rate of gold sales.

The aim of these measures was to correct the excessive depreciation of the dollar and thereby to counter upward pressures on the domestic price level. When viewed in its entirety, the policy initiative of the Administration and the Federal Reserve System indicated that the United States recognized the need for an integrated approach in addressing domestic and international economic concerns. The announcement of these measures on November 1 produced a dramatic jump in the dollar's exchange value. On that day alone the dollar advanced by 5 percent on a weighted-average basis. Heavy cooperative central bank intervention over the following few weeks provided support for the dollar as market participants tested the authorities' resolve, but the need for such intervention abated in January. As of mid-February of this year, the dollar was more than 7 percent above its October low on a weighted-average basis.

Section 7. Prices

Inflation typically has accelerated over the course of cyclical expansions in economic activity, and this upswing has proven no exception. However, the marked increase in the pace of price advance during the past year was in large measure a consequence of forces not directly related to an intensification of general demand pressures on available productive resources. Government-mandated increases in costs and special developments in the agricultural and international sectors contributed substantially to the pick-up in inflation during 1978.

Inflation moderated during the first stages of the cyclical recovery in 1975 and 1976. The earlier extraordinary pressures associated with the rise in oil prices, the sharp escalation in food prices, a worldwide boom in other commodities, and domestic price decontrol subsided, and the considerable slack in labor and product markets restrained wages and prices. Inflation began to speed up again in 1977, however, and prices then surged in 1978. The Consumer Price Index, the Producer Price Index, and the fixed-weight price index for gross business product all registered increases of around 9 percent during 1978, about 2 percentage points more than in the preceding year.

The acceleration of inflation last year reflected importantly the pressure of rising labor costs. Wage rates in the private nonfarm sector increased 8-1/4 percent, compared with about 7-1/2 percent in each of the preceding two years. A boost in the Federal

minimum wage contributed appreciably to the accelerated rise of wages; the impact was especially noticeable in the trade sector, which has the largest concentration of lower-wage workers and saw average wage increases of more than 9 percent last year.

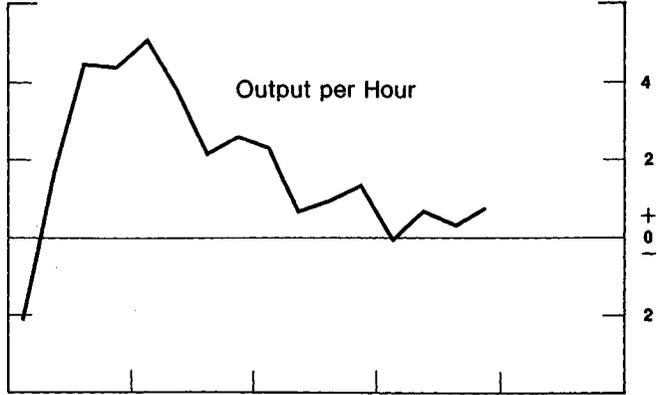
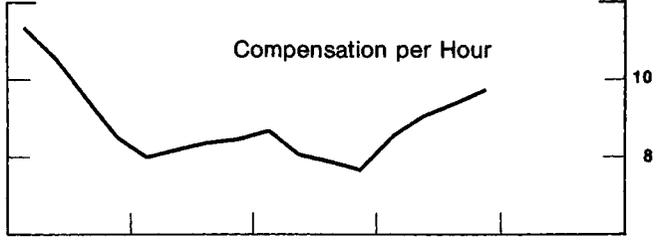
Hourly compensation, which includes, in addition to wages, the costs to employers of social insurance contributions and of privately negotiated fringe benefits, rose 9-3/4 percent--about 2 percentage points faster than in 1977. About one-quarter of the acceleration resulted from increased Social Security taxes and unemployment insurance contributions. In addition, private fringe benefits continued to rise faster than wages.

Given the weak performance of labor productivity, the larger compensation gains were translated into rapid increases in unit labor costs. Unit labor costs in the nonfarm business sector rose 9 percent during 1978 versus 6-1/3 percent in 1977. As 1979 began, labor costs again were given an upward jolt by further increases in the minimum wage and Social Security taxes.

Apart from the broad pressures exerted by rising unit labor costs, the general level of prices was affected considerably in 1978 by developments in the farm and food sector. Retail food prices rose 12 percent over the year--the largest increase since 1974. The increases at the retail level reflected a rise of almost 20 percent in farm prices during 1978 following little change in the preceding year. Meat price increases were particularly rapid, as beef production continued to decline.

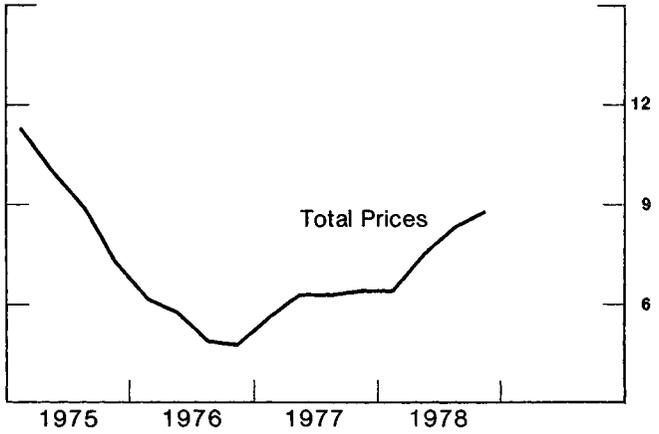
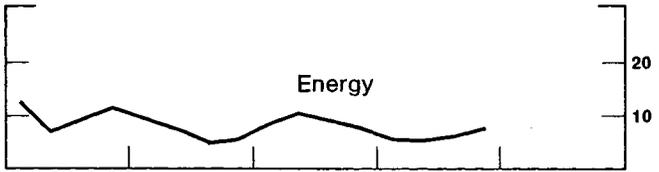
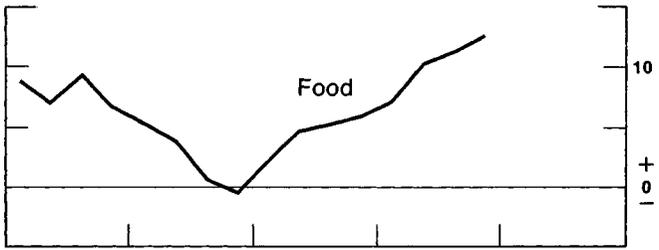
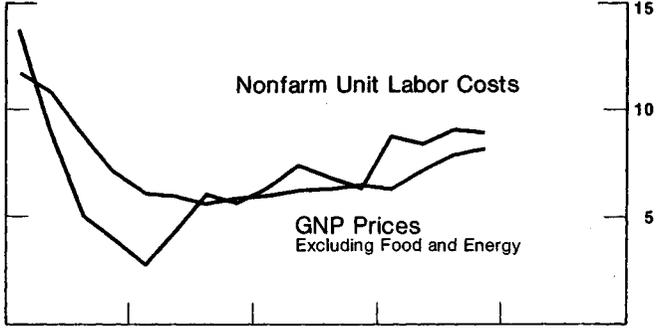
### UNIT COST INDICATORS Nonfarm Business Sector

Change from year earlier,  
annual rate, percent



**LABOR COSTS AND PRICES**

Change from year earlier,  
annual rate, percent



The decline in the foreign exchange value of the dollar also aggravated inflation. Aside from the direct impact of higher prices for imported merchandise, the price-restraining pressure of foreign competition was weakened for many domestic products. Large price increases for domestically produced automobiles and other durable goods reflected both of these effects. The inflationary pressures associated with the steep depreciation of the dollar that began in September 1977 appear to have accounted for about 1 percentage point of last year's rise in the Consumer Price Index.

At the producer level, the inflation of prices of capital equipment accelerated considerably less than that for consumer finished goods. But crude materials prices, for both food and nonfood items, increased sharply, and prices for construction materials also rose rapidly. In the first month of this year the continuing strength of inflationary forces was demonstrated by a 1.3 percent jump in the Producer Price Index; although consumer foods posted an especially large increase, all of the major groupings of finished goods and materials showed accelerated advances.

Section 8. Financial MarketsInterest Rates

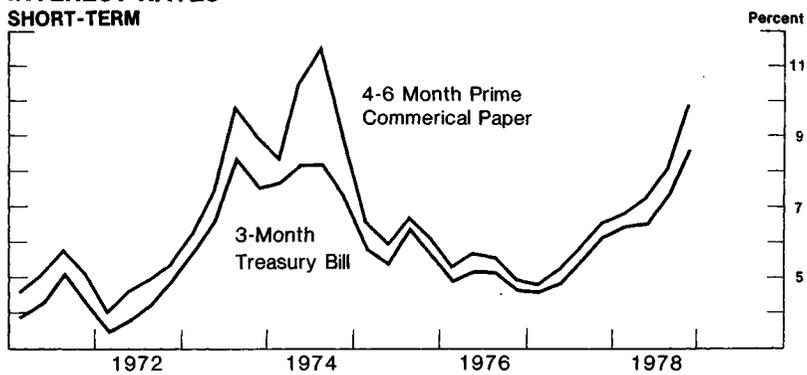
Interest rates generally declined during the early part of the current economic expansion. This departure from usual cyclical patterns probably was attributable in part to a diminution of inflation expectations associated with the observed slowing in the advance of prices and to the limited credit needs of businesses which were pursuing cautious capital spending policies. Interest rates began to move upward in the Spring of 1977, however, as the Federal Reserve acted to restrain accelerating growth in money and credit. Over the course of 1977, yields on short-term market instruments generally rose about 2 percentage points, while corporate and Treasury bond yields increased around 3/4 percentage point.

With inflation picking up, the margin of unutilized resources narrowing, and the dollar under downward pressure in foreign exchange markets, the Federal Reserve applied increasing restraint to the expansion of money and credit in 1978. This was reflected in further increases of 3 to 4 percentage points in most short-term rates over the course of the year. The combination of rising short rates and heightened inflation expectations resulted in increases of roughly 1 percentage point in bond yields. By year-end, a number of interest rates were near or above the peak levels of 1974.

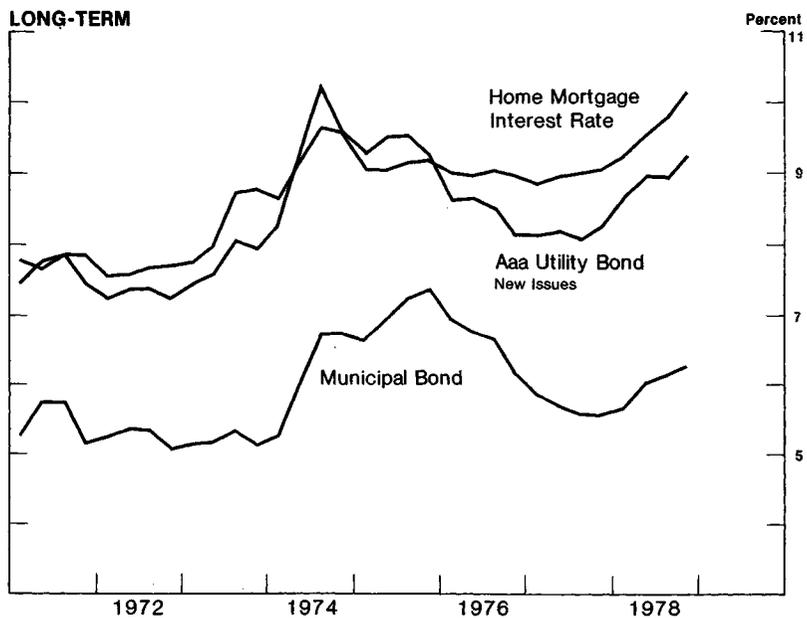
Monetary Aggregates

The monetary aggregates have exhibited some unusual patterns of behavior during the past several years. This has been especially true with respect to the narrow money stock, M-1. During

### INTEREST RATES SHORT-TERM



### LONG-TERM



1975 and 1976, growth in M-1 averaged just over 5 percent per annum. Given the concurrent decline in interest rates, the sizable increases in M-1 velocity--that is, the ratio of GNP to M-1--were much larger than would have been predicted on the basis of previous historical relationships among money, income, and interest rates.

The moderation of the public's demand for M-1 may have reflected to a degree an unusually strong cyclical swing in confidence and increased willingness to spend out of existing cash balances as the economy recovered from a severe recession. However, there is also considerable evidence that other factors played an important role. The unprecedentedly high level reached by interest rates in 1974 stimulated the creation and adoption of new cash management techniques that permitted individuals and businesses to economize on nonearning demand deposits. This development apparently continued to exert a significant influence even after interest rates turned downward, and it was reinforced by several important legislative and regulatory developments and innovations affecting the payments system. These included the authorization of NOW accounts in all of New England, of savings accounts for businesses and governmental units, and of preauthorized third party and telephone transfer privileges for personal savings accounts.

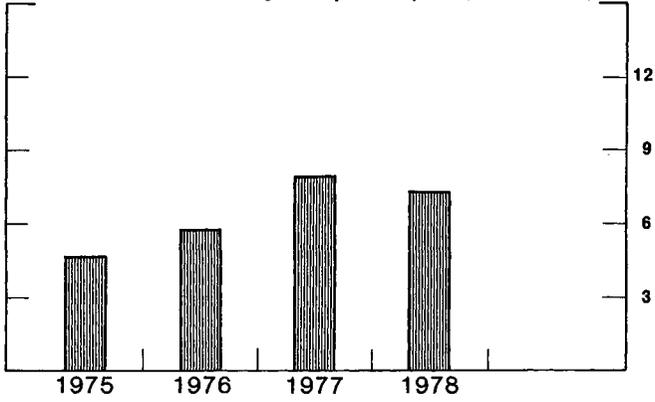
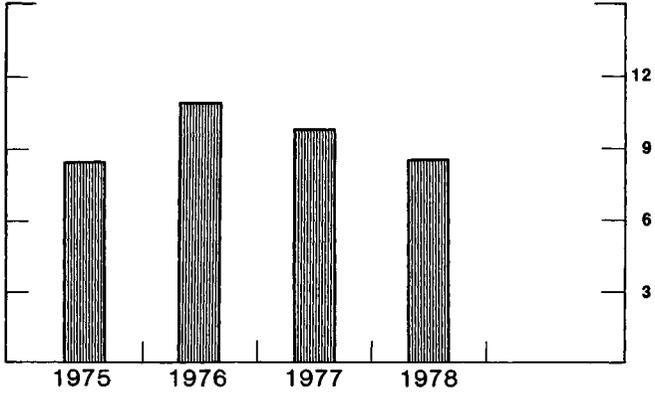
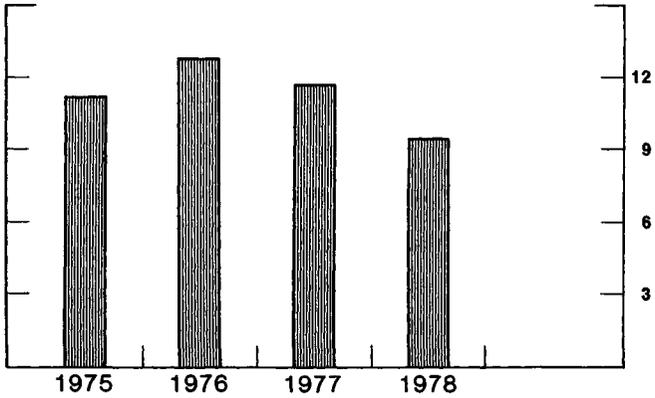
By the beginning of 1977, the level of M-1 was well below that predicted by most standard econometric models of the demand for money. This downward shift in money demand abated in early 1977, however, and growth of M-1 generally conformed to historical patterns until the final months of 1978. M-1 expanded 8 percent during

1977 and at about the same pace over the first three quarters of 1978; rising interest rates and slowing economic expansion worked to moderate M-1 growth over this span, but these influences were offset by the effect of accelerating inflation on transactions requirements.

On a quarterly average basis M-1 growth in the fourth quarter of 1978 was at a 4.4 percent annual rate, but the average level of the money stock in January was slightly below that for October. A portion of this weakness is the direct consequence of the introduction of automatic transfer services (ATS) last November 1; many individuals have shifted their transactions balances from checking accounts to savings accounts from which funds are automatically transferred to cover checks. These shifts appear to have reduced M-1 growth rates by roughly 3 percentage points per month, on average. Even after allowance for this, however, growth in M-1 has been weaker than might have been expected in light of the recent expansion of income and spending. It may be that, as in 1974, interest rates have reached a high threshold level at which households and businesses are induced to seek out and adopt cash management techniques that permit major economies in demand deposit holdings. The advent of ATS--which occasioned basic changes in the checking account pricing policies of many banks--undoubtedly has caused many individuals to assess more carefully the opportunity costs of holding noninterest-earning demand deposit balances as compared not only with ATS accounts but also with other highly liquid interest-earning assets.

**MONEY SUPPLY GROWTH****M-1**

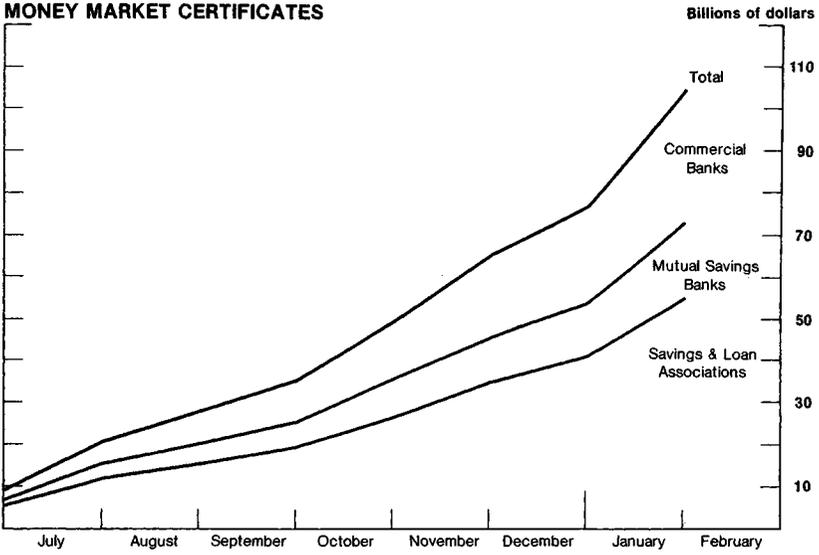
Change from previous period, annual rate, percent

**M-2****M-3**

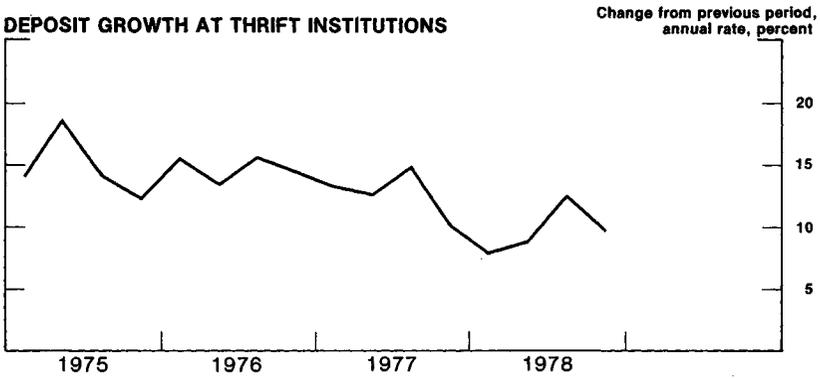
The behavior of the interest-bearing components of the broader monetary aggregates--M-2 and M-3--was generally in line with historical patterns during the first three years of the economic upswing, but there has been a marked deviation since last June. Commercial banks and thrift institutions experienced rapid growth of savings and small denomination time deposits until the latter part of 1977. At that point a gap began to develop between interest rates on short- and intermediate-term market securities and the rates permitted on insured deposits by Federal regulations. As the gap grew, inflows to savings and small time accounts gradually diminished through the spring of 1978. Commercial banks found it necessary to rely more heavily during this period on large time deposits and other managed liabilities to fund their lending activities, and savings and loan associations borrowed heavily from Federal Home Loan Banks.

To prevent a repetition of past episodes when markedly reduced deposit inflows led to an abrupt curtailment of credit to home buyers and others reliant on the depository institutions for credit, the Federal regulatory agencies authorized two new time deposit categories effective June 1. One was an 8-year account paying up to 7-3/4 percent at commercial banks and 8 percent at thrift institutions. The other was a 6-month "money market certificate" (MMC) whose maximum rate varies weekly with the average yield on newly issued 6-month Treasury bills. Given rate relationships, the 8-year certificate has not added significantly to over-all

**OUTSTANDING BALANCES OF  
MONEY MARKET CERTIFICATES**



**DEPOSIT GROWTH AT THRIFT INSTITUTIONS**



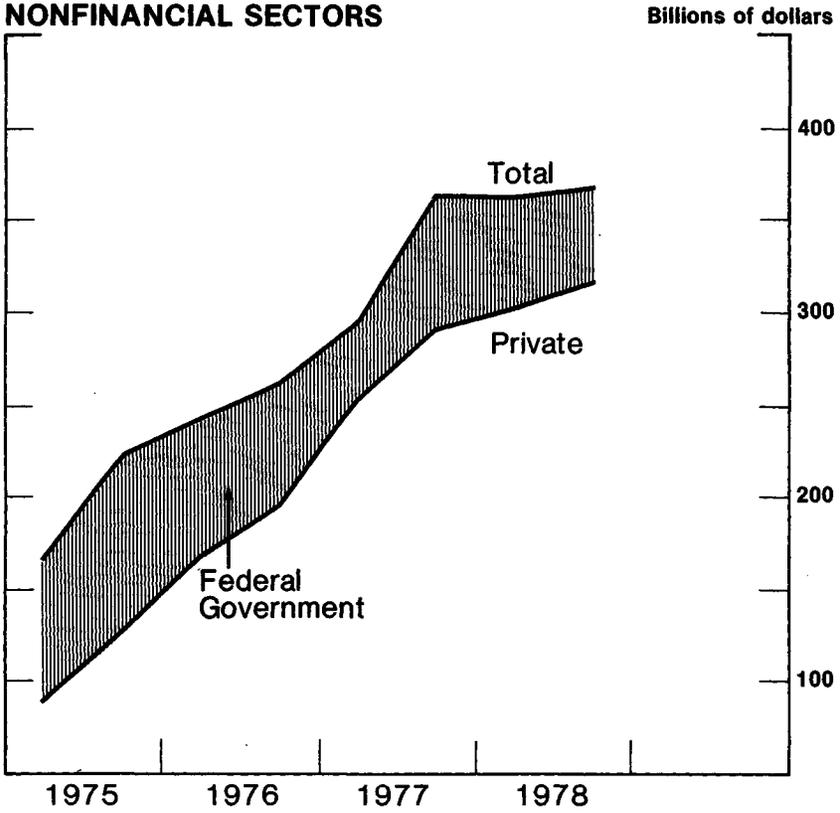
deposit flows, but quite the contrary is true of the MMCs. During the first 5 months of 1978, time and savings deposits subject to rate ceilings at commercial banks, savings and loan associations, and mutual banks grew at a 7.9 percent annual rate; since the beginning of June, these deposits have grown at a 10.3 percent rate despite substantial further increases in market interest rates. MMC balances at the end of January totaled about \$105 billion and accounted for 7-3/4 percent of savings and small time deposits at banks and almost 13 percent at thrift institutions.

The MMCs have greatly reduced the sensitivity of time and savings deposit growth to changes in market interest rates, but they have not eliminated it. Indeed, inflows have moderated during the past few months, at least partly in response to the substantial further rise in interest rates. Increased noncompetitive tenders in auctions of Treasury securities and record growth of money market mutual funds are indications that recent interest rate levels have been inducing some diversion of funds from savings and small time accounts subject to fixed rate ceilings.

#### Credit Flows

Although accelerating inflation has tended to dampen the impact of rising nominal interest rates on credit demands, there has been a perceptible flattening of the over-all pace of borrowing in the economy over the past year. Total funds raised in credit markets by the private domestic nonfinancial sectors have expanded only moderately

### FUNDS RAISED BY DOMESTIC NONFINANCIAL SECTORS



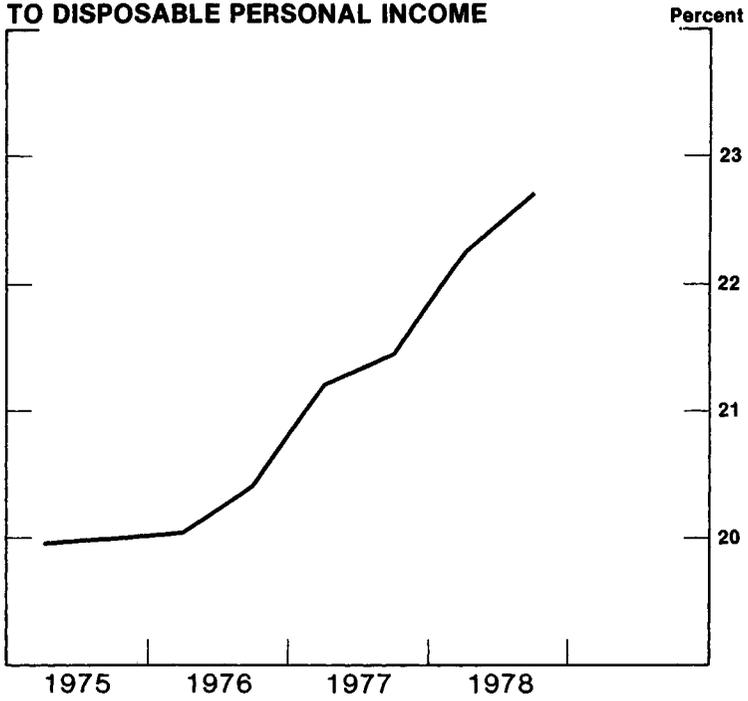
since the second half of 1977 after having risen rapidly during the earlier part of the economic expansion. Although the liquidity of depository institutions has declined over the past two years, the introduction of the MMC has prevented the disintermediation that accompanied previous interest rate cycles and permitted banks and thrift institutions to continue to account for a very large share of the funds advanced to ultimate borrowers.

Households, in particular, are heavily reliant on depository institutions for credit, and their demands for funds have remained strong. Home mortgage borrowing in 1978 was slightly larger than in 1977, and consumer instalment borrowing rose to a new record as households financed purchases of autos and other large ticket items. The aggregate flow of credit to households in 1978, at more than \$160 billion, was 15 percent greater than in 1977 and three times the volume recorded in 1975.

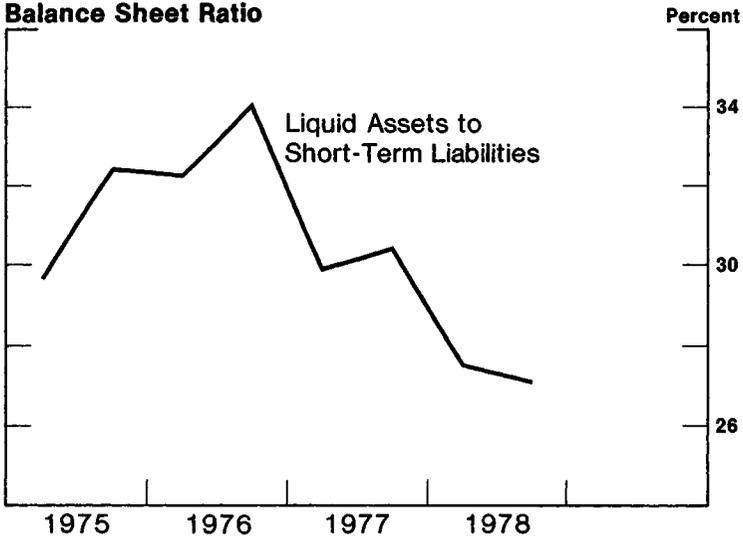
The build-up of indebtedness by households over the last three years has outstripped both the growth of this sector's financial asset holdings and of disposable income. Repayment burdens have reached record proportions. Although loan delinquency data indicate that families have not as yet encountered significant difficulty in meeting their obligations for debt service, the diminished liquidity of household financial positions suggests a greater fragility and vulnerability to any deterioration of income flows.

The nonfinancial business sector also experienced some decline in liquidity in the past year. The gap between corporate capital spending and internal cash flow widened, and firms met

### HOUSEHOLD DEBT REPAYMENTS RELATIVE TO DISPOSABLE PERSONAL INCOME



### NONFINANCIAL CORPORATIONS Balance Sheet Ratio



a substantial portion of their external financing needs through short-term borrowings--particularly from commercial banks. While commercial mortgage borrowing increased and private bond placements remained large, many of the big, highly rated industrial firms that have ready access to the public bond markets evidently preferred to defer long-term financings in the expectation that long-term rates would eventually decline. As a consequence, the aggregate ratio of liquid assets to short-term liabilities in the nonfinancial corporate sector declined over the course of 1978, to a level only slightly above the 1974 low.

State and local borrowing was about the same in 1978 as in 1977. Advance refundings again accounted for a sizable share of tax-exempt bond issuance, but such operations virtually ceased after August owing to the combination of restrictive IRS regulations and rising interest rates. Despite some rise in the past few months, the ratio of yields on municipal bonds to those on taxable obligations has remained relatively low by historical standards, reflecting in part the continued demand for tax-exempt securities by casualty insurance companies, commercial banks, and individuals.

Borrowing by the U.S. Treasury has declined over the past year, reflecting the diminution of the Federal budget deficit. Government borrowing from the public totaled \$59 billion in FY 1978, but is projected by the Administration at about \$40 billion in the current fiscal year. The preponderance of the increase in outstanding Treasury debt during 1978 was absorbed by State and local governments, which purchased a large volume of nonmarketable Treasury securities with

proceeds of advance refundings, and by foreign official institutions, which invested dollars obtained in exchange market intervention.

Commercial banks satisfied a substantial proportion of the credit demands of households, businesses, and State and local governments during 1978. Total bank credit expanded 10.9 percent over the course of the year, with loan portfolios increasing by 14.6 percent. To meet loan demands many banks had to liquidate holdings of Treasury securities and to borrow either from correspondents or in the open market through the issuance of large CDs or nondeposit liabilities such as Federal funds and repurchase agreements. Aggregate bank liquidity ratios declined appreciably, especially among the smaller and regional institutions that have experienced the strongest business loan growth during this expansion.

Thrift institutions experienced considerable cash flow pressure during the first half of 1978, but they have been able to rebuild their liquid asset positions since the MMCs began to bolster deposit growth. Thrift institution mortgage lending declined moderately during 1978, although there was some upturn in the final quarter in lagged reaction to the midyear pick-up in deposit inflows. Outstanding loan commitments also rose during the second half, but in December were slightly below the year-earlier level.

Life insurance companies and pension funds have continued to experience large inflows of investable funds. In 1978, as in previous years of the economic expansion, these institutions absorbed the bulk of the net issuance of corporate bonds. The insurance companies also have supplied a large share of commercial mortgage credit.

## CHAPTER 2

"the objectives and plans of the Board of Governors and the Federal Open Market Committee with respect to the ranges of growth or diminution of the monetary and credit aggregates for the calendar year during which the report is transmitted, taking account of past and prospective developments in employment, unemployment, production, investment, real income, productivity, international trade and payments, and prices"

Section 108(a) Full Employment and  
Balanced Growth Act of 1978

Section 1. The Objective of Monetary Policy in 1979

The objective of the Federal Reserve is to foster financial conditions conducive to a continued, but more moderate, economic expansion during 1979 that should permit a gradual winding down of inflation and the maintenance of the stronger position of the dollar in international exchange markets. Given the limited margin of unutilized labor and industrial resources remaining in the economy, it is critically important to avoid strong aggregate demand pressures that would aggravate our already serious inflation problem. At the same time, the current condition of general balance in the economy suggests that it should be possible to continue restraint to relieve inflationary pressures without triggering a recession.

Section 2. Growth of Money and Credit in 1979

The Federal Open Market Committee has selected growth ranges for the monetary aggregates that it believes will bring to bear an appropriate degree of restraint in light of current outlook for fiscal policy and the underlying strength of private demand in the economy. Over the year ending with the fourth quarter of 1979, M-1 is expected to grow between 1-1/2 and 4-1/2 percent; M-2, 5 to 8 percent; and M-3, 6 to 9 percent. Commercial bank credit has been projected to increase between 7-1/2 and 10-1/2 percent during the year.

The growth range for M-1 calls for a marked deceleration from the pace of recent years. This reflects in part an expectation that the shifting of funds to savings accounts with automatic transfer facilities and to the NOW accounts recently authorized in New York State will continue to depress the growth of demand deposits throughout 1979. The Board's staff has projected that such shifting will damp growth in M-1 this year by around 3 percentage points. Because there has been only a brief period of experience upon which to base an analysis of the attractiveness of the ATS accounts, this projection carries a broad range of uncertainty.

The unexplained flatness of M-1 in recent months introduced another uncertainty in the FOMC's deliberations regarding the monetary growth ranges. At this stage it is impossible to tell whether the weakness of M-1 relative to what would have been expected on the basis of historical relationships among money, income, and interest rates is a transitory phenomenon or one that is likely to persist for some time. The range for M-1 assumes that the recent

weakness does in some degree reflect a change in the public's desired allocation of funds among various financial assets that may persist for some time ahead, though not so strongly as in recent months.

The breadth of the specified growth range for M-1 recognizes the considerable uncertainties that currently exist. As subsequent information begins to resolve those uncertainties, the range may be adjusted. In the meantime, M-1 may continue to be a somewhat ambiguous indicator of monetary policy, and it will be especially important to monitor carefully the behavior of other financial variables.

It may be noted that the Federal Reserve is studying possible redefinitions of the monetary aggregates. Among the proposals made in a staff paper published for public comment in the January Federal Reserve Bulletin is that M-1 be redefined to encompass ATS, NOW, and other similar transactional accounts. While such a redefinition would not eliminate the need to understand the behavior of the various financial assets, it might produce an aggregate that is more reflective of the public's need for transactions balances in light of ongoing institutional changes.

The behavior of M-1 was not the only puzzling development confronting the FOMC early this month as it considered the appropriate ranges for monetary growth during 1979. There were questions as well regarding the movements of the interest-bearing components of the broader aggregates--especially the time and savings deposits at commercial banks that, along with M-1, constitute M-2. Bank savings

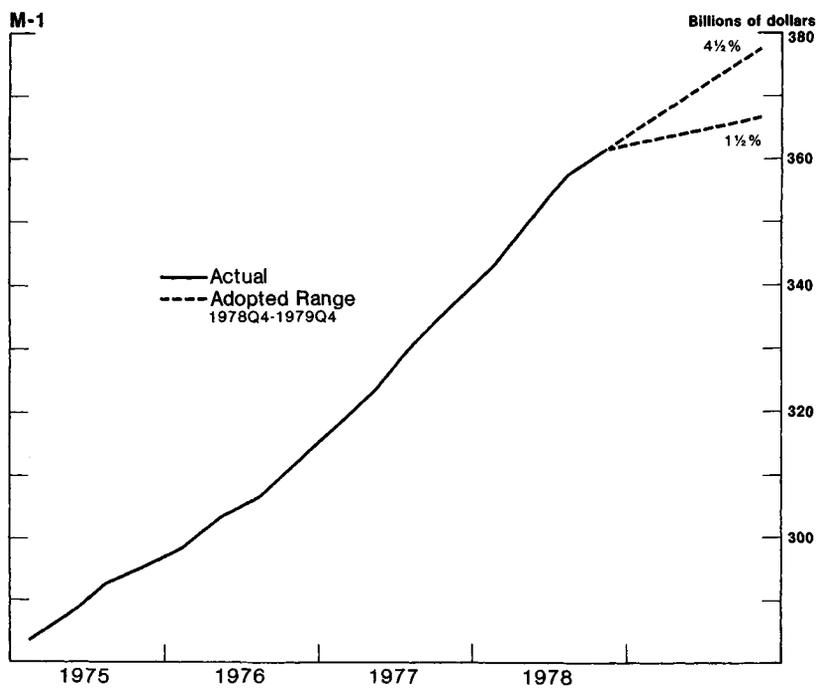
deposits have declined appreciably in the past few months, despite the influx of funds to ATS savings accounts. While savings deposit inflows might be expected to exhibit weakness when market interest rates are so far above regulatory ceilings, a large gap had existed for a considerable time and it might have been expected that most of the interest-sensitive funds had already moved into other instruments. It is possible, however, that--as perhaps with demand deposits--the recent further sharp increase in interest rates to historically high levels has prompted many people to seek out more aggressively alternative assets carrying market yields. The M-2 range adopted by the FOMC reflects an expectation that growth of the interest-bearing component will be somewhat stronger in the months ahead, buttressed by further sizable increases in the large denomination time deposits included in the total and abatement of the recent unusually large withdrawals of funds from savings deposits.

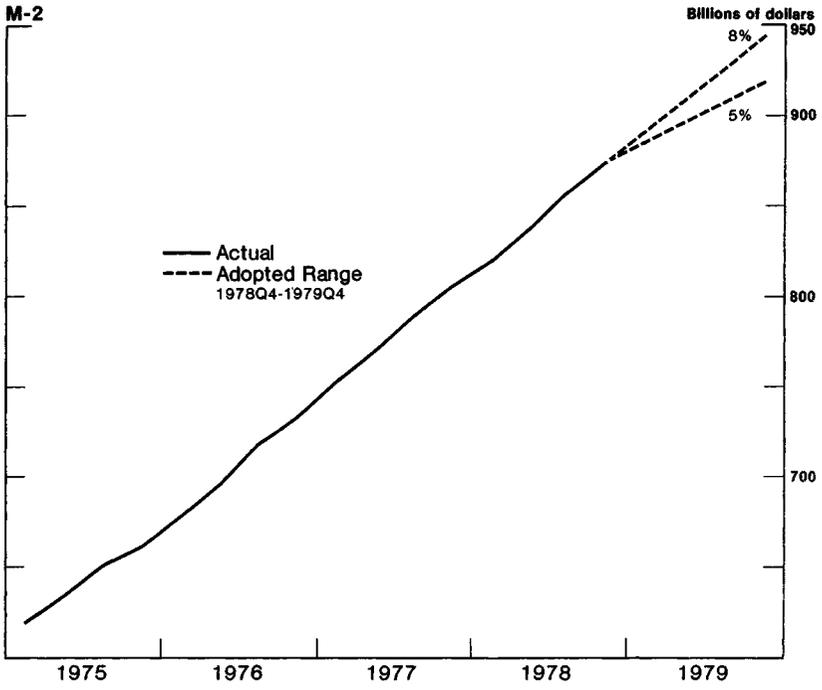
The range for M-3 implies a continued substantial growth of deposits at nonbank thrift institutions. The money market certificates have proven a reliable source of funds. While some institutions have reduced their promotion of MMCs, the certificates have continued to be widely offered at ceiling rates--although there has been some erosion of thrift institution earnings since mid-1978 as these relatively high cost deposits have taken a growing share of thrift institution liabilities.

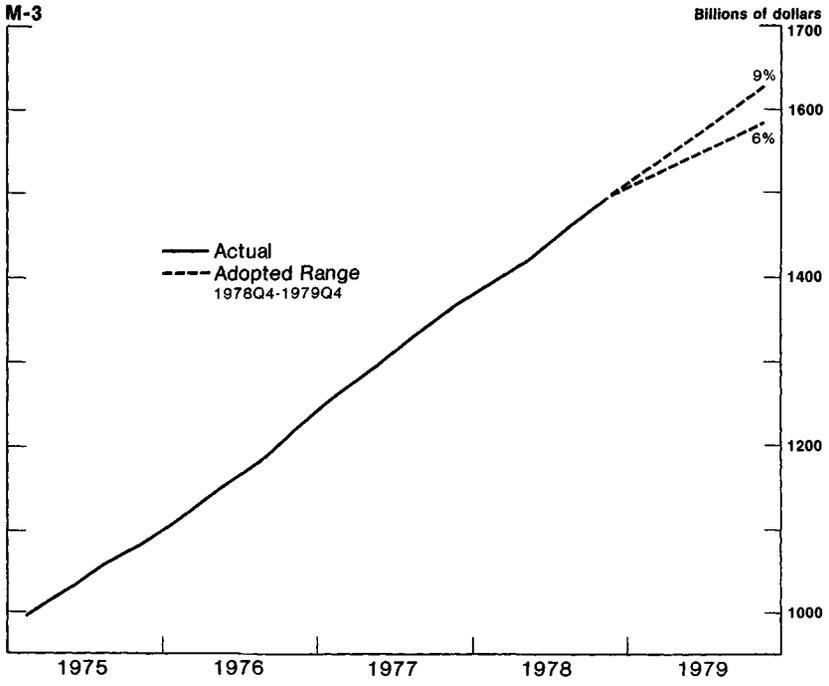
The projected range for bank credit expansion reflects an expectation that loan demands will be less intense in 1979 than in 1978, in line with the prospective more moderate growth of economic

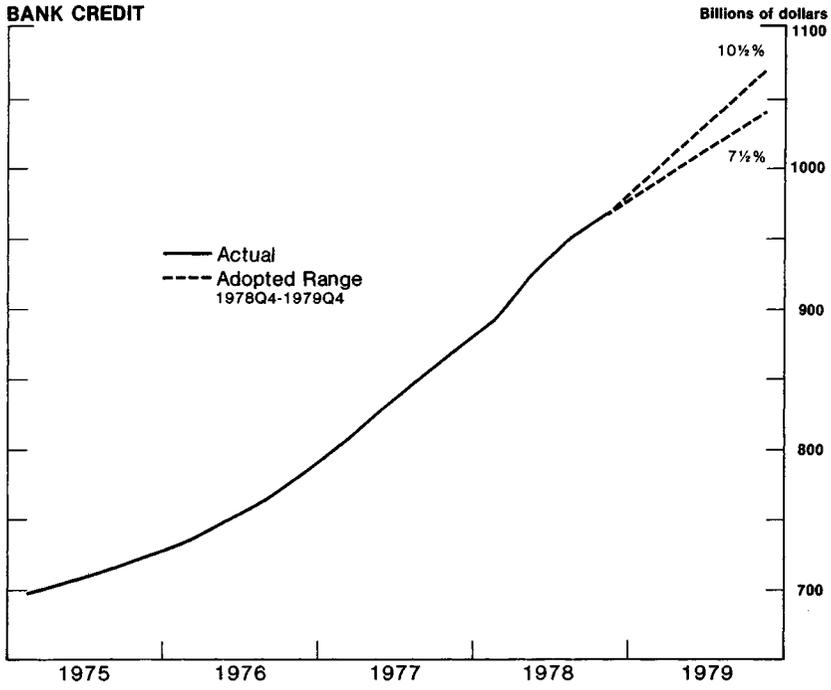
activity. Banks likely will have to continue relying heavily on large time deposits and other money market liabilities to fund asset growth, and this implies some further decline in traditional measures of institutional liquidity.

-58-









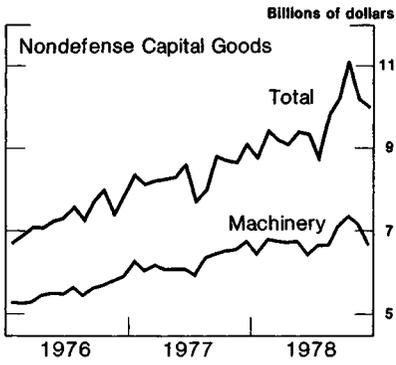
Section 3. The Economic Outlook

Despite the surge in real GNP during the fourth quarter, it appears that underlying economic and financial conditions will lead to a moderation of economic growth in the year ahead. The absence of the sorts of distortions and imbalances that have often precipitated economic downturns in the past indicates that it should be possible to slow the pace of expansion--and thereby relieve inflationary pressures--without prompting a recession. However, any further acceleration of inflation or the occurrence of severe shortages of critical commodities, such as oil, would imperil this outcome.

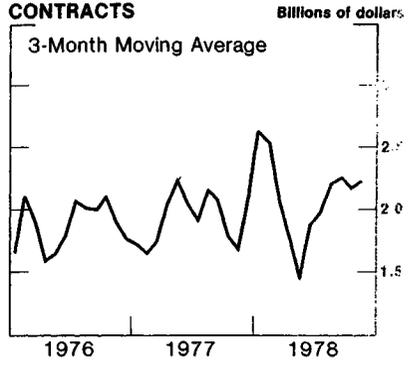
The monetary restraint applied over the past year by the Federal Reserve is expected increasingly to affect the residential construction sector. Higher costs of credit will cause land developers and builders to put aside marginally profitable projects, and the combination of higher house prices and mortgage rates will lead some families to defer home purchase. Nonetheless, owing to the MMCs and various institutional developments that have broadened the sources of mortgage funds, as well as to the strong underlying demand for shelter, the decline in housing activity should be moderate by comparison with past cycles.

Business fixed investment likely will continue to grow during 1979, but at a slower rate than in 1978. There has been some indication in the past few months of a slowing in the steep upward trend of contracts and orders for plant and equipment, and this is generally consistent with surveys of capital spending plans which

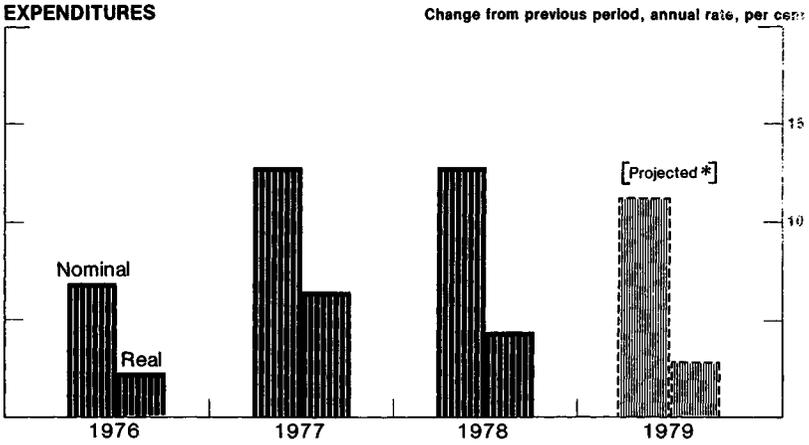
**REAL NEW ORDERS**



**REAL CONSTRUCTION CONTRACTS**



**PLANT AND EQUIPMENT EXPENDITURES**



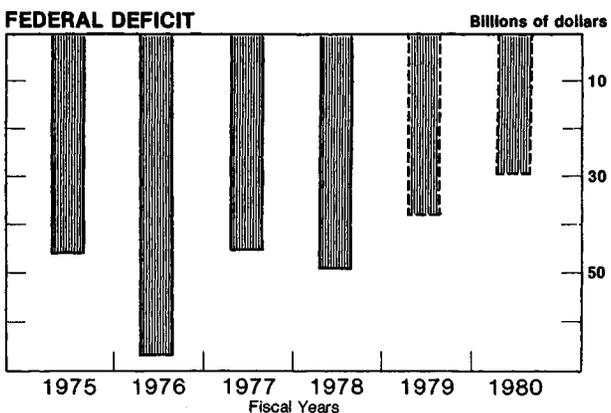
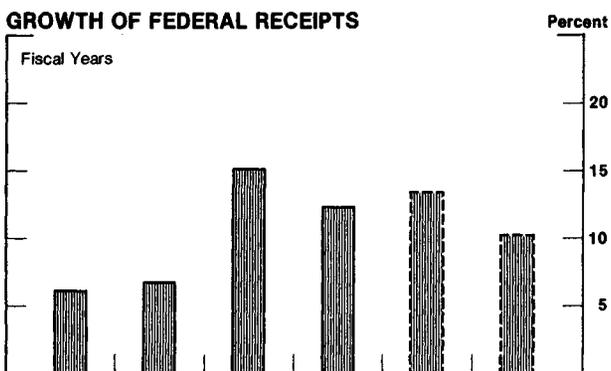
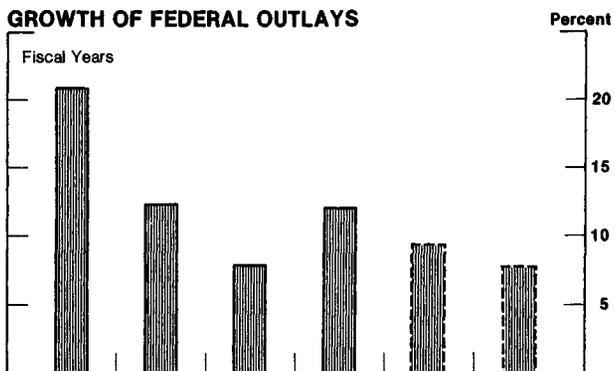
\* Department of Commerce Survey of Anticipated Plant and Equipment Expenditures, December, 1978.

point to smaller gains in outlays this year than last. On the other hand, the climate for investment can be expected to improve as business managers begin to perceive some progress in retarding inflation and become more confident about the sustainability of expansion.

Government spending probably will post only a small increase in real terms this year. Indeed, real Federal purchases could decline during the first half due partly to expected repayments of Commodity Credit Corporation loans (which are, in effect, sales of agricultural stocks). At the State and local level, slower growth of Federal financial aid and the pressure for tax relief will tend to hold spending increases to small proportions.

Foreign demand for U.S. exports should tend to strengthen during 1979. Economic expansion abroad is generally expected to continue at its recent more rapid pace, and the effects of the substantial depreciation of the dollar on the U.S. trade position should become more evident as the year progresses.

On balance, the aforementioned sectors are likely to provide a reduced impetus to income growth during the year ahead. As a consequence, consumer spending is likely to grow less vigorously. Moreover, the substantial debt repayment burdens faced by many households and generally reduced liquidity of the household sector could prompt households to increase their recent relatively low savings rate. The demand for imports also should moderate this year, not only because of the slower expansion of domestic income and production, but also because of the lagged effects of the 1977-1978 decline



Note: Projections for 1979 and 1980 are from The Budget of the U.S. Government.

in the international exchange value of the dollar. Inventory investment is likely to be relatively flat in the projected economic environment.

With a slower growth of activity, pressures on productive capacity should ease a bit. Industrial capacity utilization rates, which in the manufacturing sector are not now far below past cyclical peaks, should decline slightly. In labor markets, the growth of employment should moderate from its recent rapid pace. Labor force increases likely also will diminish, as the growth of the working age population slows slightly and as labor force participation rates--especially for youth--respond to the slackening in economic expansion. Together, the prospective changes in employment and the labor force point to a small increase in the over-all unemployment rate during 1979.

The moderation of demand pressures in labor and product markets will tend to slow the advance of wages and prices and thus to reduce the present, unacceptable rate of inflation. However, uncertainties will remain as a result of highly volatile and largely exogenous influences such as farm prices and oil prices. It now appears that food prices will increase somewhat less this year than last. Unfortunately, the price of imported oil will be boosted substantially this year as a result of the decisions taken by OPEC in December, and the unsettled situation in Iran raises the possibility of even larger price increases.

Setting aside these special factors, a key determinant of the rate of inflation this year will be the performance of unit labor

costs. Although there may well be some improvement in productivity in the next few years as the work force tends to become, on average, somewhat older and more experienced, there is little reason to expect any marked acceleration of productivity growth during 1979. Consequently, if there is to be a noticeable slowing in the rise of unit labor costs, compensation gains will have to moderate significantly.

Toward this end, the Administration's wage-price program can play an important role. By providing a standard for constructive behavior on the parts of both business and labor, the program can be a vehicle for helping to brake the wage-price spiral. Broad compliance with the Administration's standards would make a significant contribution to the slowing of inflation. Of course, the wage-price program can be successful only if there is complementary restraint in monetary and fiscal policy--to contain aggregate demand pressures and to assure the public of the Government's commitment to the restoration of price stability.

CHAPTER 3

"the relationship of the [Federal Reserve's] objectives  
and plans to the short-term goals set forth in the most  
recent Economic Report of the President"

Section 108(a) Full Employment and  
Balanced Growth Act of 1978

Section 1. The Short-Term Goals in the  
Economic Report of the President

As specified by the Full Employment and Balanced Growth Act, the President's Economic Report, transmitted to the Congress last month, lays out a detailed set of economic goals for 1979 and 1980. The discussion of the Act's requirements points out that the Administration's "short-term goals for [1979] and 1980 represent a forecast of how the economy will respond over the next 2 years not only to the budgetary policies proposed by the President for fiscal 1979 and 1980 but to the anti-inflation program announced on October 24."<sup>1/</sup>

The Administration's goals, along with the comparable figures for 1978, are summarized in the following table:

The President's Economic Goals

Item	1978 Level, fourth quarter	1979	1980
Employment (millions)	95.6	97.5	99.5
Unemployment rate (percent)	5.8	6.2	6.2
	Percentage change, fourth quarter to fourth quarter		
Consumer prices	8.9	7.5	6.4
Real GNP	4.3	2.2	3.2
Real disposable income	3.3	2.8	2.3
Productivity	0.2	0.4	1.1

<sup>1/</sup> Economic Report of the President, p. 108.

Section 2. The Relationship of the Federal Reserve's  
Monetary Growth Ranges to the Short-Term Goals in  
The Economic Report

The Full Employment and Balanced Growth Act directs the Federal Reserve to assess the relationship of its plans for monetary growth to the short-term goals in the Economic Report. This task is complicated by the fact that goals are specified for a variety of economic variables, and monetary policy does not affect each of them separately. Monetary policy has its most direct short-term impact on aggregate nominal GNP. Within the context of a particular nominal GNP outcome, the mix of real output gains and inflation, the growth of employment, and the movements in other variables are influenced importantly by conditions at the beginning of the period, by other governmental policies, by the structural and behavioral relationships in the economy, and by developments outside the domestic economy.

As required by the Full Employment and Balanced Growth Act, the Federal Reserve at this time has established ranges for monetary growth through the end of 1979. It will reassess these and report preliminary ranges for 1980 in July, unless developments in the months ahead necessitate earlier reconsideration. At this juncture, the monetary growth ranges and the Administration's 1979 economic goals appear reasonably consistent. The Administration's forecast implies an expansion in nominal GNP of around 9-3/4 percent from the fourth quarter of 1978 to the fourth quarter of 1979. The midpoint of the FOMC's growth range for M-1 is about 6 percent after adjustment for the expected impact of shifts of funds to ATS and NOW accounts.

This suggests an increase of M-1 velocity on the order of 3-1/2 percent, a figure somewhat above the longer-term trend, but reasonable in light of the lagged effects of the recent substantial increases in interest rates and the downward shift in money demand that has been occurring. The upper and lower boundaries of the M-1 range, of course, allow for the possibility of smaller or faster increases in velocity over the year.

The output-price mix in the Administration's 1979 forecast appears attainable if there is reasonable compliance with the wage-price standards and as long as there are no untoward shocks such as an unanticipated surge in food or energy prices. The employment and productivity forecasts appear consistent with the output goal, and the unemployment rate forecast seems consistent with reasonable assumptions about labor force growth in the projected economic environment.

Considerably greater uncertainties naturally are encountered with respect to the Administration's goals for 1980, a period that is still rather distant. Nothing in the monetary or economic projections for 1979 suggests to us that conditions prevailing at yearend will bar the achievement of the Administration's forecasted 9-1/2 percent growth in nominal GNP during 1980. At this time, however, the achievement of the output-price mix projected for 1980 appears to be more difficult.

The Administration has forecast a marked acceleration of real GNP growth in 1980 and a marked deceleration of inflation. Such an outcome is certainly attainable, but given the projected levels

of resource utilization--with the unemployment rate remaining around 6-1/4 percent--this result will require considerable progress in the lowering of inflation expectations. There will have to be broad conformance to the Administration's wage-price standards, and Government will have to give careful attention to the potential cost-raising impacts of its regulatory and legislative actions. Continued budgetary restraint also will be necessary, both to build confidence in the Government's commitment to avoid fiscal excesses and to minimize pressures on the capital markets.

Recognizing the risks and uncertainties that currently exist, the Administration's 1980 forecast can serve as an appropriate goal for Congress as it considers its budgetary plan for fiscal 1980. If inflationary pressures subsequently should prove stronger than the Administration has projected, then the prudent course for Government policy would be to exercise a substantial degree of restraint even if it risks less real growth in 1980 than the 3.2 percent goal. Such a policy would lay the foundation for balanced economic growth over the years to come and help to maintain the integrity of the dollar.



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

G. WILLIAM MILLER  
CHAIRMAN

March 7, 1979

The Honorable Donald Stewart  
United States Senate  
Washington, D.C. 20510

Dear Senator Stewart:

Chairman Proxmire recently relayed to me a number of questions you raised in connection with the February 20 hearings on monetary policy. Enclosed are the answers to those questions, and, as noted below, I have forwarded a copy to Chairman Proxmire for inclusion in the hearing record.

If I have failed to respond fully to your inquiry or if you would like to pursue these matters further, please let me know. If it would be useful, a member of the Board's senior staff could be made available to discuss some of the technical issues.

Sincerely,

(Signed) G. William Miller

Enclosure

cc: Chairman Proxmire

MAR 7 1979

Questions submitted by Senator Stewart and Chairman Miller's response for inclusion in the record of the hearing before the Senate Banking Committee on February 20, 1979.

1. How will the Federal Reserve's plans and objectives:

- help slow down the rate of inflation?
- help maintain a growing economy without a recession?
- help increase productivity by encouraging capital investment?

Federal Reserve policy is directed at fostering financial conditions that favor sustained, but more moderate, economic expansion. An easing of demand pressures in labor and product markets would contribute to the restraint of inflation. The prospect of a more stable, non-inflationary environment should encourage businesses to make investments that will enhance the longer-range growth of productivity.

2. How should monetary and fiscal policy be coordinated?

- Should both be tight?
- Should one be tight and the other relaxed?

It is essential that the overall thrust of monetary and fiscal policy be in the direction of restraint of aggregate demand if domestic inflationary pressures are to be reduced and international confidence in the dollar bolstered. The question of policy mix is a very difficult one, with no clearcut answer. Emphasis on fiscal restraint would be relatively conducive to business investment, while emphasis on monetary restraint might offer some advantage in attracting private capital from abroad. At this time it would appear desirable to chart a budgetary

course that will eliminate the Federal deficit within a reasonably short period; the Administration's FY 1980 budget proposal is generally consistent with that goal. By limiting Federal demands on credit markets, this will help to create an environment in which interest rates could decline as inflation expectations abate.

3. Can monetary policy offset expansive fiscal policy?

It is possible for tight monetary policies to offset an expansive fiscal policy. It would not appear that there is currently any reason for substantial concern about monetary and fiscal policies working a cross-purposes; there is good communication among the policymakers involved and a broad recognition of the problems confronting the nation.

4. What is the likelihood of a recession in 1979 given current conditions?

The economic outlook is discussed at some length in Chapter 2 of the Board's Monetary Policy Report. As is noted there, it does not appear that a recession this year is the most likely outcome. However, the state of the economy is such that unforeseen inflationary pressures or supply constraints could make it more difficult to avoid a downturn.

5. What would be the best public policy response if the economy goes into a recession?

Much would depend on the nature and causes of the recession and the prospects for an early self-correction. However, several considerations

suggest that if stimulative action is required, monetary policy might possess some advantage. One is the greater ease with which monetary policy can be adjusted in the short-run; discretionary fiscal policy involves a relatively time-consuming legislative process. Another is that, as a practical matter, stimulative fiscal actions generally prove difficult to reverse once they are no longer needed; it would be most unfortunate if any action were taken that represented an impediment to longer-range progress toward budgetary balance. Finally, a policy mix that relied relatively less on fiscal stimulus would be most favorable to business capital formation.

6. How does the monetary policy restrain inflation?

Monetary policy restrains inflation by raising the cost and reducing the availability of credit. The tightening of credit conditions damps aggregate demand and thereby eases pressures in labor and product markets.

7. Can monetary policy restrain inflation without causing a recession?

Yes, so long as monetary restraint is not applied with excessive severity. In the present instance, the Federal Reserve has set a realistic goal of gradually reducing the pace of inflation over an extended period. Nonmonetary developments could precipitate a downturn, but it is the objective of the Federal Reserve to promote financial conditions that are conducive to continued economic expansion and an easing of inflationary pressures.

8. Why has money growth been so weak in recent months?

- What should the Federal Reserve's response be to this slow money growth?
- Should monetary policy be relaxed temporarily?

As was discussed in the Monetary Policy Report, the causes of the recent weakness of monetary expansion are not at all clear. In deciding its response to the behavior of the monetary aggregates, the Federal Reserve has considered--as it always does--the broader financial picture and developments in the economy. With economic growth recently quite robust and credit demands evidently still strong, it has not appeared appropriate to ease policy.

9. How should the Fed react to downward pressure on the value of the dollar?

There is in place a broad program of dollar support operations by the Treasury and the Federal Reserve. This program has proven very successful to date, and there is no reason to doubt that it will continue so. The United States and other governments have shown their willingness to intervene in foreign exchange markets to support the dollar; there are adequate resources available under present arrangements to finance further sizable intervention if the necessity arises. Most important for the strength of the dollar is the commitment of this nation to domestic policies that will restore price stability and bolster U.S. productivity and international competitiveness.

10. How would you evaluate the impact of the 6-month money market certificates?

The money market certificates have given commercial banks and thrift institutions an effective means of competing for the savings of smaller investors in a period of high market rates of interest. While the higher cost of the certificates has put some pressure on thrift institution profit margins, the certificates have prevented disintermediation, which in past periods disrupted credit flows and economic activity. The certificates have not eliminated the impact of monetary policy, but they have altered it by placing greater emphasis on interest-rate rather than credit-availability effects. Financial markets thus should allocate credit more efficiently, and the impact of monetary restraint should not fall with such severity on certain sectors, most notably housing.

# FEDERAL RESERVE'S FIRST MONETARY POLICY REPORT FOR 1979

FRIDAY, FEBRUARY 23, 1979

U.S. SENATE,  
COMMITTEE ON BANKING, HOUSING, AND URBAN AFFAIRS,  
Washington, D.C.

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

Present: Senators Proxmire, Tsongas, Garn, and Kassebaum.

## STATEMENT OF CHAIRMAN PROXMIRE

The Chairman. The committee will come to order.

Gentlemen, I want to thank you for appearing in spite of the weather we've had. A number of Senators have indicated they're coming, but they will be a little late.

This is our second and final day of hearings to consider the Federal Reserve's monetary policy report to the Congress pursuant to the Humphrey-Hawkins Act.

Chairman Miller testified before the committee on Tuesday at which time he indicated that the Federal Reserve's intended policies for 1979 will be directed at dramatically decelerating the rate of growth of the monetary aggregates from the pace of recent years.

The objective of this policy, according to Federal Reserve, is to foster financial conditions conducive to a continued, but more moderate economic expansion during 1979 that should permit a gradual unwinding of inflation.

According to Chairman Miller, it would be possible to lessen inflation without triggering a recession given the current condition of general balance in the economy today.

The Federal Reserve's report described the relationship between the intended monetary growth ranges and the administration's 1979 economic goals as appearing to be "reasonably consistent." What we want to know is how are they consistent? I'm not sure that the Fed has answered that question sufficiently.

Chairman Miller indicated that the Federal Open Market Committee's growth rate range for  $M_1$  has been reduced to  $4\frac{1}{2}$  to  $1\frac{1}{2}$  percent for 1979, which seems like a dramatic reduction, the mid-point being 3 percent.

He also indicated that this marked deceleration reflects, in part, the Federal Reserve's expectation that funds will be shifted out of demand deposits and into automatic transfer savings accounts and NOW accounts.

The Board's staff has estimated that this shifting will dampen growth in  $M_1$  this year by about 3 percent. I have asked Chairman Miller to send us the background analysis which leads to that conclusion.

Quite frankly, no one can be sure that the Board's staff estimate of 3 percent is even close to what will actually occur.

Allowing the Fed the 3 percent adjustment to its  $M_1$  growth rate range would call for  $M_1$  growth between  $7\frac{1}{2}$  and  $4\frac{1}{2}$  in 1979. The midpoint of that range—6 percent— was emphasized by Chairman Miller. He said that it would be sufficient to lead to economic expansion in nominal GNP of around  $9\frac{3}{4}$  percent.

I think, therefore, at this point we have to assume that the Fed will be aiming at the midpoint of the adjusted  $M_1$  range.

The administration's nominal GNP growth of  $9\frac{3}{4}$  percent is composed of an output-price mix of 2.2 percent real GNP and 7.5 percent increase in consumer prices. Chairman Miller told the House Banking Committee on Wednesday that he is a little less optimistic about real GNP growth, 1.75 to 2.25 percent, and a little more pessimistic on inflation, 7.5 to 8.25 percent, than the administration.

The principal objective of monetary policy during 1979 should be the slowing down of inflation. If fiscal policy, and Federal spending, in particular, can be constrained and the wage-price guidelines are successful, we will have a coordinated fiscal-monetary approach toward restraining inflation, and fiscal restraint should allow the Federal Reserve to gradually lower the growth of the monetary aggregates without causing a recession.

However, if a recession is not avoided, the correct policy mix would call for fiscal policy to remain restrictive and for monetary policy to become more accommodative to help stimulate private investment and the economy.

I think it is important for the committee to quantify these general observations about the relationship between monetary policy and the administration's economic goals. The Federal Reserve was somewhat less responsive to that requirement in the new reporting requirements than they could have been, so I hope that our witnesses today will be able to help us fill in some of the gaps and give us suggestions as to how the monetary policy reports of the Federal Reserve can be improved.

We are fortunate to have with us today a panel of economists: Dr. Allen Sinai, vice president and senior economist, Data Resources, Inc.; Prof. Edward Kane of the Ohio State University; and Mr. Enrich Heinemann, vice president of Morgan Stanley & Co., Inc.

I think, Mr. Heinemann, you are also a former New York Times commentator on economics.

Franco Modigliani, who is the past president of the American Economic Association, was supposed to be here today, but had to change his plans at the last moment because of an unfortunate accident that he suffered.

So, gentlemen, we are happy to have you.

And, Dr. Sinai, if you would go ahead first, and we will follow with Professor Kane and Mr. Heinemann.

**STATEMENT OF ALLEN SINAI, VICE PRESIDENT AND SENIOR  
ECONOMIST, DATA RESOURCES, INC.**

Dr. SINAI. My statement is divided into two sections, one having to do with some general comments on the conduct of monetary policy and a number of new realities that have arisen to complicate the decisionmaking at the Federal Reserve, and a second part that is more concerned with the monetary policy target set by the Federal Reserve and their consistency with the administration's goals and outlook for the economy in 1979.

Although the material on the conduct of monetary policy intrigues me greatly, I think I will skip over that.

The CHAIRMAN. Yes; let me say to you, Dr. Sinai, that your entire statement will be printed in full in the record, and we would appreciate any abbreviation so we can have as much time for questions as possible.

Dr. SINAI. Well, that material really raises other issues that we could turn to, but in view of your introductory remarks, I would like to turn directly to the material in the statement that begins about page 24; and it probably would be helpful if you have copies to use them, because I will refer to some numbers, charts, and tables in the testimony.

If we look at the economic goals of the Carter administration as embodied in the 1979 Economic Report of the President—I have reprinted them in table 10, on page 25, along with the corresponding DRI projections for the economy.

Now, in table 10, the items, the variables—the projections of which are reprinted there—they were not all provided in the Economic Report of the President, but what we did was to take the DRI model of the economy and to use the key parameters of the administration policy, as was stated in the Economic Report, and then to simulate them.

And so, you see, for the range of variables listed, the sometimes explicitly stated figures of the administration and the derived numbers, out of the derived model simulation for 1979 and 1980, fourth quarter to fourth quarter.

The administration goals and outlook can be summarized in the phrase "soft landing on orderly deceleration of the economy" that produces real economic growth of 2.2 percent between now and the end of next year—between the fourth quarter of 1978 and the fourth quarter of 1979.

The inflation outlook by the administration is for about 7½ percent in consumer prices, and the unemployment rate projection is 6.2 percent in the fourth quarter.

The DRI view of the economy is more pessimistic; from fourth quarter of 1978 to fourth quarter of 1979, we think there will be almost no growth in the real economy—two-tenths of 1 percent—and considerably higher inflation, at 9 percent.

The differences in the components of the various expenditures are shown in table 10, and we see a weaker housing result, much slower consumption expenditures and, later on this year, weaker investment; and that accounts for the differences between the two projections, the implied monetary growth rates from the two projections—the one embodying the Carter goals and outlook and the one that represents our current forecast are shown in table 11.

There I have reprinted the new Fed target ranges for  $M_1$ ,  $M_2$ , and  $M_3$ .

And if we look at the  $M_1$ , implied as a result of our model simulation—the  $M_1$  growth implied by the administration forecast, it is 4.4 percent. The  $M_1$  growth that comes out of the current DRI forecast, over the time period, is 2.7 percent.

For  $M_2$ , it is  $7\frac{1}{2}$  percent for the administration scenario and 7.1 percent for the DRI forecast.

And for  $M_3$ , it is 7.9 percent for the administration projections and 7.1 percent for the DRI forecast.

Let me again say that those monetary growth rates are not explicitly stated by the administration as a consequence of what they think will happen in the economy or what they think will happen to inflation. They are the results of putting the key administration parameters into the DRI model and then floating them through two previous sets of monetary growth rates.

It is interesting to note that taking the Carter Administration assumptions on monetary growth and flowing them through our model produces monetary growth rates that are very near the upper end of the new target ranges announced by the Fed. And so, if you ask, are the monetary growth rate targets new ones, consistent with the Carter objectives and goal, the answer is “barely,” because if we have the Carter administration-type world in 1979, we would have monetary growth just about at the upper ends of the new ranges.

The DRI forecast that produces these monetary growth rates that are much closer to the midpoints—are conditioned on a mild recession in the second half, higher inflation and, really, a worse picture of the economy.

We have run a couple of other exercises to assess the consistency for the prospects for monetary growth under a Carter administration view, and under what we would think would be a more realistic view, based on our forecast, through the simulation of the DRI model.

In table 13, we see the results in terms of the probabilities of the likelihood of monetary growth occurring within the Fed target ranges, contingent on the DRI forecast for the next year.

It is virtually certain, given the parameters of our forecast, that the new target ranges of the Federal Reserve will enclose the forecasted monetary growth for both  $M_2$  and  $M_3$ —less likely for  $M_1$ .

The table that underlies table 13 is on page 28, table 12, which shows the results of a simulation of the DRI model and the resulting probability distribution for the potential range of outcomes.

We see there that the basic key parameters of the forecast, the DRI forecast, is two-tenths of 1 percent real growth within the next year, 9 percent—8.3 percent growth in the GNP deflator, 9 percent in consumer prices, the rest of—

The CHAIRMAN. Could I just interrupt for a minute? I take it that what you're saying is that when you say that the Fed range—that the Fed monetary policy would barely permit the Carter scenario to develop, because it would work out, provided the monetary increase was at the top of the range—the range is so broad as to be, in my view, almost meaningless. And the Chairman has countered that by saying: “All right, let's talk about the midpoint of the

range;" and we have agreed that, to the extent it varies from that, that it is higher than it was intended to be.

So, in that sense, I would presume that you would argue that their policy may be too restrictive—the Federal Reserve Board may be so restrictive that you will not be able to have the kind of very moderate growth that the administration wants.

Dr. SINAI. That's correct. If you take the midpoint as the key parameters for policy, then the implied monetary growth of the administration goals and the administration outlook will be substantially above the midpoint, and that would require—if the Federal Reserve took such a result seriously and acted upon it, it would require considerably higher interest rates.

The CHAIRMAN. Let me just ask one more question—I hesitate to interrupt while you're making a presentation, but right at this point it just seems so appropriate—do you accept the argument that because of the change in  $M_1$ , because of transactional accounts availability, that there will be the kind of shift out of demand deposits into savings deposits inasmuch as they can be almost used as demand deposits and could be as much as 3 percent shift here, and that would be about \$20 billion?

Dr. SINAI. My assumption in this work was 2.7 percent, so it is very close to the Fed's assumption. Our assumption is based only on the fragmentary data that has been produced so far and an extrapolation of that, so I think their 3 percent guess or our 2.7 percent guess in the reduction of  $M_1$  growth due to ATS is about in the right ballpark.

Let me turn to another part of the statement that may not be in your copies. I have added two tables, 14 and 15, on yesterday. We took the Carter administration scenario and ran simulations on it to obtain the probabilities that, given the Carter assumptions that monetary growth would be—where monetary growth would lie, relative to the Federal Reserve target ranges—and the results are interesting.

Whereas, in table 13 we see that the odds are almost certain that the monetary growth in the DRI forecast will be within the Fed target, the odds are much, much less that the monetary aggregate growth implied by the Carter economic scenario will fall within the Fed target ranges. This is the result—this is a little stronger result than the forecast implied by the two scenarios; because this is run on the basis of 100 stochastic simulations, and we find that the odds are 38 percent—or they are actually 51 percent that  $M_3$  growth under a Carter scenario will be greater than the upper limits of the  $M_1$  target range—38 percent of  $M_1$  growth will be greater than the upper limit, than the  $M_2$  target range; and 53 percent—that the  $M_3$  growth will be greater than the upper limit for that target range.

So, I would say, again, it looks to me that either the administration goals are unrealistic and very unlikely to happen or the Federal Reserve target ranges are tougher than the administration goals will be able to meet.

The CHAIRMAN. Are you suggesting then the committee ought to recommend to the Federal Reserve Board that they raise the lower limit?

Dr. SINAI. In order to achieve the orderly deceleration and the kind of real growth that the administration wants, the target ranges should be higher.

The CHAIRMAN. Thank you.

Dr. SINAI. The reason I gave the—didn't answer your question directly, yes or no, is I am not sure that it is a weaker result in the economy than the administration is talking about.

The CHAIRMAN. What we're trying to deal with in the Humphrey-Hawkins Act is to get coordinated economic policy and not have the Fed going one way and the President going the other way.

As I understand it, what we would like to do is to bring the programs together and have them work in tandem.

Dr. SINAI. It is interesting that the parameters of Chairman Miller's testimony before the House—where the breakdown was between the projections of the Federal Reserve—were about the same, but they were more pessimistic.

Chairman Miller reported a lower growth rate for real GNP than has come out of the economic report of the President, and he talked about a higher inflation rate.

Given the data that came in for January, I think this more recent view by Chairman Miller of the outlook is probably better—closer to what will actually happen than the view that is embodied in the economic report of the President.

Well again, still on this subject, let me just provide for you the results of some further simulations with the model, having to do with what would happen under different interest rate patterns.

The CHAIRMAN. Let me just interrupt once more. What you are saying is that if you follow the Fed's approach, that you're going to have a more likely prospect of a recession, or a slower rate of growth, with a higher level of unemployment—that is the price you pay for more effectively combating inflation; is that right?

Dr. SINAI. Yes. I'm not totally unsympathetic to that view. The slower real economic growth, implied by their targets, that would be necessary to produce the midpoints of the target ranges announced, so long as we don't get into an area which goes into a deep recession, might not be such a bad thing at this time.

Well, with regard to a little further sensitivity analysis, the remaining few pages of this section of the statement reported on what happens—what would happen under different assumptions about interest rate patterns in the economy.

There are those who argue that interest rates should be raised very sharply now and whatever happens ought to happen, because there would be significant long-run benefits. The Federal Reserve is following a course of moderation on interest rate rises. And there are those who feel that the interest rates ought to go lower.

By varying the assumptions on monetary policy so that high and low interest rate patterns could be produced, we get some idea of what would happen to the economy on unemployment and the inflation rate. And these results are summarized in charts 12a through 12e—charts 12e and 12d are reversed. Actually, I'm not sure what 12e—there is something wrong with chart 12e, but if you look at chart 12a, on page 30, you get an idea of the range of variation in the Federal funds rate.

Just to assume different policy questions by the Fed— and this is now assuming a kind of interest rate target of growth rather than an ordinary growth approach, but in a high rate situation where Fed funds could go over 12 percent, we would get a prime of near 14 in the summer, which is one view of what will happen in the next 5 or 6 months.

We don't get that much. We get worse real economic growth in 1979, but—and a deeper recession and a higher unemployment rate, and rather substantial further impacts on housing starts, in 12c, but we don't get much benefit on inflation.

I think inflation is shown in what is now called chart 12e—that is, the implicit GNP deflators. The downward variation of inflation over the next 3 years in that kind of interest rate pattern is not anything to get too excited about. What it does say is that so much of the inflation now is due to other causes besides demand-pull causes and so much of it structural and cost-push and oil-price oriented that interest rates of 12 and 13 percent in the summer will not provide us with that much benefit; and at the same time, the major shock of such interest rate would be on housing and would be on unemployment.

If one varies the monetary growth rates—we performed simulations that produced high, relatively high growth rates for  $M_1$ ,  $M_2$ , and  $M_3$  growth, near the upper bands, the upper limits of the Fed targets, and then another simulation with monetary growth rates at the lower ends. One produces wide variations in interest rates. Once again, it does not do much to jog the economy.

What I conclude from all of this is the following: It isn't going to make much difference to the economy and to inflation this year whether the Fed chooses policies to keep interest rates—the rate of interest rates at another 100 or 150 basis points. The recession this year is pretty well in place, and there isn't really much that anyone can do about it. And so when you bring in other considerations—such as sustaining the dollar and the strength of the dollar—into the picture, I would conclude that it pays to keep the interest rates about where they are, and to keep them up, and not to turn interest rates down sharply when the economy does begin to unwind. It isn't going to do much good now, one way or the other, to vary interest rates 100 basis points up or down; and so the appropriate policy would be to keep them high and to demonstrate for the rest of the world our resolve to fight inflation in order to sustain dollar stability.

[Complete statement of Dr. Sinai follows.]

NEW REALITIES FOR MONETARY POLICY

by

Allen Sinai  
Vice President and Senior Economist

Data Resources, Inc.

Lexington, Massachusetts

Corrected version of statement prepared for the Senate Committee on Banking, Housing and Urban Affairs, Hearings on the Conduct of Monetary Policy Pursuant to the Full Employment and Balanced Growth Act of 1978, Washington, D.C. presented originally on February 23, 1979.

## NEW REALITIES FOR MONETARY POLICY

by Allen Sinai

A set of new economic realities is complicating the formulation and implementation of monetary policy. These "new realities" include:

- (1) a sluggish response of aggregate demand and inflation to rising nominal interest rates, with considerable uncertainty over when, how, and where tighter monetary policy will bite to slow the economy;
- (2) changes in the structure of the financial system that have altered the response of the economy to monetary impulses and the meaning of the monetary aggregates for the conduct of monetary policy;
- (3) the discipline imposed on the U.S. economy by a chronic balance of payments disequilibrium and a weak dollar;
- (4) a pervasive high and accelerating inflation, brought about by a complex set of forces not easily amenable to standard short-run stabilization policy prescriptions;
- (5) the necessity for greater coordination of monetary, fiscal, and incomes policies to avoid self-defeating policy actions;
- (6) growing prospects for a "mild austerity" in the U.S. economy, with a recession in 1979 to be characterized by still high inflation and rising unemployment.

What difficulties do each of these "new realities" bring to the conduct of monetary policy? Are nominal interest rates now high enough for an orderly deceleration of the

economy? Are the monetary aggregates no longer relevant to Fed policy-making? Of what significance is the recent sluggish growth in the monetary aggregates? How critical is dollar defense for monetary policy? Are the new monetary growth targets of the Federal Reserve consistent with Carter Administration goals? What is the likelihood that the monetary aggregate targets selected by the Federal Reserve will produce these goals? What is the appropriate posture for monetary policy in the months ahead?

In this statement, the new realities for monetary policy are analyzed in terms of their consequences for the conduct of monetary policy. A brief analysis of the recent behavior for nominal, "real", and real after-tax interest rates is presented. The new Fed targets for monetary aggregate growth are examined for consistency with respect to Carter Administration goals and in light of the DRI outlook for the U.S. economy. Alternative patterns for interest rates and monetary growth are simulated with the DRI Model to examine their likely impacts in 1979 and 1980. Finally, some suggestions for the conduct of monetary policy are offered, based on current prospects, the model simulations, and analyses reported here.

In summary:

- monetary policy has only been unambiguously tightened in the past three months, so that the slow response of the economy should not be a surprise. At current levels of nominal interest rates, the bite of tighter monetary policy is impacting significantly on the mortgage flows to housing and will continue to do so throughout most of 1979. There will be lesser effects on consumption and business spending, given the relatively

## New Realities

low real after-tax costs of borrowing that exist. However, by mid-year, the tighter monetary policy and other factors such as reduced purchasing power, the oil price shocks, worsened confidence, and a tight fiscal policy will combine to push the economy into a mild recession.

- nominal interest rates do not have to be raised further to produce the desired slowdown in the economy. "Real" interest rates are on the rise and, although lower than in most postwar tight money episodes, remain above the levels of 1973-74. DRI model simulations indicate that the 1979 recession is well-in-place, and would occur even if interest rates remained at current levels for the rest of the year. And, the pattern for nominal interest rates necessary to prevent a recession later this year would involve declines that would be unwise, given the current near full employment condition of the economy and weak position of the dollar. Sharply higher rates of interest would only serve to intensify the coming recession without much benefit to inflation, real economic growth, or unemployment in 1980.
- changes in the structure of the financial system have made the monetary aggregates less meaningful for the conduct of monetary policy, at least until better concepts are developed. However, the recent sluggish monetary growth is too pervasive and entrenched to be a transitory phenomenon. All of the major monetary aggregates are showing growth rates characteristic of late in the business expansion, reflecting the systematic impact of tighter money on the economy. The fundamental behavior that is in process will not be reversed for many months, and the slow monetary growth signals the long-awaited deceleration in the economy.
- the discipline of dollar defense is a critical reality for monetary policy, given the dangers a weak dollar poses for domestic inflation and economic stability. The implication for monetary policy is that sustained, high interest rates are necessary for longer than otherwise would have been the case. At the same time, too high a profile of interest rates could deepen the coming recession sufficiently to hurt the dollar through repercussions on the economies of our trading partners.
- the new monetary growth targets of the Federal Reserve will permit the achievement of Carter Administration economic goals, although barely. DRI simulations of the Carter economic assumptions for 1979 imply M1 growth from 1978:4 to 1979:4 of 4.4%, M2 growth of 8.0% and M3 growth of 9.1%; about at the upper Fed targets of 4-1/2%, 8%, and 9%, respectively. Thus, higher interest rates may be necessary if the "soft landing" scenario of the Administration actually unfolds.
- stochastic simulations with the DRI model indicate the mild recession and high inflation forecasts of DRI are more consistent with achieving monetary growth near the midpoints of the new Fed target ranges than the Administration or Federal Reserve views of the economy. Given the DRI forecasts and model structure, the probabilities of above-targeted growth for M1, M2, and M3 during the next year are 10% or less. Given the Administration outlook, the odds on above-targeted monetary growth rise to over 50% in the case of M1 or M3, and 38% for M2.
- the current U.S. inflation is primarily from cost-push and structural factors, and less from excess demands. Too great a reliance on monetary policy to limit such an inflation would be counter-productive, as was the case in 1973-74. A better solution is to combine a tight fiscal-tight monetary policy over the near-term with TIP-like incentives to reduce wage costs, while simultaneously providing tax incentives for business capital spending and R&D outlays. As

## New Realities

inflation unwinds and the dollar is permanently stabilized, a "tight fiscal-easier money" policy mix would be more appropriate. But any turn toward easier money must only be modest, so long as inflation remains between 7 and 10% and the dollar is fragile.

the "new realities" will make the conduct of monetary policy difficult and suggest a "mild austerity" in the U.S. economy to sustain an unwinding of inflation. Although the near-term implications of the new realities require high and perhaps even further rises for interest rates, the longer-run prospects are for enhanced economic performance. The key is whether the resolve to maintain tougher policies will last until there is a fundamental reversal in the rate of inflation to near 5 or 6%. Current actions and evidence suggest optimism for the longer-run, with potential implications that should not be lost on decision-makers.

#### The New Realities and the Fed Policy Dilemmas

The post-World War II era has been characterized by three phases of Federal Reserve policy-making:

- 1) 1946-1951: constant interest rates to support Treasury financing;
- 2) 1952-1970: a credit conditions approach, with interest rates the focus of Fed policy;
- 3) 1971-1978: a "monetarist" approach with monetary aggregate growth the target of Fed policy and the Federal funds rate the operating lever used to achieve the desired monetary aggregates. Relatively narrow target ranges have been set for the monetary aggregates, following the monetarist prescription that stability in monetary growth should bring less volatility to the economy and prices.

Did a switch to a monetary aggregate approach make a significant difference in the performance of monetary policy and its relation to real economic growth, inflation, and unemployment? A casual look at the record of the U.S. economy over the past eight years does not suggest success. The economy has shown considerable instability during the period since 1970, despite greater stability in monetary growth. Real economic growth has fluctuated between -10 and over 11%; inflation rates have varied from 3 to 13%; and the unemployment rate has been 4.8% but also as high as 8.7%. The four-quarter rate of increase for M1 has ranged between 4.6 and 8.2%, exhibiting a more stable pattern of behavior than in previous

Table I  
Federal Reserve Performance  
In Meeting Long-Run Objectives: 1975 to 1979\*

Date Announced	Target Period	M1 (%)	M2 (%)	M1	M2
5/1/75	March 1975-March 1976	5-7½	8½-10½	5.3	9.6
7/24/75	75:2 - 76:2	5-7½	8½-10½	5.3	9.6
11/14/75	75:3 - 76:3	5-7½	7½-10½	4.6	9.3
2/3/76	75:4 - 76:4	4½-7½	7½-10½	5.8	10.9
5/3/76	76:1 - 77:1	4½-7	7½-10	6.5	11.0
7/27/76	76:2 - 77:2	4½-7	7½-9½	6.8	10.8
11/11/76	76:3 - 77:3	4½-6½	7½-10	8.0	11.1
2/15/77	76:4 - 77:4	4½-6½	7-10	7.9	9.8
5/3/77	77:1 - 78:1	4½-6½	7-9½	7.7	8.8
7/77	77:2 - 78:2	4-6½	7-9½	8.2	8.6
11/77	77:3 - 78:3	4-6½	6½-9	8.1	8.6
2/78	77:4 - 78:4	4-6½	6½-9	7.3 <sup>1</sup>	8.5
5/78	78:1 - 79:1	4-6½	6½-9	5.8 <sup>1</sup>	7.5
7/78	78:2 - 79:2	4-6½	6½-9	4.0 <sup>1</sup>	7.0 <sup>1</sup>
11/78	78:3 - 79:3	2-6	6½-9	2.7 <sup>1</sup>	6.5 <sup>1</sup>
2/20/79	78:4 - 79:4	1½-4½	5-8	2.7 <sup>1</sup>	7.1 <sup>1</sup>

\*Based on published statements by the Federal Reserve Board, beginning 5/1/75. The long-run monetary growth targets were not made public prior to that time.

<sup>1</sup> from 2/19/79 DRI forecast.

periods, although the long-run year-over-year M1 growth targets have been achieved in only 5 of 12 instances since May 1975. The Fed has done better with respect to the M2 targets, succeeding in obtaining growth within the designated ranges in 8 of 12 cases.

During 1978, a series of events caused significant changes in the conduct of monetary policy, after many years of the "monetarist" experiments. First, dollar performance considerations emerged as a major constraint. Some 225 to 280 basis points of the rises in short-term interest rates since last January can be at least partially attributed to dollar support, capped by the near 100 basis point rises on November 1 of most short-term rates in a coordinated defense by the Administration, U.S. Treasury, and Federal Reserve to prevent further dollar deterioration.

The tightening of monetary policy in support of the dollar was unprecedented for the postwar period, coming after many years of dollar weakness and accelerating U.S. inflation. The dilemma for monetary policy in 1979 is how much of a loss in real economic growth and employment to accept for dollar stability and some lessening of inflation. The rate rises of 1978 probably will cost 1 to 1-1/2% of real economic growth in 1979.

Second, although short-term nominal interest rates rose 250 to 350 basis points between 1977:4 and 1978:4 and bond yields were higher by 100 basis points, the real economy remained resilient and inflation rates accelerated. Real economic growth moved strongly ahead at 4.3%, with the more typically interest-rate sensitive spending categories, such as automobiles and housing, proving to be exceptionally strong. The major price indices rose between 8 and 10% for the worst performance on inflation since 1974.

The puzzle for monetary policy, as yet unresolved, but with important implications, is whether aggregate spending and inflation can be slowed by the current, high nominal interest rates. Or, whether further sharp rises are required for interest rates to offset the higher rates of inflation that have been occurring.

Third, the cumulative impact of at least a decade of financial innovations and new money-saving technological advances surfaced most

decidedly in 1978, with major impacts on housing activity and the monetary aggregates used to guide Federal Reserve policy. The effects of the financial innovations have been to delay or mitigate the impacts of tight monetary policy and to distort the monetary aggregates enough to make their use as a guide to policy uncertain. Some of the innovations have arisen within financial institutions in order to circumvent restrictive monetary policy, such as the implementation of large CD's in 1961, use of the Eurodollar market in 1969, the variable rate mortgages of the past few years, pass-through mortgage-backed certificates, and recently new issues of commercial paper for thrifts. However, the monetary and regulatory authorities also have instituted changes which made the implementation of monetary policy more difficult, e.g., the six-month money market certificates (MMC's). The financial innovations are eliminating barriers to flexible interest rates and the flows of funds through financial institutions. The recent thrust of monetary policy, too, has been toward a reliance on interest rates to slow real economic growth and inflation, rather than to squeeze liquidity as in 1966, 1969-70, and 1973-74.

The dilemma for the Federal Reserve is whether these innovations are making monetary policy less potent and itself inflationary, as higher nominal interest rates became integrated into the structure of prices. Also, with money-saving technology and new portfolio practices making uncertain the meaning of the monetary aggregates, deviations of actual monetary aggregate growth from targets could provide false signals for policy. The sluggish monetary growth of late 1978 and early 1979 is a case in point. If truly signaling a sluggish economy, then moderation in monetary policy would be appropriate. On the other hand, if the slowed growth of the monetary aggregates is the result of money-saving technology, then moderating monetary policy could prove to be a mistake, permitting too much stimulus at a time when the economy is close to full employment. The task is to devise appropriate measures for the monetary aggregates and systematic procedures for choosing the growth targets.

Fourth, a pervasive high and accelerating inflation for over a decade has led to a growing realization that inflation is a multi-dimensional problem, requiring a coordinated attack from monetary, fiscal, and incomes measures.

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Tougher demand management policies to slow real economic growth, wage-price restraints short of controls, and removal of government props to costs and prices are being instituted.

The dilemma, however, is the degree to which tight monetary policy should be applied to fight an inflation that has much of its origin in cost-push factors, structural elements from government regulations, and significant exogenous influences such as severe weather effects on crops and livestock, and the vagaries of the Mideast or OPEC oil pricing.

Fifth, the necessary coordination with other arms of policy to successfully achieve the goals of the Full Employment and Balanced Growth Act of 1978 is a new feature of contemporary macroeconomics. The dilemma is to determine an optimal policy mix, given stated objectives on economic goals but differing views on the means to achieve them and the outlook for the economy.

Finally, a new "mild austerity" may be emerging as an effect of high inflation, low productivity, and a weakened dollar. The straightjacket of U.S. economic problems is likely to remain for some time, until a better performance can be achieved on inflation. The dilemma is to figure out an escape from stagflation, the policies necessary to stimulate capital formation and productivity, and the required duration for relatively tough demand management policies.

#### Is Monetary Policy Working?

There are several questions that relate to the apparent failure of monetary policy to bite on the economy during 1978. First, has monetary policy really been tight? Even though nominal interest rates have risen sharply in the past two years, other indicators of monetary policy such as free reserves, the pace of monetary

growth, growth in the monetary base, real money balances, and "real" interest rates might not have unambiguously indicated tightness. Second, even if monetary policy was tight, financial innovations, especially in housing, may have acted to insulate the economy. Third, a stress on interest rates rather than credit availability to slow aggregate spending could have been misdirected, since previous slowdowns have so often required a corresponding squeeze on liquidity. Finally, even the rapid nominal interest rate rises are perhaps insufficient if it is "real" interest rates that impact most significantly on spending and borrowing.

Has monetary policy been tight? Table 2 shows the behavior for a broad range of monetary policy indicators between 1977:1 and February 1979. The Federal funds rate rose a large 550 basis points. Net free reserves, a good indicator of banking system tightness, was quite negative over the same period, also suggesting restraint. Both of these measures, however, could have been responding to demand-side pressures rather than Fed restriction.

Another dimension of monetary policy is related to growth in the monetary base, defined as total bank reserves plus currency and adjusted for changes in reserve requirements. The Federal Reserve has strong control over bank reserves but little impact on currency held by the public. Given that total reserves have averaged 39% of the monetary base, its growth is an important indicator of supply-side tightness. For much of the past two years, monetary base growth has been quite high, portending further rises in the growth rates for the other monetary aggregates and suggesting that rising nominal rates were not indicative of a tighter monetary policy. Recently, however, growth in the monetary base has slackened considerably, rising by only 6.9% during the last three months.

Table 2  
Dollar Weakness and Money Market Rate Increases

	Jan. 1979	78:4	78:3	78:2	78:1	77:4	77:3	77:2	77:1	
Federal Funds Rate (%)	10.15	10.07	9.58	8.10	7.28	6.76	6.51	5.82	5.16	4.66
Free Reserves (Bils. of \$)	-0.73	-0.59	-0.73	-0.99	-0.77	-0.17	-0.70	-0.44	0.00	0.15
Monetary Base (Annual %)	5.0	7.9	10.1	9.7	8.2	10.4	9.3	9.7	8.7	7.5
M1 Growth (Annual %)	-8.2	-4.9	4.4	8.4	9.5	6.9	7.5	8.9	7.6	7.6
M2 Growth (Annual %)	-1.3	-1.1	8.0	10.3	8.6	7.2	8.1	10.4	9.3	11.4
Real M1 Growth (Annual %)	-23.0	-23.3	-3.7	-0.1	-1.2	-1.1	2.9	3.7	-1.1	-0.7
Real M2 Growth (Annual %)	-16.2	-20.2	-0.4	1.6	-2.0	-0.8	3.5	5.1	0.5	2.9

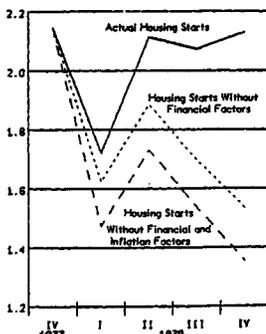
\*Nominal and Real M1 and M2 Growth as of February 21, 1979.

Indeed, the other measures in Table 2 unambiguously indicate a very tight monetary policy, although only for the past few months. Free reserves are still quite negative; the monetary base is on a much slower growth path; both the growth rates for the nominal and real money supply are declining sharply; and interest rates are at or near record highs.

Have financial innovations insulated the economy from the impacts of a restrictive monetary policy? Most certainly, the financial innovations that are maintaining the mortgage flows to housing are a mitigating factor. In almost all the housing downturns of the postwar period, interference with interest rates and a crunch on the supply of funds caused rationing in the mortgage markets. But, with the new MMC's circumventing existing deposit rate ceilings, bank and nonbank thrift institutions have been able to prevent a severe disintermediation despite record short-term interest rates. DRI estimates place the "saved" housing starts from the MMC's at 253,000 units, seasonally adjusted at annual rates, during 1978:4. Other factors that have held housing up include 1) higher deposit rate ceilings and fewer usury limits; 2) support by mortgage and housing-related agencies; and 3) investment in housing as a hedge against inflation.

The brunt of the tighter monetary policy has been falling on the buyer with borrowing costs, rather than funds availability, the major mechanism for reducing housing demands. It is only within the last two months that mortgage availability, along with costs, has been limiting the pace of housing activity. Without the MMC's and other financial innovations to support the mortgage markets and housing, the pattern of housing starts in 1978 would have closely resembled previous tight money episodes.

Chart 1  
Housing Starts With and Without  
Special Factors: 1977:4-1978:4  
(mils. of units)\*



\*Source: Footnote 1

Chart 2  
Auto Loan Rate: Nominal vs.  
Expected After-Tax Real (Percent)

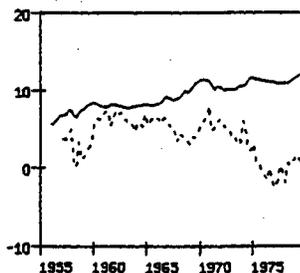
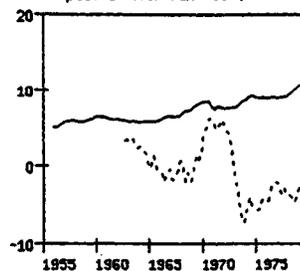


Chart 3  
Mortgage Loan Rate: Nominal  
vs. Expected After-Tax Real (Percent)



1 Allen Sinai, Roberta Gerson, and Terry Glomski, "Mortgage Finance and Housing," Data Resources Review, February 1979, p. 18.

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At the same time, a greater proportion of families in higher tax brackets and embedded high expected rates of inflation have made the real expected after-tax costs of borrowing much lower than indicated by nominal interest rates.

The bottom line is that higher nominal interest rates are now required to produce a given amount of economy slack, so long as the Federal Reserve does not want to interrupt the liquidity flows of the financial system.

Should monetary policy continue to stress "costs" or strive to restrict "availability"? The reliance on flexible market interest rates rather than interruptions in the flow-of-funds is a preferred means for slowing the economy. The postwar history of the economy is filled with instances of perverse reactions to interference with the interest rate mechanism. Severe credit crunches and deep recessions have been the typical response to sharp reductions in liquidity. A quick slowdown in the economy could be achieved, especially in housing, through measures that sharply reduce liquidity and limit lending. However, unless an abrupt braking is required, it is better to rely on higher interest rates as the cutting edge of monetary policy.

Are nominal interest rates high enough to do the job? Much has been made of the possibility that spending is less sensitive to tighter money in this business expansion because high rates of inflation have reduced real borrowing costs and real returns on financial assets. If real after-tax returns on savings and borrowing are low, high nominal interest rates might fail to weaken spending. Embedded inflation expectations and the increasingly progressive U.S. tax system might well have rendered ineffective the current Fed policy of slowing demand through interest rates, requiring much sharper rises in nominal interest rates than have yet occurred.

Charts 4 through 9 show nominal and expected real after-tax rates for six important financial instruments, along with two measures of "real" interest rates. The period shown extends through 1979:4 and reflects the current DRI forecasts. The "ex-post" real interest rate is defined as the nominal interest rate less the current percent change in the relevant inflation rate. The inflation rate utilized for a given interest rate is based on the relevant price index for the spending category of a sector. The "ex-ante" real rate is defined as the nominal rate of interest minus a weighted average of the relevant inflation rate over a horizon approximating the holding period for

Chart 4a  
Savings Rate: Nominal vs. Expected  
After-Tax Real (Percent)

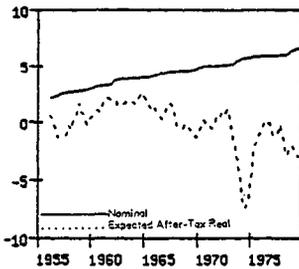
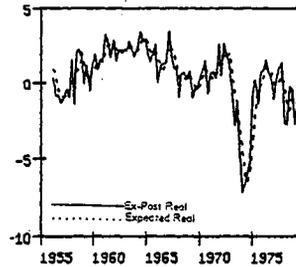


Chart 4b  
Savings Rate: Ex-Post Real  
vs. Expected Real (Percent)



## New Realities

Chart 5a  
Municipal Bond Rate: Nominal  
vs. Expected After-Tax Real  
(Percent)

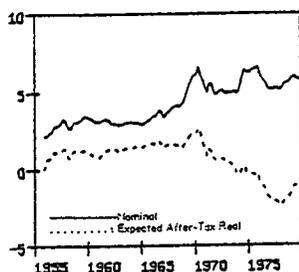
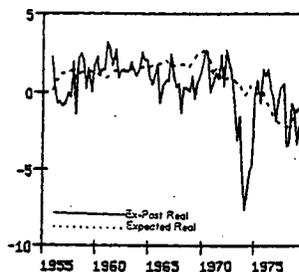


Chart 5b  
Municipal Bond Rate: Ex-Post  
Real vs. Expected Real  
(Percent)



the instrument. The weights either form a rectangular distribution with lengths up to 20 quarters or a second order Pascal distribution on consumer goods prices as in the case of the long-term bond yield.<sup>2</sup>

The shorter the holding period for a given instrument, the closer the ex-ante and ex-post real interest rates. The return on savings deposits has been on a steady decline since 1974, with no upturn forecasted yet (Chart 4b). The expected real return on municipal bonds, on the other hand, has been on the upswing since 1977 (Chart 5b). Both returns, however, are negative and regardless of how measured, remain below the levels for most of the period since 1955. After correction for taxes, almost all of the real rates of return and real interest rates are negative (Charts 4a, 5a, 6a, 7a, 8a, and 9a).

<sup>2</sup>See the Appendix for details of the calculations. Expected real interest rates are the most relevant concept for spending, since it is expectations of rates upon which behavior is based. An expected real rate is a nominal rate less the expected rate of inflation. The problem is estimating the expected rate of inflation. Different schemes for forming

Charts 6 and 7 show that the expected real costs of auto and mortgage loans are now on the upswing after a series of declines into early 1978. The ex-post real rates show a more decided upturn than the ex-ante values. Furthermore, the rises are quite recent, following on the heels of the decidedly tighter monetary policy that was instituted during the fourth quarter. But the after-tax costs for borrowing by households are quite low, relative to history.

In Charts 8 and 9, the interest rates on prime business loans and new issues of high-grade corporate bonds are seen to be rising. The expected real rates are near those in many other periods since 1955. After taxes, however, the average costs of business loans and top-quality bond issues are among the lower of the tight money periods since 1955.

expected inflation rates will produce different real rates. Extrapolative methods were used here, except for the long-term bond yield which embodies a theory of "permanent expectations formation." For another approach, see W. Elliott, "Measuring the Expected Real Rate of Interest: An Exploration of Macroeconomic Alternatives," *American Economic Review*, June 1977, pp. 429-444.

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Chart 6a  
Auto Loan Rate: Nominal vs.  
Expected After-Tax Real  
(Percent)

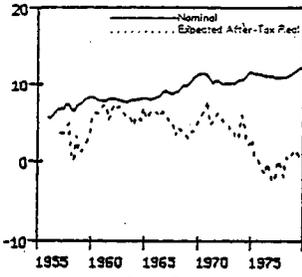


Chart 6b  
Auto Loan Rate: Ex-Post Real  
vs. Expected Real (Percent)

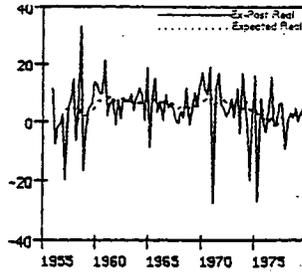


Chart 7a  
Mortgage Loan Rate:  
Nominal vs. Expected After-  
Tax Real (Percent)

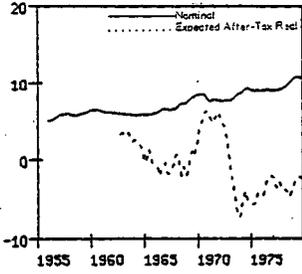


Chart 7b  
Mortgage Loan Rate:  
Ex-Post Real vs. Expected Real (Percent)

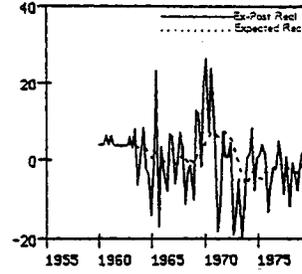


Chart 8a  
Prime Commercial Loan Rate:  
Nominal vs. Expected After-Tax  
Real (Percent)

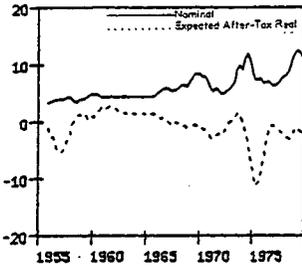
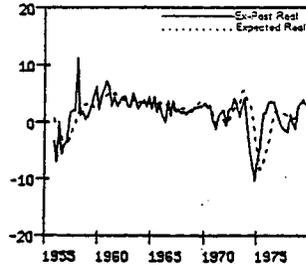


Chart 8b  
Prime Commercial Loan Rate:  
Ex-Post Real vs. Expected Real (Percent)



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Chart 9a  
Rate on Top-Quality Corporate  
Bond Issues: Nominal vs. Expected  
After-Tax Real (Percent)

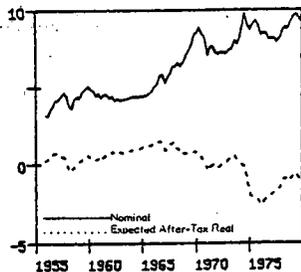


Chart 9b  
Rate on Top-Quality Corporate  
Bond Issues: Ex-Post Real vs.  
Expected Real (Percent)

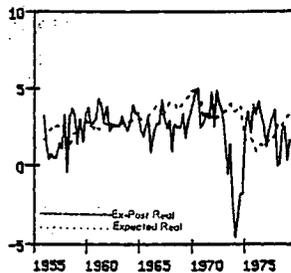


Chart 10a  
Average Yield on New Issues  
of High-Grade Corporate Bonds  
(Percent)



Chart 10b  
Ex-Post Real Average Yield  
on New Issues of High-Grade  
Corporate Bonds (Percent)

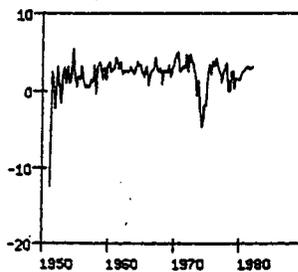


Chart 10c  
Expected Rate of Inflation-  
Personal Consumption Expenditures  
Deflator (Percent)

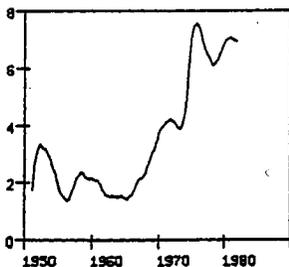
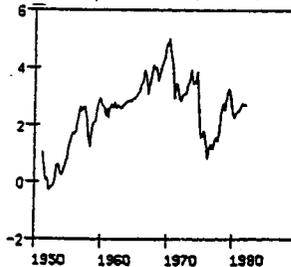


Chart 10d  
Expected Real Average Yield  
on New Issues of High-Grade  
Corporate Bonds (Percent)



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Chart 11a  
Average Market Yield on  
U.S. Government 3-Month Bills  
(percent)

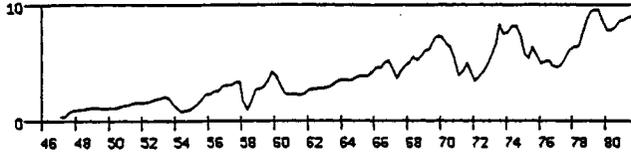


Chart 11b  
Compound Annual Percent Change  
in the Wholesale Price Index-  
All Commodities (Percent)

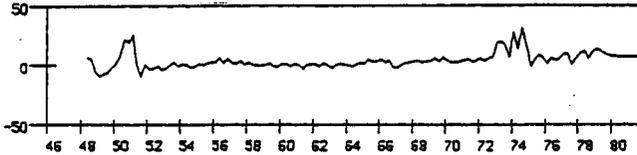
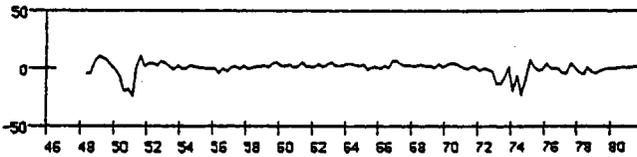


Chart 11c  
Expected Real Average Market  
Yield on U.S. Government 3-Month  
Bills (Percent)



Charts 10 and 11 show the nominal and real rates for 90-day Treasury bills and the long-term corporate bond yield during the full postwar period. The weighting on the expected rate of inflation for long-term bonds is obtained as a second order Pascal lag on the implicit deflator for consumer goods and simultaneously estimated in the DRI model with other parameters for the AAA-equivalent corporate bond yield. On the other hand, the ex-post real new issue rate is fairly stable over the postwar period. In both cases, however, the real rate is

either rising or forecasted to move higher in the next year.

Several general conclusions can be drawn from these various calculations of nominal and real interest rates. First, real interest rates, although low by historical comparisons, are now on the rise. The modest increases for interest rates forecasted by DRI in 1979 will maintain the higher real rates that began in 1978. Second, the rising real rates are of recent

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vintage, mostly beginning in the second half of 1978. Third, real returns on financial assets are much lower relative to historical values than are the real costs of borrowing. Fourth, the real costs of consumer borrowing are lower relative to history than the costs of prime business loans and issues of long-term corporate debt. Fifth, after taxes, all interest rates and returns are among the lowest of the postwar period, reflecting the growing impacts of

accelerated inflation and the progressive U.S. tax system on net interest rate returns and costs. Sixth, the modest rises of interest rates in the DRI forecast are sufficient to bring real rates higher, although not up to the levels typical of most other tight money periods. However, the real rates in this episode are generally higher than in the 1973-74 credit crunch episode and lower than in other situations where deep recessions have occurred.

Table 3  
'Ex-Ante' After-Tax Real Rates During 'Tight Money' Periods\*

	Savings Rate	Bill Rate	Municipals	Stock	Auto Loans	Mortgage Loans	Prime Business Loans	Commercial Paper	Top-Quality Bond Issues
	Household Sector					Corporate Sector			
55:4	NA	-0.30	0.05	4.42	NA	NA	-0.96	-5.02	0.25
56:1	0.66	-0.69	0.70	5.08	NA	NA	-2.56	-6.81	0.34
56:2	0.29	-4.11	0.76	4.59	NA	NA	-2.63	-5.37	0.56
56:3	-0.69	0.20	0.78	4.26	NA	NA	-4.43	-4.72	0.68
56:4	-1.25	-2.63	1.19	4.74	NA	NA	-5.23	-6.67	0.76
57:1	-1.28	0.56	1.14	4.80	3.74	NA	-5.34	-5.56	0.60
57:2	-1.20	1.58	1.12	4.35	3.70	NA	-4.63	-2.72	0.58
57:3	-1.12	-0.84	1.37	4.20	4.21	NA	-3.12	-0.15	0.51
57:4	-0.26	2.46	1.37	4.68	4.92	NA	-2.77	-0.11	0.21
59:2	0.57	1.01	1.30	4.02	2.14	NA	1.48	-0.31	0.39
59:3	-0.16	0.31	1.25	3.08	2.72	NA	0.53	1.43	0.56
59:4	0.30	5.12	1.16	2.89	3.67	NA	1.27	3.12	0.61
60:1	0.55	2.46	1.16	3.78	6.19	NA	1.02	1.62	0.41
60:2	1.02	1.41	1.02	3.46	6.34	NA	1.53	0.48	0.43
66:1	1.02	-0.82	1.74	4.96	6.29	-0.86	1.35	0.46	1.32
66:2	0.75	1.86	1.66	4.96	5.69	-2.06	0.68	-1.43	1.33
66:3	0.30	0.08	1.92	5.04	6.39	-0.86	0.91	-0.37	1.51
66:4	0.70	6.30	1.72	4.88	6.22	-0.43	0.19	0.07	1.36
69:1	-0.19	1.70	1.82	3.37	2.99	-0.59	-0.66	-0.86	0.69
69:2	-0.78	-0.56	2.04	2.97	3.94	1.17	-0.52	-0.85	0.71
69:3	-0.99	3.13	2.29	3.09	3.98	0.56	-0.40	-1.03	0.72
69:4	-1.36	0.23	2.42	2.70	4.62	1.82	-0.55	-1.18	0.82
70:1	-0.85	2.26	2.36	2.68	5.60	4.40	-0.64	-0.86	0.72
73:1	0.26	-13.58	0.59	2.34	3.70	-2.06	0.37	1.41	0.32
73:2	-1.27	-13.98	0.37	2.33	3.85	-4.02	0.47	-0.11	0.39
73:3	-2.11	-9.97	0.39	2.34	2.98	-6.61	1.53	-0.49	0.55
73:4	-3.67	0.26	-0.13	2.45	3.08	-7.35	1.55	-0.67	0.22
74:1	-5.15	-20.63	-0.38	2.18	5.99	-5.70	0.11	-2.72	0.11
74:2	-6.99	-7.09	-0.06	2.23	4.91	-3.95	-1.32	-6.80	-0.09
74:3	-7.44	-24.19	0.23	2.68	2.22	-5.18	-3.41	-10.73	-0.17
78:1	-1.08	-4.29	-2.40	2.21	-1.93	-3.66	-2.21	-3.83	-1.00
78:2	-2.35	-6.06	-2.07	2.29	0.59	-4.10	-2.69	-3.19	-0.90
78:3	-2.89	0.35	-1.99	2.05	0.23	-4.73	-3.00	-4.63	-1.12
78:4	-2.09	-3.46	-1.77	2.47	0.83	-3.60	-2.16	-3.39	-0.94
79:1F	-2.06	-5.59	-1.40	2.87	1.38	-2.68	-1.33	-1.83	-0.63
79:2F	-2.60	-3.01	-1.08	3.05	1.40	-2.34	-0.91	-1.85	-0.63
79:3F	-3.01	-1.34	-1.06	2.99	0.56	-2.12	-1.42	-2.24	-0.82
79:4F	-2.65	-0.74	-0.94	2.72	1.07	-2.65	-1.93	-2.59	-1.22

Expected after-tax real rates are after-tax nominal interest rates less a moving average of the compound annual percent change in the inflation rate. See the Appendix for further clarification.

\*Pre-Crunch Periods: 1955:4 to 1957:4, 1959:2 to 1960:2, 1966:1 to 1966:4, 1969:1 to 1970:1, 1973:1 to 1974:3, 1978:1 to 1979:2 (est.)

F = DRI Interim Control Forecast of 2/1979

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Whether these rates, ex-ante or ex-post, before- or after-tax, bear a systematic relationship to spending and borrowing by households and corporations remains a topic for further investigation. The simple association between low after-tax returns on savings instruments and the currently low personal savings rate, the relatively low after-tax costs of borrowing for households and rapid pace of spending, and the somewhat higher costs for corporate borrowing and cautious pace of business spending do not necessarily mean these relations would hold in econometric analyses.

According to the DRI forecast, interest rates somewhat higher than currently, nominal or real, are sufficient to produce a mild recession in the U.S. economy during the second half of 1979. The effects of alternative interest rate patterns on real economic growth, housing starts, inflation, and unemployment appear in Charts 12a to 12e. Three alternative interest rate scenarios are simulated (Constant Rates, High Rates, Low Rates) with the DRI projections for moderate rises of interest rates also represented (Base). The results show that even a low interest rate scenario does not fully eliminate negative real economic growth from the 1979 economy, although preventing a recession by the standard National Bureau of Economic Research definition. The forecasted recession is consistent with the interest rate patterns that appear in the charts. In other episodes, nominal and real interest rates have risen considerably higher, but at the same time the recessions have been deeper. Therefore, if the goal of policy is to avoid a deep recession, the nominal interest rate pattern of the DRI forecast probably should not be exceeded and the lower real interest rates of this episode are to be desired.

Indeed, the DRI model simulations, summarized in more detail in Appendix Tables A3 to A5, indicate that the Federal Reserve can do little on interest rates to change the outlook for 1979. Raising interest rates 100 to 150 basis points would deepen the recession to -0.9% real economic growth between 1978:4 and 1979:4, limit the change in real GNP to 4.3% from 1979:4 to 1980:4 compared with the 4.8% in the Base, but at the expense of a 0.3% higher unemployment rate and with little effect on inflation. The low interest rate scenario, with the Federal funds rate dropping to 9.0% by 1979:4, would raise real economic growth for

next year to 0.8% from the 0.2% of the forecast, but only cause inflation rates to rise 0.1% higher. The most sensitive responses would occur in housing, with strong reactions to swings of interest rates from current levels. The low interest rate pattern would bring the unemployment rate down to 6.5% by 1980:4.

Chart 12a  
The Effective Rate on Federal Funds (Percent)

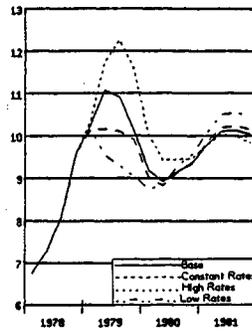
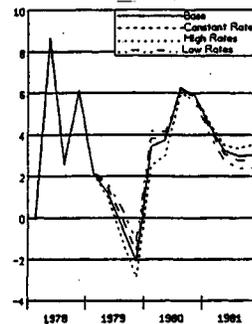


Chart 12b  
Real Economic Growth  
(Compound annual percent)



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Chart 12c  
Housing Starts, Private  
Including Farm-Total  
(Mils. of units)

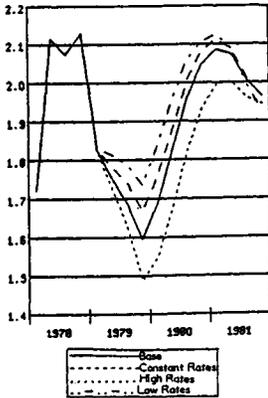


Chart 12e  
Unemployment Rate - All  
Civilian Workers (Percent)

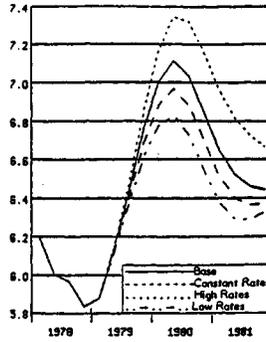
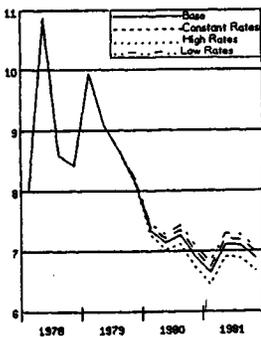


Chart 12d  
The Rate of Inflation as Measured  
by the Compound Annual Growth  
Rate of the All Urban Consumer  
Price Index-All Items (Percent)



Is monetary policy working? The answer is yes, for now. The monetary policy indicators in Table 2 all signal tightness and real interest rates, as well as nominal, are on the rise. Recent evidence also suggests a slowing in the pace of the economy, although it is difficult to attribute the patterns solely to restrictions in monetary policy. Exogenous inflation shocks and tighter fiscal policy, the reduced purchasing power of consumers and business, and a worsening of confidence all are contributing to the slowdown. Nevertheless, the weakness in mortgage finance and housing that has arisen recently is suggestive that monetary policy has begun to bite. So is the 0.4% rise in retail sales during January, the sluggish pace of business loans that has been occurring, and the weakness of industrial production.

How will monetary policy work further to produce the forecasted recession? In the DRI model, monetary policy impacts on housing, consumption, and business fixed investment through rental prices, debt burdens, the stock market, and financial risk. The consumer spending boom and record pace of borrowing have established the base for a future slowdown in household expenditures, with a record high

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debt burden relative to disposable income that eventually will have to be reduced. A similar effect appears in the corporate sector, through the burden of debt and debt service relative to cash flow. The long-time weakness of the stock market is now affecting consumer spending, after long lags. Finally, the rental prices of housing, autos, and business fixed investment have risen quite high. The bite of monetary policy will not require higher nominal interest rates unless there is another shock, dollar or otherwise, that threatens to raise the "permanent" rate of inflation. However, it is also true that a mildly higher pattern for interest rates will do little further damage to the economy, except for housing, now that rates have reached the current plateau.

#### Financial Innovations and the Conduct of Monetary Policy

The major impacts from the financial innovations of the past decade have been to insulate housing longer and to change payments mechanisms in the economy. The innovations include:

- 1) the ending or relaxation of regulation Q deposit rate ceilings;
- 2) improved secondary markets in mortgages, with the advent of mortgage-backed security issues by thrifts and mortgage market support from agencies such as the Federal Home Loan Mortgage Corporation (FHLMC), Federal Home Loan Bank Board (FHLBB), the Federal National Mortgage Association (FNMA), Government National Mortgage Association (GNMA), and HUD;
- 3) six-month money market certificates (MMC's) tied in yield to the six-month Treasury bill rate, as a new time deposit account for households;
- 4) the gradual elimination or relaxation of mortgage rate usury ceilings with only 18 states now having ceilings of 10% or below, 9 with ceilings at 12%, and the rest with ceilings above 12%;
- 5) new lending instruments such as variable rate mortgages (VRM's), graduated payment mortgages (GPM's), and terms for consumer installment borrowing up to five years;
- 6) in effect, an end to the ban on interest payments for checking accounts, with the institution of automatic deposit transfer systems (ATS), NOW accounts, and special savings accounts for corporations;
- 7) new portfolio practices of households and corporations, stressing conservation of cash and high returns on near-money liquid assets, and favoring direct purchases of money market instruments, repurchase agreements and new outlets such as money market funds.

Perhaps most importantly of late, NOW accounts; ATS accounts; and instruments such as security repurchase agreements, money market funds, and direct holdings of short-term securities have altered the monetary aggregates. With so many leakages now from the various M's, it is difficult to determine whether the monetary aggregate approach to monetary policy is being successful and what the appropriate interpretation of the monetary aggregates is for policy implementation.

Monetary growth has been exceptionally weak in recent months. Based on revised data, the two-month growth rate for M1 was -3.9%, well below the latest short-run Fed targets. M2 rose 0.2% over the same period, far below the lower limit of the December-January target range of 5 to 9%. At 4.9%, long-run M1 growth was only slightly above the new 4-1/2% upper target limit set for 1978:4 to 1979:4. M2 growth, at a year-over-year 7.1%, was easily within the newly announced 5 to 8% target range for the coming year. And, growth in M3 is projected at 6.7% by DRI for 1979:1, also well within the designated target range for 1978:4 to 1979:4.

The weak monetary growth has lasted too long to be only temporary, or a result of the new ATS or NOW accounts. It is more likely the result of a systematic process in response to high interest rates, one that has occurred in the late stages of every business expansion since 1955. The negative two-month growth rates for

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Table 4  
Monetary and Reserve Aggregates:  
Recent Growth Rates (%)\*

	Last Month	Last 8 Weeks	Last 13 Weeks	Last 26 Weeks	Last 52 Weeks
Money1 ** (SAAR, as of 2/14/79)	-8.5	-3.9	-2.3	-1.7	4.9
Money1 Plus *** (SAAR, as of 2/14/79)	-11.9	-7.1	-5.5	-0.5	2.7
Money2 **** (SAAR, as of 2/14/79)	-0.7	0.2	1.5	5.3	7.1
Nonborrowed Reserves ***** (SAAR, as of 2/21/79)	-14.1	-3.7	20.6	19.1	9.9
Monetary Base (SAAR, as of 2/21/79)	4.5	8.9	6.5	8.9	8.6
Adjusted Federal Reserve Credit (SAAR, as of 2/21/79)	2.1	10.7	9.9	11.3	9.8

\* Percent change, simple annual rates: 4 week average ending on date indicated from 4 week average ending at the earlier period.

\*\* Latest announced growth targets: 1978:4 to 1979:4, 1-1/2 to 4-1/2%  
December-January, 2 to 6%

\*\*\* Latest announced growth targets: 1978:3 to 1979:3, 5 to 7-1/2%

\*\*\*\* Latest announced growth targets: 1978:4 to 1979:4, 5 to 8%  
December-January, 5 to 9%

\*\*\*\*\* Unadjusted for changes in reserve requirements.

M1 that have appeared in nine of the last 12 weeks represents the weakest performance since the credit crunch of 1966. In the case of M2, the low growth rates of the past three months are approaching the 1969 experience and are weaker than in 1966 and 1973-74. The corresponding weakness of M1+ indicates that the automatic funds transfers instituted on November 1 are not the explanation for the slow growth of M1, since M1+ includes these accounts.

The most likely reason is the economizing on transactions balances occasioned by the near record level of interest rates. A shift of funds out of regular passbook accounts at commercial banks to six-month money market certificates has accelerated. Another factor impacting to slow monetary aggregate growth is the increased use of money market funds and security repurchase agreements by both households and corporations. With daily yields at 10 to 11%, no penalty for withdrawal, check-writing privileges, and required deposits as low

as \$1,000, the money market funds have become increasingly attractive to households. The most recent Federal Reserve flow-of-funds data show a rise from \$6.4 billion in 1978:1 to \$9.6 billion for this instrument in 1978:4. Further sharp increases are likely in 1979:1. The security repurchase agreements held by nonfinancial corporations have been near \$10 to \$12 billion for several quarters now, indicating a major use of this instrument as a repository for corporate liquid funds. These effects are responses to high interest rates and differ in kind from past episodes, but not in substance.

How meaningful are the monetary aggregates now? Clearly, M1 has lost its significance as a measure of the transactions accounts in the economy and is too ambiguous for appropriate Federal Reserve reaction. Even allowing for the ATS, there will still be considerable difficulty in using monetary aggregate growth as a guide to policy until further study has been completed. Thus, the implication for monetary policy of this new reality is more reliance on

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direct indicators of economy performance such as inflation, real economic growth, and dollar stability.

## DOLLAR DEFENSE AND MONETARY POLICY

Perhaps the most significant event for monetary policy in 1978 was the collapse of the dollar and the emergence of international financial considerations as a major constraint on the central bank. With imports over 10% of GNP and the price structure such that rises in import prices impact greatly on U.S. domestic inflation, the Federal Reserve had no choice but to move toward substantial restriction in order to prevent further declines in the dollar. Without some interruption, the cycle of higher inflation, a weaker dollar, and even higher inflation might have continued until both the political and economic fabric of the U.S. was undermined. In addition, the threat to the role of the U.S. currency as a key international reserve was severe, with a potential run on the dollar that would have created chaos in international trade and finance.

Given all of these considerations, the worsening balance of payments disequilibrium that arose in 1978 could not be ignored by the central bank. To aggravate the situation further, holders of dollars, whether foreign central banks or U.S. institutions, had begun to rebalance portfolios, adding to the extended weakness in the dollar. Even with an improvement in the so-called "fundamentals", lack of confidence in the determination of the U.S. to move the economy to a sustainable growth path with moderating inflation was sure to bring continued erosion of the dollar, further U.S. inflation, and the need for even more severe restriction later. The classic policy mix for a country facing inflation and weakness in the balance of payments is austerity, implemented primarily by tight monetary policy.

The dollar has performed well since the unprecedented November 1 tightening. But the November 1 measures can only provide a stop-gap until the comparative economic growth rates of the U.S. and its trading partners, relative rates of inflation, and trade positions permit a sustained improvement in the balance

of payments. The U.S. policymakers, especially the monetary authority, must therefore remain vigilant until the dollar and balance of trade are on a solid footing.

Table 5  
Dollar vs. Major Foreign Currencies  
(Bid, % change as of today)

	Yesterday 2/19/79	1 Week Ago 2/13/79	10/30/78	3 Months Ago 11/21/78	One Year Ago 2/21/78
Yen	0.2	-0.1	13.1	3.3	-15.3
Fr. Franc	0.1	-0.1	7.2	-3.0	-11.2
Sw. Franc	0.0	-0.7	12.3	-3.1	-9.1
German Mark	0.0	-0.5	7.3	-3.5	-9.3
Pound	-0.1	-0.7	4.4	-3.0	-3.1

Source: BANCS (Bank of America, Money and Credit Statistics)

Current DRI projections indicate that this will not be possible before year end, when a recession is in place and inflation rates have turned downward. Monetary policy must remain relatively tight until then, regardless of the growth in the monetary aggregates, unless the recession is much deeper than expected.

## MONETARY POLICY AND INFLATION

Restrictive monetary policy has been a key to slowing the economy in every cyclical episode since 1955. But in each case, a tight Fed policy was overstayed to the point of driving the economy into a deeper recession than was necessary.

Why did the Federal Reserve remain restrictive for so long? The most likely answer is that the monetary authority probably did not appreciate the potency of monetary policy or have adequate knowledge of the lags between policy implementation and its effects. The central bank reacted strongly to contemporaneous signals, especially inflation, at the same time a weakening was in process. It was difficult to ease up on policy prior to signs of a significant economy slowdown and reduced inflation, despite the lagging nature of the inflation and unemployment indicators. Yet, in order to

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avoid overkill, monetary policy, because of the lags, must turn before full proof of the success from earlier restrictive policy appears.<sup>3</sup>

In addition, the current experience is complicated by the fact that much of the inflation has not been caused by excess demand. Restrictive monetary policy is most effective against the excess demand variety of inflation rather than cost-push or other factors. The complex set of forces that has brought about the continuing high and accelerating inflation in the U.S. economy is not easily amenable to the standard monetary policy prescription. In order to effectively combat inflation, the sources must be known and policies appropriate to a specific attack applied.

According to DRI studies, the escalation of inflation in 1978 was only due in small part to excess demand, which accounted for 0.3% of the rise from the "trend" or "hard-core" inflation rate of 5.3% to the actual change in consumer prices of 7.7%. Much of the 2.4% acceleration was due to higher food prices and the surge in home ownership. Cost-push factors from the dollar depreciation, minimum wage, and social security increases, and other policies brought about 0.8% of the acceleration.

Table 6  
What Made Inflation Worse?  
(Consumer prices, percent change)

	1978
The Trend Inflation Rate	5.3
— was aggravated by:	
Food Prices	0.7
- Policy	0.3
- Livestock	0.4
The Dollar	0.4
Minimum Wage	0.1
Social Security & Other Policy	0.3
Homeownership	0.6
Demand	0.3
Actual change in consumer prices	7.7

Sources: R. Gough and R. Siegel, "Why Inflation Became Worse", in *Data Resources Review*, January 1979, p. 16.

<sup>3</sup>See A. Sinai, "Credit Crunches—An Analysis of the Postwar Experience," in O. Eckstein, ed., *Parameters and Policies in the U.S. Economy* (Amsterdam: North-Holland, 1976), pp. 273-74.

The base inflation rate, estimated at 5.3%, is much the effect of wage and price increases in excess of productivity and lingering as well as current effects from higher energy prices, especially on oil. With so much of the current inflation the result of high wage costs relative to low productivity, policies designed to impact on these factors are necessary. Inflation is no longer a one-dimensional phenomenon, to be treated solely with aggregate demand measures. Like the cancer of physical illness, a battery of medicines needs to be applied for optimal results.

Given these realities of inflation in the U.S. economy, the role for monetary policy is circumscribed. Even if the recent January acceleration of inflation was primarily intensified by excess demand, the prospects for a deep reduction in the current inflation through tighter monetary policy are not good. A sharp restriction in response to Iranian oil shortages, the winter weather effects on food prices, or any other exogenous shocks, would prove counter-productive, just as in 1973-74.

If not through monetary policy, how then to impact inflation? The answer lies in attacking the core rate of inflation at the same time demand-management policies remain tough. TIP-like policies to induce reductions in wages would be most beneficial, accompanied by tax incentives for business fixed investment and R&D to raise productivity. A sustained hard-line on fiscal and monetary policies but without an abrupt move toward the restriction that would cause a deep recession, combined with inducements to wage-earners to accept lower wages, holds the most hope for improvement. Regardless of the policies attempted, the process of unwinding the current high inflation promises to be long, extending well into the 1980's.

<sup>4</sup>Tax subsidies to wage earners who accept significantly lower wage increases might well produce sufficient economy stimulus to generate offsetting tax revenues. Just as "exogenous inflation shocks" have been associated with worsened price inflation and higher unemployment, so would "exogenous deflation shocks" work to benefit the economy. See A. Sinai, "Inflation and Business Capital Spending," in *Special Studies on Economic Change, Hearings Before the Joint Economic Committee* (Washington, D.C.: U.S. Government Printing Office, 1978), pp. 883-901.

## POLICY COORDINATION

Monetary and fiscal policy should be coordinated more closely to seek a higher level of economy performance without raising the prospects for accelerated inflation. Neither monetary nor fiscal policy alone can do much about the current inflation. Until recently, the two policies had never been closely related, and were often at odds with one another. One possibility is a "tight fiscal-easier money" approach. By tight fiscal policy is not meant decreased expenditures by the Federal government. More realistically, it refers to slower growth in Federal government spending than has been the case in previous years. The "easier money" component of a tight fiscal-easier money policy also does not refer to a radically extreme measure. By easier money is meant a Federal Reserve policy that permits money growth between 7-1/2 and 8% per annum, in recognition of the difficulty in reducing the core 5 to 6% inflation rates of the U.S. economy. The tight fiscal component simply would make monetary relaxation a more agreeable choice for the central bank.<sup>5</sup>

Unfortunately, the easier money component of the "tight fiscal-easier money" policy mix must be delayed because of dollar considerations. The policy now is "tight fiscal-tight money" and should continue until the U.S. economy slows and the excess demand component of inflation is diminished. At that time, however, the appropriate coordination of policy will be to move the mix toward a "tight fiscal-easier money" mode, with particular restraint on the spending of the Federal government. Should the Administration and Federal Reserve manage such a policy posture once the dollar is stabilized, the prospects for a better economic performance in the 1980's will be enhanced.

In the past year, important strides have been made toward closer cooperation in stabilization policy. The Federal budget deficit was moved significantly toward restraint, in part due to the urging of the Federal Reserve. Tax reduction scheduled for 1978:4 was postponed to ease the

<sup>5</sup>For a simulation analysis of such a policy, see A. Sinai, "The Conduct of Monetary Policy: Performance and Prescriptions," in Hearings before the Senate Committee on Banking, Housing, and Urban Affairs (Washington, D.C.: U.S. Government Printing Office, 1977), pp. 266-269.

demand-side pressures on the economy. The Federal Reserve, Treasury, and Administration moved together on November 1 to prevent further deterioration of the dollar. In retrospect, all of these policy moves were correct, given the worse-than-expected inflation that has materialized. Such complementarity in the actions of the major arms of macroeconomic policy is not typical of the postwar period and illustrates the benefits from a close, but independent collaboration.

In particular, further attacks on inflation must involve attempts to strengthen productivity. General macroeconomic policies which stimulate business fixed investment can be of little benefit in this area, now that full resource utilization is close-at-hand. As the economy nears full employment, tax incentive measures for business capital formation become particularly important because the mix of spending would be shifted away from consumption and toward business fixed investment.

Tax policy to remove the inflation drag on business spending should be implemented. Households should not be the only group to be granted tax relief to ease the "bracket effect" that arises from accelerated inflation. Business firms face the same problem given original cost depreciation and present inventory valuation methods. More rapid depreciation is needed and investment tax credits for capital formation and R&D spending should be examined closely.

## MONETARY POLICY TARGETS FOR 1979

The economic goals of the Carter Administration, embodied in the January 1979 Economic Report of the President, are provided in Table 7, along with the corresponding DRI projections for 1979 and 1980.<sup>6</sup>

<sup>6</sup>The details of the Administration forecast have been worked out in the DRI model simulation "Carter Country-January 26, 1979," which reflects the key economic assumptions of the Administration, but also provides the complete macroeconomic detail from the DRI model. The entries in Table 7 for many of the variables are implied by the DRI model, based on key Administration projections that appear in Tables 21 and 22 and pages 97-123 of the 1979 Economic Report of the President.

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Table 7  
Economic Goals of the Carter Administration and the DRI Forecast\*

Item	1978 Actual	1979	1980	Annual Average 1979 1980	
Percent change, fourth quarter to fourth quarter					
Consumer Prices					
Administration	9.0	7.5	6.4	8.2	6.7
DRI	9.0	9.0	7.2	9.1	7.7
Nominal GNP					
Administration	12.9	9.7	9.9	11.5	9.5
DRI	12.9	8.5	12.4	11.0	9.9
Real GNP					
Administration	4.3	2.2	3.2	3.6	2.5
DRI	4.3	0.2	4.8	2.5	2.3
Real Consumption Expenditures					
Administration	3.8	3.8	1.6	4.4	2.0
DRI	3.8	1.2	4.0	3.2	2.3
Real Business Fixed Investment					
Administration	8.3	1.8	5.5	4.3	2.8
DRI	8.3	0.0	5.2	3.8	1.3
Real State and Local Purchases					
Administration	3.5	2.0	2.7	2.5	2.4
DRI	3.5	1.7	2.0	2.3	1.8
Productivity <sup>2</sup>					
Administration	0.3	0.4	1.1	NA	NA
DRI	0.3	1.4	2.3	1.2	2.6
Level, fourth quarter <sup>1</sup>					
Employment (millions)					
Administration	95.6	97.5	99.5	96.9	98.8
DRI	95.6	96.8	98.8	96.5	97.8
Unemployment Rate (%)					
Administration	5.8	6.2	6.2	6.0	6.2
DRI	5.8	6.8	6.8	6.3	7.0
Housing Starts (mils. of units)					
Administration	2,009	1,832	2,168	1,967	2,006
DRI	2,009	1,594	2,044	1,715	1,878
Auto Sales (mils. of units)					
Administration	11.1	11.9	10.9	11.2	11.1
DRI	11.1	9.7	11.1	10.5	10.8
Treasury Bill Rate (%)					
Administration	7.19	8.33	7.19	8.81	7.60
DRI	7.19	8.54	8.63	9.27	8.10

\*Sources: 1979 Economic Report of the President, p. 109; Data Resources, Inc. Interim Control of February 19, 1979; "Carter Country" DRI Simulation, January 26, 1979

<sup>1</sup> seasonally adjusted

<sup>2</sup> real GNP per hours worked

## New Realities

The Carter Administration envisions a moderation of real economic growth during 1979, but no recession. From 1978:4 to 1979:4, the goal for real economic growth is 2.2%, a pace below potential, but that would permit moderation in the inflation pressures on the economy. The goal for consumer prices is near 7.5%, a slight deceleration from the 7.7% of 1977:4 to 1978:4. But greater optimism on the efficacy of the voluntary program on wages and prices is exhibited than appears in the DRI forecast. The unemployment rate would rise somewhat, to 6.2% by the end of 1979, as a result of the slowed pace in real economic growth.

The DRI forecast takes a more cyclical view. A mild recession is forecasted during the second half of 1979, holding real economic growth to 0.2% for 1978:4 to 1979:4. Higher interest rates than are assumed by the Administration, a greater decline in housing, weaker real consumption, and a worse result for auto sales are the primary differences between the DRI view and the Carter goals. A 45-day auto strike in 1979:4 and even higher inflation due to a partial cutback in Iranian oil also are assumed.

On balance, the DRI forecast is more pessimistic than the Carter Administration

outlook. Higher unemployment and inflation rates characterize 1979 and 1980 than under the Administration view. This weaker performance is mostly due to the near-term outlook and, in particular, the higher profile of interest rates that results from Federal Reserve "sustained restraint" to maintain dollar defense and the fight against inflation. The effects of the higher interest rates and extended financial position of consumers impact most greatly on housing activity and consumer spending during 1979. But real economic growth is projected at 4.8% by DRI for 1980, considerably above the Administration goal of 3.2%.

The monetary growth rates in the DRI interim forecast of February 19, 1979 and those implied by the Carter Administration goals are presented in Table 8. The new Federal Reserve target ranges for M1, M2, and M3 announced on February 20 also are given.<sup>7</sup> The various monetary aggregates, M1, M1+, M2, and M3 all grow more slowly from 1978:4 to 1979:4 under the DRI forecast than in the Administration scenario. M1 growth is projected at 2.7%, near the mid-point of the 1-1/2 to 4-1/2% Fed target

<sup>7</sup>The assumption in the DRI forecast is that ATS reduces monetary growth by 2.7% in 1979. The Federal Reserve estimate is 3%.

Table 8  
Fed Targets and Monetary Growth Under the Carter Administration  
and DRI Scenarios (Fourth quarter to fourth quarter)

	1978 Actual	1979	1980
<b>Fed Target Ranges</b>			
M1	4-6½	1½-4½	NA
M1+	5-7½ <sup>a</sup>	NA	NA
M2	6½-9	5-8	NA
M3	7½-10	6-9	NA
<b>Monetary Growth</b>			
M1			
Administration	7.3	4.4	4.5
DRI	7.3	2.7	5.9
M1+			
Administration	5.3	8.6	9.3
DRI	5.3	6.9	10.4
M2			
Administration	8.5	8.0	8.9
DRI	8.5	7.1	9.9
M3			
Administration	9.0	9.1	10.3
DRI	9.0	7.9	10.8

<sup>a</sup>latest available



## New Realities

Table 10  
Probabilities for Growth of the Monetary Aggregates:  
1978:4 to 1979:4, Classified According to the Target Range\*

	M1	M2	M3
New Target Range (7½ to 7¾)	1½-4½	5-8	6-9
Greater Than Target	0	0	0
Within Range	.95	1.00	1.00
Below Target	.05	0	0

\* DRI Interim Forecast of February 19, 1979

Thus, according to the DRI model, the interest rate patterns consistent with monetary aggregate growth near the midpoints of the new Fed targets will be sufficient to produce a mild recession during 1979. These rates include a peak of 11-1/4% for Federal funds at mid-year, 12-1/2% in the prime, and 9-3/4% for top-quality bond yields. Subsequently, the declines in rates would be very modest. These results suggest that the target ranges necessary to avoid a recession would have to be considerably higher than the ones set by the Federal Reserve.

The Carter Administration scenario, on the other hand, produces M1, M2, and M3 growth rates near the upper bounds of the Federal Reserve target ranges. The growth rates exceed the target for M3 slightly and deviate significantly upward from the mid-points of the announced target ranges of M1 and M2. As Table II shows, the probabilities that the monetary growth rates implied by the Carter Administration goals will be within Fed target ranges are much less than for the DRI forecast. The implication is that interest rates must be raised significantly from current levels to achieve the midpoints of the targets, given the Administration goals on real economic growth and inflation.

Table II  
Probabilities for Monetary Aggregate  
Growth: 1978:4 to 1979:4, Classified  
According to the Target Range\*

	M1	M2	M3
New Target Range (7½ to 7¾)	1½-4½	5-8	6-9
Greater Than Target	.51	.38	.53
Within Range	.49	.62	.47
Below Target	0	0	0

\* "Carter Country 0126" simulation.

The Federal Reserve has yet a different outlook for 1979, as revealed in Chairman Miller's testimony. Table 13 compares the Administration, DRI, and Federal Reserve projections for 1979. The central bank view also is more pessimistic than the Carter goals, but consistent with the monetary growth rates that have been chosen. It would take much higher inflation, a surprising continuation of economy-wide strength, or a turnabout in the conservative stance of fiscal policy to cause the upper bounds to be violated. Too low monetary growth is the most probable error, especially if the economy weakens more because of unexpected shocks.

Charts 13a to 13j show the results of high and low monetary growth scenarios compared with the baseline. Appendix Tables A2, A6 and A7 provide the details. The interest rate swings are magnified in order to quickly achieve the lower or upper ranges of the new Federal targets. To obtain the lower bounds for M1, M2, and M3 in 1979, interest rates would have to be raised to all-time peaks, with the Federal funds rate reaching 14.1% during 1979:3 and AAA-equivalent bond yields at 9.8%. Achieving growth rates for the monetary aggregates near the lower bounds would be associated with a deep recession, with real economic growth dropping 0.9% over the next year and not even a full recovery in 1980. There would be significant reductions of inflation, especially in 1980, but at considerable expense to employment.

On the other hand, the high monetary growth scenario, associated with a much lower pattern of interest rates, would generate additional inflation and lower unemployment. The deterioration of inflation would not be so great relative to the reduced unemployment.

## New Realities

Table 12  
Risk Ranges From Stochastic Simulations with the DRI Model

	Growth Rates 1978:4 TO 1979:4								
	Non-Stochastic "Carter Country" Forecast	Stochastic Simulation Percentiles						5K	Low
		H1	95K	75%	50%	25K	5K		
Real GNP.....	2.2	4.9	3.8	2.9	2.2	1.5	0.4	-0.1	
Consumption.....	3.7	6.1	5.0	4.4	3.8	3.0	2.1	1.2	
Fixed Investment									
Business.....	1.7	6.0	5.1	3.0	2.0	1.2	-1.0	-4.2	
Residential.....	-2.6	8.0	3.0	-0.1	-3.0	-5.2	-10.0	-13.8	
Exports.....	5.3	9.5	8.4	6.7	5.4	3.8	1.7	0.7	
Imports.....	1.9	6.5	5.4	3.5	2.2	0.1	-3.3	-5.1	
Government Spending									
State & Local.....	2.0	4.0	3.7	2.7	2.1	1.3	0.4	-1.1	
Federal.....	-0.3	4.8	3.5	1.5	0.0	-1.7	-4.1	-5.3	
Wages and Prices									
Avg. Hourly Earnings	8.3	9.1	8.9	8.6	8.3	8.1	7.8	7.2	
G.I.P. Deflator.....	7.4	8.7	8.3	7.7	7.4	7.0	6.5	6.1	
Wholesale Prices....	8.7	11.7	10.6	9.4	8.7	8.1	7.0	6.3	
Consumer Prices.....	7.4	9.2	8.8	7.8	7.2	6.9	6.1	5.8	
Incomes									
Personal Income.....	10.2	13.1	11.8	10.8	10.4	9.5	8.4	7.6	
Real Disp. Income....	3.3	5.3	4.7	3.9	3.4	2.6	1.6	0.9	
Corporate Profits									
Before Taxes.....	1.4	11.2	6.4	4.0	1.4	-0.7	-4.3	-5.9	
After Taxes.....	4.0	16.8	12.4	7.5	4.2	0.6	-3.3	-5.4	
Other									
Money Supply.....	4.4	6.2	5.7	4.9	4.5	3.8	3.0	2.5	
MONEY2.....	7.9	8.9	8.6	8.1	7.9	7.5	7.1	5.7	
MONEY3.....	9.1	10.2	9.9	9.4	9.1	8.8	8.4	7.9	
Indust. Production..	1.2	9.2	4.4	1.0	1.3	-0.4	-2.4	-3.8	
Housing Starts.....	-13.9	-4.0	-6.1	-10.7	-14.3	-18.4	-23.5	-27.3	
Car Shipments.....	7.4	19.0	15.6	10.8	7.0	3.6	0.3	-4.4	
	Stationary Series Average for 1978:4 TO 1979:4 (Percentage Except For Federal Surplus)								
Unemployment Rate....	6.0	6.7	6.4	6.2	5.9	5.8	5.5	5.3	
Fed. Surplus (\$11. B.)	-30.7	-20.0	-25.0	-27.7	-31.3	-34.0	-37.3	-40.7	
Interest Rates									
Federal Funds.....	10.0	11.4	10.9	10.4	10.0	9.7	9.2	8.9	
Prime Bus. Loans....	11.5	12.5	12.1	11.8	11.5	11.3	11.0	10.8	
New Corporate Bonds.	9.4	9.8	9.7	9.5	9.4	9.3	9.1	9.0	

Table 13  
The 1979 Outlook\*

	1979 (4th Quarter to 4th Quarter, percent change)		
	Administration	Federal Reserve	DRI
Nominal GNP		9-3/4	
Real GNP	2 to 2%	1-3/4 to 2%	-0.3 to 0.5
Consumption	1-3/4 to 2%	NA	0.1 to 1.4
Nonresidential Fixed Investment	4 to 4%	NA	-1.3 to 1.3
Residential Investment	-8% to -9%	NA	-11.1 to -15.9
Federal Purchases	-0.3	NA	1.7 to -4.1
State and Local Purchases	3.5	NA	1 to 3%
GNP Implicit Price Deflator	7% to 7%	7% to 8%	7.9 to 8.6
Real Disposable Income	2.5	NA	1.9 to 3.2
	Level, 4th Quarter		
Unemployment Rate (%)	6 to 6%	NA	6.8
Housing Starts (mil. of units)	1 1/2 to 1-3/4	NA	1.59%

\*Source: 1979 Economic Report of the President; Miller Testimony; Table 12

New Realities

Chart 13a  
M1 Growth (4 Qtr. % chg.):  
Interim Control and High and  
Low Money Growth Simulations\*

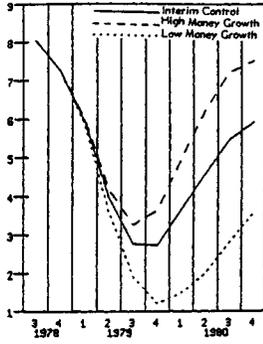


Chart 13b  
M2 Growth (4 Qtr. % chg.):  
Interim Control and High and  
Low Money Growth Simulations\*

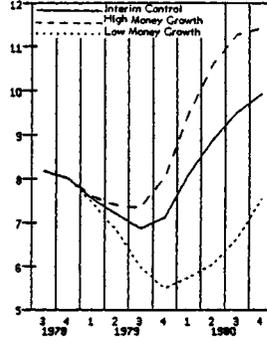


Chart 13c  
Federal Funds Rate (Percent):  
Interim Control and High and  
Low Money Growth Simulations\*

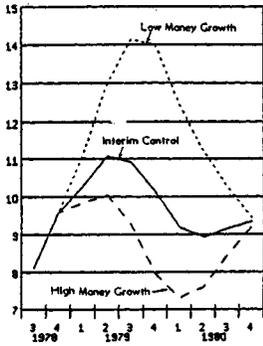
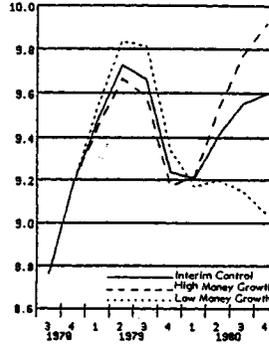


Chart 13d  
New Issue Rate for AAA-Equivalent  
Corporate Bonds (Percent):  
Interim Control and High and  
Low Money Growth Simulations\*



\*High Money Growth Simulations: Long-run money growth at upper limit of recently announced Fed target range for 1978:4 to 1979:4.  
DRI Interim Controls: long-run money growth midway between lower and upper limits of recently announced Fed target range for 1978:4 to 1979:4.  
Low Money Growth Simulations: long-run money growth at lower limit of recently announced Fed target range for 1978:4 to 1979:4.

New Realities

Chart 13e  
Real Growth in GNP (% chg.):  
Interim Control and High and  
Low Money Growth Simulations\*

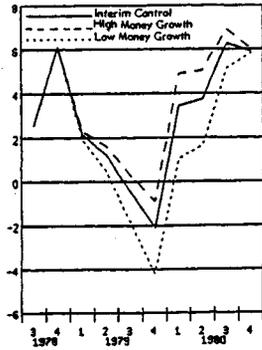


Chart 13f  
Unemployment Rate (Percent):  
Interim Control and High and  
Low Money Growth Simulations\*

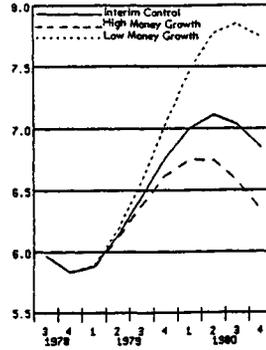


Chart 13g  
Inflation-Implicit GNP Deflator  
(% chg.): Interim Control and  
High and Low Money Growth  
Simulations\*

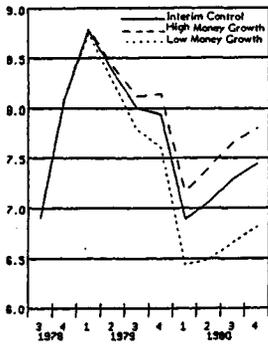
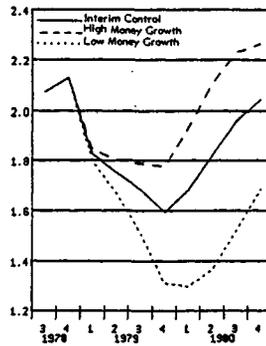


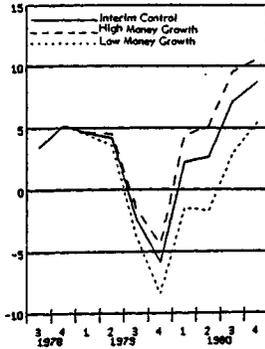
Chart 13h  
Housing Starts, Private Including  
Farm - Total (Mils. of units):  
Interim Control and High and  
Low Money Growth Simulations\*



\*High Money Growth Simulations long-run money growth at upper limit of recently announced Fed target range for 1978:4 to 1979:4.  
 DRI Interim Control: long-run money growth midway between lower and upper limits of recently announced Fed target range for 1978:4 to 1979:4.  
 Low Money Growth Simulations long-run money growth at lower limit of recently announced Fed target range for 1978:4 to 1979:4.

## New Realities

Chart 13i  
Growth in Real Fixed Nonresidential  
Investment (% chg.): Interim  
Control and High and Low Money  
Growth Simulations\*



\*High Money Growth Simulations Long-run money growth at upper limit of recently announced Fed target range for 1978:4 to 1979:4.  
 OR Interim Controls long-run money growth midway between lower and upper limits of recently announced Fed target range for 1978:4 to 1979:4.  
 Low Money Growth Simulations long-run money growth at lower limit of recently announced Fed target range for 1978:4 to 1979:4.

## Concluding Comments

"New realities" in the economy will make the conduct of monetary policy considerably more difficult in the months ahead. In particular, the dollar defense constraint and an inflation that is not amenable to tight Fed policy suggest a long period of high interest rates and "austerity" before any significant headway can be achieved. A mild recession in 1979 and slow growth for 1980 appears to be the minimal costs necessary for significant reductions in the inflation that has been occurring.

Over the longer-run, however, the new realities, improved policy coordination, tough demand management and a turn to conservatism in politics holds considerable hope for a decelerating inflation and the benefits to U.S. economic performance that would arise.

The United States is now biting the bullet on inflation. Although painful over the short-run, if the various arms of policy and the public have the staying power, the decade of the 80's should more closely resemble the 50's and early 60's than the 70's.

## APPENDIX

Nominal Interest Rates:

The savings rate is the weighted average effective rate on savings deposits at commercial banks, mutual savings banks, and savings and loan associations, weighted by the ratio of each institution's deposits to total deposits.

The bill rate is the average market yield on 3-month Treasury bills, quoted on a bank discount basis.

The municipal bond rate is the yield on Moody's AAA State and local government bond issues.

The return on stocks is the expected cost of equity financing. As defined by DRI, this return equals the yield on Standard and Poor's daily stock price index - 500 composite - plus a weighted moving average on the growth of earnings per share - 500 composite.

The auto loan rate is the interest rate on direct consumer loans of new automobiles (36 months) at reporting commercial banks.

The mortgage loan rate is the average effective interest rate on loans closed for purchasing newly built, single-family homes for all major types of lenders, led one quarter.

The rate on prime business loans is the most common large business prime loan rate.

The rate on commercial paper is the rate on prime, four-to-six month commercial paper, the designation for short-term, negotiable, unsecured promissory notes sold by reporting companies to investors, usually other companies.

The rate on top-quality bond issues is the average yield on new issues of high-grade corporate bonds, as calculated by DRI.

Ex-Post Real Interest Rates:

The ex-post real interest rate is the nominal interest rate less the compound annual percentage change in the inflation rate in the same period. The rate of inflation for the savings, municipal bond, stock, and top-quality bond issue rates is defined as the compound annual rate of growth in the implicit price deflator for personal consumption expenditures. For the 3-month Treasury bill rate, the rate of inflation is defined as the compound annual percentage change in the Wholesale Price Index - All Commodities. The measure for the inflation rate connected with the mortgage rate is the compound

annual growth rate for the median sales price of new one-family houses sold. The rate of inflation for consumer loans is the compound annual rate of growth in the average price of a new car. For the prime and the commercial paper rates, the rate of inflation is determined by the compound annual growth rate in the implicit price deflator for gross fixed private nonresidential investment.

Expected Real Interest Rates:

The expected real interest rate is the nominal interest rate less a moving average of the compound annual percent change in the rate of inflation. The number of quarters over which the moving average rate of inflation for each interest rate is calculated is 3 (savings rate), 1 (bill rate), 20 (municipals and stock), 12 (auto and mortgage loans), 6 (prime business loans) and 2 (commercial paper). For the average yield on top-quality bond issues, the expected rate of inflation rate is defined as a second-order Pascal lag distribution on past actual percent changes in the consumption goods deflator. This form of the weights results from joint estimation of the expected rate of inflation and parameters of the DRI Model equation for the AAA-equivalent corporate bond rate.

After-Tax Nominal Interest Rates:

The after-tax nominal interest rate is the nominal interest rate less deductions for Federal and State and local personal or corporate taxes. Specifically, the after-tax interest rate for savings is the nominal savings rate less deductions for Federal and State and local personal taxes. The after-tax bill rate is net of Federal personal taxes. The after-tax municipal bond rate is net of State and local personal taxes. The after-tax return on stocks is the nominal rate less personal capital gains on the Federal and State and local government level. The after-tax consumer loan and mortgage rates are net of Federal personal taxes. Finally, the rates on prime business loans, commercial paper, and top-quality bond issues, after taxes, are after deductions for Federal and State and local corporate taxes.

Ex-Post After-Tax Real Interest Rates:

The ex-post after-tax real interest rate is the after-tax nominal interest rate less the compound annual percentage change in the rate of inflation.

Expected After-Tax Real Interest Rates:

The expected after-tax real interest rate is the after-tax nominal interest rate less a moving average of the compound annual percentage change in the rate of inflation.

## New Realities

Table A1  
U.S. Economic Performance: 1978:4 to 1980:4  
(Carter Administration Assumptions - Carter Country 1/26')

	1978:4A	1979:1	1979:2	1979:3	1979:4	1979:4/1978:4 (% Chg.)	1980:4/1979:4 (% Chg.)
Federal Funds Rate (%)	9.58	10.43	10.53	10.12	9.34	-2.5	-20.2
AAA-Equivalent Corporate Bond Yield (%)	9.19	9.51	9.53	9.51	9.23	0.4	1.2
M1 (% Chg.)	4.4	3.0	4.4	4.9	5.3	4.4	4.5
M1+ (% Chg.)	2.5	5.4	8.2	10.5	10.5	8.6	9.3
M2 (% Chg.)	8.0	6.4	7.6	8.7	9.1	8.0	8.9
M3 (% Chg.)	9.7	8.3	8.7	9.5	10.1	9.1	10.3
Real GNP (% Chg.)	6.1	4.5	1.5	1.3	1.6	2.2	3.2
Inflation (% Chg. - CPI)	8.6	8.5	7.2	7.4	6.4	7.4	6.3
Unemployment Rate (%)	5.8	5.5	6.0	6.0	6.2	6.1	-0.1
Velocity (% Chg.)	9.9	8.8	4.4	3.6	3.6	5.1	5.1
Housing Starts (Mils. of Units)	2.129	2.071	2.045	1.919	1.832	-13.9	18.3
Auto Sales (Mils. of Units)	11.1	11.0	10.9	11.1	11.9	7.4	-8.7

Table A2  
U.S. Economic Performance: 1978:4 to 1980:4  
(DRI Interim Control - February 19, 1979)

	1978:4A	1979:1	1979:2	1979:3	1979:4	1979:4/1978:4 (% Chg.)	1980:4/1979:4 (% Chg.)
Federal Funds Rate (%)	9.38	10.26	11.07	10.91	10.12	5.6	-7.6
AAA-Equivalent Corporate Bond Yield (%)	9.19	9.48	9.73	9.86	9.24	0.5	3.9
M1 (% Chg.)	4.4	1.4	2.2	3.0	4.4	2.7	5.9
M1+ (% Chg.)	2.5	4.7	6.4	7.7	8.6	6.9	10.4
M2 (% Chg.)	8.0	5.2	6.7	8.0	8.7	7.1	9.9
M3 (% Chg.)	9.7	6.7	7.3	8.3	9.3	7.9	10.8
Real GNP (% Chg.)	6.1	2.2	1.2	-0.5	-2.1	0.2	4.8
Inflation (% Chg. - CPI)	8.4	9.9	9.1	8.7	8.1	9.0	7.2
Unemployment Rate (%)	5.8	5.9	6.1	6.4	6.8	16.0	1.1
Velocity (% Chg.)	9.9	9.6	7.3	4.4	1.2	5.6	6.0
Housing Starts (Mils. of Units)	2.129	1.828	1.753	1.686	1.594	-25.1	28.2
Auto Sales (Mils. of Units)	11.1	11.2	10.7	10.2	9.7	-12.4	13.8

Table A3  
U.S. Economic Performance: 1978:4 to 1980:4  
(DRI Constant Rate Simulation - February 19, 1979)

	1978:4A	1979:1	1979:2	1979:3	1979:4	1979:4/1978:4 (% Chg.)	1980:4/1979:4 (% Chg.)
Federal Funds Rate (%)	9.58	10.15	10.17	10.11	9.90	3.4	-5.4
AAA-Equivalent Corporate Bond Yield (%)	9.19	9.45	9.43	9.40	9.20	0.1	5.3
M1 (% Chg.)	4.4	1.5	2.8	3.5	4.9	3.1	4.2
M1+ (% Chg.)	2.5	4.8	7.3	9.3	10.1	7.8	10.5
M2 (% Chg.)	8.0	5.2	7.0	8.6	9.3	7.5	10.1
M3 (% Chg.)	9.7	6.8	7.8	9.0	10.0	8.4	11.0
Real GNP (% Chg.)	6.1	2.2	1.5	0.0	-1.6	0.5	4.9
Inflation (% Chg. - CPI)	8.4	9.9	9.1	8.7	8.2	9.0	7.2
Unemployment Rate (%)	5.8	5.9	6.1	6.4	6.7	14.7	0.1
Velocity (% Chg.)	9.9	9.5	7.2	4.3	1.3	5.6	6.0
Housing Starts (Mils. of Units)	2.129	1.832	1.781	1.741	1.667	-21.7	24.8
Auto Sales (Mils. of Units)	11.1	11.2	10.7	10.3	9.8	-11.3	13.6

## New Realities

Table A4  
U.S. Economic Performance: 1978:4 to 1980:4  
(DRI High Rates Simulation - February 19, 1979)

	1978:4A	1979:1	1979:2	1979:3	1979:4	1979:4/1978:4 (% Chg.)	1980:4/1979:4 (% Chg.)
Federal Funds Rate (%)	9.58	10.15	11.75	12.26	11.58	20.3	-18.3
AAA-Equivalent Corporate Bond Yield (%)	9.19	9.49	9.82	10.12	9.38	2.0	0.7
M1 (% Chg.)	4.4	1.4	1.9	2.3	3.4	2.2	5.1
M1+ (% Chg.)	2.5	4.6	5.7	6.1	5.9	5.6	9.2
M2 (% Chg.)	8.0	5.2	6.3	7.3	7.5	6.6	9.1
M3 (% Chg.)	9.7	6.7	6.9	7.5	7.9	7.2	10.0
Real GNP (% Chg.)	+6.1	2.1	1.0	-1.0	-2.9	-0.2	4.3
Inflation (% Chg. - CPI)	8.4	9.9	9.1	8.6	8.1	8.9	7.0
Unemployment Rate (%)	5.8	6.9	6.1	6.5	6.8	17.8	4.4
Velocity (% Chg.)	9.9	9.6	7.4	4.5	1.3	5.6	6.2
Housing Starts (Mils. of Units)	2.129	1.824	1.728	1.629	1.488	-30.1	29.9
Auto Sales (Mils. of Units)	11.1	11.2	10.7	10.2	9.6	-13.8	12.7

Table A5  
U.S. Economic Performance: 1978:4 to 1980:4  
(DRI Low Rates Simulation - February 19, 1979)

	1978:4A	1979:1	1979:2	1979:3	1979:4	1979:4/1978:4 (% Chg.)	1980:4/1979:4 (% Chg.)
Federal Funds Rate (%)	9.58	10.15	9.55	9.30	9.04	5.7	5.8
AAA-Equivalent Corporate Bond Yield (%)	9.19	9.39	9.35	9.30	9.05	-1.5	7.9
M1 (% Chg.)	4.4	1.5	3.0	4.2	5.5	3.5	5.4
M1+ (% Chg.)	2.5	4.8	6.2	10.7	11.5	8.8	10.7
M2 (% Chg.)	8.0	5.2	7.4	9.3	10.0	8.0	10.4
M3 (% Chg.)	9.7	6.8	8.2	9.8	10.8	8.9	11.2
Real GNP (% Chg.)	6.1	3.2	1.7	0.4	-1.1	0.8	5.0
Inflation (% Chg. - CPI)	8.4	9.9	9.1	8.7	8.2	9.0	7.3
Unemployment Rate (%)	5.8	5.9	6.1	6.4	6.6	13.5	-1.2
Velocity (% Chg.)	9.9	9.5	7.0	4.2	1.3	5.5	5.9
Housing Starts (Mils. of Units)	2.129	1.832	1.813	1.791	1.734	-18.5	21.4
Auto Sales (Mils. of Units)	11.1	11.2	10.8	10.4	9.9	-10.4	13.6

Table A6  
U.S. Economic Performance: 1978:4 to 1980:4  
(DRI High Money Growth Simulation - February 19, 1979)

	1978:4A	1979:1	1979:2	1979:3	1979:4	1979:4/1978:4 (% Chg.)	1980:4/1979:4 (% Chg.)
Federal Funds Rate (%)	9.58	9.85	10.04	9.25	7.95	-17.0	15.8
AAA-Equivalent Corporate Bond Yield (%)	9.19	9.45	9.67	9.58	9.17	-0.2	8.2
M1 (% Chg.)	4.4	1.4	2.8	4.1	6.1	3.6	7.5
M1+ (% Chg.)	2.5	5.1	7.8	10.2	12.2	8.8	12.5
M2 (% Chg.)	8.0	5.4	7.3	9.1	10.4	8.0	11.4
M3 (% Chg.)	9.7	6.9	8.1	9.6	11.3	9.0	12.4
Real GNP (% Chg.)	6.1	2.3	1.6	0.3	-0.9	0.8	5.7
Inflation (% Chg. - CPI)	8.4	9.9	9.1	8.7	8.2	9.0	7.4
Unemployment Rate (%)	5.8	5.9	6.1	6.4	6.6	13.5	-4.3
Velocity (% Chg.)	9.9	9.5	7.1	4.2	1.0	5.4	5.7
Housing Starts (Mils. of Units)	2.129	1.844	1.803	1.789	1.776	-16.6	27.4
Auto Sales (Mils. of Units)	11.1	11.2	10.8	10.3	9.9	-10.4	16.3

## New Realities

Table A7  
 U.S. Economic Performance: 1978:4 to 1980:4  
 (201 Low Money Growth Simulation - February 19, 1979)

	1978:4A	1979:1	1979:2	1979:3	1979:4	1979:4/1978:4 (% Chg.)	1980:4/1979:4 (% Chg.)
Federal Funds Rate (%)	9.58	11.10	12.96	14.13	13.99	46.0	-32.6
AAA-Equivalent Corporate Bond Yield (%)	9.19	9.54	9.84	9.81	9.34	1.7	-1.3
M1 (% Chg.)	4.4	1.0	1.1	1.0	1.6	1.2	3.6
M1+ (% Chg.)	2.5	3.9	4.0	3.3	2.4	3.4	7.2
M2 (% Chg.)	8.0	4.8	5.6	5.9	5.7	5.5	7.5
M3 (% Chg.)	9.7	6.2	6.1	5.3	5.7	6.0	8.3
Real GNP (% Chg.)	6.1	1.9	0.5	-1.9	-4.2	-0.9	3.4
Inflation (% Chg. - CPI)	8.4	9.9	9.1	8.8	8.0	8.9	8.8
Unemployment Rate (%)	5.8	5.9	6.2	6.6	7.0	20.6	10.0
Velocity (% Chg.)	9.9	9.7	7.6	4.7	1.5	5.8	6.4
Housing Starts (Mils. of Units)	2.129	1.797	1.689	1.513	1.312	-38.4	28.5
Auto Sales (Mils. of Units)	11.1	11.2	10.6	10.0	9.3	-15.9	10.0

The CHAIRMAN. Thank you very much, Dr. Sinai.  
Dr. Kane is our next witness. Dr. Kane, go right ahead, please.

**STATEMENTS OF PROF. EDWARD J. KANE AND EVERETT D. REESE, PROFESSOR OF BANKING AND MONETARY ECONOMICS, THE OHIO STATE UNIVERSITY**

Dr. KANE. Mr. Chairman, I want to thank you and the committee for inviting me here to share my analysis of what the Fed's current policy statements mean.

The CHAIRMAN. May I say the same: If you could abbreviate your statement, we would appreciate it, and your statement will be printed in full in the record.

Dr. KANE. My statement is fairly abbreviated as it stands.

Official Federal Reserve pronouncements are as intricately crafted as medieval scrolls. Like illuminations in the Irish Book of Kells, Fed statements have an iconography all their own and filigree embellishments that alternately cover and uncover a long and complicated line of reasoning. Fed argumentation is so artful that almost no one can follow every twist and turn.

Fed officials speak in arabesques for sound bureaucratic reasons: To foster and exploit public confusion about the political appearances and political realities of U.S. monetary policy decisions. Popular views of how the Federal Reserve works are confused in three ways:

First: They're confused about how to tell whether monetary policy is tight or easy in an inflationary environment;

Second: They are confused in thinking Federal Reserve officials are effectively insulated from political pressures by long terms of appointment and budgetary autonomy;

Third: They are confused by disingenuous Federal Reserve statements as to what its policies are intended to accomplish.

**THEORY OF MONETARY POLICY**

I want to talk first about the theory of monetary policy. Basically, this theory is a theory of policy dilemmas. Every action the Federal Reserve may take to improve one of the several economic performance rates that concern people tends to worsen at least one of the other rates. Experience teaches that while rapid growth of the money stock reduces unemployment, it simultaneously tends to aggravate inflation and to lower the foreign-exchange value of the dollar. Slow money growth tends to raise unemployment, but to improve the other two performance rates.

Experience—and economic theory—also teaches that when the inflation rate varies over time, the policy effects of changes in the level of nominal interest rates become hard to interpret. Nominal interest rates treat loan repayments of future dollars as the equivalent in value of current dollars. But with inflation, future dollars have increasingly less purchasing power. To account for this, it is better to focus on real interest rates. These are nominal interest rates minus the anticipated rate of price inflation. For example, with 9-percent anticipated inflation, a 10-percent government bond rate would pay only 1-percent real.

Now, although real and inflation-adjusted interest rates would measure the thrust of monetary policy more accurately, in the popular mind and in the popular press the Fed's chief task is to act as the arbiter of nominal interest rates. During times of monetary restraint, this adversary perception subjects the Fed to political pressures from sectors that are hurt by rising interest rates. These sectors' political action leads elected officials to resist increases in nominal interest rates.

This political response then focuses attention on the change in market interest rates and reinforces the mistaken popular notion that changes in the level of nominal interest rates are reliable indicators of the microeconomic thrust of monetary policy.

#### POLITICS OF FED DECISIONMAKING

Next, I want to discuss the political dependence of the Federal Reserve System. Fed officials have a narrow political base. What political strength they have is drawn from an incohesive constituency against inflation. Responding to this constituency, Fed spokespersons are fond of drawing parallels between their situation and that of the Supreme Court. They argue that long terms of appointment and budgetary autonomy insulate them from shortsighted election-year pressures to expand the money supply, to promote employment today, at the expense of inflation later.

But since the Fed's special privileges are revocable by a simple act of Congress, their insulation is paperthin. To protect its bureaucratic privileges, the Fed must respond to short-run political pressures. Hence, even in such strongly inflationary environments as those of 1972 and 1978, the Fed finds itself compelled to downgrade its efforts to fight inflation during an election year.

It is wrong to suppose that the timing of Federal Reserve policy actions can be explained as passive, statesmanlike reactions to independent economic cycles of inflation and unemployment.

First: One must allow for the lags in the effects that the Fed policy instruments have on the macroeconomic goal variables. Second: To understand the abrupt shifts in the tradeoffs that the Fed actually makes in executing its conflicting assignments of fighting inflation and fighting unemployment, one must look simultaneously at the electoral cycle and factor in the distance until the next Federal election. The role that this distance plays in the Fed decisionmaking has increased noticeably in the last 14 years.

Among electoral strategists, it is an article of faith that a strong economy benefits incumbents. A second article of faith is that a rising trend in unemployment costs incumbents many more votes than a similarly rising trend in inflation. Finally: It is widely supposed that the inflationary consequences of less than fully anticipated monetary expansion take longer to develop fully than effects on unemployment.

Cyclically shifting electoral payoffs to incumbents combine with lags in the effect of monetary policy to produce an overlay to the ordinary business cycle. This process goes a long way toward explaining the cyclical worsening in U.S. levels of unemployment and inflation. Throughout the first 9 or 10 months of an election year, the Fed is pressed to err on the side of monetary ease. However, as

the election draws closer, lags in the effect of monetary policy make further attempts to reduce unemployment less useful to incumbent politicians, and the buildup of inflationary pressure more worrisome.

Before money-market certificates were instituted, the effect of disintermediation on housing and savings and loan associations, and the complaining voices of other sectors vulnerable to rising market rates of interest, tended to cloud incumbents' immediate interest in seeing the election-induced acceleration in inflation stabilized as soon as possible before the next election. But in November 1978, the choice was clear. Approximately 1 week before the polls opened, the President virtually commanded the Fed to shift its operating priorities back to fighting inflation again.

These hypotheses not only explain zigs and zags in 1978 monetary policy. They also let us predict the pattern the Fed will follow in 1979. Post-election monetary restraint will be held overlong in the largely futile effort to overcome the lagged effects of election-year monetary expansion. This policy will be held until unemployment establishes a clear upward trend.

By this time inflation, though still high, will begin to decelerate, making it reasonable for the Fed to undertake its politically necessary election-year task of making the fight against unemployment its No. 1 priority again.

#### THE FED AS A SCAPEGOAT

Last: I would like to discuss my view that Fed officials are political scapegoats, whose job requires them to engage in double-talk. Especially in election years, one of the least reliable indicators of the state of U.S. monetary policy is what the Federal Reserve tells us about FOMC intentions. Particularly in the late stages of any business-cycle expansion, the occupant of this political hot seat is virtually forced to talk out of both sides of his mouth.

To placate the Fed's natural constituency in the business and financial community, the Chairman must emphasize how vigorously Fed officials are fighting inflation with high and rising nominal rates of interest. However, to keep Congress and the administration off their backs, the Fed officials must simultaneously fight unemployment by expanding the money stock.

In the first 10 months of 1978, Fed officials claimed repeatedly that monetary policy was highly restrictive, even though the money supply was growing rapidly and estimates of future inflation, along with observed inflation, were rising faster than nominal interest rates.

To put monetary policy effects in proper perspective, the Fed should focus on the level of real interest rates, that is, on the difference between nominal interest rates and anticipated rates of inflation. Focusing on the level of nominal interest rates badly serves the Fed's anti-inflation constituency. It takes pressure off elected officials by deceiving the public into believing that, even when the Fed has temporarily abandoned the battlefield, it is somehow waging a continual war against inflation.

In the face of the three-point acceleration in the inflation rate observed in 1979, it was unconscionable for Fed officials to cite smaller changes in nominal interest rates as evidence that their policies were anti-inflationary. Their doing so fostered confusion and indicates that they value the political options that public confusion currently confers on them.

The Fed's political tasks are almost always contradictory in election years. This sharpens the horns of the Fed's policy dilemma. Fed officials are expected simultaneously to lead the verbal and educational onslaught against inflation and to deliver approximately the degree of monetary expansion that employment-oriented elected officials decide the public interest requires.

Although the Fed is formally an off-budget agency, Congress and the President know how to threaten it into line. The Fed as scapegoat hypothesis is confirmed by events in 1978. By Presidential order, the monetary stimulus shifted dramatically just before the November elections. The approximate growth rate for the first 10 months of 1978:  $M_1$  grew at about 8.4 percent,  $M_2$  at about 8.6 percent. In the next 3 months,  $M_1$  declined by about 1 percent and  $M_2$  grew only about 1½ percent—I have not seen the latest figures that came out yesterday.

Because monetary policy affects the performance rate only after a few months' lag, this change in policy was conveniently timed to allow incumbent Congresspersons and a frustrated President to take credit for both an improving employment picture and a promising anti-inflation program.

The dramatic turnaround in the  $M_1$  growth rate may or may not be overstated because of the legalization of the ATS accounts in November. But the measured decline in  $M_2$  growth is free of this bias, and is itself sharp enough, if it continues into the summer, to bring on a recession.

While elected officials talk reassuringly about the possibility of "soft landings," most of them are fairly fatalistic about the eventual need for a recession to decelerate inflation. With the current boom a record 4 years old, officeholders who are cognizant of business-cycle mortality statistics feel that a recession is inevitable by 1980. Incumbents would rather feed the economy its recession medicine now, so as to be able to run against the backdrop of an improving economy in 1980.

To hold up its end, the Fed is prepared both to deny now that it is manufacturing a recession and to confess in 1980 that its 1979 policies may perhaps have been a shade too restrictive. This is merely an exquisitely open variation of the cynical policy gambit that over the last 20 years the Fed and elected officials have adopted more and more plainly.

Sooner or later, the public and the press are going to learn that stop-and-go monetary policy is a game played at the electorate's expense.

The CHAIRMAN. Thank you, Dr. Kane.

[The complete statement of Mr. Kane follows:]

PREPARED STATEMENT OF EDWARD J. KANE AND, EVERETT D. REESE, PROFESSOR OF BANKING AND MONETARY ECONOMICS, THE OHIO STATE UNIVERSITY

Mr. Chairman, I want to thank you and your Committee for inviting me to share with you my analysis of what current Fed policy statements mean. Official Federal Reserve pronouncements are as intricately crafted as medieval scrolls. Like illuminations in the Irish Book of Kells, Fed statements have an iconograph all their own and filigree embellishments that alternately cover and uncover a complicated line of reasoning. Fed argumentation is so artful that almost no one can follow every twist and turn.

Fed officials speak in arabesques for bureaucratically useful reasons: to foster and exploit public confusion about the political appearances and political realities of U.S. monetary-policy decisions. Popular views of how the Federal Reserve operates are confused in three fundamental ways. First, they are confused about how to tell in an inflationary environment whether monetary policy is tight or easy. Second, they are confused in presuming that Federal Reserve officials are effectively insulated from myopic political pressures by long terms of appointment and budgetary autonomy. Third, they are confused by disingenuous Federal Reserve explanations of what its policies are intended to accomplish.

This confusion allows the Fed institutionally to shield incumbent politicians from being blamed for politically induced short-sighted mistakes in monetary policy while simultaneously allowing Fed officials to pose as disinterested and far-sighted macroeconomic troubleshooters.

#### A. THEORY OF MONETARY-POLICY EFFECTS

The theory of monetary policy is a theory of policy dilemmas. Every action that FR authorities may take to improve one economic-performance rate tends to worsen at least one of the other rates. Experience teaches that, while rapid growth in the money stock reduces unemployment, it simultaneously tends to aggravate inflation and to lower the foreign-exchange value of the dollar. Slow money growth tends to raise unemployment, but to improve the other performance rates.

Experience (and economic theory) also teaches that, when the inflation rate varies over time, the policy effects of changes in the level of nominal interest rates become hard to interpret. Nominal interest rates treat loan repayments of future dollars as the equivalent in value of current dollars. But with inflation, future dollars have increasingly less purchasing power. To account for this, it is better to focus on real interest rates: nominal interest rates minus the anticipated rate of price inflation. For example, with 9-percent anticipated inflation, a ten-percent government-bond rate would pay only one-percent "real."

When the inflation rate varies only slightly from year to year, nominal and real interest rates move fairly sympathetically. However, when (as in recent years) the inflation rate fluctuates sharply, nominal interest rates do not accurately track changes in household and business incentives to save and invest.

At times when the "moneyness" of various assets is not changing rapidly, various monetary and bank-reserve aggregates provide good alternative measures of the current thrust of monetary policy. However, when accelerating inflation is causing Federal Reserve membership to decline and with deposit-rate ceilings making deposit substitutes proliferate, changes in "real" or inflation-adjusted interest rates become more reliable indicators of the impact of current monetary policy on financial incentives.

Despite the obvious need to factor in the distorting effects of changes in anticipated inflation, in the popular mind and in the financial press, the Fed is perceived as the beleaguered arbiter of nominal interest rates. During times of money restraint, this perception implies that the Fed is subject to short-run political pressures from sectors hurt by rising interest rates. These sectors' political action leads elected officials openly to resist increases in the level of nominal interest rates. This political response system focuses attention on changes in market interest rates and reinforces the mistaken popular notion that changes in the level of nominal interest rates are reliable indicators of the macroeconomic thrust of current monetary policy.

#### B. POLITICAL DEPENDENCE OF THE FED

Fed officials have a narrow political base. What political strength they have is drawn from an incohesive constituency against inflation. Acutely conscious of this constituency, Fed spokespersons are fond of drawing parallels between their situation and that of the Supreme Court. They argue that long terms of appointment and budgetary autonomy insulate them from short-sighted election-year pressures to expand the money supply to promote employment today at the expense of inflation

later. But since the Fed's special privileges are revocable by a simple act of Congress, their insulation is paper-thin. To protect its bureaucratic privileges, the Fed must respond to short-run sectoral and electoral pressures. Hence, even in such strongly inflationary environments as those of 1972 and 1978, the Fed finds itself compelled to downgrade its efforts to fight inflation during an election year.

It is wrong to suppose that the timing of Federal Reserve policy actions can be explained as passive statesmanlike reactions to independent economic cycles of inflation and unemployment. First, one must allow for the inevitable lags in the effect that Fed policy instruments have on macroeconomic variables. Second, to understand the abrupt shifts in the tradeoffs that the Fed actually makes in executing its conflicting assignments of fighting inflation and fighting unemployment, one must look simultaneously at the electoral cycle and factor in the distance until the next federal election. The role that this distance plays in Fed decisionmaking has increased noticeably since the early 1960's.

Among electoral strategists, it is an article of faith that a strong economy benefits incumbents. A second article of faith is that a rising trend in unemployment costs incumbents many more votes than a similarly rising trend in inflation. Finally, it is widely supposed that the inflationary consequences of less than fully anticipated monetary expansion take longer to be fully felt than effects on employment.

Cyclically shifting electoral payoffs to incumbents combine with lags in the effects of monetary policy to produce a politically induced overlay to the ordinary business cycle. This process goes a long way toward explaining the secular worsening in U.S. levels of unemployment and inflation.

Through the first nine or ten months of an election year, the Fed is pressed to "err on the side of monetary ease." However, as the balloting draws very close, lags in the effects that monetary policy has on macroeconomic goal variables make further attempts to reduce unemployment less useful to incumbent politicians and the build-up of inflationary pressure more worrisome. Before money-market certificates were instituted, the effects of disintermediation on housing and S&Ls and the complaining voices of other sectors vulnerable to rising market rates of interest tended to counterbalance incumbents' immediate interest in seeing the election-induced acceleration in inflation stabilized as soon as possible before the next election. But in November 1978, the choice was clear. Approximately one week before the polls opened, the President virtually commanded the Fed to shift its operative priorities back to fighting inflation again.

Besides explaining zigs and zags in 1978 monetary policy, assuming that Fed policy serves the perceived interest of incumbent politicians allows us to predict the pattern that the Fed will follow in 1979. Post-election monetary restraint will be held overlong in a largely futile effort to overcome the lagged effects of 1978's election-year monetary expansion. Monetary restraint will be maintained until unemployment establishes a clear upward trend. By this time, inflation (though still high) will begin to decelerate, making it reasonable for the Fed to undertake its politically necessary 1980 election-year task of making the fight against unemployment its number-one priority again.

#### C. FED OFFICIALS ARE POLITICAL SCAPEGOATS WHOSE JOBS REQUIRE THEM TO ENGAGE REGULARLY IN DOUBLETALK

Especially in election years, one of the least-reliable indicators of the state of U.S. monetary policy is what Federal Reserve Chairmen tell us about FOMC intentions. Particularly in the late stages of any business-cycle expansion, the occupant of this political hotseat is virtually forced to talk out of both sides of his mouth. To placate the Fed's natural constituency in the business and financial community, the Chairman must emphasize how vigorously Fed officials are fighting inflation with high and rising nominal rates of interest. However, to keep Congress and the Administration off their backs, Fed officials must simultaneously fight unemployment by expanding the money stock.

In the first ten months of 1978, Fed officials claimed repeatedly that monetary policy was highly restrictive, even though the money supply was permitted to grow overly rapidly and observed inflation along with estimates of future inflation rates to rise faster than nominal interest rates. To put monetary-policy effects in proper perspective, the Fed could have focused on changes in the level of real interest rates: nominal interest rates corrected for the anticipated rate of inflation. To do this most effectively, the Fed would have to survey regularly a stratified sample of financial and business decisionmakers for their expected inflation rates over different horizons. Such information would usefully supplement distributed-lag functions of past inflation rates currently used as proxies for these forecasts.

Focusing on the level of nominal interest rates badly serves the Fed's anti-inflation constituency. It takes pressure off elected officials by deceiving the public into believing that, even when the Fed has temporarily abandoned the battlefield, it is somehow waging a continual war against inflation. In the face of the 3-point acceleration in the inflation rate observed in 1979, it was unconscionable for Fed officials to cite smaller changes in nominal interest rates as evidence that their policies were anti-inflationary. Their doing so fostered confusion and indicates that they value the political options that public confusion currently confers on them.

The Fed's political tasks are almost always contradictory in election years. An approaching election sharpens the horns of the Fed's policy dilemma. Fed officials are expected simultaneously to lead the verbal and educational onslaught against inflation and to deliver approximately the degree of monetary expansion that employment-oriented elected officials decide the public interest requires.

Although the Fed is formally an off-budget agency, Congress and the President know how to threaten it into line. The Fed-as-scapegoat hypothesis is confirmed by events in 1978. By Presidential order, the direction and magnitude of monetary stimulus shifted dramatically just before the November elections. Whereas  $M_1$  and  $M_2$  each grew at roughly 8.5 percent per annum during the first ten months of 1978, monetary growth has dramatically decelerated since. During the next three months,  $M_1$  declined at approximately one percent per annum, while  $M_2$  grew at a rate of only 1.5 percent. Because monetary policy does not affect macroeconomic performance rates until after at least a few months lag, this change in policy was perfectly timed to allow incumbent Congresspersons and a frustrated Democratic Party to take credit for both an improving employment picture and a promising anti-inflation program.

The dramatic turnaround in the  $M_1$  growth rate may or may not be overstated because of the legalization of ATS accounts in November. But the measured decline in  $M_2$  growth is free from this bias and is itself sharp enough—if it continues into the summer—to bring on a recession.

While various officials talk reassuringly about the possibility of "soft landings," most incumbent politicians are fairly fatalistic about the eventual need for a recession to decelerate inflation. With the current boom a record four years old, officeholders who are cognizant of business-cycle mortality statistics feel that a recession is inevitable by 1980. Incumbents would rather feed the economy its recession medicine now, so as to be able to run in 1980 against the background of an improving economy.

To hold up its end, the Fed is prepared both to deny now that it is manufacturing a recession and to confess in 1980 that its 1979 policies may perhaps have been a shade too restrictive. This is merely an exquisitely open variation on the cynical policy gambit that over the last 20 years the Fed and elected officials have adopted more and more plainly. The problem is not that the Fed is accountable to elected officials. In a representative democracy, policymakers must be accountable at least indirectly to the electorate. The problem is both that re-election pressures lead politicians to press for short-sighted monetary policies and that the Fed protects the true authors of its policies from punishment at the polls by pretending that monetary-policy mistakes are entirely its own doing.

Sooner or later, the public and the press are going to recognize that stop-and-go monetary policy is a political shell game being played at the expense of long-term economic stability. I sincerely hope that these and subsequent hearings held under the Humphrey-Hawkins Act contribute to the learning process.

Mr. CHAIRMAN. Mr. Heinemann, go right ahead, sir.

**STATEMENT OF H. ERICH HEINEMANN, VICE PRESIDENT,  
MORGAN STANLEY & CO., INC.**

Mr. HEINEMANN. I appreciate the opportunity to present my personal views on the conduct of monetary policy to this committee. In my remarks today, I plan to sketch a few details concerning the current economic setting that appear pertinent. I will try to suggest an alternative approach to the problem of monetary policy measurement and targeting that in my opinion is both simple and meaningful.

I will argue that so long as the Federal Open Market Committee insists on trying to manage the Nation's money stock by pegging

short-term interest rates, the actual record of policy implementation will most likely be procyclical—too easy during economic expansions and too tight during economic contractions—and indeed, will bear very little relationship to targets announced at these oversight hearings.

Finally, I will make some comments about desirable strategic goals of monetary policy, based in part on the most recent policy statement of the Shadow Open Market Committee, of which I'm a member.

I believe that a number of significant policy errors in macroeconomic policy were committed prior to Mr. Miller's taking office a year ago. I think these errors make the likelihood that the Nation will in fact be able to avoid at least a moderate contraction in real business activity very, very small.

In the circumstances, I think that more expansive policies aimed at postponing a moderate downturn would, in all probability, eventually result in a more serious recession than would otherwise occur, thus placing some very heavy burdens on sectors of the economy least able to bear the cost.

I do not concur with Mr. Miller's frequently announced judgment that the economy, quote, "is in reasonably good balance" at the present time. We can identify perhaps six major areas of distortion in the economy at the present time. We see a clear pattern of excess demand, with nominal spending rising about four times more rapidly than can be sustained in a noninflationary manner over the long term. We see a sharp buildup of household sector leverage, with a debt service burden in the household sector which promises to be very troublesome at some future time.

We see a lagging investment sector, with productivity suffering accordingly. We see tight labor markets, with skilled labor essentially at full employment now for quite a long period of time.

In financial markets and foreign exchange markets, we see patterns which characteristically are associated with the peak of a business cycle rather than the stages of the cycle where continued expansion is implied.

And finally, we see Federal financing demands which by any standard I believe are excessive for this stage of the business cycle.

Overall, we would conclude that a number of important cyclical imbalances are already in place, which in a sense preclude the policy option of avoiding recession. As far as I am concerned, for the past year fiscal and monetary policymakers have not been debating whether or not the Nation will have a recession, but rather, when one will occur and what its magnitude will be.

I don't think there is any real debate from the administration these days concerning the need to restrain the growth of aggregate demand. The Secretary of the Treasury, Mr. Blumenthal, has been making that point repeatedly in recent weeks in his congressional testimony.

We strongly endorse Mr. Blumenthal's conclusion that there are indeed warning signals of excess demand in the economy at the present time and, secondly, that without fiscal and monetary discipline, no combination of policies to control inflation will be successful. But while we endorse these conclusions, we think the timing of the administration's actions is tragic.

By waiting until evidence of excess demand pressures in the economy is clearly visible, by waiting until after prices were rising at a clearly unacceptable rate, the administration has, as far as I'm concerned, condemned the economy to yet another dismal round of stop-and-go policies, the very result that they say they want to avoid.

I think what we have here is a classic example of the whites-of-the-eyes approach to inflation—waiting until the clear evidence is at hand, at which point inflation cannot be halted short of at least a moderate business downturn.

I think that monetary policy has to bear a significant portion of the burden for the growth of excess demand in the economy. There is, of course, on a long-term basis, a close association between sustained changes in the rate of change of money and a lagged response of a similar nature in the price level.

Nevertheless, I would not single out the Federal Reserve as an institution for blame. It seems to us that monetary policy has been correctly reflecting the general political consensus within both the administration and the Congress, despite warnings from the private sector about the danger of inflation. I think that the Washington view of the economy during 1977 and the first part of 1978 was one that tended primarily to focus on symptoms of underperformance in economic activity rather than the potential for excess demand.

In terms of the general thrust of its policy, I think the Federal Reserve—and indeed, I would say as it must—has followed the lead of the administration. I have developed the view over many years of reporting on the Fed that the impact of monetary policy is indeed so intensely political that to speak about a nonpolitical central bank really is a contradiction in terms. As a country, we believe in civilian control of the military. I think the same general political principle is involved as far as the monetary authority is concerned.

If we do not have the political discipline to control policy at the political level, I think it is highly unrealistic to expect a group of individuals who are essentially technicians at the central bank to do the job for us.

The Federal Reserve, within the statute, the Federal Reserve Reform Act of 1977, has a mandate, quote:

To maintain long-run growth of the monetary and credit aggregates commensurate with the economy's long-run potential to increase production, so as to promote effectively the goals of maximum employment, stable prices and moderate long-term interest rates.

Close quote.

I think this is a fine target. I do not think, without solid support from political leadership both in the administration and in Congress, that the Fed will succeed in accomplishing this task.

In the short run, as has already been pointed out here this morning, I think the Fed has lost its freedom of maneuver. I think the foreign exchange markets have demonstrated repeatedly that they have no tolerance at all for administration policies or American economic policies that suggest a lack of resolution in dealing with the problem of inflation. I think that we have in fact, in the way we have conducted our international financial affairs, gener-

ated some significant international political costs which are beginning to undermine our leadership position in the industrial world.

I think that the administration and the Federal Reserve must take action in a sustained and credible manner to reduce inflationary pressures in the United States relative to those in other industrial nations, if in fact the dollar is to be stabilized over some period of time in the exchange markets.

Now, an important goal of the Humphrey-Hawkins legislation was to set up a structured procedure for reviewing monetary policy for given periods ahead. I think this is all to the good. It tends to perhaps further formalize the existing practice, and it clearly confirms the congressional determination that the measure of monetary policy that is relevant for purposes of these oversight hearings is the long-run rate of change in the monetary aggregates. I think this emphasis is all to the good. I think it should help in the process of weaning the Federal Open Market Committee from its fixation with trying to manage short-term interest rates instead of long-run rates of monetary expansion.

But having established that the proper business of the central bank is the management of the money stock over time, we are still left with the messy but vital task of establishing a meaningful analytical framework within which to judge the performance of monetary policy. I'm not suggesting that Congress write legislation on this subject. But I do think that this committee could make a substantial contribution through these oversight hearings in focusing the attention of the money managers on relevant targets.

I think that the moving target approach, which was developed by the Federal Reserve in 1975, changing not only the growth rates, but also the base for the growth calculation every three months, has not been useful. At best it has been meaningless; at worst it has been misleading.

The Fed has been telling the country for the last 4 years that its monetary policy was gradually tightening, when in fact monetary expansion has been accelerating almost continuously over that period up until about 6 months ago.

I think that the procedures established under Humphrey-Hawkins for targeting monetary policies is all to the good. The use of a fixed base in the fourth quarter of each year for the calculation of projected monetary growth is helpful, but I would suggest it doesn't go far enough. We have had some success in our own work in my firm in looking at a continuous measure of the rate of monetary change which is stable, free of seasonal factor distortions, and tends to reflect the underlying numbers accurately, which I have spelled out in my prepared statement.

You can see a chart of this measure on page 173 at the bottom of the page, figure 4. It shows the highly procyclical record of monetary policy over the period since 1960.

At the beginning of this testimony I suggested that so long as the Federal Open Market Committee continues to be preoccupied with pegging short term interest rates, the record of monetary policy will most likely continue to be procyclical.

I think that in trying to fix short term interest rates, the Fed has created a procedure which is inherently self defeating and will inherently lead it into the kind of policy pattern which we in fact

have seen during periods of economic expansion. The Federal Reserve has been characteristically reluctant to see short term interest rates rise. Their reluctance has been expressed in terms of more rapid rates of expansion in their holdings of Government securities, which feeds directly into the monetary base and eventually into more rapid rates of expansion in the monetary aggregates.

On the down side of the cycle there is a consistent record that the Fed is reluctant to see short term interest rates come down, which gives us sharper contractions, temporary cyclical contractions in monetary expansion than is desirable. I think the solution is for the Fed to abandon its preoccupation with short term interest rates and begin to manage the one aggregate over which it has direct control, namely, the monetary base.

This of course is not a new idea. There is a rich literature available on this subject. I think that this committee could make a major contribution to the quality and efficiency of the administration of economic stabilization policy by focusing attention on the costs and benefits in social and economic terms of trying to stabilize short term interest rates instead of trying to stabilize the long term rate of monetary expansion.

I have no illusion that technical reforms of this sort will solve the basic problem of monetary strategy; for example, whether the fundamental trend of growth in the money stock over the next decade will accelerate or decelerate or stay about the same.

I think that the answer to this question obviously will have an important influence on the quality of life in the country and indeed as far as I'm concerned on the stability of its political institutions. This is a political question which should be properly answered by the political process.

Meanwhile, the tactical problems of monetary policy implementation are pressing and should be dealt with quickly. Until that occurs, I think that the relationship between the Fed's announced policy intentions at these oversight hearings and the actual course of monetary policy will be a very uncertain one indeed.

Looking further ahead at the general strategy of monetary policy, I strongly support the bipartisan objective of gradually reducing the rate of monetary expansion over the next 5 to 10 years or even longer that has been advocated both by Mr. Miller and his predecessor, Dr. Burns.

But as the experience of the last 4 years demonstrates so convincingly, mere advocacy of monetary virtue has precious little impact on the rate of increase in aggregate spending or the rate of change in prices.

In specific terms, the underlying rate of monetary expansion, as far as I'm concerned, should be reduced gradually, perhaps by about 1 percentage point a year, to take a useful rule of thumb, until a noninflationary rate of growth in the money stock is achieved. I think that American voters have demonstrated that they want the more stable economy that would result from a sustained and credible long run reduction in monetary growth. A major contribution to effective implementation of such a policy, as far as I'm concerned, would be achieved if the Federal Reserve could be induced to let short term interest rates respond to current

market forces and instead concentrate on the management of the monetary base.

At the same time, I think Congress needs to proceed with its work of implementing the administration's pledge to reduce the rate of growth in Government spending below the growth of private spending. Steady reductions in the absolute size of the Treasury deficit must be a major goal of public policy if the fundamental task of monetary stabilization is to be achieved.

And finally, the real burden of taxation at all levels of Government must be reduced in order to energize the creativity and dynamism of the private sector.

[Complete statement of Mr. Heinemann follows:]

## Weekly Federal Reserve Report

February 23, 1979

*The following is the text of testimony presented by H. Erich Heinemann to the Senate Committee on Banking, Housing, and Urban Affairs on February 23, 1979. The hearing was held pursuant to the Committee's statutory responsibility to oversee the Federal Reserve System's conduct of monetary policy. The title of Mr. Heinemann's remarks was "Avoiding Recessions."*

I appreciate the opportunity to present my personal views on the conduct of monetary policy to this distinguished committee. In my remarks today I plan to sketch a few details concerning the current economic setting that appear pertinent to me. I will suggest an alternative approach to the problem of monetary policy measurement and targeting that in my opinion is both simple and meaningful. I will argue that so long as the Federal Open Market Committee insists on trying to manage the nation's money stock by pegging short-term interest rates, the actual record of policy implementation will most likely continue to be procyclical -- too easy during economic expansions and too tight during economic contractions. Finally, I will make some comments about desirable strategic goals of monetary policy, based in part on the most recent policy statement of the Shadow Open Market Committee, of which I am a member.

A BALANCED ECONOMY?

In testimony before the House Budget Committee on January 25, Mr. G. William Miller, chairman of the Board of Governors, maintained that "an examination of available indicators suggests that the economy currently is in reasonably good balance." He stated that "the Federal Reserve does not consider a recession desirable," and that "'stop-go' patterns of economic growth have discouraged productivity-enhancing investment and brought no lasting relief from inflation."

As a general matter, we agree with the Chairman's desire to avoid recession -- now and in the future. But we believe that significant policy errors were committed prior to Mr. Miller's taking office. These errors make the likelihood that the nation will in fact be able to avoid at least a

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moderate contraction in real business activity very small. In the circumstances, we believe that policies aimed at postponing a moderate downturn would in all probability eventually result in a more serious recession than would otherwise occur. Heavy burdens would be placed on those in the economy least able to bear the cost. Furthermore, we do not concur in the judgment that the economy "is in reasonably good balance" at the present time.

<u>Federal Reserve Data</u>					
(Weekly Averages of Daily Figures; in Millions of Dollars)					
	<u>Latest Week</u>	<u>Change From Prev. Week</u>	<u>Rates of Change Over</u>		
			<u>3 Months</u>	<u>6 Months</u>	<u>1 Year</u>
Money Supply (M-1)* (1)	\$360,000	\$- 100	- 2.3%	+ 1.6%	+ 4.9%
M-1-Plus* (1)	580,800	- 300	- 5.4	- 0.5	+ 2.7
Money Supply Plus Comm'l Bank Time Deposits Other Than Large CDs (M-2)* (1)	878,500	+ 1,600	+ 1.5	+ 5.3	+ 7.1
Monetary Base* (2)	144,000	+ 700	+ 7.0	+ 8.9	+ 8.4
Adjusted Federal Reserve Credit* (2)	125,300	+ 700	+10.2	+11.5	+ 9.9
Total Effective Bank Reserves* (1)	44,600	- 300	--	+ 4.4	+ 5.7
Member Bank Borrowing (2)	937	- 117	NA	NA	NA
<u>Wednesday Figures</u>					
Short-Term Business Credit (1) R	N/AV	N/AV	N/AV	N/AV	N/AV
Total Commercial Paper Outstanding* (1)	87,165	+ 1,490	+44.6	+26.9	+30.0
Business Loans:					
All Large Banks (1) R	N/AV	N/AV	N/AV	N/AV	N/AV
New York City Banks* (2)	38,507	+ 274	- 3.0	+12.0	+11.8
Chicago Banks (1) R	13,421	+ 129	N/AV	N/AV	N/AV

R = Series Revised; Figures are not comparable with those published during 1978.

\*Seasonally Adjusted      NA = Not Applicable      N/AV = Not Available

Rates of change are compound annual rates. Short-term business credit includes commercial and industrial loans at large banks plus loans sold to affiliates less bankers' acceptances and commercial paper held in portfolio plus loans at large banks to finance companies and nonbank financial institutions plus nonbank commercial paper.

(1) February 14

(2) February 21

There are a number of reasons for this conclusion:

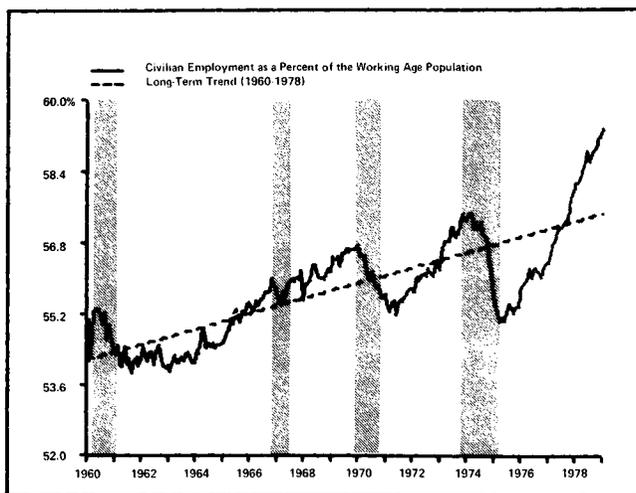
- During this business cycle expansion, from the beginning of 1975 to the end of 1978, total spending in the economy measured in current dollars has grown at a rate of almost 12%. This rate of growth in total spending was, and is, clearly unsustainable. According to the most recent estimates of the President's Council of Economic Advisers, the real growth potential of the economy from 1973 through 1978 was only 3%. This means that aggregate demand for goods and services expressed in current dollars has been rising at a rate roughly four times the long-run ability of the economy to grow in a noninflationary manner. This disparity is so great that it has long been a foregone conclusion that a serious inflation would develop sooner or later. On the assumption that a reported unemployment rate of 5.1% represents "full employment" in today's economy (an assumption that we would not necessarily accept), the Council estimates that the actual level of real GNP in 1978 was only 2.66% below its "potential." Even if this calculation is only partially correct, the rate of increase in total spending must be slowed in a gradual and sustained manner to avoid a rampant, demand-pull inflation.
- As Mr. Miller has frequently -- and very usefully -- pointed out in his testimony over the past year, there has been an explosion of debt in the household sector in the past few years. Total household sector debt now exceeds \$1.1-trillion, up about 50% since 1975. More important the debt-service burden of households has risen very rapidly to levels that are extraordinary by postwar standards. Repayments of interest and principal on mortgages and consumer credit are estimated by the Federal Reserve Board to have been at a seasonally-adjusted annual rate of \$344-billion in the fourth quarter of last year, or 22.8% of disposable personal income. Since income and debt are not evenly distributed through the age structure (debt is concentrated in younger groups and income in older groups), this means that actual debt service ratios are probably much higher than these aggregate numbers would suggest. In our view, this constitutes a serious economic imbalance which will have to be corrected. Many analysts in the financial community believe that a sudden retrenchment by overextended consumers could trigger a much more serious business downturn than is now contemplated by the consensus economic forecast. We do not share this view, but neither do we dismiss this concern as frivolous.
- This committee is, of course, well aware that new investment activity over the past four years has lagged well behind the norm of the postwar period. The value of the real capital stock per member of the labor force -- if you will, the tools the economy provides to its workers -- has been falling in

the last few years, after having risen at a trend rate of 2.6% from 1948 through 1973. The secular slowdown in productivity growth, which underlies the reduction last month in the Administration's estimate of the economy's real growth potential, has coincided with this secular slowdown in investment. In a number of key areas -- for instance, cement, aluminum, and paper -- low levels of investment in new facilities are now contributing to product shortages. This, too, is an important economic imbalance.

- An unprecedented surge in the demand for labor has pushed the employment rate (total civilian employment as a percent of the population 16 years of age or older) to a high of 59.3%, which is not only far above any previous cyclical peak, but is also sharply above the trend value for this key measurement (see Figure 1). We have observed that there has been a close and systematic association between periods when the employment rate has been substantially over its long-term trend value and periods of cyclical weakness in productivity and cyclical strength in unit labor costs (see Figure 2). This association suggests to us that when employment is high relative to its own long-term trend, skilled, trained, and motivated workers tend to be in short supply, and productivity and unit labor costs tend to suffer accordingly. In our view, these relationships provided fair warning during 1977 that the economy was much closer to its effective limits than did more conventional measures such as the Federal Reserve Board's index of manufacturing capacity utilization.
- Financial markets, both at home and abroad, would also seem to point toward imbalance and instability in the economy at the present time. Short-term interest rates have spiked upward to near-record levels in nominal terms, and some measures of long-term credit costs are now above the points posted in 1974. Overseas, of course, the dollar has been under intermittent attack for more than two years, as participants in world financial markets have reacted to the inflationary implications of excessive monetary and fiscal stimulus in the United States. In the past, disturbances of this sort in financial markets have typically not been associated with stable and well-balanced economic expansions.
- Finally, the Federal Government is continuing to impose a massive financing requirement on the nation's money and capital markets four years into the nation's longest peacetime economic expansion. New estimates just published by the Federal Reserve Board show that the nonfinancial demand for funds from the Federal Government (net of the change in the Treasury's cash balance) came to \$47.1-billion last year, only moderately lower than the \$55.7-billion demand in 1977. Including borrowing by Federal agencies, the total

Figure 1

A Sharp Rise in Use of Human Resources . . .

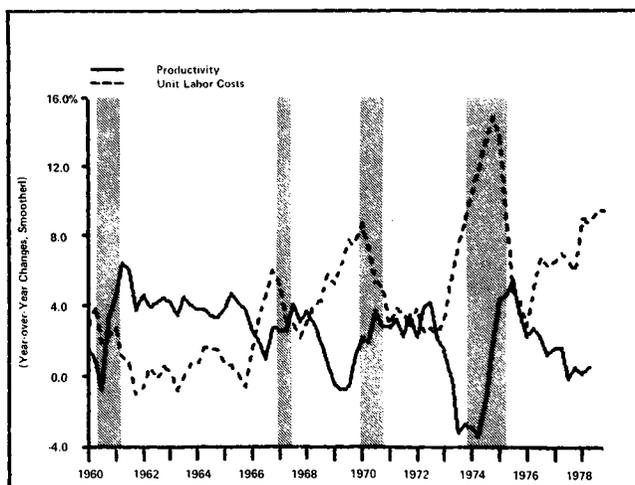


Shaded areas represent periods of recession as designated by the National Bureau of Economic Research except for the mini-recession of 1966-1967.

Sources: Chase Econometric Associates Data Base; Morgan Stanley Research

Figure 2

. . . Has Been Associated with Falling Productivity and Rising Unit Labor Costs



Shaded areas represent periods of recession as designated by the National Bureau of Economic Research except for the mini-recession of 1966-1967.

Sources: Chase Econometric Associates Data Base; Morgan Stanley Research

U.S. Government demand for funds last year came to \$92.8-billion, up from \$84.3-billion in 1977, and only 5.5% below the recession peak posted in 1975. Put another way, the Federal Government's financing demands came to 19.2% of total funds raised by all sectors in the money and capital markets last year (both financial and nonfinancial). This is well below the record peak of 44.7% reached in 1975, but it is almost double the Federal Government's proportionate demand for funds at the cyclical peak in 1973. Preemptive demands for funds from the Treasury of this size -- at this point in the business cycle -- can only serve to distort the market's allocation of the available stream of savings in the economy.

Overall, we conclude that a number of important cyclical imbalances have already developed in the economy which preclude the policy option of avoiding recession. In our view, for the past year, fiscal and monetary policymakers have not been debating whether or not the nation will have a recession, but rather when one will occur and what its magnitude will be.

#### THE CHANGE IN STRATEGY

To be sure, there is now no debate from the Administration concerning the need to restrain the growth of aggregate demand. As the Secretary of the Treasury, Mr. W. Michael Blumenthal, has observed repeatedly over the past few weeks in his testimony to various Congressional committees on the Administration's economic policy for 1979, "The centerpiece of the President's anti-inflation strategy is sustained and concerted restraint on aggregate demand, effected through both fiscal and monetary policies." There are two reasons for this approach, according to Mr. Blumenthal: First, "in recent months," there have been "warning signals" of excess demand, and second, without fiscal and monetary discipline, no combination of policies to control inflation will be successful. We strongly endorse these conclusions, but the timing of the Administration's change in policy is tragic.

By waiting until evidence of excess demand pressures in the economy was clearly visible -- by waiting until after prices were rising at a clearly unacceptable rate -- the Administration has condemned the American economy to yet another dismal round of stop and go policies. The very result that the President, Mr. Blumenthal, and Mr. Miller say that they most want to avoid has, in our opinion, already been locked in place. This amounts to a classic example of the "whites-of-the-eyes" approach to stabilization policies.

In a system as large and viscous as the American economy, there are substantial and uncertain lags between policy actions undertaken by Government and their impact on spending and investment decisions by millions of economic units. Yet it was not until the summer of 1978 -- following the vote on Proposition 13 in California -- that the basic tone of economic policy began to change. History's message in circumstances of this sort is very clear -- once a major cyclical inflation has been allowed to take hold, it cannot be controlled short of at least a moderate economic downturn.

THE FEDERAL RESERVE'S CONTRIBUTION TO INFLATION

We believe that the sustained and powerful stimulus provided to the economy by monetary policy over the past few years has played a major role in maintaining the growth of aggregate spending at an excessive level and thus contributing to our present inflation. The "underlying rate of expansion" in M-1 -- see Figure 4 for a definition of this measure -- was about 5% at the end of 1975 and about 8% at the end of 1977. Even on the assumption of only a loose association between sustained changes in the rate of change of monetary expansion and the behavior of aggregate spending, a cyclical acceleration in the growth of the money stock of this size necessarily will have a major influence on the trend of outlays and prices. In fact, the association between monetary policy, aggregate spending, and the long-run behavior of the price level is anything but loose (see Figure 3). Therefore, monetary policy must carry a large portion of the burden for the critical state of the economy at the present time.

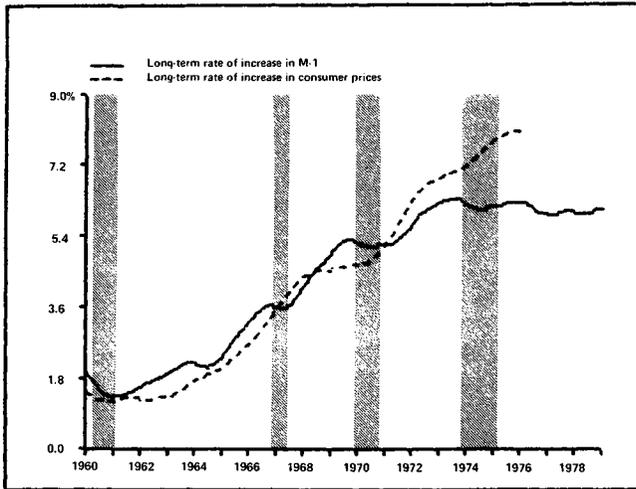
Nevertheless, we would not single out the Federal Reserve as an institution for "blame." It seems to us that monetary policy has been reflecting the general political consensus within both the Administration and the Congress. Despite warnings from the private sector about the danger of inflation, the "Washington view" of the economy during 1977 and the first part of 1978 was one that tended primarily to focus on symptoms of underperformance rather than the potential for excess demand. In terms of the general strategic thrust of its policy, the Federal Reserve -- as indeed it must -- has followed the lead of the Administration.

The central issue of monetary policy is not a failure of the central bank to coordinate with the political authorities. Rather, it is the failure of the political process to perceive the problem of economic stabilization as other than a series of ad hoc accommodations to pressures of the moment. The Federal Reserve has a legal mandate to "maintain long run growth of the monetary and credit aggregates commensurate with the economy's long run potential to increase production, so as to promote effectively the goals of maximum employment, stable prices, and moderate long-term interest rates." It will not succeed in this task without the full support of the nation's political leadership.

THE INTERNATIONAL CONSTRAINT

In the short run, the Administration and the Federal Reserve have already lost any meaningful freedom of maneuver. Participants in the foreign exchange markets have demonstrated repeatedly that they have no tolerance for American policies that imply a lack of resolution in dealing with inflation. But, in our view, the turmoil in the foreign exchange markets is only symptomatic of a much more fundamental difficulty. The expansionist bias in United States economic policy for much of the past two years has, naturally enough, generated expectations of accelerating inflation, which, in turn, has led to severe downward pressures on the dollar in the foreign exchange markets. In the face of what has appeared to be at best a passive attitude on the part of the Administration toward the international value of the dollar (at least until mid-summer 1978), foreign governments have felt compelled to intervene heavily to stabilize the key currency. To have failed to do so would have risked serious

Figure 3  
Money and Prices - The Long-Run Association

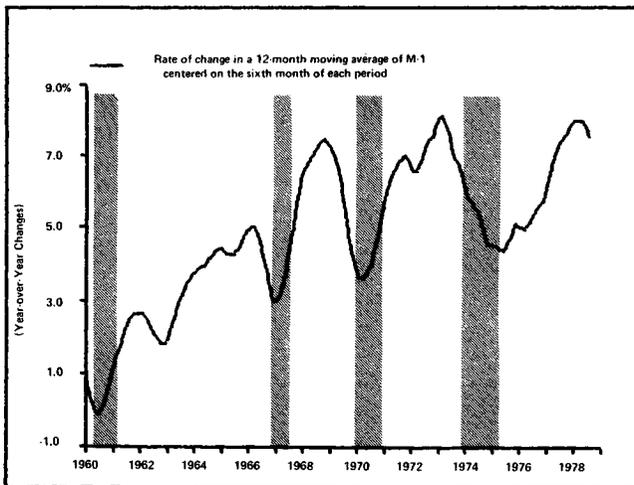


Data for money and prices are 60-month trailing moving averages of the year-over-year percentage change in M-1 and the consumer price index. Price data have been plotted 36 months earlier than their actual occurrence.

Shaded areas represent periods of recession as designated by the National Bureau of Economic Research except for the mini-recession of 1966-1967.

Sources: Chase Econometric Associates Data Base; Morgan Stanley Research

Figure 4  
Underlying Rate of Monetary Expansion - M-1



Shaded areas represent periods of recession as designated by the National Bureau of Economic Research except for the mini-recession of 1966-1967.

Sources: Chase Econometric Associates Data Base; Morgan Stanley Research

disruption in the conduct of world trade. Their actions have produced a number of consequences:

- One, domestic financial markets have benefited in the short run as foreign central banks have purchased roughly one-third of total new Treasury and agency issues sold over the past two years. The massive foreign buying of Treasury and agency securities during this business cycle expansion has helped to delay somewhat the normal cyclical rise in interest rates. Thus, a frothy, speculative boom in residential real estate markets has been able to coexist -- up until now -- with a record peacetime Treasury deficit.
- Two, the central banks of some of our closest allies -- West Germany, Japan, and the United Kingdom, in particular -- have acquired substantial open, unhedged positions in dollars. On the basis of data published by the International Monetary Fund, we estimate the increase in the dollar holdings of the main industrial countries to have been about \$45-billion just over the past two years. Given the sharp drop in the value of the dollar in this time period, it is safe to assume that these portfolios are now showing substantial losses.
- Three, these dollar-support operations have contributed to rates of monetary expansion in the countries that have provided the bulk of such assistance -- rates that are substantially in excess of the targets established by their governments. As one example, the German monetary base rose at an average rate of about 11.4% last year, far above the official target of 8%.

Thus, it would appear that the Administration's policy toward the dollar, while in the short run generating some "beneficial" domestic effects, has created some far more serious long-run international costs. We do not pretend any expertise in foreign affairs, but it seems to us that financial policies which impose major costs on America's strongest allies are not consistent with continued United States leadership of the main industrial nations in political and military affairs. To our way of thinking, one of the principal lessons of the crisis in the exchange markets last October is that this approach is no longer viable. The Administration and Federal Reserve must take action in a sustained and credible manner to reduce inflationary expectations in the United States relative to those in other industrial nations. Only in this manner will the performance of the dollar in the exchange markets be stabilized.

#### HOW TO MONITOR MONETARY PERFORMANCE

One important thrust of the Full Employment and Balanced Growth Act of 1978 was to require structured and systematic consultation between the Federal Reserve System and the banking committees of Congress on the targets for monetary policy and their relationship with the economic goals of the national administration. While for the

most part this requirement simply formalizes existing practice, it provides an opportunity to improve substantially the management of monetary policy. In particular, the statute reconfirms the Congressional determination -- which was also clearly stated in the Federal Reserve Reform Act of 1977 -- that the measure of monetary policy that is relevant for purposes of these oversight hearings is the long-run rate of change in the monetary aggregates. This emphasis is all to the good. It should help in the process of weaning the Federal Open Market Committee from its fixation with trying to manage short-term interest rates instead of long-run rates of monetary expansion.

But having established that the proper business of the central bank is the management of the money stock over time, we are still left with the messy, but vital, task of establishing a meaningful analytical framework within which to judge the performance of monetary policy. We are not suggesting that Congress attempt to write legislation on this technical subject, but we do believe that this distinguished Committee can make a substantial contribution through the medium of these oversight hearings in focusing the attention of the money managers on relevant targets.

Under the prod of House Concurrent Resolution No. 133, 94th Congress, the Federal Open Market Committee on April 15, 1975 established for the first time formal targets for growth in the money supply. Since that time, including the new targets that Mr. Miller announced on Tuesday of this week, the FOMC has established a total of 16 monetary growth targets. Just by way of illustration, the target growth for M-1 was originally set at a lower limit of 5% and an upper limit of 7 1/2%. Over the ensuing four years, these stated growth targets have been gradually lowered to the present level of 1.5% to 4.5%. Leaving aside for the moment the Federal Reserve's success (or lack of it) in achieving its announced targets (a subject to which we will return shortly), the message that the Federal Open Market Committee has conveyed to the nation through these actions has been faulty. At best, the FOMC's targets for monetary expansion have been meaningless; at worst, they have been misleading. The Federal Reserve System has been telling the country that its monetary policy has become increasingly more restrictive over the past four years, when in fact up until about six months ago it was increasingly more expansionary. It has not been clear to us why the Congress has not objected to this deception more vigorously than it has.

The problem with the FOMC's procedures is well known. Every three months, the authorities not only review their growth targets, but also they change the basis for their growth calculation. Each quarter's target is based on the average level of the aggregates for the quarter just ended. The result of this "moving target" approach to monetary management has been to compound the errors of policy implementation. For example, during 1977 and 1978 the actual levels of the monetary aggregates were frequently above those specified by the FOMC. Therefore, as new monetary targets were established every three months, the bases for these calculations were ratcheted toward steadily higher levels. Thus, while the Federal Reserve's targets were held steady or lowered, the actual rate of monetary expansion showed a sustained and powerful acceleration.

The Federal Reserve's errors over the past four years have been -- as is characteristic during the expansion phase of the business cycle -- predominantly on the upside. Actual monetary expansion has been more rapid than desired. The great danger now is that the monetary authorities will make a similar error on the down-

side, which could easily lead to a more serious economic contraction than otherwise need occur. The FOMC's procedures for establishing its monetary targets enhance rather than diminish this danger.

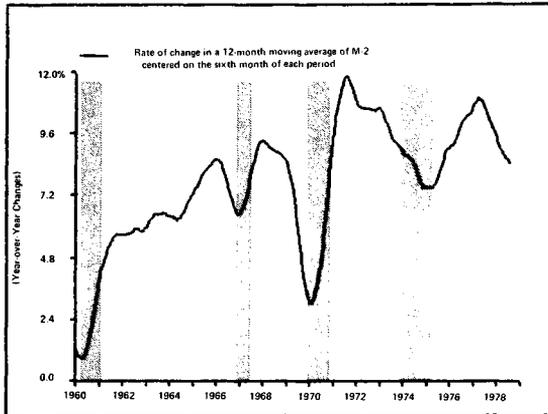
In our view, the Federal Open Market Committee should state its intentions about monetary policy for the year ahead in much more specific terms than those that are now in use. The fundamental determination should be whether or not monetary growth during the target period is to speed up, slow down, or stay roughly the same. In our own analytical work, we have had substantial success in making calculations of this sort with a measure that we call the "underlying rate of monetary expansion." The technical definition of this measure is very simple: We calculate a 12-month moving average of, say, M-1; we center the moving average on the sixth month of each 12-month period; then we calculate the year-over-year percentage change in the moving average. You can see the results of this calculation in Figure 4 on page 8 and in Table 1 on page 16.

There are four important advantages to this approach:

- By using 12-month moving averages, we eliminate any possible distortion in the data from faulty seasonal adjustment procedures. The rates of change are the same whether seasonally adjusted or seasonally unadjusted data are used.
- Since these data are annual averages of monthly averages of daily figures, there are in fact 365 discrete observations of the monetary aggregate as defined in each data point. With a sample of this size, we think it is very unlikely that there are significant errors in the data. (This does not consider the issue of the proper definition of the monetary aggregates, which is beyond the scope of this presentation. We would observe in passing, however, that the recent proposal of the Federal Reserve Board staff to redefine the aggregates appears to be deficient. It does not include transactions balances held by the business sector in the form of so-called zero-balance accounts and overnight repurchase agreements.)
- Since we are comparing points along a moving average line, the resulting rate of change calculation is smoothed sufficiently so that even a casual observer can quickly and easily form an accurate impression of the general thrust of monetary policy. Figure 4 shows clearly that there has been a stable association between sustained changes in the underlying rate of monetary expansion as we have defined it here and movements in overall business activity. (Figure 5 on page 12 and Table 2 on page 17 show the same calculation for M-2.)
- If the underlying rate of monetary expansion were to be used as the criterion for monetary policy, target levels for the monetary aggregates could be specified very precisely. For example, M-1 for the 12 months ended January 1979 averaged \$354.5-billion, which was 7.57% higher than the average of

Figure 5

The Underlying Rate of Monetary Expansion -- M-2



Shaded areas represent periods of recession as designated by the National Bureau of Economic Research except for the mini-recession of 1966-1967.

Sources: Chase Econometric Associates Data Base, Morgan Stanley Research

\$329.5-billion in the 12 months ended January 1978. (The percentage change was calculated from unrounded numbers.) The underlying rate of monetary expansion for the 12 months ended February will depend on whether the relative change in M-1 this month from the same month last year is greater than, the same as, or smaller than the similar change from 1977 to 1978. Since the 1977-1978 change is already known, the desired 1978-1979 change can be easily specified. In actual fact, current data suggest that the underlying rate of monetary expansion will drop to under 7.4% in the 12 months ended February, down sharply from the 7.99% rate of expansion in M-1 for the 12 months ended September 1978. This confirms the rapid shift in monetary policy toward restraint that Mr. Miller described to this Committee on Tuesday.

#### PROPER USE OF THE MONETARY BASE

At the outset of this testimony we stated that so long as the Federal Open Market Committee continues to be preoccupied with pegging short-term interest rates, the record of monetary policy will most likely continue to be procyclical. The reason is

simple. In its day-to-day operations, the FOMC is in fact attempting to peg a price (namely, the Federal funds rate) in a market where demand is inherently and characteristically unstable. The historical record suggests that the managers of the Federal Open Market Account at the Federal Reserve Bank of New York are normally slow to recognize changes in the aggregate demand for funds. During cyclical expansions in the economy, this means that the authorities typically feed money into the marketplace at progressively more rapid rates in order to slow the rise in the cost of short-term money. During the declining phase of the cycle, they have been equally reluctant to see short-term interest rates fall, with the result that there has been a progressive deceleration in the provision of new funds to the market. These changes in the Federal Reserve System's posture have tended to be sustained over fairly long periods of time. They directly affect the rate of change in "high-powered" money in the economy -- that is, the monetary base -- and hence also the general trend of expansion in the monetary aggregates. Figures 4 and 5 on pages 8 and 12, respectively, make plain just how cyclical the record of monetary policy has been since 1960.

The Federal Reserve's problems with trying to manage short-term interest rates are not due, in our opinion, to any technical shortcomings. Rather, the basic approach is wrong. Indeed, we would argue that the market for liquid dollar balances -- for which the Federal funds rate is one of the most sensitive indicators -- is now so huge and complex that no individual, no institution, can understand all of the forces bearing upon it on a real time basis. Among other things, the overnight money market in New York is now tightly linked to the overnight Eurodollar market in London. This means that the supply and demand factors that come to bear on the Federal funds rate are global rather than simply domestic in character.

The solution, of course, is for the Federal Reserve to abandon its preoccupation with short-term interest rates. It should begin instead to manage the one aggregate over which it has direct control, and which generally determines the trend of monetary expansion -- namely, the monetary base. This is not a novel idea. There is a rich literature available on the tactics of monetary control. This Committee could make a major contribution to the quality and efficiency of the administration of economic stabilization policy by bringing its resources to bear on this issue. Given the unstable record of monetary policy over the past 20 years, the Federal Reserve should be asked to justify its preference for managing short-term interest rates. We need to examine the tradeoffs in social and economic benefits and costs that might occur if short-term interest rates were allowed to fluctuate freely in relationship to market forces, but greater stability were achieved in the rate of monetary expansion.

As a practical matter, we would endorse the three-point program advocated the other day by Mr. Lawrence K. Roos, president of the Federal Reserve Bank of St. Louis, in an important policy address to the New York Society of Security Analysts:

- "One, we should totally abandon the stabilization of interest rates as the primary goal of monetary policy and move gradually toward a freely-fluctuating Federal funds market.
- "Two, we should concentrate instead on establishing and adhering to long-term money supply growth rates that are consistent with national economic policy.

- "Three, as the most effective available means of controlling monetary growth, monetary policymakers should target on the monetary base, which is the source of money creation."

We should have no illusions that technical reforms of this sort will solve the basic problem of monetary strategy -- for example, whether the fundamental trend of growth in the money stock over the next decade will accelerate, decelerate, or stay about the same. The answer to this question will have an important influence on the quality of life in the United States, and indeed, on the stability of its political institutions. This is a political question, which should properly be answered by the political process. Meanwhile, the tactical problems of monetary policy implementation are pressing and should be dealt with quickly. Until that occurs, we would venture that the relationship between the Federal Reserve's announced policy intentions at these oversight hearings and the actual course of monetary policy will be an uncertain one indeed.

#### THE STRATEGY OF MONETARY CONTROL

For the future, we strongly support the bipartisan policy objective of gradually reducing the rate of monetary expansion over the next five to 10 years, or even longer, that has been advocated by Mr. Miller and by his predecessor, Dr. Arthur F. Burns. But as the experience of the last four years demonstrates so convincingly, mere advocacy of monetary virtue has precious little impact on the rate of increase in aggregate spending, or on the rate of change in prices. In specific terms, the underlying rate of monetary expansion should be reduced by one percentage point annually until a noninflationary rate of growth in the money stock is achieved. The decision to adopt such a course is, of course, political -- our view is that American voters have demonstrated that they want the more stable economy that would result from a sustained and credible long-run reduction in monetary growth.

A major contribution to effective implementation of such a policy would be achieved if the Federal Reserve could be induced to let short-term interest rates respond freely to current market forces and instead concentrate on the management of the monetary base. At the same time, the Congress should implement the Administration's pledge to reduce the rate of growth in government spending below the growth of private spending. Steady reductions in the absolute size of the Treasury deficit must be a major goal of public policy if the fundamental task of monetary stabilization is to be achieved. Finally, the real burden of taxation at all levels of government must be reduced in order to energize the creativity and dynamism of the private sector.

Not long ago, our good friend, Jerry L. Jordan, senior vice president and chief economist of the Pittsburgh National Bank, enunciated a new and fundamental law of human behavior and economics. The only sure way to avoid a hangover, Mr. Jordan said, was not to get drunk. We might add a corollary to Mr. Jordan's proposition (as well as mix a metaphor): If one is overweight, one must be prepared to be hungry for a while in order to reduce. Eventually, one will be healthier and probably live longer, but there is no easy, painless way to correct the problems of prolonged indulgence.

In economic terms, we have to admit that the party is coming to an end, and that a hangover is on the way. We have to admit that we are overweight and will have to reduce. Having come to this recognition, we will have the opportunity -- but only the opportunity -- to avoid hangovers, crash diets, and, yes, even recessions, in the future.

The interest rates regularly monitored by the Federal Reserve were as follows:

Rate	Daily Average February 14	Week Ended February 21	Change in Basis Points
Federal Funds	10.15%	9.97%	- 18
90-Day Treasury Bills	9.28	9.34	+ 6
90- to 119-Day Commercial Paper	9.96	9.96	--
90-Day CDs (Secondary Market)	10.17	10.16	- 1
90-Day Eurodollars	10.90	10.80	- 10
20-Year Governments	9.05	9.05	--

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February 23, 1979

STATISTICAL APPENDIX

Table 1  
The Underlying Rate of Monetary Change -- M-1

Year	M-1											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1960	\$143.3	\$142.9	\$142.8	\$143.0	\$142.6	\$142.7	\$143.5	\$144.0	\$144.3	\$144.3	\$144.2	\$144.2
1961	144.4	144.9	145.2	145.6	146.1	146.4	146.5	146.8	147.3	147.8	148.4	148.7
1962	148.9	149.1	149.5	149.8	149.8	149.9	149.7	149.5	149.4	149.9	150.5	150.9
1963	151.5	151.8	152.2	152.7	153.3	154.0	154.6	154.7	155.1	155.8	156.9	156.5
1964	156.9	157.3	157.8	158.0	159.0	159.5	160.6	161.4	162.3	162.9	163.6	163.7
1965	164.2	164.4	164.9	165.3	165.4	166.5	166.9	167.4	168.6	169.8	170.4	171.4
1966	172.6	173.3	174.1	175.4	175.3	175.6	174.9	174.9	175.9	175.3	175.4	175.8
1967	175.6	177.3	178.6	177.9	179.8	181.2	182.8	183.8	185.0	186.1	186.6	187.4
1968	189.3	189.2	190.0	190.9	192.9	194.2	195.5	196.6	197.8	199.1	200.8	202.5
1969	203.4	204.4	205.0	205.0	206.0	206.5	207.0	207.1	207.5	208.3	208.9	209.0
1970	210.6	209.8	211.2	212.5	213.3	213.3	213.9	215.8	217.3	218.0	218.6	219.7
1971	220.8	222.7	224.4	225.8	228.3	229.4	230.7	231.9	232.3	232.7	233.1	234.0
1972	235.7	237.7	240.0	241.4	242.2	242.9	245.1	247.3	249.2	251.0	252.2	255.3
1973	257.7	258.2	258.0	259.0	261.9	264.0	264.7	265.2	265.1	265.2	265.6	270.5
1974	271.8	273.1	274.6	275.4	276.2	277.8	278.3	279.0	279.6	280.7	282.4	282.9
1975	282.7	282.8	285.0	284.8	287.6	291.5	291.5	293.0	294.1	293.6	296.1	295.2
1976	296.6	298.9	300.0	301.7	304.0	304.1	304.9	306.6	307.8	310.7	311.9	313.8
1977	316.1	317.9	319.7	322.5	323.6	325.3	328.7	330.6	333.1	335.4	336.5	338.7
1978	341.9	342.4	343.2	347.9	350.7	352.5	354.5	357.0	361.1	361.6	361.0	361.5
1979	360.0	--	--	--	--	--	--	--	--	--	--	--

Year	12-Month Moving Average											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1960	\$143.4	\$143.3	\$143.3	\$143.4	\$143.4	\$143.5	\$143.6	\$143.7	\$144.2	\$144.5	\$144.8	\$144.8
1961	145.0	145.2	145.5	145.8	146.1	146.5	146.9	147.2	147.6	147.9	148.3	148.5
1962	148.8	149.0	149.2	149.4	149.6	149.7	150.0	150.2	150.4	150.6	150.9	151.3
1963	151.7	152.1	152.6	153.1	153.6	154.1	154.5	155.0	155.5	155.9	156.4	156.8
1964	157.3	157.9	158.5	159.1	159.6	160.3	160.9	161.4	162.0	162.6	163.2	163.8
1965	164.3	164.8	165.3	165.9	166.5	167.1	167.8	168.5	169.3	170.1	171.0	171.7
1966	172.4	173.0	173.6	174.1	174.5	174.9	175.1	175.5	175.8	176.0	176.4	176.9
1967	177.5	178.3	179.0	179.9	180.9	181.8	182.9	183.9	184.8	185.9	187.0	188.1
1968	189.2	190.2	191.3	192.4	193.6	194.8	196.1	197.3	198.6	199.8	200.9	201.9
1969	202.9	203.8	204.6	205.3	206.0	206.6	207.2	207.6	208.1	208.7	209.3	209.9
1970	210.4	211.2	212.0	212.8	213.6	214.5	215.4	216.4	217.4	218.4	219.4	220.2
1971	222.6	224.0	225.2	226.4	227.7	228.8	230.1	231.3	232.6	233.9	235.1	236.2
1972	237.4	238.7	240.1	241.6	243.2	245.0	246.8	248.5	250.1	251.5	253.2	254.9
1973	256.6	258.1	259.4	260.6	262.0	263.3	264.5	265.7	267.1	268.4	269.6	270.8
1974	271.9	273.1	274.3	275.5	276.8	277.7	278.6	279.4	280.2	281.0	282.0	283.1
1975	284.2	285.4	286.6	287.7	288.8	289.8	291.0	292.3	293.6	295.0	296.4	297.4
1976	298.5	299.7	300.8	302.2	303.5	305.1	306.7	308.3	309.9	311.7	313.3	315.1
1977	317.1	319.1	321.2	323.2	325.3	327.3	329.5	331.5	333.5	335.6	337.9	340.1
1978	342.3	344.5	346.8	349.0	351.0	352.9	354.5	--	--	--	--	--
1979	--	--	--	--	--	--	--	--	--	--	--	--

Year	Year-Over-Year Percentage Change											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1960	0.92%	0.57%	0.30%	0.11%	-0.02%	-0.11%	-0.11%	-0.02%	0.14%	0.31%	0.59%	0.89%
1961	1.15	1.34	1.51	1.68	1.89	2.11	2.30	2.43	2.54	2.62	2.63	2.61
1962	2.62	2.61	2.95	2.47	2.34	2.21	2.09	2.00	1.91	1.83	1.82	1.85
1963	1.94	2.07	2.27	2.48	2.72	2.91	3.06	3.21	3.36	3.49	3.61	3.67
1964	3.72	3.80	3.87	3.92	3.92	4.00	4.09	4.16	4.23	4.32	4.35	4.42
1965	4.42	4.36	4.30	4.27	4.26	4.27	4.32	4.39	4.48	4.61	4.77	4.86
1966	4.94	5.00	5.03	4.94	4.84	4.65	4.37	4.10	3.85	3.46	3.18	3.00
1967	2.98	3.04	3.11	3.36	3.65	3.98	4.44	4.81	5.12	5.61	6.01	6.34
1968	6.54	6.70	6.84	6.91	7.01	7.14	7.20	7.31	7.44	7.47	7.42	7.35
1969	7.26	7.11	6.94	6.74	6.43	6.02	5.65	5.20	4.80	4.45	4.19	3.94
1970	3.73	3.64	3.63	3.64	3.69	3.85	3.96	4.25	4.52	4.76	5.05	5.41
1971	5.79	6.06	6.24	6.41	6.57	6.69	6.84	6.89	6.95	7.00	6.92	6.78
1972	6.64	6.58	6.61	6.71	6.84	7.06	7.28	7.44	7.49	7.52	7.69	7.92
1973	8.06	8.11	8.02	7.87	7.72	7.46	7.14	6.90	6.81	6.73	6.50	6.22
1974	5.99	5.82	5.74	5.69	5.58	5.47	5.34	5.15	4.93	4.68	4.57	4.55
1975	4.52	4.51	4.49	4.42	4.40	4.38	4.45	4.63	4.76	4.97	5.10	5.05
1976	5.03	5.00	4.96	5.06	5.10	5.26	5.40	5.46	5.57	5.66	5.72	5.94
1977	6.21	6.47	6.77	6.95	7.16	7.30	7.43	7.54	7.60	7.68	7.84	7.96
1978	7.96	7.97	7.99	7.98	7.92	7.82	7.57	--	--	--	--	--
1979	--	--	--	--	--	--	--	--	--	--	--	--

Sources: Chase Econometric Associates Data Base; Morgan Stanley Research

Table 2

The Underlying Rate of Monetary Change -- M-2

Year	M-2											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1960	\$210.7	\$209.9	\$209.7	\$210.3	\$210.1	\$210.6	\$212.1	\$213.5	\$214.7	\$215.6	\$216.5	\$217.1
1961	218.0	219.5	220.0	221.2	222.5	223.4	224.3	225.2	226.1	227.1	228.3	228.6
1962	230.2	231.7	233.5	235.1	235.6	236.6	237.2	237.5	238.3	239.9	241.5	242.9
1963	244.7	245.8	247.1	248.6	250.0	251.4	252.7	253.8	255.0	256.7	259.0	258.9
1964	259.9	261.1	262.0	263.0	264.8	266.4	268.2	270.0	272.1	273.6	275.5	277.1
1965	279.1	281.1	282.7	284.1	285.1	287.4	289.3	291.2	293.8	296.7	299.0	301.4
1966	303.9	305.4	307.0	309.8	311.1	312.1	312.7	313.9	315.7	316.0	316.8	318.2
1967	319.7	323.0	325.9	327.3	331.4	335.0	338.4	341.3	343.8	346.5	348.3	350.0
1968	351.7	354.3	356.4	358.3	361.2	363.7	366.0	369.3	372.5	375.8	379.7	383.3
1969	384.8	386.6	388.0	389.3	390.1	391.6	390.7	390.0	390.6	391.2	392.2	392.5
1970	393.2	392.2	394.7	398.0	400.1	402.1	405.7	410.4	414.4	417.3	420.0	423.7
1971	428.4	435.0	441.2	445.6	450.7	454.2	456.9	459.2	461.6	464.5	467.9	471.9
1972	477.1	482.2	487.1	490.4	493.9	497.4	502.3	507.4	511.9	516.2	519.7	525.3
1973	530.3	533.0	535.5	538.4	544.0	547.9	550.6	554.2	556.6	561.0	566.4	571.4
1974	576.0	581.0	585.1	588.1	590.5	594.5	597.4	600.2	602.3	606.7	610.4	612.2
1975	614.8	619.1	624.1	626.5	634.0	642.3	646.8	650.4	653.3	655.0	662.6	664.7
1976	671.6	680.0	684.3	690.7	696.5	699.4	704.3	710.8	717.5	725.3	732.9	740.6
1977	747.5	753.3	759.2	765.6	769.9	775.5	783.9	789.6	795.5	801.2	805.2	809.4
1978	816.0	819.4	822.6	830.3	836.7	842.6	848.7	856.9	866.2	870.9	874.3	876.3
1979	875.5	--	--	--	--	--	--	--	--	--	--	--
Year	12-Month Moving Average											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1960	\$210.8	\$211.0	\$211.2	\$211.6	\$212.1	\$212.6	\$213.2	\$214.0	\$214.8	\$215.7	\$216.8	\$217.8
1961	218.9	219.8	220.8	221.7	222.7	223.7	224.7	225.7	226.8	228.0	229.0	230.0
1962	231.3	232.3	233.3	234.4	235.5	236.7	237.9	239.1	240.2	241.3	242.5	243.7
1963	245.0	246.4	247.8	249.2	250.6	252.0	253.2	254.5	255.8	257.0	258.2	259.4
1964	260.7	262.1	263.5	264.9	266.3	267.8	269.4	271.1	272.8	274.6	276.3	278.0
1965	279.8	281.5	283.3	285.3	287.2	289.2	291.3	293.3	295.4	297.5	299.7	301.7
1966	303.7	305.6	307.4	309.0	310.5	311.9	313.2	314.7	316.2	317.7	319.4	321.3
1967	323.4	325.7	328.1	330.6	333.2	335.9	338.5	341.2	343.7	346.3	348.8	351.2
1968	353.5	355.8	358.2	360.6	363.2	366.0	368.8	371.5	374.1	376.7	379.1	381.4
1969	383.5	385.2	386.7	388.0	389.0	389.8	390.5	391.0	391.5	392.3	393.1	394.0
1970	395.2	396.9	398.9	401.1	403.4	406.0	408.9	412.5	416.4	420.3	424.5	428.9
1971	433.2	437.2	441.2	445.1	449.1	453.1	457.2	461.1	464.9	468.6	472.2	475.8
1972	479.6	483.6	487.8	492.1	496.5	500.9	505.3	509.6	513.6	517.6	521.8	526.0
1973	530.0	533.9	537.6	541.4	545.3	549.1	552.9	556.9	561.1	565.2	569.1	572.9
1974	576.8	580.7	584.5	588.3	592.0	595.4	598.6	601.8	605.0	608.2	611.8	615.9
1975	620.0	624.2	628.4	632.5	636.9	641.3	646.0	651.1	656.1	661.4	666.7	671.4
1976	676.2	681.2	686.5	692.4	698.3	704.6	710.9	717.0	723.3	729.5	735.6	742.0
1977	748.6	755.2	761.7	767.9	773.9	779.7	785.4	790.9	796.2	801.5	807.1	812.7
1978	818.1	823.7	829.6	835.4	841.2	846.7	851.7	--	--	--	--	--
1979	--	--	--	--	--	--	--	--	--	--	--	--
Year	Year-Over-Year Percentage Change											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1960	1.36%	1.12%	0.97%	0.91%	0.92%	0.99%	1.19%	1.51%	1.90%	2.32%	2.83%	3.35%
1961	3.83	4.21	4.53	4.79	5.03	5.23	5.41	5.49	5.59	5.68	5.68	5.67
1962	5.67	5.67	5.67	5.70	5.72	5.80	5.86	5.91	5.88	5.84	5.86	5.89
1963	5.95	6.07	6.20	6.32	6.44	6.47	6.46	6.47	6.48	6.49	6.47	6.44
1964	6.41	6.37	6.35	6.31	6.24	6.28	6.38	6.51	6.66	6.85	6.99	7.15
1965	7.30	7.42	7.52	7.68	7.86	8.00	8.13	8.21	8.27	8.36	8.48	8.53
1966	8.55	8.54	8.49	8.32	8.10	7.83	7.51	7.27	7.07	6.79	6.58	6.49
1967	6.51	6.60	6.73	6.99	7.33	7.70	8.09	8.42	8.68	9.00	9.20	9.29
1968	9.28	9.23	9.18	9.08	9.01	8.97	8.93	8.88	8.84	8.78	8.69	8.62
1969	8.49	9.27	7.96	7.59	7.10	6.50	5.89	5.25	4.66	4.13	3.69	3.29
1970	3.06	3.04	3.15	3.37	3.69	4.15	4.72	5.50	6.34	7.16	8.00	8.87
1971	9.60	10.16	10.59	10.97	11.33	11.60	11.80	11.78	11.66	11.50	11.24	10.95
1972	10.73	10.62	10.58	10.57	10.55	10.54	10.52	10.48	10.45	10.49	10.54	10.54
1973	10.51	10.40	10.21	10.00	9.83	9.62	9.41	9.29	9.24	9.19	9.06	8.93
1974	8.84	8.76	8.71	8.67	8.56	8.42	8.26	8.05	7.84	7.61	7.52	7.49
1975	7.48	7.49	7.52	7.52	7.59	7.71	7.82	8.19	8.44	8.75	8.96	9.01
1976	9.06	9.13	9.25	9.46	9.63	9.87	10.05	10.13	10.24	10.29	10.34	10.51
1977	10.71	10.86	10.94	10.90	10.84	10.66	10.47	10.30	10.08	9.88	9.72	9.54
1978	9.29	9.08	8.92	8.79	8.69	8.61	8.45	--	--	--	--	--
1979	--	--	--	--	--	--	--	--	--	--	--	--

Sources: Chase Econometric Associates Data Base; Morgan Stanley Research

The CHAIRMAN. Well, gentlemen, thank you very much for the most provocative and fascinating presentations.

Mr. Heinemann and Dr. Kane, you both take the same position that many people have taken for years. Well, I was going to say it sounds like echoes of Wright Patman in a way and the criticism of the Federal Reserve coming from an entirely different angle, but at any rate, you argue on the basis of your fascinating analysis in your statement, Mr. Heinemann, that it is procyclical, that the money supply decreased just before or during the recessions as it did in 1967, 1970 and 1974. And then with an exuberant growth in the money supply, it seems to aggravate the cycle.

And Mr. Kane, I understand you to say it is pretty much the same kind of thing.

Dr. KANE. Yes, the major difference between us is that I believe the Federal Reserve isn't fooled into thinking that focusing on short-term interest rates is sound policy. Rather I believe that the political response system, driven by sectors that are ill-served by rising interest rates, makes it necessary for the Fed to follow nominal interest rates closely and to increase them less rapidly than the fight against inflation would require. It is merely convenient internally and externally for Fed officials to rationalize their interest-rate focus as they do.

The CHAIRMAN. You see my problem with this is I just wonder if the Federal Reserve does have control of monetary policy, if they can do what they really want to do. I have a feeling here that one of the reasons for this chart is because, as Chairman Martin said, in the old days, you can't push a string.

You come to a period in which business activity goes down as it did in the depression, and Milton Friedman used to fault—does fault the Fed of course for their performance in the depression when we reduced the supply of money on the grounds that it's very hard in those circumstances to persuade people to use credit.

As you know, interest rates were extraordinarily low during that period. I don't know what they could have done to persuade people to come in and borrow money when business prospects were so bleak. The situation is nothing like that in recent years, but at the same time I just wonder if they had followed, Mr. Heinemann, your prescription, if they would have had success in the 1970 and 1974 period, at least, of actually being able to smooth out that recession or even avoid it.

Do you think so?

Mr. HEINEMANN. My impression would be that because of the Fed's reluctance to see short-term interest rates decline—and there is a lot of very specific tactical evidence of that reluctance which developed in 1974 and 1975—that indeed money growth was driven lower than it should have gone. I do not subscribe to the "pushing on the string" hypothesis, the notion that you can't push on a string. I would restate it to say that if you tie some money on the end of a piece of string, somebody will pull it.

The Fed has the power to inject reserves into the banking system, and the banks will use those reserves to create new money so long as interest rates are sufficiently high to cover the cost of the transaction. That certainly was the case during 1974 and 1975.

In historical terms, short term interest rates were quite high in that period, even though they were coming down.

If the Fed had provided reserves to the banking system, monetary expansion would not have contracted to the extent that it in fact did. I think the procyclical record does in fact grow out of what I regard to be a completely mistaken fixation of the Federal Open Market Committee and the Federal Reserve Bank of New York in managing the Federal funds rate rather than trying to manage the monetary base or some other reserve aggregate.

The CHAIRMAN. Mr. Sinai, one problem with this whole exercise we have here and what the Fed is doing is that we are in a period when we aren't very sure of the kind of standards we have in measuring what the monetary policy is doing. The money supply figures,  $M_1$  and  $M_2$ , are in a period of transition because of the transactional balances and so forth.

As we indicated earlier, when you first opened your remarks, it is hard to know whether or not in fact the flat performance of  $M_1$  in the last 3 months was actually a situation in which the money supply was stationary or was really a trend of money out of  $M_1$ .

At the same time, interest rates, it is hard to focus on those because they are distorted to grossly by inflation. We are told by Mr. Miller, as you know, that the very high interest rates really aren't very high now, that they are quite low. As a matter of fact, if you correct them for inflation, the mortgage rate is lower than it has been in many years, so that it is hard there to get a notion of what monetary policy is really doing and how effective it is.

Can you help us on that? Incidentally, I read that fascinating commentary by Bob Dowling in Business Week in which he uses you at some length in pointing out how Miller's arguments about interest rates and the nominal rate corrected for inflation, and so forth, is wrong. That is one of the reasons I wanted to ask you about that.

Dr. SINAI. There are several strands of questions in what you've said. One is: How do we know what monetary policy is doing. And that other part of that is: What are the monetary aggregates telling us now? What informational content is there in their performance about how the monetary policy affects the economy.

And the third part of what I think you said is: What about this distinction between nominal and real interest rates and how meaningful is that and what have they been doing? In looking at what monetary policy is doing, I would suggest that perhaps the worst indicators of the current state of monetary policy are the actual growth rates in the  $M_1$  and  $M_2$  and  $M_3$ . Those growth rates are very much the result—and if I don't say it, I'm sure Professor Modigliani would if he were here— but the demand side forces of the economy, the transactions and the demand for money and the portfolio choice—but they're overwhelmingly the result of inflation and real economic growth.

And I think they account for the procyclical findings of Mr. Heinemann and our own findings that  $M_1$  has been—is extemporaneous of how the economy is performing; the information content in  $M_1$ ,  $M_2$  and  $M_3$  is more about what's going on in the economy than what the state of monetary policy is at this time.

Now, with regard to what we are learning about this weak growth in the monetary aggregates over the last 3 or 4 months, I think it is not temporary. It is not transitional. It is not a function of only the new definition or the ATS or NOW accounts and their effects on  $M_1$ . Since the slow monetary growth is so pervasive and appears in all the aggregates, it just can't be the new money saving technology which is in  $M_1$ . It really is showing that the economy isn't one that there is a portfolio adjustment process, a choice of higher interest yielding financial assets by households and corporation.

That is slowing the growth of the monetary aggregates.

The CHAIRMAN. Well, that's fascinating. You explained that not in terms of Federal Reserve policy, but in terms of what the economy is doing when the Federal Reserve policy is more passive.

Dr. SINAI. Well, I'm not alone in that. The alternative view on what controls the monetary growth to what has been presented here would be that it is very much the demand side of the economy, what portfolio choices of the various households, corporations, financial institutions are bringing and they are telling me that, at least as I look at it, that all of those numbers—that flights of  $M_1$  and  $M_2$  and  $M_3$  and to high yielding alternatives that I think is going on now is very much part and parcel of a systematic process that we've seen in every late stage of every business expansion since 1955.

So it is meaningful in the sense that it is across all of the monetary aggregates. When you get to the question of which of the aggregates do you attach any meaning to and how do you read the effects of monetary policy, I suggest that if slow money growth were only showing up at  $M_1$  then you could conclude that it was the money saving technology that was doing it.

You can't look only at one of those aggregates now to discern what is happening. You have to look at all of them and probably some other measures, too. And so I've come to look at seven or eight measures of monetary policy: real money growth; nominal money growth. I think both of those are not very good, by the way, for what monetary policy is doing now.

They tell you what monetary policy did 6 or 7 months ago. They tell you more about what is happening in the economy now, so you have to look at a wide range of numbers. As for real and nominal interest rates, that is a tough one, too. I can't really conceive of the Federal Reserve trying to control real interest rates, nor can I conceive of them trying to control real money balances because the inflation component is something that in the short term is beyond anything they can do.

The record on real interest rates does tell us a different story from what the nominal rates show. They do show—and there are a number of charts in my statement—that real rates almost no matter how you measure them are lower relative to what they have been in the historical postwar period. And indeed, when you correct them for taxes, you get an even lower figure.

The CHAIRMAN. They're always low, however, when you have a big inflationary situation; are they not?

Dr. SINAI. Yes.

The CHAIRMAN. They are not as low as they were in the 1974 period.

Dr. SINAI. That's correct.

I want to make really two points: They are relatively low compared to most of the postwar period. They are higher compared to 1973, 1974 and lately they have been rising, and so you have to say all of those things to look out for the—quote, unquote—what has been referred to as the double talk about nominal and real interest rates. I think they are high enough now.

They are at least in our world. To produce a mild recession—I don't think anybody wants anything more than a mild recession. And so I would not be for sharp rises in nominal interest rates that would produce real interest rates like some of the previous episodes we have had in the postwar period. I think then we might get a deeper recession than anyone is looking for.

The CHAIRMAN. Senator Kassebaum.

Senator KASSEBAUM. I would just like to ask Dr. Kane what suggestions you might see in disentangling, so to speak, the Federal Reserve System from its political influence.

Dr. KANE. Well, I think the need is not so much to disentangle the Federal Reserve System from political influence as to help the American public to understand who is responsible for bad policy performance. Accountability for our economic policies, and for monetary policy in particular, should flow through to elected officials; that what I find stunning about the current U.S. situation is that the Federal Reserve tries to convince people that it is truly independent. Every Senator and Congressperson knows that the Fed responds to political pressures, as indeed it ought to do under our system of government. Why should it take the blame institutionally for mistakes of policy that are forced on it? The problem is not so much the Federal Reserve cannot flatten out business cycles, although I don't think that it can, but that it acts in ways that aggravate the cycle. It serves as a mechanism for injecting politically induced, procyclical influences that make these cycle swings wider.

Senator KASSEBAUM. I almost think that's a fact of life, though.

Dr. KANE. That, trying to do well, we do worse? That's just what I'm saying. In their efforts to do well, given the constraints they feel, Fed officials end up doing worse. An important part of the difficulty is the emphasis they place on nourishing the false image of independence. If they could accept clearly either in their charter or in their hearts that they are fundamentally servants of Congress and the President no different from any other bureaucrats, things would be better. It would clear up some of the confusion.

The CHAIRMAN. Senator Tsongas.

Senator TSONGAS. Could I get a sense from the three of you as to how you view the impact of monetary policy in this day and age compared to what it has historically been? I get the distinct impression that you are saying that given various forces, structural, inflation, et cetera, we really have far less capacity to deal with our economic problems than we have in the past.

Is that a fair restatement in lay terms?

Dr. SINAI. I have an opinion on that, and that is that monetary policy cannot bear the brunt of response to inflation that it did in

the past because the nature of inflation is such that the standard monetary policy—medicine can't work well. It's like a patient with a multiple series of disorders. You can throw a general antibiotic at that patient and it will fix some of the disorders and not others. And it could also kill the patient because of allergies or something like that.

And so what has been happening in American policy making is that there has been a move toward a multiple kind of attack on inflation in recognition of the different sources of inflation that have been occurring and less of a reliance solely on monetary policy and my own reading of the administration and the Fed's attempt at doing something about structural causes of inflation is that this has finally been recognized in the policymaking scene. We are not all the way there yet, but it is a good start.

It is a somewhat unfortunate analogy. But it is like the treatment of cancer. These days it's very multiple medicine oriented because there are so many kinds of cancer and the same approach has to be used on inflation. And in the past the policy has been to attack inflation just by going hell bent on dealing with it and to drive us into a recession.

Dr. KANE. I would say that much of the inflationary thrust we observe at any time is the effect of past monetary policy. Some of what Dr. Sinai calls structural adjustments I would portray as defensive or catchup reactions to price changes that have already occurred in sectors that react more quickly to monetary policy. Uneven price and wage changes occur as lagging sectors attempt to realine prices and wages with prior changes in other sectors.

This adjustment process forces the Fed into a policy dilemma. Does it support today the additional adjustments which have their roots in the expansive monetary policy of the past? Can it dare to fight the momentum of change emanating from the weight of the past?

In practice, it tends to follow both courses in sequence. When it finally decides to resist, it tends to overdo and to create new problems for the future. It is not so much that monetary policy can't do an awful lot. It is that it can't do an awful lot very quickly. One has to conduct monetary policy over a long horizon. Again, this is where the electoral cycle and the way it conditions policy formation prevents monetary policy from responding to the economy's true long-run needs.

Mr. HEINEMANN. I think that if one looks at monetary policy solely in terms of the level of short-term interest rates, if one equates tight money with high nominal rates, then one indeed is left with a puzzling situation at the present time. It seems as though monetary policy has no bite, and we have lost one of our primary tools. I think that is an incorrect perception. I think that the level, the rate of change, the direction of change in short-term interest rates are not reliable guides to monetary policy which should in fact be measured by sustained changes in the rate of change of the monetary aggregates.

In fact, we have not had monetary restraint until 4 or 5 or 6 months ago. There is no credible or sustained evidence of a slowing of the rate of monetary expansion until very recently. The economy has appeared not to respond because there hasn't been any

restraint. I would concur with some of the comments that Dr. Sinai made just a minute ago about the problems in trying to interpret the monetary aggregates at the present time. The published aggregates are indeed severely deficient. And I think one needs to raise the public policy question why the ATS, the introduction of the ATS system was not in fact synchronized with reforms in the reporting mechanism. There is no reason why the economic intelligence system has to lag 6 months or a year or 2 years behind the structural changes.

The regulatory people at the Fed and the economic people at the Fed ought to be able to talk to each other to coordinate their actions. We have had the same kind of thing happen at a very technical level with the weekly data on the condition of large banks. The data have been totally changed in the last month and a half and no provision was made for any continuity between the old reporting system and the new reporting system.

Senator TSONGAS. Would you concur with the analogy, with the medical analogy that was used, that the problem of inflation in our economy is just so multifaceted that to be a monetarist and purist in this day and age is a lot more difficult and requires a little intellectual movement?

Mr. HEINEMANN. For support, I guess I would turn to Secretary Blumenthal's statement that no combination of policies will work in dealing with the inflation we have today that does not include effective long-run restraint on aggregate demand.

Senator TSONGAS. That, I think there is no question on, that particular issue. But you have to agree, I would think, that in totality monetary policy is of diminishing significance, not that it is not significant, but relative to other causes.

Mr. HEINEMANN. I would say that the danger in using incomes policies, in using—in putting an ice cube on the thermometer temporarily, is that we may be tempted to avoid the fundamental correction: We may appear to be getting results through a series of controls and jawboning or whatever, and this tends to take some of the heat off of macro economic policy.

We saw a very explicit example of this, of course, in 1971 and 1972, when we had direct controls and very stimulative policy. The tactic did not work, and the lid blew off and we had very serious inflation.

Senator TSONGAS. Let me pursue this, if I might.

What I am trying to get to is the argument that one hears all the time about what kind of impact on the economy does the Federal deficit have; is the Federal deficit at these projected levels all that serious? Other questions such as given our increasing interdependent world order—oil being the best and most noted example—whether you can in any way isolate the United States from outside economic shocks that have as much, if not more, impact than what the Fed may be doing. It is the context I am trying to raise.

Mr. HEINEMANN. There is no question that—and I tried to indicate this clearly in my statement—that the size of the federal financing in the economy is a major distorting factor at the present time.

I would suggest, however, that the size of the deficit, per se, is less important than how the deficit is financed. If the deficit is

heavily financed through the mechanism of the central bank, it has highly inflationary implications. If the central bank does not finance the deficit, the implications are much less inflationary.

We saw, so far as the oil price increase is concerned, a quadrupling of oil prices in 1973. However, because of a stabilizing monetary policy, perhaps through most of 1975 and in 1976 we saw the rate of inflation come down very rapidly toward levels that might be implied by the long-run demand factors in the economy.

I think monetary policy can play a stabilizing role. It is not impotent, and if we ignore it, we will fail in fact to deal with the fundamentals of the problem.

Senator TSONGAS. I don't think anyone is suggesting that we ignore it. It is sort of like a political district: If part of your constituency is growing, you take note of that; if part of it is diminishing, you take note of that as well. It doesn't mean that they don't exist anymore.

Mr. HEINEMANN. I do not agree that the monetary policy district is shrinking.

I would just like to add one little footnote to Dr. Sinai's comment before about the current reading of monetary policy. I find it extremely interesting and highly significant that in the last 4½ months or so we have had a major change in the behavior of monetary base and bank reserves. The aggregates that the Fed does control that are not distorted or impacted by those regulatory and structural changes have in fact slowed down in a major way.

The total effective reserve base of the American banking system, for example, grew at a rate of 10.3 percent from December of 1977 to October of 1978. From October of 1978 through the second week of February this year, the rate of growth in the effective reserve base in the American banking system was minus two-tenths of 1 percent. There has been a major downshifting in the rate of growth of bank reserves. Unless one is prepared to argue that the Fed simply sits there and responds passively to random changes in the level of demand deposits in the banking system—which I think some people would argue; I don't agree with that—this suggests a major change in the way the Fed is behaving if they keep this up. We are beginning to put in place a very restrictive monetary policy.

Dr. KANE. I would like to add a footnote with respect to how to tell what Fed policy is right now. Throughout the business cycle, institutional change affects the moneyness of various assets. Interest ceilings on time and savings accounts and the total prohibition of interest on demand deposits promote, in an inflationary climate, the development and substitution of new assets for regulated deposits. In the past many substitute assets developed that are broadly similar to the automatic transfer services that have just been legalized for households. For some years now, corporations have had automatic repurchase agreements that insure that corporate demand funds do not have to sit at zero interest. Funds in the automatic purchase agreements do not count in  $M_1$ , but they are every bit as spendable as ordinary checking accounts.

I think that, as a matter of public relations, the Fed finds it convenient at this time to fuss a lot about possible special effects from newly authorized ATS accounts. Households accounts are far

from predominant in  $M_1$ , and banks and other intermediaries have offered similar services for a long time. As market interest rates have risen, new services have been provided as ways of paying implicit interest. Bill-paying services, sometimes available via telephone, have been set up to improve the substitutability of savings accounts for checking accounts. In more and more parts of the country, electronic machines are open 24 hours a day and can be used for instant access to passbook funds. The spendability of time and savings accounts has increased more or less continually with inflation throughout the last 10 years.

ATS is merely a change that can be dated more easily than these other changes. Given that households respond to new opportunities slowly as they learn about them and decide how they can best take advantage of them, I think that growth rates in monetary aggregates are not severely distorted by ATS. The cutback in monetary-aggregate growth rates evidences a definite change in policy thrust.

The Chairman. Mr. Heinemann, you claim in your testimony that the Federal Reserve should abandon its preoccupation with short-term interest rates and instead look at one aggregate over which it has control; namely, the monetary base.

Dr. Sinai's statement indicates that the monetary base is defined as: total bank reserves plus currency and adjustments for changes in reserve requirements. He adds that the Fed has strong control over bank reserves, but little impact on currency held by the public.

If the Fed has little control over currency, which makes up about two-thirds of the monetary base, can and should it be counted on as a direct control instrument by the Fed? And if anything close to the base should be controlled, shouldn't it control bank reserves? Why not focus on that?

Mr. HEINEMANN. I think that the reserve component of the base is a useful target. However, I would take some fairly strong exception to the way in which the monetary base was described. The monetary base is a concept which is very much like a corporate balance sheet: It has sources analogous to assets; it has uses which are analogous to liabilities.

The uses—the liability side, if you will, of the monetary base balance sheet—are bank reserves and currency. The sources are the Fed's portfolio of securities, the monetary gold stock, discount window credit, and a miscellaneous collection of other smaller items.

What the Fed does is to operate on the source side of the monetary base. That is where open market operations have their impact. The public decides how the monetary base which the Fed makes available is to be used: how much is in the form of currency, and how much is in the form of bank reserves.

The Fed has direct and complete control over the size of its own securities portfolio, and that is in fact the only significant dynamic component on the source side of the monetary base over time.

I think that the monetary base is a highly relevant monetary policy target. I would not quibble, however, with the notion of using the reserve component of the base as an additional complementary target for policy.

The Chairman. Would you say that this indicates the need for universal reserve requirements? Monday we are starting hearings on that proposal by the Federal Reserve Board, that they have a system of universal reserve requirements with exemptions for small institutions, applying it across the board not only for commercial banks, but for all institutions.

Mr. HEINEMANN. My own very, very personal view is that the same kind of deposits ought to have the same reserve requirements, no matter where they are located, and I would not include an exemption for small institutions. I am aware of the earnings impact, but I think that the benefit to monetary control with truly universal reserve requirements would in fact provide substantial long-run social benefits.

The Chairman. Well, frankly, the reason why we have decided on the exemption is political and practical: You're not going to get support if you're going to bring in a lot of small institutions into reserve requirements that they don't have to meet now.

Mr. HEINEMANN. I am aware of that.

The Chairman. And the Federal Reserve feels it is not necessary anyway, that they can handle it with a reduction in reserve requirements so that all of the banks would be better off but with no reserve requirements for the smaller banks.

I would like both Dr. Sinai and Dr. Kane to comment.

Dr. SINAI. With regard to universal reserve requirements?

The CHAIRMAN. No; on the monetary base question.

Dr. KANE. I would be happy to comment on the universal reserve requirements. I have done a great deal of research on the so-called Federal Reserve membership problem.

To understand reserve requirements, one must first recognize that they are a tax: a differential tax on different types of deposits and on deposits at different types of banks. They are a tax in the sense that they influence the net proceeds from various resources. Banks and their customers earn less money by holding deposits subject to reserve requirements than they would otherwise. In fact, in our system much of the revenue from required reserves even passes through to the Treasury. The Federal Reserve earns interest income that might have been earned by banks or paid out to their customers, income which is largely passed on to the Treasury. So, changing the structure of reserve requirements changes the structure of our tax system.

This matter is on the legislative agenda primarily because the Federal Reserve is embarrassed by its continuing loss of members, and it argues that these losses are somehow harmful to its policy performance. But it is very hard to make the argument that it makes a lot of difference to the effectiveness of monetary policy that banks are leaving the Federal Reserve System. A considerable body of analysis suggests that nonmember banks do not seriously inhibit monetary control. In this respect, the membership problem really is not a problem at all. Of course, in some different type of economy or in some distant future it might become a problem. But operationally the important issues are tax issues.

Bank liabilities that are not to be taxed will be induced to grow more rapidly than those that are. Hence, requirements would by their selectivity among bank liabilities change the shape of bank

balance sheets. I am also concerned about distinguishing the initial structure of these requirements from their long-run equilibrium structure. I am skeptical of the permanence of a tax system that promises to exempt the vast majority of banks from its provisions. The current proposal reminds me very much of the initial shape of the income tax. The income tax was originally going to apply only to the rich, and to be imposed at very low rates. Through time, the Government's need for revenue led to restructuring of the tax. Now it falls on everybody and rates become higher and higher.

The CHAIRMAN. It didn't fall on everybody. We exempt about half the population with the proposal we have now.

Dr. KANE. Well, we don't so much exempt them——

The CHAIRMAN. From the income tax. People with low incomes are exempt.

Dr. KANE. We have personal exemptions, a standard deduction, and a low-income tax credit. It's certainly true that a lot of people don't literally pay taxes, but as an incentive system the tax is there, and it affects at the margin what everyone does. Implicitly, the highest rate of tax may be paid by someone who is currently on welfare and is discouraged from taking a good job. In that it affects incentives, everyone is taxed.

The CHAIRMAN. Well, I agree everyone is taxed, but the income tax, there is a substantial exemption there.

Dr. KANE. I grant that many individuals may not be paying any positive federal income tax in hard cash, but they are taxed implicitly because they know that if they rearrange their activities to get more income——

The CHAIRMAN. Well, I didn't mean to get off on that.

Dr. KANE. Reforming Reserve requirements is a very serious tax issue, and it should properly be combined with various privileges that commercial banks now enjoy under the income tax code.

What I find most odd in the tax code's treatment of banks is that it permits them to engage in interest arbitrage by borrowing in taxable markets to finance holdings of tax-exempt securities issued by State and local governments. Banks are able to borrow at largely regulated interest rates and to treat that money as a deductible expense. Interest paid on the funds banks borrow is deductible against their taxable incomes, although the income that they earn on tax-exempt securities remains fully tax exempt. I believe that the conventional justification for this has been that banks face burdensome reserve requirements anyway, so that they may deserve a break or two.

Because this philosophy imbues that tax code, easing reserve requirements should lead us to reconsider other substantial elements of banks' Federal treatment. The change should be linked conceptually to their overall treatment under the tax code.

The CHAIRMAN. Dr. Sinai, did you want to make a comment on the monetary base as the aggregate we should focus on?

Dr. SINAI. Yes. I think at the moment we are suffering because we don't have a target.

The CHAIRMAN. That's right. That's one of the reasons this committee is in a dilemma.

Dr. SINAI. The monetary base problem there, I think, is the currency component. I think currency up until recently has grown at about 9 or 10 percent.

The CHAIRMAN. What would be wrong, then—I think Mr. Heinemann would agree—that the bank reserves are under the control of the Federal Reserve, and currency isn't. But how about the reserves then?

Dr. SINAI. On the reserves, you can go one step further, and if you get away from the borrowed reserve component, which is behavior that is determined by the commercial banking system, we then get to reserves, which are even better, and, indeed, the best one would be the one that Mr. Heinemann, I think, would be the one that the Federal Reserve portfolio that we all agree, I know, that that really is what they control.

But the problem with all of those is that of the linkage between what is done to the base or to the Federal Reserve portfolio. The linkages from those concepts to the money stock to the economy to inflation, are really not well understood. The kind of correlation that you get or used to get between  $M_1$  and the nominal GNP doesn't appear to work with the monetary base that the Federal Reserve holdings of Government securities. So, if you look at that as something to operate on, you don't know quite what you are heading for.

One advantage of the monetary aggregates has been, I think, in the procyclicality argument that Mr. Heinemann made, and I think I support that. That is that it is a problem for the economy, and when you operate on ends that deviate from the target, then you knew you were operating on something that was approximately going on in the economy at that time and have always presumed that was the rationale for the Fed's action on  $M_1$ , and in that sense supported it.

What we need is a good monetary aggregate concept that represents reality and tells what is available for transactions. Transactions are driven by the real economic behavior, by inflation. And if we have a concept and a process for that, that is available every week; then when the Fed operates on that concept it is actually operating on the key parameters of the economy.

The CHAIRMAN. This is exactly what the Fed is working on now.

Dr. SINAI. I think all I have to offer there is that they would only consider adding to the various components.

The CHAIRMAN. Well, I like what both of you gentlemen have suggested, because you have said that we ought to look at a number of aggregates, not just one.

And Mr. Heinemann, I think, has very, very properly focused on the slipperiness of these other factors and the fact that the monetary base could be a very helpful indicator and it is much more stable and one that doesn't have some of the problems these others have.

Let me ask you, Dr. Kane: The Fed says very little about the relation between monetary policy and the administration's targets for 1980. You get the feeling that the Fed thinks they are a little optimistic. You say—and say very emphatically—that the Federal Reserve Board and Reserve banks are too politically sensitive. Since they are an independent agency, independent of the execu-

tive branch—constitutionally, they are a creature of this branch, of the Congress—shouldn't they be more forthright and give us their unbiased forecast of economic conditions and policies?

Dr. KANE. I think they should. But the reward system works against such behavior. If you see Fed officials (as I do) as scapegoats, the perennial issue they face is how to absorb and distribute blame within the Federal Reserve System.

The concept of the Fed as a scapegoat that must absorb guilt efficiently explains very well the complicated, arbitrary-looking structure of the Federal Reserve System. If the Federal Reserve Chairman is asked here whether he changed policy at such and such date, he will reply that he is "only one among equals." He will emphasize that the Board and Federal Open Market Committee make these decisions. He will tell you that the FOMC consists of 19 people some of which don't even vote. By the time he finishes, it won't be possible to pin down any blame at all.

The CHAIRMAN. They haven't done that. They have been very direct in taking full responsibility for what the Fed does, and all three—Martin, Miller, and Burns—in my experience, they have all come before us, and they all say they don't speak for themselves, they speak for the Board. They have made that very clear. That's why all of them have refused to permit other Governors to come and testify on monetary policy, something I would like to see done. But I can understand their viewpoint. They feel it is a corporate position they're taking, and they speak for the whole Board.

Dr. KANE. This is what I am saying, that because they say they speak for a group they are better able to shoulder the blame that is heaped upon their institution.

The CHAIRMAN. Senator Garn?

Senator GARN. Mr. Chairman, I am sorry. I was in the Intelligence Committee all morning, and I don't want to come in and interject myself in the middle, so you proceed.

The CHAIRMAN. Senator Kassebaum?

Senator KASSEBAUM. I think the other question I had has been answered.

The CHAIRMAN. Senator Tsongas.

Senator TSONGAS. I hate to raise this issue again. Mr. Heinemann raises the issue of how you finance a deficit. But if the Federal deficit were reduced to zero in this budget that we are now considering, what impact would that have to our inflation rate? And I know this is a very simplistic question.

Mr. HEINEMANN. Other things being equal?

Senator TSONGAS. What will Milton Freidman have to write about if we balance the budget?

Mr. HEINEMANN. One result of significantly reducing the Federal borrowing requirement is to reduce the pressure on the Fed to monetize the debt and to make it easier for the Fed to carry out its announced policy objectives of gradually reducing monetary growth over time.

Senator TSONGAS. I understand that. But if the budget were balanced tomorrow, would things be significantly different, realistically?

Mr. HEINEMANN. If we shifted from a \$40 billion to \$50 billion deficit to a balanced budget tomorrow, I am sure there would be

short-run shock effects of substantial magnitude, and that Dr. Sinai could describe in great detail, as a result of the DRI model.

As a general matter, over time, a lower Federal borrowing requirement makes it more feasible for the monetary authority to maintain a stable policy.

Senator TSONGAS. Let me pursue that, if I might.

You consider yourself a monetarist, I take it?

Mr. HEINEMANN. That's correct.

Senator TSONGAS. There is much discussion of the balanced budget amendment that has now passed, I think, 29 State legislatures. If you perceive fiscal policy as perhaps not as important as monetary policy but a useful vehicle, are you concerned about what impact the straitjacket on the budget would have on having that weaponry to deal with economic dislocations?

Mr. HEINEMANN. Fiscal policy is not my primary area of expertise, but I would say that I have not been terribly excited about the budget deficit as the principal target that one ought to be concerned about when dealing with these policy questions.

It seems to me that the deficit is a residual; it reflects both spending and revenue decisions. It reflects a broad range of macroeconomic factors that are beyond the reach of the legislative process, certainly in the short-run.

My own preference would be to deal with the problem much more through restraint on spending.

I think that a legislative or, indeed, a constitutional requirement for budget balance could, in fact, prove to be, in my personal judgment, a very difficult requirement to live with.

I think that the element of restraint in fiscal policy needs to be—is more properly implemented through the medium of spending restraint rather than a mechanical requirement to balance the budget.

Dr. KANE. Could I comment on that?

Senator TSONGAS. Yes.

Dr. KANE. One can always say that flexibility is potentially better than having an inflexible rule.

The issue has to be whether if, in practice, a zero-deficit rule would lead on average to better policy, even if policy might be worse at some stages in the business cycle.

But I would turn back to the point that if this zero budget became uncomfortable, bureaucrats and legislators would find ways to avoid it. For example, they could agree to move some expenditures off budget. Such maneuvers could provide substantial practical flexibility.

So, I think, the controversy is just a tempest in a teapot.

Senator TSONGAS. That's the same argument you're using against people in the Fed now, though. They give you the impression of certain behavior, yet, they don't always have recourse to these techniques which you are suggesting.

So where do you come out?

Dr. KANE. On this issue, I'm saying that I don't think it makes a lot of difference whether anyone legislates a zero-budget restriction. If it is enacted, it will have mainly cosmetic benefits. Initially, some people may feel better about the Nation's economic future. It

may lead some people to see greater hope that our secular inflation will settle down.

It is not going to make a lot of difference by itself, without specific further restrictions on expenditures, per se.

Senator TSONGAS. So you might be tilted in the direction of voting no on the Constitutional Convention by the introduction of legislative economic language?

Dr. KANE. Yes.

Dr. SINAI. Reducing the deficit would be pretty costly in unemployment and might be worth about 1 percent or 1½ percent down in inflation in 1980.

The CHAIRMAN. Can't hear you. Will have what effect on inflation?

Dr. SINAI. My guess would be that we've run enough simulations in the model and checked out questions like that, that if you took \$30 billion of spending out and removed that projected \$29 billion deficit, that it would have substantial effects in the second half of this year. And you talked about a 1-percent, or 1½-percent reduction in inflation in 1980. And probably about the same rise, maybe somewhat more of a rise in the unemployment rate.

Now that is one extreme.

Dr. KANE. I wouldn't challenge this analysis of what such large changes in Government activity would do. If you could work such a change de facto, it would have a significant impact on the economy. I just don't feel that the institutions of this country would allow such a quick change. First, we almost always grandfather in significant changes in the rules of the game. Second, the more grandfathering occurs, the more opportunities exist to avoid the stated intent of any piece of legislation.

The CHAIRMAN. Would the Senator yield on that?

Senator TSONGAS. Yes.

The CHAIRMAN. You say it's social because you don't know what the psychological effect might be and that might overwhelm any mechanical, economic effect. After all, if you have a balanced budget, the effect that this could have on the business community in holding down their prices might be substantial.

If you have a substantial increase in unemployment, the effect that this might have on wage demands, and therefore, wage costs, and therefore, prices, might be very significant.

But you just don't know because, of course, so much of this depends upon bargaining and depends upon the psychological reaction to balanced budget, which has become such an article of faith with a very large proportion of the American people.

Dr. SINAI. Let me respond. I presume that gets a little deeper, which is expenditure restraint.

Now on expenditure restraint, I think it's interesting that with all economists, and I certainly would argue for legislatures to come down higher on expenditure restraint because at this time when we're pretty close to full employment, if you get tough on spending and have less of a demand on the capital markets from the central government financing, the mix of what happens favors lower interest rates and naturally favors capital formation, productivity, and that is a major problem.

So going to a zero deficit is probably a little extreme and very costly. But being tough on spending is really a good idea.

Now whether you should be so tough as to have a constitutional amendment on balancing the budget, that I am very much opposed to. And I would rather rely on the potential for errors in the policymakers than put them in this straitjacket.

Senator TSONGAS. The point I'm trying to make is I don't think that the Constitution is something you tamper with for what may be marginal advantages.

I'm in favor of balancing the budget. I think you can do it legislatively but you don't amend the Constitution of the United States for this kind of interesting intellectual exercise.

This really takes time away from other concerns that I think are equally valid and it's unfortunate.

I have a final question which I don't think I have time for. The CHAIRMAN. Go ahead.

Senator TSONGAS. On the question of productivity, I have in my State, basically, a thrust toward high technology as our economic future, which I support and have been working on.

What concerns me is that if, indeed, we are going to be productive, and now I'm taking the country as a whole, that if we just continue the policy of noninvestment in capital equipment, et cetera, and achieve a zero productivity that we saw recently, what does that portend over the long run and how can we change that?

Dr. SINAI. Some work we were involved in recently suggests that retractions, or tax incentives for R. & D. spending, which is a question that concerned you some months ago, could be of significant benefit, some other work on tax incentives and effects on business capital spending, which we have done a lot of work on that topic, has always indicated that tax credits and accelerated depreciation would give very good results on business capital formation.

And, indeed, as we get close to, so close to full employment, these are measures that are worthwhile considering, especially in view of the fact that productivity results have been so miserable over the past few years.

Senator TSONGAS. Mr. Chairman, are these issues outside the domain of this committee—productivity and capital investments?

The CHAIRMAN. No, indeed. Well, of course, the immediate jurisdiction would be the Ways and Means and Finance Committees on any kind of tax legislation. But we would have an input on it and we would have an interest in it. And I think it is perfectly proper for us to consider it.

Furthermore, many times the committee has considered various means of improving productivity but not by the tax routes.

Senator TSONGAS. I would be curious. I have a capital formation committee back in Massachusetts that tries to deal with this issue, and it seems to me it is so complex. Maybe at some point we might consider holding a hearing just on that issue.

The CHAIRMAN. Let me get into this. This also is not precisely a monetary question, but I would like to ask each of you gentlemen about this because the point has been raised so well by Senator Tsongas.

In 1953, of course, we had the Korean war going on. Because such a large component of transfer payments are appropriated through an automatic appropriation process, I would suggest that there are some major structural problems involved in trying to legislate expenditure control from the top down rather than the bottom up.

I think we have to go into the individual programs and begin to try to get some control over the spending in the items that have actually been increasing over time.

The CHAIRMAN. Let me interrupt to say I couldn't agree with you more. You're absolutely correct and your analysis undoubtedly is right.

But it seems to me that, nevertheless, it would still be desirable to achieve what the economists tell us they would like to achieve, which is a balance over the cycle and not have it based upon, really, what has been, which is a full-employment surplus.

We never get to the full employment, which is 4 percent, which is probably right now an extraordinarily inflationary kind of situation.

The result is we pile up these enormous deficits. The country is rightly exorcised about them. We're not going to do anything about it, really, unless we take some kind of action.

What I propose may not be the right kind of thing but something of that kind that provides an extraordinary restraint on the Congress and, theoretically, we should not have that.

But the experience year after year after year and deficit after deficit in periods of growth and to have the country talking about an austere budget with a \$30 billion deficit in the fifth year of recovery really is pretty ridiculous.

Mr. HEINEMANN. I completely agree. I think to implement this, the process has got to involve going back into the uncontrollable expenditures and making them controllable.

I am with you at your goal. I don't know whether a requirement expressed in percentage terms of nominal GNP, in fact, would achieve the practical result if that were all that were done.

Dr. SINAI. The advantage of the constitutional amendment which I would definitely oppose is it is almost like an order from the top: We don't care how you do it, but to make sure it happens.

The CHAIRMAN. I'm not proposing that.

Dr. SINAI. I'm just saying that's one extreme. I think your proposal is much more practical and much more in tune with what the public would want and be much more acceptable.

So I think it is a sound one to make.

The implementation, though, at least as a principle, the problem is so many stress factors arise during the course of a 3- to 7-year business cycle, that there are all kinds of special contingencies, whether it's a war or a war on poverty or whatever it is, that can happen to change that.

The CHAIRMAN. Well, a war we can set aside. We always come out of our recessions like gangbusters. The feeling is that we just have to reduce taxes and increase spending and put people to work. And we just overdo it every time.

Dr. SINAI. But you have to watch, I think, in your proposal, because in a recession, we would have low growth and you would

I've got two proposals: One would meet what, Mr. Heinemann, you refer to as the importance and all of you gentlemen referred to as the importance of holding down spending.

This is an amendment that I'm going to offer on Tuesday when we mark up the Council on Wage and Price Stability. That would provide for a reduction in the proportion of Federal spending in relationship to the gross national product of approximately 22 percent down to 20 percent over a 5-year period.

The President has announced he's for it, but there's nothing in the legislation that would require that he be responsible.

And I'm hopeful we can get favorable consideration of that.

Now the other proposal would be to try to do something about balancing the budget over a cycle.

I have agreed that to rigidly require a balanced budget every year would be counterproductive and wrong. And there are all kinds of problems involved in that.

But what I propose instead of that is this: That the President should propose a budget and Congress should pass a budget which would provide that in the event we have real growth of 3 percent, that the budget would be in balance. If we had that in effect over the last 17 years instead of 16 deficits and 1 small surplus, an explosion of the national debt, we would have had 12 surpluses and 5 deficits.

It is a proposal that is flexible because in the event of slow growth, where you have a deficit, which you should have, and in the event of recession, you have a deeper deficit, which you ought to have also.

But in the event of exuberant growth, you have a surplus which you ought to have, which tends to hold down the prices and tends to counteract inflationary forces.

Now why wouldn't a combination of these two be desirable in providing for a greater degree of economic stability?

Now this would be a bill, not a constitutional amendment. Congress can change it if they wish. It would be subject, of course, to a two-thirds vote if the Congress wanted to overrule it and provide for a bigger budget or a bigger deficit.

Why wouldn't that be sensible? Mr. Heinemann?

Mr. HEINEMANN. I think that the general principles that you have enunciated, Senator, are completely sound. I would observe, however, that as we look at the composition of the growth in Federal spending over the last 30 years or so, that there are some extraordinary problems of implementation which I think need to be addressed.

Looking at the Federal budget in real terms and breaking it down by its main components in the national income accounts—the purchase of goods and services, transfer payments, grants-in-aid to State and local government—all of the growth of Federal Government spending, virtually all since the 1950's has come from the transfer of payment side. I have adjusted transfer payments by the personal consumption deflator in the national income accounts.

Real Federal purchases of goods and services, in fact, were lower in absolute 1972 dollars in the first year of Mr. Carter's administration than they were in the first year of Mr. Eisenhower's administration.

accept some sort of deficit as part of the balanced budget over the cycle, and it still would permit the speed or the pace that the policy stimulates.

That is very important.

The CHAIRMAN. That's right. It would retard the pace of the stimulus. That would be a price you pay. But it seems to me on the basis of our experience, that is a pretty good price to pay.

Dr. SINAI. If you're going to balance it over the cycle, why couldn't somebody come out of a recession spending \$20 billion instead of \$5 billion?

The CHAIRMAN. Well, that is what we've done. That is what we do all the time. We come out of a recession—we came out of the 1975 recession with a colossal deficit and the deficits continue.

Dr. SINAI. But it could happen under your proposal just as well because there is that leeway over the whole cycle in terms of a zero deficit.

The CHAIRMAN. No. My proposal would automatically, regardless—this is something that the economy would do for you—the President would submit a budget which would be in balance in the event real growth, or 3 percent. If the growth were 4 percent, you would have a bigger surplus, 5 percent, a still bigger surplus.

If he was wrong and you had a recession, you would have a substantial deficit which would stimulate the economy.

In other words, the economy —

Dr. SINAI. I see, the Government takes no action and lets the economy do it.

The CHAIRMAN. That's right.

Dr. SINAI. I'm not sure.

The CHAIRMAN. Well, I would like to get your reaction because it would be very helpful.

Dr. Kane?

Dr. KANE. I think your proposal would be very useful in terms of educating voters and other Members of Congress to the trade-offs involved in detailed expenditure decisions. That is the great value of it. It should make people think about placing another road in the middle of Kentucky, if it is going to force a reduction in expenditure something else.

The CHAIRMAN. It's a good thing you did not say Wisconsin, Utah, or Kansas.

Dr. KANE. You'll notice that I didn't say Ohio either. In any case, speaking about roads raises the issue of how to regulate capital formation by the Government. When we talk about balancing the budget over the business cycle, we must recognize the possibility that the Government should undertake some important capital expenditures that ought not to be financed on a pay-as-you-go basis because the benefits of the project spread out into the distant future. A so-called good war provides an extreme example of such an expenditure.

The CHAIRMAN. Senator Garn?

Senator GARN. Thank you, Mr. Chairman.

Along this same line, I agree with most of what I have heard in the last few minutes.

I favor a constitutional amendment because in the 5 years I've been in the Senate, we had a national debt limit, and I think we

should do away with it because it not only is meaningless because we simply increase it every year so that the Government can continue to function. Then it becomes a Christmas tree.

And we had all kinds of ornaments on it and add all kinds of amendments that would otherwise never pass.

So we get bad legislation. So I'm opposed to the debt limit on the statutory basis because it has a negative impact, in my opinion.

I see no reason that Congress, being what it is, and its ability to spend—and I certainly agree that we need spending limitations—would have justification in a year for going beyond any statutory limitation, just like it does with the debt limit.

I see no restraint.

I understand the problems of a constitutional amendment and, from a principle standpoint, I say we shouldn't be putting into the constitution those kinds of details.

But when you have served in this body for 5 years and you see the lack of restraint that any statutes place upon us, that is why I go the constitutional amendment route.

However, I would oppose any constitutional amendment that just requires a balanced budget. We could have a \$2 trillion balanced budget with nothing but spending.

So I think we have to have a combination and I would like your comments on this, just to throw something out, a constitutional amendment requiring a balanced budget, but with a limitation of whatever, 18, 19, 20 percent of gross national product to provide the flexibility that you need. Put in maybe a requirement that a two-thirds or three-fourths majority of the Congress is needed to have a deficit in order to meet such things as a war or war on poverty, or whatever, recessions.

It would be much more difficult to get two-thirds or three-fourths, as you well know.

What do you think about that kind of a three-pronged proposal to try and attack all of the things that I've talked about?

Dr. KANE. Well, I think that the action that the Congress takes on the national debt limit illustrates my thesis that almost every legal restriction that is put on a group of people who really don't fully accept the purpose of the law leads to avoidance rather than compliance.

I think the newscasters have increasingly ridiculed Congress whenever they announce that the national debt ceiling has been raised again. It is a charade.

But I want to discuss what worries me about putting your ratio into the Constitution. It is fairly clear that it would be an improvement to restrict Federal Government expenditures to 20 percent of GNP today.

That ratio seems prudent relative to today's circumstances, but it seems very likely that this won't always be the size of government we're going to want. I don't think we should adopt a constitutional amendment with the intention of reopening it again and again. Prohibition has a lesson to teach us here.

It would set very dangerous precedents vis-a-vis fundamental amendments, such as the Bill of Rights, that I hope are truly inviolable. Constitutional solutions should have a permanence to

them that limiting the Federal Government to 20 percent of GNP could not.

Senator GARN. That is why I added the third thing, and that is the supermajority in order to go beyond that 20 percent if necessary.

Dr. KANE. Again, it is a question of what we mean by a constitutional amendment. I think that, once we recognize that a rule we have in mind is going to need future adaptation, it should be incorporated into an ordinary public law rather than made part of the Constitution. If we have a rule that reasonable persons could agree with year in and year out, century in and century out, then and only then should it be lodged in the Constitution.

Senator GARN. I agree with you in principle. But look what we've turned into. We've turned into a circus, a zoo. This is the best show in town, actually, next to the National Zoo downtown. We give conservative speeches, everybody around here. Everybody ran as a conservative last fall. And we've reached the point where, as the chairman pointed out, we talk about a \$29 billion or a \$30 billion budget as being austere.

Where is the control? I really don't think it should be in the Constitution, except I'm going to support some kind of constitutional amendment, because we have not restrained ourselves. There is a need for some dramatic bolt of lightning out of heaven that suddenly takes some of the rhetoric and doubletalk out of some of our colleagues that speak one way and vote another—I am searching for an answer to control this monster.

And, I'm tired of those who continually attack the military budget when it has continued to go down as a percentage of GNP and a percentage of the total budget. And you're right, most of the increases come in the transfer payment area, taking from one and giving to another.

And I am frankly tired of being told those are uncontrollable. They are not uncontrollable. If Congress has the courage to tighten the eligibility requirements and take out some of the golden California children who come to my ski resorts in Utah and buy food with food stamps and collect unemployment while they ski all winter—sure, they are unemployed. But we need to get the money to the really needy. And you could eliminate thousands of most of these transfer payments, and the most that would happen is they couldn't ski as much or surf in California. I guess they go back to California in the summer and work long enough to get back on the benefits, and then they snow ski in the winter and water ski and surf in the summer.

But I don't know how to control it, other than a constitutional requirement. It works in Utah. Obviously, we have a State that has an entirely different economic requirement than the country. We don't have wars. We don't have all of the factors involved. But I will guarantee you, had we not had a constitution that requires balanced budgets, the budgets would not have been balanced in the State and local and city governments in my State.

So I look at it as something that is not preferable to get that specific in the Constitution, but I don't have any other answer. And my hindsight tells me that my colleagues will not control themselves with statute. They will do what is politically expedient for

the next election, and they will buy votes with expenditures of Government funds and programs in their States.

So you're looking at it from an economic standpoint, that I agree with you. I'm looking at it from a political standpoint and political realities and what has happened in this country over the last 25 or 30 or 40 years.

I have nothing else, Mr. Chairman.

The CHAIRMAN. Did you want to respond, Dr. Sinai?

Dr. SINAI. Well, rules arise from problems that exist at the moment. But unfortunately, rules you make today, 5 or 10 years down the road don't look like such good rules.

I think ultimately here the answer is in the election process. We have seen a major shift in political opinion in this country, and the, quote, unquote, "message" sent to the legislature. I see it every time I come down here to testify. Because the kinds of views legislators had 4 or 5 years ago are not the views they hold today. And I think that is really the answer, is not a constitutional amendment. It is that all too slowly the American electorate will come to really, I think, the right conclusion. Maybe it is too slow for some of us.

Senator GARN. Well, I'm not convinced you're right.

Dr. SINAI. But I would suggest that something that is more in between is the kind of a proposal that Senator Proxmire is making, which also has a problem, in that it is rules now which 5 or 6 years down the road might not look so good. But at least it would get the message through and provide something to shoot at.

The CHAIRMAN. You mean change by law.

Dr. SINAI. Yes.

Senator GARN. Well, it isn't a momentary thing, as you say. It is 40 years.

Dr. SINAI. But I can see a situation under the balanced budget, under the constitutional amendment, that would lead to, 5 or 6 years from now, a very large number of people unemployed, maybe an inflation rate down to 2 or 3 percent, which we could applaud, but then you might have 10 or 12 percent unemployment. And all those people and their sympathizers running around and voting out the people who put those policies in.

Senator GARN. Well, let's go back and look at hindsight again. Historically, you have not had that much of a range in Federal expenditures. If you pick Senator Proxmire's figure of 20 percent, and if you go back over 40 years, it hasn't varied that much. You have not had those big swings. It has been a gradual increase.

I don't see a momentary crisis from setting that kind of a limit or percentage if the economy is growing.

Dr. SINAI. I think the percent is a good idea, but not by constitutional amendment.

Senator GARN. Without these kind of restraints, we have had the kind of unemployment you talked about. We have had everything you have described, without a constitutional amendment. I don't see that we have a great deal to lose.

Dr. KANE. Well, it sounds to me a little like looking for courage in a bottle. You said that courage will come when Congress is ready—and the President, too—to take a tough stand on these matters: to recognize that trade-offs exist and that actions should

be avoided whose short-run benefits are not worth the obvious long-run harm worked on the economy. Only then will we get different policies.

Putting in a constitutional amendment would, of course, come across as a much more dramatic action than passing an act of Congress. Passing an act of Congress leaves open the possibility that you're going to have to show resolve again every day to make it stick.

But that's the only way that individuals do reform, is by continually reresolving that they're going to behave differently.

Senator GARN. Well, there's another point you miss in talking about the public and their attitudes for a long time, proposition 13 is going around this country. No matter where you went, the conservative mood was there. The attitudes against the big budget deficits and big government have been there. They have not been organizing an opportunity to vote. But what you're seeing happening right now happens every day in my office. Constituents will come in and say: Senator Garn, we love the way you vote. You just keep voting against those big deficits. But now we want to talk to you about the supplemental appropriation for veterans. And everybody wants everybody else's budget cut but their own. And that is something that is being missed in this conservative trend across the country.

I had a meeting in my office this morning. Boy, we think this is great. We wish we had a proposition 13 in our State. Now we want to talk to you about community mental health.

Well, there is somebody that is for every program in my State, somebody in Senator Proxmire's that thinks their portion of the Federal budget is good but everybody else's should be cut because it is wasteful.

So it isn't quite as easy as you say. The constituencies are rather demanding for their particular tiny piece of the budget.

So I'm not convinced that we are out of the area yet. I've got a proposal here: Don't cut our military base in Utah. We've got a whole bunch of very high-up people. One of the things it says in here: They hate to lose the officers club because of the tax on booze. Isn't this great. It's a whole big memorandum. I'm getting a lot of pressure to fight the closing of this one base in my State, and I'm going to take the attitude that you're going to have to prove it to me economically. If it isn't justified, then it's going to go, whether it's in my State or not.

But you cannot believe the political pressures on this budget to maintain an officers club so they can have untaxed booze. It is incredible, despite what you hear about proposition 13.

So again, we've got to have something dramatic. We've got to have something so a Senator can say: Well, I'm sorry, I would love to keep that base, I would love to fund this and I would love to fund that, but we're at the limit, we can't go any further.

I'm just maybe a little bit too politically realistic right now. But you have more trust in my colleagues than I do.

Dr. SINAI. It is difficult without some kind of rule like that backing you up, it is difficult to say that there are problems here. But I think it's easy for me to say this, because I am not now

running for election or anything like that. I think you just have to stand up and tell them exactly what you told us.

Senator GARN. Maybe if we could limit a President to one 6-year term and Senators to two 6-year terms and Congressmen to three 4-year terms and send us all home, so that we don't have to keep getting reelected. Maybe that is the ultimate budget restraint, is to turn us over.

Dr. KANE. That is one of the things we could do. Having elections every 2 years encourages stop-and-go monetary policy. To the extent that the problem is that election-year pressures force policy-makers to adopt an inappropriately short-run horizon, somewhat longer terms in office would be helpful.

However, no matter what you choose to do with the Constitution, you are still going to face pressures from your constituents to take care of their needs. People want their tax rates lower and their benefits increased. Everyone wants his or her life to become better and better. Voters know that it costs somebody for the Government to make them happier. Their goal is to get the fruit and ship the rind to someone else.

Right now the argument tends to be: Why can't we have goodies from the Government when everyone else is getting goodies, too. The question is whether we can change with an act of Congress (or even with a Constitutional amendment) the general environment in which public choices are made. Voters must learn that relying habitually on the Government for help produces not more for some people, but less for everybody.

The CHAIRMAN. Gentlemen, the hour is late, and I apologize for continuing, but there are a few more questions I would like to ask.

Two weeks ago I introduced legislation known as the Small Saver Equity Resolution of 1979. It would have the effect of directing the financial regulatory agencies to lower the minimum denomination on deposits such as the 6-month money market certificates to \$1,000 from the current \$10,000. The reason why this is so important is that savers with less than \$10,000 are being discriminated against in a very inflationary environment.

The real rate of interest on savings deposits is close to -4 percent. So the old and very young, who don't have sufficient funds to purchase floating rate instruments are stuck.

I also intend to introduce legislation to gradually phase out Regulation Q ceilings by raising them a quarter of a percentage point every 6 months for the next 10 years.

I would like to ask each of you to comment on that. Dr. Kane?

Dr. KANE. Let me begin by taking these proposals apart. First, to relax regulation Q in stages as you describe is an excellent idea. The costs to small savers of regulation Q have been obvious and unfair. The only way we will ever get rid of these ceilings is to plan a staged withdrawal, setting immutable dates for moving from one stage to the next. To provide room for affected institutions to protect themselves, it is useful to proceed in stages. In any case, regulation Q has already been extended through the end of 1980. So, you are talking about relaxation beginning in 1981?

The CHAIRMAN. That's correct.

Dr. KANE. Managers of institutions currently benefitting from reg Q would have some time before they lost the "Q crutch," time to plan how best to operate in the new environment.

Any harm a change in law might work on someone is less when they have advance notice. This occurs partly because future harm must be discounted back to present value and partly because interim adaptation can lessen the ultimate harm.

Consumers would benefit from anything that creates more effective competition for their savings. The problem of reducing the money-market certificate denomination to \$1,000 is that it would reduce discrimination only against "large" small savers. Anyone who can put aside \$1,000 for 6 months in one of these certificates has far more money than the average U.S. resident. We are still going to have our ordinary citizens—those who can put aside only a little bit of money perhaps in hopes of buying a house—having an unfairly hard time accumulating any kind of nest egg.

In short, this part of the proposal certainly moves us in the right direction, but it is a very small movement.

The CHAIRMAN. Well, would you do it or not? It seems to me that it does increase the equity.

Dr. KANE. Sure, but I would say why not take away the minimum denomination altogether?

The CHAIRMAN. Yes. But if I could I would. The question is, Will you go from \$10,000 to \$1,000? What about the people with \$10,000?

Dr. KANE. Well, I realize that this is not necessarily my function to advise you on this. But if you start with zero and make the industry try to compromise at \$1,000, you've got a lot better chance to force movement. They're going to fight \$1,000. They couldn't fight zero any harder.

I would suggest an additional provision that you might consider putting in your bill. This would be to remove as soon as possible all ceilings and minimum denominations on relatively long-savings instruments, those of 3 or more years in maturity.

The Chairman. At the same time I proposed reviewing the \$10,000 to \$1,000, I also propose that regulation Q be lifted. So the really small saver would be unlikely to buy certificates of less than \$1,000. If he puts his money in a savings deposit, then he would be able to get a better rate of interest.

Dr. KANE. I understand that. But I'm saying that even the savings and loan industry can offer very little justification for ceilings on long instruments. They should be able to pay the market rate on such funds, whose maturities are only a little shorter than the effective maturity on their mortgage assets. I think such a provision would be a wise addition to your bill.

Dr. SINAI. Those, I think, are most superb ideas on a large number of grounds. The only problem is the usury ceilings in some 18 States, which would hurt the thrift institutions. At the same time, those usury ceilings could be lifted.

The CHAIRMAN. This would be one of the elements that would help lift the usury ceilings.

Dr. SINAI. Well, I think both of those ideas are excellent on economic grounds and any way you look at it.

Dr. KANE. The industry does tend to talk a great deal about these usury ceilings, but I don't think Federal policy for the entire

Nation should be made contingent upon the action or inaction of a minority of State legislatures.

The CHAIRMAN. Well, just this week, I think, Maryland repealed their mortgage usury.

Dr. KANE. That's right. Moving toward market competition in savings deposits is forcing other State legislatures to reconsider what low ceilings on nominal interest rates mean when inflation is high.

Mr. HEINEMANN. Price controls on deposit interest rates, from my point of view—and I totally agree with my colleagues—have been counterproductive and harmful to the country. From my point of view, any way station, any progress that can be made at all along the road toward complete elimination of interest rate—of price controls on deposit interest rates is positive and beneficial. And I would really not pretend any expertise on the best legislative tactics required to accomplish that.

I think we ought to move with all deliberate speed to get rid of all controls on deposit interest rates, because I think they have not done the job. As a matter of fact, they have produced counterproductive results.

The CHAIRMAN. How about on the 6-month certificates?

Mr. HEINEMANN. I would leave the establishment of interest rates on deposits to the open market, and I would move in a phased manner, as Dr. Kane said, I would move in a phased manner toward the elimination of all Federal controls on deposit interest rates.

The CHAIRMAN. Now, Dr. Sinai in his statement said that a sustained hard line on fiscal and monetary policies without an abrupt move toward the causes, would cause deep recession. I am in general agreement with Dr. Sinai. I think the administration is prepared to follow this type of approach.

Also, Dr. Sinai, the inducements to wage earners that you referred to, are you talking about the real wage insurance?

Dr. SINAI. No, I was talking about another type of plan. But it boils down to the same thing. Real wage concerns, the type of plan that I referred to, which is, simply stated, to make payments to people to induce them to behave the way you want them to. And because the wage cost and the labor cost, et cetera, is such a large part of our inflation on the cost-push side of our inflation, that it could have dramatic effects. The real wage insurance plan itself, I would say, would not have a dramatic effect on inflation, on minimizing inflation.

The CHAIRMAN. Well, I feel very, very ambivalent about that program. I'm against mandatory controls. They worked so dismally in the Nixon period. They have not worked before in wartime. This is kind of a halfway house we've got. It would seem to me if we can't get the wage insurance, you could make a very strong case against the rest of the program.

Look what's happened to Canada. As we know, in Canada they held wages down to about 6½ percent and they had inflation of 8½ percent over the last 2 or 3 years, and now they are paying the price of that. Now they are in a position where they're going to have to settle, make their wage settlements 9 or 10 percent. It's highly inflationary.

We have the Blinder and Newton study, a Princeton study which, as you know, they made a study of the Nixon controls and found in the long run they were counterproductive, that we have a higher rate of inflation because of those controls than we would have had had we never had them.

Dr. SINAI. Well, in anything like that, in fact, in financial markets and otherwise, we get reverse effects. In retrospect, I think we'll find that some of the terrible inflation of the last 2 or 3 months is just because of the wage-price voluntary program, because it has affected the natural pattern of pricing that would have occurred.

The only way you can deal with that is to change the relative prices through taxes, as we have done in some other cases.

The CHAIRMAN. The argument that Dr. Bosworth and Dr. Kahn made to us was that what you buy when you get the controls program is a lower level of unemployment for a given rate of inflation. They feel that this—it may be marginal, but they think that it is significant, and that it'll work this time, provided you have restraining monetary and fiscal policy, and that it is going to result in a lower level of unemployment and a lower level of inflation than you would have had absent that.

Do you buy that or not?

Dr. SINAI. Well, it is so marginal that I'm not really sure. I think what it comes down to is, it will turn out to be inflationary and the wage-price program will have very little to do with it.

The CHAIRMAN. As far as you're concerned, we're just as well off with monetary and fiscal restraint, and let the rest of it go?

Dr. SINAI. Except for the carrot kind of—TIP program is different. Unfortunately, there's very little support for that, which is really what I'm alluding to, to simply pay people through the tax system so that they don't, in a sense, lose anything in their real income, to lower their wage demands, and when they do that the wage costs of business are less, the business markup of prices is less. And that kind of policy would be like an exogenous deflationary shock, instead of the inflationary shocks that have caused us so much problem.

The CHAIRMAN. That is what the wage insurance program tries to do.

Dr. SINAI. It is only very minor.

Dr. KANE. I just wanted to say that the one predictable effect that even a voluntary controls program has is to increase uncertainty in the economy. People begin to worry whether what they could do now, can still be done later.

The CHAIRMAN. So you think on the whole it is negative?

Dr. KANE. I think it is very negative. There have been cases where individuals have believed that they had better get that wage increase or price increase in now, because 1 year from now, as we get closer to the 1980 election, the Government may have a mandatory program.

The CHAIRMAN. You think the January disaster was part of that?

Dr. KANE. I would say that it is part of the explanation. I haven't any hard economic evidence by which to sort the situation out, but it is obvious that many people think this way.

The CHAIRMAN. Mr. Heinemann?

Mr. HEINEMANN. Senator, actually I would like to pass on that one. But I wondered if I might have your permission to change the subject and to insert a comment that I had wanted to make earlier in regard to the analysis I tried to present on the monetary base. And this is simply to make a very simple international analogy.

There are many reasons why price performance in Germany and Switzerland has been relatively favorable in the last few years. The performance of their currencies, the relative size of foreign trade, a lot of things have influenced it. Clearly, there is a political determination in both countries to keep prices relatively stable.

I would observe, however, that both the German and the Swiss central banks use the monetary base as their formal operating target. The complaints of the Federal Reserve that this is not a practical technique, I think, have little standing in the face of the developing evidence in some of the countries that are doing the best in terms of controlling prices.

The CHAIRMAN. Has the Bundesbank done that consistently?

Mr. HEINEMANN. Oh, yes.

The CHAIRMAN. The monetary base, not  $M_1$ ?

Mr. HEINEMANN. Yes. Their target is expressed in terms of the monetary base. They call it the central bank money stock, and they define it exactly the way we define ours.

The CHAIRMAN. And you say they have been quite successful, of course, in both countries?

Mr. HEINEMANN. Yes. Their record in hitting their monetary base targets has been uneven. The Germans substantially exceeded their monetary base target in 1978. I alluded to that in my formal statement.

Their price level has not responded to money growth above their target levels, in part because their currencies have been so strong. But they are beginning now to change monetary policy because they feel that further appreciation of the deutschmark, for example, is unlikely. They are beginning to tighten up.

I am merely speaking about the technical feasibility of using a target of this sort. That does not, dealing with the tactical issue, does not solve the long-term structural problem. It does not solve the political issue. But it does get over an important technical hurdle that I think we need to cross.

The CHAIRMAN. Well, this is very helpful. What I'm going to do is to send this, your testimony, on to the Federal Reserve and Mr. Miller and ask for their response on this, because I think it is a very helpful suggestion, so that we can get some standards we can rely on better. And it seems to have good support among your colleagues here this morning.

Dr. KANE. I think that the Fed could make an important contribution to economic stability if it were to survey regularly and carefully the inflation expectations of business and financial decisionmakers.

If they were to conduct a stratified sample survey of capital market participants as to what rates of inflation respondents expect over several different horizons, it would make it possible to employ the real interest rate as an additional index of the effect of monetary policy on economic incentives. The real interest rate

would track more closely effects on the spending and lending decisions that are featured.

The CHAIRMAN. Real interest rate? The difficulty, you see—the real interest rate, it would seem to me, would depend upon the estimate of the investor as to what inflation is going to be during the life of the security that he is buying. So there's a short-term rate—that he might estimate what the inflation is going to be during that period. If it's a long-term rate, it's going to make a different estimate. And those estimates are so subjective, so varying. And, as Dr. Sinai pointed out—in the article referred to, in *Business Week*—so erratic, and when you have a sudden inflation, it is sometimes negative.

And I think you pointed out that they were negative for mortgages in the 1974 period, that it is a little hard to rely on that as a useful index.

Dr. KANE. One of the problems we have is, as you say, to discover what these decisionmakers are thinking. There is some variation in that thinking, but through survey techniques we could obtain an additional supplementary measure of what expected inflation rates actually apply. My analysis is that right now there is a tendency for policymakers to focus on nominal interest rates and not always to factor in how anticipated inflation may be eroding the apparent impact of monetary policy. But we need better measurements, and I think this would be one way to get it.

The CHAIRMAN. I have one final question, and each of you gentlemen might take a crack at it.

The report we received from the Federal Reserve, is the first under the new requirements imposed by the Humphrey-Hawkins Act. In many ways we've had improvements, which we will know more about the new process in July when the second report, for the year 1979, is presented.

I am disappointed that the Fed did not lay out the assumptions underlying the monetary and credit aggregate targets; and also to discuss in more detail the relationship between the intended monetary policies and the administration's goals, the Fed did not give its view of the output price mix or indicate how its policies relate to the 1980 goals, as the act requires.

I would like to get your reaction—and we will start with Mr. Kane—to the Federal Reserve's report and any suggestions you would have for improvement in that report for the future.

Dr. KANE. Well, I did not get the report until very late last night. I have been traveling this week and, as you know, heavy snows slowed the mails throughout the East.

If one looks through the report as if one were a book reviewer, one's first reaction is that editorial space and emphasis are badly misallocated. The bulk of the report is designed to provide a summary discussion of economic events in the recent past.

The CHAIRMAN. If you go to page 53, I think that's—you have to go until there, till you get to talk of the future.

Dr. KANE. Right. At that point, they cite a quote from your act, and turn to discuss, very quickly, what they have decided to do. From the point of view of congressional oversight, some passages struck me as particularly distressing. At one point they proceeded from the standpoint—on page 57, line 7—that it is possible that

various things would happen. Such reasoning makes it very hard for a reader to evaluate their thinking. I don't think they should focus on mere "possibilities." They should talk about "probabilities" and give us some notions of how they assess the probabilities.

All in all, it is a fairly impenetrable presentation. It is written in code. One has to have an awful lot of outside knowledge to translate the presentation into meaningful statements.

Despite all they tell us about the economy, they don't tell us enough about how their policies are made, how they change their policies to deal with shortfalls in macroeconomic goals or what trade-off they are prepared to strike between shortfalls on individual goals. That is surely the sort of information Congress envisioned when it drafted this legislation.

The CHAIRMAN. Dr. Sinai.

Dr. SINAI. I'm sorry, I haven't got a copy. I would be happy to respond later in writing.

The CHAIRMAN. Fine. If you would do that when you correct your remarks, if you would give us in writing your reaction, that would be very helpful; and we will look forward to that.

Dr. KANE. Could I do that, too? That would be my corrected version.

The CHAIRMAN. Yes, indeed.

[Dr. Kane submitted the following information for the record:]

I have already commented on Chapter 1. Probably the most remarkable change in the document is the sharply lower range of growth rates targeted for  $M_1$  in Chapter 2. This is, I believe, the first time that the FOMC has changed the upper and lower endpoints of one of its target ranges by more than half a point. On page 58, this change is presented as merely incorporating an uncertain staff projection of shifts in  $M_1$  growth due to ATS and NOW accounts. We are warned (on page 56) that the Fed may adjust the range as information on the growth of these new accounts develops.

This exegesis gives the Fed complete flexibility on the  $M_1$  front.

The chapter goes on to suggest that the other conventional aggregates may give misleading signals as to the thrust of Fed policy, too. These explanations serve to fuzz up any policy commitment that the selected range of growth rates might otherwise have conveyed to your Committee.

Chapter 3 (the shortest of the lot) is potentially the most interesting section, but the analysis the Fed provides does not truly reconcile its policy plans with the President's short-term economic goals. The text does tell us that the Fed considers the Administration's inflation and unemployment forecasts to be excessively optimistic. Keeping this in mind, the report's last paragraph tells us that the Fed is prepared to accept additional unemployment in fiscal 1980 to restrain inflation. It would, of course, be helpful to know just how much unemployment the Fed expects to trade for what degree of improvement in the inflation rate.

Mr. HEINEMANN. I, too, received it late yesterday afternoon, and I've only general comments. And the comments I would make would be those that would apply in general, and not simply to this specific document.

The recent performance of monetary policy, in my judgment, is not set forth in relevant terms. I think that monetary policy needs to be described by the Central Bank in terms of what technically would be the second derivative, the change in the rate of change of monetary growth. I think it needs to be stated in that way, in a consistent manner through time.

We need to have an explicit recognition by the Central Bank that, in fact, there has been a major acceleration in monetary growth during this business cycle which they are now finally start-

ing to do something about. I think we need to look at measures of monetary change within a relevant framework.

I think that the way in which the Fed has chosen to do this—to develop Professor Kane's theme—is really written in code. It is designed to present a moving target that is very hard to hit. That really was the strategy, I think, in the rolling target, reset every 3 months, that we got beginning in April of 1975.

I think, in terms of policy implementation, we ought to see some explicit language describing just exactly how fast bank reserves are expected to grow, consistent with the monetary growth which the Fed wants to achieve.

The Fed does not control, directly, the monetary aggregates. It does control, directly, the reserve base, the monetary base of the banking system.

I think we need to see some explicit forecasts of the behavior of the money multiplier. There is a great deal of quite sophisticated work being done, for example, at Michigan State University on the whole issue of forecasting the relationship between monetary base and the money supply—the way changing public portfolio preferences about the form in which money is held interact with what the Fed does to the monetary base to produce the ultimate monetary aggregate growth rate.

I think there could be a great deal more specificity in this document in terms of where the Fed is going, how they're going to get there. I think the issue of how they get there, how they progress along the road they propose to take, is a highly relevant issue.

If the signposts—if the description of the scenery is no good, we really don't know what they're doing.

The CHAIRMAN. This is a most helpful answer, but I'm not sure I understand when you say they should describe how they're going to get there.

Now, they've indicated that a considerable change in their  $M_1$  rate of increase—

Mr. HEINEMANN. By how they want to get there.

The Federal Open Market Committee today gives an operating instruction to the Federal Reserve Bank of New York that has meaning, in day-to-day terms, only in one respect.

Mr. Alan Holmes, who is Executive Vice President of the Federal Reserve Bank, is told to maintain the Federal funds rate at a particular level. That's the only thing that he's told to do that he can do on a day-to-day basis.

The Fed, for I think good and sufficient reasons, doesn't want to forecast what that interest rate target is going to be; and I perhaps might differ with some of my monetarist colleagues about the desirability of disclosing that rate target. I think that rate target ought not to be disclosed. We shouldn't have any rate target at all.

When I talk about the road going forward, I am speaking in terms of the path expected for the monetary base, the path expected for bank reserves, and the anticipated relationship between those aggregates which the Fed can control directly in its day-to-day operations and the desired rate of change in the money supply, defined in a variety of different ways.

There is no reason for the Congress or the country to pick  $M_1$ , or  $M_2$ , or  $M_3$ —we can all have all of the flavors. It is the way they

behave in concert, over time, that's going to give us a consistent pattern which will suggest whether we have increased monetary stimulus, or a stable policy, or increased restraint.

The CHAIRMAN. Well, would this give us a picture of how they would expect monetary policy to achieve the unemployment target and the inflation target?

Mr. HEINEMANN. This is one step beyond. I'm talking only about the relationship—in the narrow, technical, operating sense—between what they do from day to day in the open market and how that is going to be translated into a particular kind of monetary control.

The CHAIRMAN. To apply to the Humphrey-Hawkins Act and make it meaningful to the Congress and the public.

Mr. HEINEMANN. The next set of assumptions has to be an analysis, really, of the velocity of income, if you will, of the kind of spending that's going to result. There's a mix between consumption and investment goods, the working out of their forecast. Certainly, that would fully specify the report in terms of what I would read, as a casual observer, to be the intent of the Humphrey-Hawkins legislation.

The CHAIRMAN. That's a very fine answer. I appreciate it.

And I want to thank you gentlemen so very much for your fine testimony. This is one of the best panels we've had in a long, long time. It's most constructive and thoughtful, and we're in your debt. You have made a fine record.

[Whereupon, at 12:35 p.m., the hearing was adjourned.]

[Additional material received for the record follows:]

STATEMENT  
OF THE  
NATIONAL RETIRED TEACHERS ASSOCIATION  
AND THE  
AMERICAN ASSOCIATION OF RETIRED PERSONS

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The Associations and the Elderly

The National Retired Teachers Association and the American Association of Retired Persons have a membership in excess of 12 million persons. This is a significant portion of an elderly population that is increasing very rapidly. In 1950 there were 18.5 million persons age 60 and over. By the year 2000, there will be 40.6 million.

The 75 and over segment of the elderly population is increasing even faster. In 1950, there were only 3.9 million persons in that age category. But by the year 2000, there will be about 13.5 million - 3 1/2 times more than there were in 1950.

The Associations have been leading proponents of the idea that the elderly should, to the extent possible, be encouraged to remain productive and useful members of our society. We feel that the proportion of the elderly who are working is much too small; only 1 out of 5 men and only 1 out of 12 women 65 years of age and older are now working. But even if this proportion is significantly increased (as it must be if the elderly are to enjoy a reasonably adequate

standard of living in the future), the majority of the elderly will be either fully retired or working only part-time. Thus savings and private and public pensions will continue to be the primary sources of income for most persons in their later years of life.

Yet these primary income sources are seriously threatened. The rapid decline in the value of the dollar during the past decade has drained away a significant portion of the income of many of the elderly in real terms. Our Associations are convinced that the monetary policy pursued during this period was a major contributor to the weakening of the dollar and the price inflation that account for that loss.

Congress has the power to promote long range monetary policies that would gradually reduce the currently high (and rising) level of inflation. Regretably, much time has already been lost. There has been a refusal over the past decade to face the fact that the money supply has been excessively expanded year-after-year. The lack of discipline in controlling the expansion of money has been obscured by much discussion of the details of money markets and

general macroeconomic objectives, and by an increasing acceptance of the idea that "money does not matter".

The levels of persistent ("hard core") inflation have been rising over the past decade. For this phenomena there is no single or simple explanation; yet too often academic and government economists have attributed it to "exogenous" shocks of various kinds, which the economy cannot shake off or to a number of microeconomic factors (the majority of which have long been in existence but failed to raise the rates of inflation significantly before the 1970's).

#### The 1970's: Economics in Disarray

The 1950's and the 1960's were years of rapid and sustained real wage and economic growth in this country. In contrast, the years of the 1970's afford little comfort to any sector of the economy. The decade began with prices tending to rise so fast that mandatory controls on wages and prices became a component of the economic stabilization policy of the U.S. Government (August 1971 to April 1974). This experiment was followed by accelerated inflation: in 1974 prices increased at an 11 percent rate in the United States and at even higher rates abroad. In late 1974 and early 1975 the deepest recession of the post-war period set in. While the rate of inflation moderated, it still remain-

ed high but was now accompanied by high rates of unemployment. The conjunction of these two factors, formerly thought to be largely mutually exclusive, led to the popularization of the word "stagflation".

The economic recovery, which began in 1975, has been long and is continuing. However it has been marked by declining productivity, declining rates of investment and stabilized unemployment levels that are relatively high (between 6 and 7 percent). In addition, the annual inflation rates have been high and persistent. Because of the sustained inflation levels more and more families have found it necessary to have both husband and wife working to attain any significant increase in living standard or just to maintain what they already had. Real wages have risen little if any during the 1970's. For the elderly living on relatively fixed income - and especially for the elderly middle class - these years have been a disaster.

Economic disarray has not been confined to this country. Stagflation has become endemic in many of the older, industrial countries. However, although prices have been rising abroad, the United States has found that it has been losing its ability to compete with many of the products of foreign industry like steel, electronic equipment and textiles.

It can be argued, with some force, that much of the economic disarray on the international scene dates from the August 15, 1971 suspension of the convertibility of the dollar into gold for international settlements. This, in effect, ended the Bretton Woods agreement under which exchange parities between currencies had been fixed and during the life of which post-war trade had flourished.

The second devaluation of the dollar (February 12, 1973) suspended the Smithsonian Agreement. This was the death knell of any serious attempt, on a world-wide basis, to reestablish fixed parities among the major currencies. Since the collapse of this agreement, international conferences have brought little order to the international monetary scene. As the currency of the dominant free-world power, however, the U.S. dollar continues to be the reserve currency of most countries and provides much of the liquidity needed for international transactions.

Unfortunately, the dollar has continued to decline in value against such major currencies as the German mark, the Japanese yen and the Swiss franc. Unless the U.S. begins to pursue tough anti-inflation policies, this decline is likely to continue, contributing further to instability abroad and exacerbating inflation at home.

There have been many who have felt that the U.S. dollar has been undervalued and that the falling value of the dollar in the foreign exchange markets should be treated with "benign neglect". However, as long as foreigners see U.S. productivity declining, inflation running apparently out of control and the U.S. money supply expanding too briskly, they are likely to continue to discount the dollar.

The dollar's abrupt decline in the foreign exchange markets during 1977 and 1978 prompted the government's rescue attempt last November. But while the government's intervention in the exchange markets has halted the slide in the dollar's value, this type of intervention - as the British found in their many post-war attempts to support the pound sterling - is only a palliative. The attack on the dollar will cease when we mend our economic ways and that entails a "disciplining" of money supply expansion.

Also in the 1970's an important change has occurred with respect to this country's balance of payments. Not only have trade deficits appeared, but they are persistent and increasing in size. During 1977 the deficit was \$26.7 billion. This was four times larger than the previous 1972 record and demonstrates how far we have drifted from

the trade surplus situation which prevailed prior to 1971. The problem is not just due to the cost of energy imports (now running in excess of \$40 billion) but also to an increasing trade deficit in manufactured goods. The international competitive environment has changed; several countries (notably Japan) have become more productive and innovative in manufacturing than we have and the governments of those countries support their exports trade more aggressively than we do.

If it seems that we are unfairly painting the decade of the 1970's as chaotic in the United States (and abroad), we would point out that the 1978 "Economic Report of the President" carried a detailed discussion of the "Origins of the Current World Economic Disorder." Cited as the principal sources of disorder were prolonged inflation, rising unemployment and large current account imbalances. While the report cites the strong expansionary policies existing everywhere in 1972, the rising rates of inflation were attributed to non-monetary factors: the demand for raw materials and grains during the early years of the decade, OPEC's quadrupling of crude oil prices in 1973, and the wage/price momentum which had become institutionalized in the economies of many industrialized states. The Council of Economic Advisors, which prepared the report, has, in our view, however underestimated the contribution that overly expansive monetary policy has made to the economic instability of the 1970's.

In an October, 1978 Boston interview the well-known Cambridge economist, Joan Robinson, spoke of the capitalist world's arriving at a deep crisis, with the foundations of its economies shaking loose. She thought that the capitalist world was up against the limits of its resources, with no easy way out of the mess. Americans, she said, were "bastard Keynesians" in that they believe that the capitalist economies were essentially stable and that government spending could bring unending growth and prosperity.

During the 1950's and early 1960's, this country experienced unparalleled prosperity. If the foundations are now coming apart, perhaps it is because we have tried to follow Keynesian economic prescriptions too closely since the mid-1960's. According to this school of economics, it is not enough to give counter-cyclical fiscal help; the economy must be perpetually fine-tuned. An emphasizing of income stream manipulation has lead to a deemphasizing of money value stabilization. Increasingly, the value of money has ceased to matter.

In fact, however, money matters a great deal in a capitalist society (and to the elderly in such a society). If money is not reasonably stable, savings, investment, and enterprise are at a disadvantage. If money becomes highly unstable, substitutes must be found, or industry will grind to a walk.

Restoring Economic Order

The Associations believe that a fundamental (but by no means the only) cause of the economic disorder of the 1970's had been the lack of stability of the dollar. If economic order is to be restored in the 1980's the dollar must be stabilized in a dynamic sense by assuring that over the long run the rate of growth in the money supply is tied to the rate of growth in real (non-inflationary) Gross National Product (GNP). The Council of Economic Advisors should set real GNP growth rate targets for five year periods. These targets and the statistics that accumulate during the period should be forwarded to the appropriate Congressional Committees so that long term plans for the money supply as proposed by the Federal Reserve, can be closely coordinated.

Because present law requires the Federal Reserve Board to submit a statement of its policy only for the one year period for which the report is written, the scope of the policy in terms of the time period covered is much too short. What we are proposing is a five year plan, which will, of course, be subject to annual review and adjustments. We think a plan of this length is needed so that the rate of expansion of the money supply, to the extent it exceeds the rate of real GNP growth, can be brought down gradually and systematically,

without generating a serious recession.

The rationale for our proposal is this. The country's economic machine will apparently be capable of only an annual real growth rate of between 2 and 3 1/2 per cent during the coming years. Therefore the money supply growth rate ought to be brought down gradually to this same range. Obviously, the monetary expansion policy we call for is quite the opposite of what has been pursued in the recent past.

A simple comparison between the growth of M1 money stock and the growth of real GNP reveals that in the first two decades after World War II M1 grew at a slower rate than real GNP. However, for the 9 years from 1967 through 1976, real GNP grew at an annual rate of only 2.6, while the money stock grew at a 5.8 per cent annual rate. In the following pages we cite much refined analysis of post-war money supply growth to support what appears from a superficial examination of the data - money stock growth rates have become so high that they are supporting elevated rates of inflation.

We recognize that enabling legislation would be needed to carry out our proposal for gradually reducing the money supply growth rate and ultimately coordinating that growth rate with the real GNP growth rate planned over a five year period. Immediately, however, the Federal Reserve Board can

<sup>1</sup> See Table I in Appendix, p.

commence a phased reduction in the money supply growth rate. without any new legislation. The Banking Committees ought to use the consultation process with respect to the monetary policy proposals (that the Federal Reserve Board must present each year under last year's Humphrey-Hawkins legislation) to make sure such a gradual reduction is undertaken.

#### A Phased Reduction in the Growth of Money Stock

If any significant progress toward price stability is to be made, the uncharacteristically high M1 growth rates of the 1970's must be substantially lowered. To avoid a serious recession, the reduction should be at a steady rate, phased in over a period of years.

A careful econometric examination of the possibilities of this approach was made by Peter I. Berman, recently a senior economist with The Conference Board.<sup>2</sup> Dr. Berman investigated the usefulness of a number of measurements but determined upon the M1 money stock for his final, econometric model, about

<sup>2</sup> P. Berman, Inflation and the Money Supply in the United States, 1956-1977 (1978).

which he had this to say:

"The correct specification for the M1 model is a stable 10 quarter distributed lag with uniformly sized weights. Since 1956, this model explains about 70 per cent of the variability in inflation. For the 1963-1971 period R2 increases to 80 per cent and the normally distributed residuals imply that, stochastically, money growth completely explains inflation, i.e. the real sector price effects are adequately captured in the trend term."<sup>3</sup>

Mr. Berman assessed the effects of increases in the M1 money stock as follows: "....a permanently maintained 1 per cent increase in M1 growth will eventually increase inflation by 1.4 percentage points provided there is no change in the net influence of the real sector on the price level. By inference, the quantity theory may not hold in the near term."<sup>4</sup>

The value of the model of course must be based on its ability to forecast. On this subject Dr. Berman had the following to say:

"An out-of-sample forward simulation beginning in mid-1971 gives impressive forecasts. For 1976 and 1977, the average forecast error is only 0.5 percentage point, and the forecast errors do not show any sign of progressive deterioration. ....Only one quarter 1977/2 has a forecast error exceeding two standard errors, 1.6 percentage points. At the very least, the M1 model is a useful forecasting tool."<sup>5</sup>

<sup>3</sup> Id. at 6.

<sup>4</sup> Id.

<sup>5</sup> Id.

According to Berman, a phased reduction of 1 per cent a year in the M1 growth rate would reduce inflation by about 4.5 per cent over a five year period. A 1-1/2 per cent a year reduction would reduce inflation by 4 per cent over a 4 year period. A 2 per cent a year reduction - a "crash" program - would reduce inflation by 4-1/2 per cent in 3 years.<sup>6</sup>

The Associations would be satisfied with any phase-down program (like the ones cited in the above paragraph) that could be adopted without generating a major recession. Because of changes in banking practices, M1 may have to be redefined; M2 might be a better aggregate to serve as a standard for the phase-down. The main thing, as we see it, is to slow down the growth of the money stock in a gradual and systematic fashion. This recommendation calls for a gradual slowing of the money supply growth rate until it is brought into line with the rate of growth in real GNP. This recommendation also requires that GNP be targeted for monetary policy purposes. In other words, the target GNP real rate of growth figures must not be made so large that more inflation is promoted.

<sup>6</sup> Id. at 120.

Recommendations that monetary policy focus on planned money stock growth over a five-year period and that the size of the money stock be disciplined in accordance with the needs of an expanding (or contracting) real GNP are recommendations which represent substantial change from monetary policy as practiced in the past. The proposed policy would be focused on changes in monetary aggregates rather than on changes in interest rates. We think such a shift in focus is called for. The fact is that the dollar is now an inconvertible paper currency. Thus, we cannot afford to continue to give in to popular demands for cheap money and abundant supplies of money because this makes the growth of the money supply, and the inflation such growth facilitates, a secondary consideration for the central bank.

#### A Stable Economy vs. Stable Money Markets

With the adoption of House Concurrent Resolution 133 on March 24, 1975, the Congress began to emphasize the importance of money stock aggregates, requiring the Federal Reserve Board to propose ranges of growth of monetary aggregates for a twelve month forward period. Historically, however, the primary objective of central bankers including our own Federal Reserve has been to keep "the financial structure on an even keel" and the ideal situation for them has been financial

stability, with interest rates stabilized.

Our objection to having interest rate stability as the primary focus of monetary policy is that supplies of bank credit and money become determined by the demand for them. Because changes in money supply are induced by changes in private demands for money and credit, a rate stabilizing policy results in money supply changes which tend to amplify business fluctuations, rather than countering them. Expanding the money supply in order to moderate increases in interest rates is effected at the cost of increasing price inflation. The correct approach it seems to us, is to keep the money supply growing at a relatively steady rate in accordance with the needs of an expanding or declining real GNP. Interest rate fluctuations should then be no cause of great concern, since they would not be indicators of either an excessively deflationary or an excessively inflationary policy. The history of the monetary policy of the 1970's - a disaster in terms of its inflationary consequences - has led us to conclude that pre-occupation with interest rates as the primary guide for monetary policy is just not the correct course to follow.

Because this country has had a history of low inflation rates, we are only now beginning to appreciate the significance

of the inflation premium that is being added to real interest costs. Expanding the money supply to keep down interest rates only yields temporary success; lenders soon perceive that they will be paid back in a devalued dollar and thus must include an inflation premium in their rate of interest. The long-term result is a rise in interest rates. An expansionary monetary policy to keep interest rates down will, if it contributes to more inflation, lead to even higher interest rates in the future.

Reducing the Money Stock Growth Rate: Will It Bring on a Recession?

We have proposed a phased reduction in the rate of growth of the money stock over a period of years to bring it into line with real GNP growth rates. One question that will be raised is whether or not this course of action will eventually produce a recession. We think it will not. A gradual slowing of the money stock growth rate has not produced recessions in the past. As the chart in the appendix on page 34 indicates, the gradual money stock growth rate reductions that occurred in 1955, 1962, 1965, 1971 and 1976 did not spawn recessions. Only when the reductions were very sharp, as they were in 1959, 1969 and 1973, did they tend to

bring on recessions.

A sharp reduction in growth rates will not be needed and a serious recession can be avoided if a phased and systematic reduction is pursued in the years immediately ahead. The sharp reduction in money stock growth rates in the 4th quarter of 1978 and the 1st quarter of 1979 is likely to provoke a recession, if continued into the 2nd quarter of 1979. This abrupt restraining of money supply growth might not have been needed if monetary policy had been oriented since 1976 to steady growth, rather than to interest rate stability.

Since the last quarter of 1976, when M1 grew at a rate of 7.7 per cent on an annual basis, and up until the last quarter of 1978 when the present restraint began, the M1 growth rate has dipped below 7 per cent only once - during the 1st quarter of 1978. These high and sustained growth rates have virtually institutionalized inflation in the 6 to 8 per cent a year range.

#### Monetary Policy for 1979

This Committee has responsibility for reconciling

the short term goals of the President's Economic Report with the short term goals and targets of the Federal Reserve Board and its Open Market Committee. The Committee will be receiving proposals for various ranges for the monetary aggregates from the Board for the coming quarters and proposals for interest rates to be established for Federal Funds. We hope the Committee agrees with one of the main points of this statement: the Federal Reserve system cannot, at this juncture, adequately control both monetary aggregates and interest rates; if the focus is on interest rate stabilization, control of money stock growth will be sacrificed; if the focus is on the monetary aggregates, interest rates will fluctuate. Our recommendation is to abandon the past emphasis on interest rate stabilization and concentrate instead on control of money stock growth in the context of a long range - preferably 5 year - plan.

It follows from our recommendation that we believe the Committee should relate the proposals of the Federal Reserve Board for the control of monetary aggregates to the expected growth of real GNP for the coming years. The President's January 25, Economic Report has estimated the real GNP will grow at a rate of only 2 1/4 per cent during calendar year 1979. This is optimistic when compared to the - 0.1 to 1.9 per cent real GNP growth rate which the Congressional Budget Office projects for the period 1978:4 to 1979:4. The CBO

estimates real GNP growth for 1979:4 to 1980:4 in the range of 2.7 to 4.7 per cent. While the Economic Report speaks of monetary restraint, there are no specifications whatsoever for restraint under the discussion of "Policies to Control Inflation." This failure to be specific about monetary restraint by relating money stock to the needs of the economy as measured by real GNP is puzzling. Could it be the Administration has failed to recognize the connection between the economic disorder of the 1970's and the undisciplined expansion of the U.S. money supply?

It appears that an annual four percent real economic growth rate is not attainable in the immediate future. Declining investment, declining productivity, rising energy costs and other factors appear to preclude that. Politicized goals for real GNP growth cannot be trusted as a gauge for the expansion of the money supply. The Wharton School's econometric projection of real growth in GNP for the 5 years ending with 1985 is an annual average rate of 3.2 per cent. As a long range goal, we think an average annual rate of growth in the money stock of 3 per cent would be appropriate and non-inflationary. However, we ought to move toward this optimum growth rate over a period of years to avoid bringing

on a severe recession by decelerating to quickly from the very rapid growth rates of the recent past.

For simplicity we are specifying our plan for reducing money stock growth in terms of M1. Nevertheless we recognize that changes in the ways banks and thrift institutions handle accounts may make it necessary to restate the resulting M1 stock aggregates in nominal currency. If so, the Federal Reserve Board is fully capable of making such a re-statement. Alternatively, the Federal Reserve might wish to use another aggregate such as M2. But the objective is to arrive, in a systematic manner at the end of a period of years at a money supply rate of expansion that is no greater than the rate of growth of real GNP.

The phased reduction that we propose would proceed in accordance with the following schedule.

<u>Year</u>	<u>Ave. M1 Money Stock Growth 4 Quarters</u>
1979	6%
1980	5%
1981	4%
1982	3%

If this schedule does not reduce the inflation rate to 2 per cent a year, a further reduction in the growth of money stock

could be made in 1983, so that annual inflation is reduced to this rate.<sup>7</sup>

The adoption by Congress and the Federal Reserve system of a disciplined method for controlling the expansion of the money stock should begin to dampen inflationary expectations immediately. The world will be put on notice that this country intends to defend the value of the dollar on a long range basis. Persistent, elevated rates of inflation should gradually fall. Vigor should be restored to our capital markets, both in equity offerings and in fixed securities, since lenders will be able to calculate real long range returns with reasonable accuracy. New enterprise should be promoted with the elimination of the uncertainties affecting the return on investment created by fluctuating, elevated rates of inflation. The return of relative stability to the dollar should eliminate the enormous inflationary burdens that the social security system would otherwise have to bear. Finally, the growing elderly population should be better able to sustain themselves through savings.

#### Employment and Inflation

We know the Committee will be reviewing short term monetary policy against the economic goals set forth in

<sup>7</sup> P. Berman, *supra* note 1, at 14, 20

The Full Employment and Balanced Growth Act of 1978. The Associations have expressed on many occasions our support for counter-cyclical action by the Federal Government to promote employment and business activity during the declining phase of the business cycle. However, we are much opposed to the Federal Government's pursuit of stimulative monetary and fiscal policies as full employment is approached. We believe that the pursuit of stimulative policies in both good economic times and bad has been another major factor contributing to the lifting of the inflation rate levels. The Federal Reserve system has found itself obliged during recent quarters to try and brake the inflation rate which has once again risen to double digit levels by freezing the expansion of the money stock and by raising the Federal Funds rate to very high levels. This action is certain to promote uncertainties of all kinds in the business community and to induce a severe recession if continued.

We hope the Committee will agree with the point of view of our testimony that monetary policy ought not to be used to expedite short term economic goals but instead should focus on the long term goal of expanding the money supply in accordance with the rate of expansion of real GNP.

Because many researchers have found that the money supply tends to act slowly on prices and business activity, monetary policies should not be changed on an ad hoc basis from quarter-to-quarter or even from year-to-year; underlying all changes in policy should be sound long range planning. The failure to follow a long range policy of expansion has made for stop-and-go policies (even during the present economic recovery) that have had damaging effects on employment and on the rate of persistent inflation.

The Humphrey-Hawkins bill was intended, in the eyes of some of its sponsors, to be a blueprint for economic action by the Federal Government. However, not only do we consider its goals to be rather "dated", but we have also found that the methods of control implied by the bill - fine-tuning of the economy - work poorly as evidenced by the results of the past decade. Full employment goals in the 3 to 4 per cent range fail to take account of important changes in the working population. Phillip Cagan of the American Enterprise Institute has estimated that full employment at which inflation neither increases nor decreases is somewhere between 5.9 and 6.3 per cent. We believe that the goals of full employment and low inflation for the United States can best

be promoted by stabilizing the value of the dollar by methods we have outlined in the previous paragraphs.

Money: The Quantity Matters

The thesis of our statement is that the quantity of money issued by government is an important determinant of the exchange value of that money and to stabilize its value, long range monetary policy should center on a planned expansion of the money stock in accordance with the expansion (or contraction) of GNP in real terms.

While we have referred to certain studies in previous paragraphs, we would like to conclude our statement with descriptions of two more, one by the Federal Reserve Bank of St. Louis, and one by the Brookings Institute. Both find a close association between money supply expansion rates and rising price levels. However, before proceeding to these, we would like to refer to an older study of great depth, which was done by Milton Friedman and Anna Jacobson Schwartz, The Monetary History of the United States 1867-1960. One of their most important findings is summarized in the following quotation from that study:

"Throughout the near-century examined in detail we have found that:

1. Changes in the behavior of money stock have been closely associated with changes in economic activity, money income and prices.
2. The interrelation between monetary and economic changes has been highly stable.
3. Monetary changes have often had an independent origin; they have not been simply a reflection of changes in economic activity."

Although it is nearly twenty years since these conclusions were formulated, we have no reason to believe that they are other than fundamentally sound. In saying this we are not trying to make money stability the touch-stone of economic prosperity. We are simply affirming again that money changes - which are long range in their effect on economic activity and on prices - are important - so important that they must be made according to a long range plan. We simply can no longer afford "stop-and-go" monetary policies or policies that shift with the political winds.

#### Monetary Growth and Prices

A December 1978 study by the Federal Reserve Bank of St. Louis demonstrated that there is a simple monetary guide to the rate of inflation: the rate of change in prices over the next year will be about equal to the average rate of growth of the money stock over the previous five years.<sup>7</sup>

<sup>7</sup> Albert E. Burger "Is Inflation All Due to Money?", Bulletin of the Federal Reserve Bank of St. Louis (December 1978).

As shown in Table II of the appendix (page 33), over the nineteen year period 1953-71 the average difference between the actual rate of inflation and the rate indicated by the past rate of monetary expansion was only 0.2 of a percentage point. In two-thirds of the years the error in the predicted rate was 0.5 of a percentage point or less. It was found that although prices oscillated around the trend rate on a quarter-to-quarter basis, the rate of change of prices returned consistently to that dictated by the rate of monetary expansion.

Also during this period it was found that the five-year trend in the growth of money accurately indicated changes in the year-to-year rate of inflation, up or down. For example, as the trend in the growth of the money slowed in the period 1958-63 the rate of inflation slowed down. Over the next eight years the trend in the growth of money accelerated steadily from around 2 per cent a year to 5 per cent and this corresponded with a rise in the annual inflation rate from, 2 to 5 per cent.

Over the short run the level of prices may be strongly influenced by factors other than the trend in the growth of the money supply. However, after the effects of the non-monetary factors (frequently described as shocks) have been absorbed into the economy the level of prices tends to revert

to the trends indicated by the past growth in the money supply. Table II shows that prices in 1974 and 1975 rose far higher than what would be indicated by the past five-year growth in the money supply. The shocks that raised prices over the trend lines were the two separate dollar devaluations of 1973, which raised the costs of imports in the following years, the worldwide food shortages of 1973 and 1974, the four-fold increase in world crude oil prices dating back to mid-1973, and raw material shortages. Price levels in those two years were probably also boosted by widespread expectations of inflation. But in 1976 and 1977 the inflation rates reverted to those indicated by past growth in the money supply; the 1977 inflation rate of 5.9 per cent was only 0.1 percentage points off target.

We do not cite this study as proof that there is a mathematically verifiable relationship between the level of prices and the growth of the money supply; it remains possible that other factors could account for the apparent relationship between price levels and past money supply growth rates. However, elaborate econometric models of the economy have been failing to forecast the rate of inflation with reasonable accuracy since the rates began to accelerate in the late

sixties. The money stock method for predicting inflation rates ought at least to be deemed a useful tool. In addition, it raises the possibility that more elaborate demonstrations may prove a casual relationship between money supply changes and changes in the rates of inflation.

#### World Inflation and Monetary Accommodation

An important econometric study of the sources of inflation in this country and several other industrial countries was described in the "Brookings Papers on Economic Activity, 2: 1977."<sup>8</sup> The Report was supervised by Robert J. Gordon of Northwestern University. The research was supported by the National Science Foundation. The period analyzed covered the years 1958 to 1976.

The major alternative explanations for the acceleration in the rate of inflation since 1965 and the advent of world wide inflation have been monetary expansion, (an increase attributable primarily to the excessively expansionary monetary policy of the United States) and wage-push inflation, promoted by the strength of labor unions. The paper assumes that in the long run inflation is a monetary phenomenon, confirmed by many studies on the connection between the growth

<sup>8</sup> R. Gordon, "World Inflation and Monetary Accommodation in Eight Countries", Brookings Papers on Economic Activity (1977).

of world money and prices. However, this is to be regarded as an initial step in the understanding of the inflation process, because the sources of change in the money supply remain to be explained. In other words, we may correlate world prices and money but we do not rule out wage-push as a source of world monetary growth. We ought not to regard the behavior of the monetary authorities and wage-push factors as competitive explanations for inflation, because the monetary authorities may be expanding the money supply to accommodate wage-push and other causal factors like fiscal deficits, supply shocks and the counter-cyclical monetary reaction function. Thus, if we are analyzing why the monetary authorities are expanding the money supply at certain rates, we must investigate the various factors that may be affecting their judgement. The reason that wage-push factor assumes so much importance is that central bank must - for political reasons - expand the money supply so that it is adequate to ratify any given level of money wages, regardless of how the wage levels are determined. If they fail to do so, excessive unemployment may be the consequence.

Econometric analysis of the relative importance of the various sources of inflation is a difficult task. The results

- 30 -

of the study can only be accepted with reservations. Nevertheless, the study is solid in one respect: the growth of the money supply was found to be a critical factor in determining the inflation rate and control of money supply growth was found to be essential to control of inflation. The importance of this conclusion is such that we quote this particular summation as set forth in the study.

"Is the control of the money supply sufficient to control inflation?" Money growth has a significantly positive impact on wage growth in four major countries making up 72 per cent of the 1976 GNP of the eight countries considered here. Not only does this tend to deny the contention of some wage-push proponents that wage claims are numbers "picked out of thin air," but it also supports the international-monetarist position that control of world monetary growth is a crucial requirement in the determination of the world inflation rate. A qualification is that in the remaining four countries the effect of money on wages is weak or nonexistent. A further qualification is that the estimated elasticity of wages with respect to money is small, and that of prices with respect to money is smaller still. Finally, this effect of money on prices apparently operates in conjunction with the effect of money on output."

## APPENDIX

TABLE I

POST-WORLD WAR II TRENDS IN NOMINAL AND REAL GROSS NATIONAL PRODUCT AND IN MONEY STOCK (M1 AGGREGATE) 1947/1977

(All figures in Billions)

Year	Nominal GNP	Money Stock M1 Aggregate	Real GNP in 1972 Dollars
1947	\$232.8	\$113.1	\$468.3
1948	259.1	111.5	487.7
1949	258.0	111.2	490.7
1950	286.2	116.2	533.5
1951	330.2	122.7	576.5
1952	347.2	127.4	598.5
1953	366.1	128.8	621.8
1954	366.3	132.3	613.7
1955	399.3	135.2	654.8
1956	420.7	136.9	668.8
1957	442.8	135.9	680.9
1958	448.9	141.1	679.5
1959	486.5	143.4	720.4
1960	506.0	144.2	736.8
1961	523.3	148.7	755.3
1962	563.8	150.9	799.1
1963	594.7	156.5	830.7
1964	635.7	163.7	874.4
1965	688.1	171.3	925.9
1966	753.0	175.7	981.0
1967	796.3	187.3	1007.7
1968	868.5	202.2	1051.8
1969	935.5	208.8	1078.8
1970	982.4	219.6	1075.3
1971	1063.4	233.8	1107.5
1972	1171.1	255.3	1171.1
1973	1306.6	270.5	1235.0
1974	1413.2	283.1	1214.0
1975	1516.3	294.8	1191.7
1976	1692.4	311.9	1265.0

30 yr. ave. an. growth rate	} 7.1%	3.6%	3.5%
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M1 Growth rates: 1947/1957 -1.9%; 1957/1967 -3.3%;  
1967/1976 -5.8%.

Real GNP growth rates: 1947/1957 -3.8%; 1957/1967 -4.0%;  
1967/1976 -2.6%.

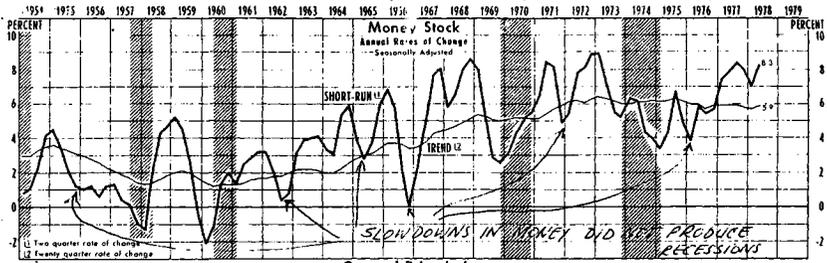
Date from various government sources as given in the 1977 Economic Report of the President.

TABLE II  
 MONETARY GROWTH AS AN INDICATOR OF INFLATION

<u>Period</u>	<u>(1) Growth Rate of Money</u>	<u>Period</u>	<u>(2) Growth Rate of Prices</u>	<u>(1) - (2)</u>
1947-52	2.3%	1953	1.5%	0.8
1948-53	2.7	1954	1.4	1.3
1949-54	3.2	1955	2.2	1.0
1950-55	3.3	1956	3.1	0.2
1951-56	2.7	1957	3.4	-0.7
1952-57	1.8	1958	1.6	0.2
1953-58	1.5	1959	2.2	-0.7
1954-59	2.0	1960	1.7	0.3
1955-60	1.3	1961	0.9	0.4
1956-61	1.5	1962	1.8	-0.3
1957-62	1.8	1963	1.5	0.3
1958-63	2.2	1964	1.6	0.6
1959-64	2.2	1965	2.2	0.0
1960-65	3.1	1966	3.3	-0.2
1961-66	3.6	1967	2.9	0.7
1962-67	4.0	1968	4.5	-0.5
1963-68	4.8	1969	5.0	-0.2
1964-69	5.2	1970	5.4	-0.2
1965-70	5.1	1971	5.1	0.0
1966-71	5.5	1972	4.1	1.4
1967-72	6.1	1973	5.8	0.3
1968-73	6.2	1974	9.7	-3.5
1969-74	6.1	1975	9.6	-3.5
1970-75	6.2	1976	5.2	1.0
1971-76	6.0	1977	5.9	0.1

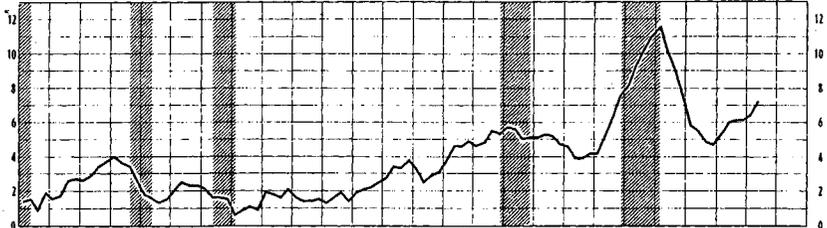
Table reproduced from Page 9, December 1978 Review of the Federal Reserve Bank of St. Louis, "Is Inflation all Due to Money?"

Trends and Fluctuations of Money, Prices, Output, and Unemployment



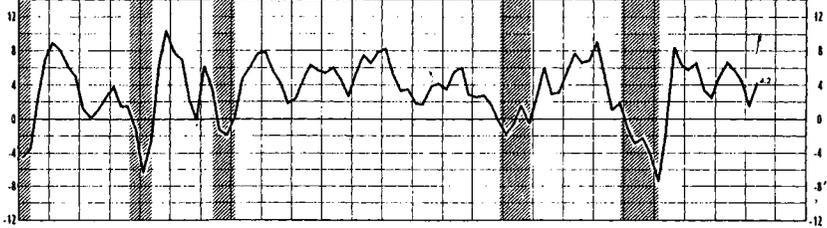
General Price Index

Four-Quarter Rates of Change  
Seasonally Adjusted



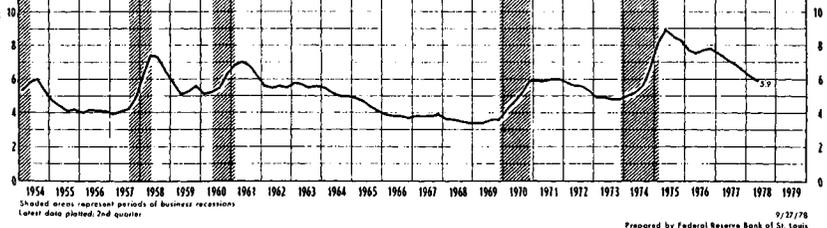
GNP in 1972 Dollars

Two-Quarter Rates of Change  
Seasonally Adjusted



Unemployment Rate

Seasonally Adjusted



Shaded areas represent periods of business recessions  
Latest date plotted: 2nd quarter

9/30/78  
Prepared by Federal Reserve Bank of St. Louis

**Carnegie-Mellon University**

1979 MAR 16 PM 1:36

Graduate School of Industrial Administration  
 William Larimer Mellon, Founder  
 Schenley Park  
 Pittsburgh, Pennsylvania 15213  
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Allan H. Meltzer  
 Maurice Falk Professor of  
 Economics and Social Science

March 14, 1979

Senator William Proxmire  
 United States Senate  
 5241 Dirksen Building  
 Washington, D. C. 20510

Dear Senator Proxmire:

Enclosed are the most recent statements of the Shadow Open Market Committee. You will note that we have issued two statements this time. One discusses the redefinition of monetary aggregates.

The Committee believes that there is a serious risk of an error in monetary policy arising because of current uncertainties about the definitions of the monetary aggregates. The committee believes that Congress should act promptly to reduce the risk of serious error.

May I again ask you to circulate our recommendations to the members of the Senate Banking Committee?

Cordially,



Allan H. Meltzer

AHM/jep

encl.

SHADOW OPEN MARKET COMMITTEE

The Committee met from 1:30 p.m. to 8:00 p.m. on Sunday, March 11, 1979.

Members:

Professor Karl Brunner, Director of the Center for Research in Government Policy and Business, Graduate School of Management, University of Rochester, Rochester, New York

Professor Allan H. Meltzer, Graduate School of Industrial Administration, Carnegie-Mellon University, Pittsburgh, Pennsylvania

Mr. H. Erich Heinemann, Vice President, Morgan Stanley & Company, Inc. New York, New York

Dr. Homer Jones, Retired Senior Vice President and Director of Research, Federal Reserve Bank of St. Louis, St. Louis, Missouri

Dr. Jerry Jordan, Senior Vice President and Chief Economist, Pittsburgh National Bank, Pittsburgh, Pennsylvania

Dr. Rudolph Penner, American Enterprise Institute, Washington, DC

Professor Robert Rasche, Department of Economics, Michigan State University, East Lansing, Michigan

Professor Wilson Schmidt, Department of Economics, Virginia Polytechnic Institute, Blacksburg, Virginia

Dr. Beryl Sprinkel, Executive Vice President and Economist, Harris Trust and Savings Bank, Chicago, Illinois

Dr. Anna Schwartz, National Bureau of Economic Research, New York, New York

POLICY STATEMENT  
Shadow Open Market Committee  
March 12, 1979

A surge of inflation in 1978 and 1979 has made the effects of excessive monetary and fiscal stimulus visible to all. Inflation reached an average of 9% in 1978 and is likely to be even higher in 1979. In the past two years, the dollar has depreciated substantially against the currencies of our trading partners. Oil price increases have added to the costs borne by consumers and producers. Although political events in Iran contributed to the most recent rise in oil prices, most of the current inflation is the result of misdirected economic policies of the Federal Reserve and the Federal Government in recent years.

Many forecasters predict that recession and rising unemployment will add to the nation's economic problems in 1979. Recessions have occurred at irregular intervals during most of our history, and no fundamental change has occurred to break the pattern. The occurrence of a recession possibly could be postponed by increasing monetary and fiscal stimulus; however, additional stimulus at this time would further raise the ultimate cost of reducing inflation. The Shadow Open Market Committee is strongly opposed to the adoption of stimulative fiscal and monetary policy to postpone a recession.

The desire to "do something" about rising inflation appears to have produced a shift towards antiinflation policy in recent months. It should be recognized that inflation this year has largely been predetermined by past policies. Increasingly restrictive steps over the coming months should be avoided, but also the temptation to reverse policies once again when the economy slows must be resisted.

The principal aim of economic policy, now and in the future, should be to establish conditions under which the U.S. and other market economies can achieve stable, noninflationary growth and rising standards of living in the 1980's. Another round of "stop and go" culminating in higher inflation and slow growth of productivity in the early 1980's is a highly probable outcome if a break with past approaches to stabilization is not made at this time.

#### What Has Been Done

For the fifth time in two decades, lower inflation and a smaller budget deficit are given high priority in the rhetoric about economic policy. But the words will not necessarily be matched by deeds. Announced policies are likely to increase instability in the near term, while not offering any assurance of increased stability in the early eighties.

Current economic policy has three main features:

(1) A pitifully small reduction in the proposed budget deficit for the fiscal year starting next October, to be achieved principally by allowing inflation to increase taxes. Estimates by the Congressional Budget Office show no reduction in the budget deficits for fiscal 1980.

(2) An unprincipled system of coercion masquerading as voluntary price and wage restraint. Programs of this kind confuse the symptoms of inflation with the causes of inflation, encourage strikes, involve the President and his staff in collective bargaining to the detriment of that process, impose large costs of compliance, arbitrarily restrict the incomes earned by particular groups of

workers and firms, but do nothing to slow inflation. The many attempts at formal or informal wage and price controls, here and abroad, during the past fifteen years have not produced success for any policy of this kind.

(3) Continued emphasis on the level of short-term interest rates as a measure of the degree of monetary restraint. In the past, emphasis on interest rates has caused excessive monetary growth and rising inflation during years of economic expansion, and insufficient monetary growth and recession at other times.

In 1976, 1977 and 1978, the Federal Reserve refused to permit modest, prompt increases in interest rates in response to the borrowing demands of the public and private sector. Instead, money growth and inflation rose, and the dollar fell on foreign exchange markets. Eventually, market interest rates and inflation rose to much higher levels than would have been required if a policy of gradually reducing money growth had been followed in these years.

Now the risks are in the opposite direction. If private demand for credit were to slow, a policy of controlling short-term interest rates would cause money growth to fall. The economy would be pulled into a deeper recession than is required to slow inflation.

The risks of serious recession are increased by the absence of reliable information about the nation's money supply. The interaction of inflation with interest rate ceilings, complex reserve requirements, and new regulations prevent the public and the government from knowing what is happening to actual money growth. Congress should promptly eliminate restrictions on the payment of interest on demand, time, and savings deposits as part of a program to restore the reliability of data on the monetary aggregates.

## What Should Be Done?

The high priority now given to controlling inflation will have no lasting effect on inflation unless it is a part of a sustained program. Anything less than a sustained program, lasting three to five years, would be a costly, wasted effort. After fifteen years of rising inflation and many commitments by past administrations and Federal Reserve officials, skepticism is large and government credibility is small.

At our meeting last September, we urged that monetary growth be reduced as one part of a program to end inflation and restore stability within the next five years. Although excessive monetary growth continued in the fall, there is growing evidence that the annual growth rate of money has now been reduced even after adjustment for change in definitions. We believe that further reductions in the annual growth rate of the money aggregates at this time would be a mistake. Instead we urge:

One - the importance of growth in monetary aggregates is now widely recognized. Uncertainty about these growth rates can lead to major errors in the interpretation of monetary policy and to severe recession or increased inflation. Uncertainty can be minimized only if Congress removes controls on the payment of interest on demand and time deposits. Continued failure to act imposes large risks and small benefits.

Two - the growth of the monetary base should be 8% for the year ending in August 1979. This is consistent with the recommendation of this Committee at our meeting in September 1978, when we selected the monetary base, as published by the Federal Reserve Bank of St. Louis, as the most reliable measure of monetary growth currently available in this period of uncertainty about the interpretation of growth rates of monetary aggregates. The monetary base is entirely

controllable by the Federal Reserve since changes in the base are the direct result of changes in the Federal Reserve portfolio. To control the size of its securities portfolio -- which is the principal source of the monetary base -- the Federal Reserve must allow short-term interest rates to respond freely to forces in the open market.

Three - we have urged repeatedly that the Federal Reserve adopt a five-year program to end inflation by reducing the growth rate of the monetary base by 1% a year for the next five years. The need for a program of this kind has now been recognized by Chairman Miller. During the past four months, the Federal Reserve has not made any effort to announce and implement the program. The Federal Reserve can reduce the cost of ending inflation by publicly accepting a commitment to sustained, gradual, but persistent reductions in money growth.

Four - productivity has grown at an average rate of 1% for the past two years. Capital investment has lagged behind the growth of the labor force. To encourage investment and output, Congress should further reduce the growth of government spending (including off-budget items) below the recommendations of the President, and reduce real tax rates. A tax reduction bill, to reduce the real burden of taxation on households and firms should be passed early in the session to encourage investment.

Five - to reduce uncertainty in financial markets, Congress should move at once to repeal the Credit Control Act of 1969 and the International Emergency Economic Powers Act of 1977. These laws -- which, respectively, create standby authority for (1) direct government control of domestic financial markets and (2) the imposition of foreign exchange controls in peacetime -- are unnecessary. Should the Administration ever implement these authorities, the result would be counterproductive and very costly to American society.

## REDEFINING THE MONETARY AGGREGATES

## Statement on Monetary Aggregates

Prepared by the Shadow Open Market Committee

March 12, 1979

Monetary aggregates are now widely recognized as important indicators of exchange rates, interest rates, inflation, and economic activity. Central banks in several countries now seek to control some monetary aggregates, and even the Federal Reserve states target rates of growth for various monetary aggregates. Governments, central bankers, investors, and savers throughout the world draw inferences about the future by observing trends in monetary aggregates. While foreign central banks have employed some variant of the monetary base concept, the Federal Reserve has stated its targets exclusively in terms of the money stock concept.

The monetary base statistics have proven to be accurate and reliable over extended periods of time. However, money stock statistics periodically have been subject to major revisions after the identification of measurement errors. As long as errors in the reported statistics remained small or could be regarded as constant, no major problems of interpretation arose. Currently, errors appear to be large and variable. The possibility of a major error in monetary policy or in private decisions based on a misinterpretation of monetary aggregates as currently recorded has increased.

The Federal Reserve Bulletin for January, 1979, invited interested parties to comment on the staff's proposals to redefine the monetary aggregates so as to reduce potential errors of interpretation. Our Committee believes that the proposed changes in definition are in the right direction. However, the published proposal neither addresses the central problem nor fully adjusts the definitions for past changes in financial arrangements. Measures of the monetary aggregates can never be entirely accurate, but current errors can be reduced to more acceptable levels.

The staff of the Board of Governors proposes two principal types of change to M-1 and M-2. One removes deposits of foreign banks and official institutions from these aggregates. The other adds consumer-type transaction deposits at thrift institutions to the aggregates.

The proposal does not incorporate into the monetary aggregates the effects of substantial changes in businesses' asset management practices such as the use of overnight repurchase agreements, overnight Euro-dollar deposits and other relatively close substitutes for bank deposits. These practices appear to have as much importance for the levels and rates of change of monetary aggregates as the items in the staff proposal. Currently, there are no comprehensive measures of these items. The Federal Reserve should promptly institute sampling procedures to assure adequate measurement.

It is regrettable that the Federal Reserve did not foresee the need to change its data collection procedures in advance of the regulatory changes it recently instituted. Future changes in regulatory practice should be coordinated with monetary policy and data collection.

#### The Central Problem

The central problem cannot be solved permanently by changing definitions. There is now a large and rapidly growing volume of financial assets not subject to ceiling rates on deposits, not covered by Federal Deposit Insurance programs, and in some cases not subject to reserve requirements. The private benefits from these arrangements are entirely the result of archaic regulations and controls on interest rates.

Interest rate controls on savings, time, and demand deposits encourage innovation to circumvent regulations. Differential reserve requirements for the types of liabilities issued by banks and non-bank institutions provide additional

incentives to innovate. The relatively high market rates of interest, resulting from past and currently anticipated inflation, increase the incentives for owners and issuers of financial liabilities to circumvent regulations and controls on the payment of interest. The net social cost resulting from misinformation about the growth of the aggregates is high and probably is rising.

The proper remedy is to remove these restrictions and controls. The Congress, the Federal Reserve, the Federal Home Loan Bank Board, and other regulatory agencies should act promptly to remove controls on interest rates and other incentives to socially wasteful innovation.