SHADOW OPEN MARKET COMMITTEE

Policy Statement and Position Papers

September 12, 1975

Policy Recommendations of the Shadow Open Market Committee Meeting

September 12, 1975

The economy is now poised for recovery. At its meeting today, the Committee considered issues affecting short-term prospects for the economy and longer-term goals for reducing inflation: (1) the severity of the recession from which recovery now appears to be underway; (2) the appropriate size of expansionary actions required for economic recovery; (3) the dangers posed by the large Federal deficit; (4) international economic policy; (5) the appropriate rate of monetary growth for long-term price stability.

Severity of the Recession:

A prevalent judgment is that the recession that has apparently reached a trough is the most severe of the post-World War II recessions, some even regarding it as in the same class as the 1929-33 contraction. The data do not support such a view. The decline from November 1973 to September 1974 was not primarily cyclical, but a response to real shocks that lowered real income and real wealth. It did not generate a pattern of sagging employment levels and weak labor markets. A true cyclical decline comparable to earlier postwar recessions may be dated from September 1974, in response to a pronounced deceleration in monetary growth. The decline in nonfarm employment in the recent recession ranks fourth in severity among postwar recessions, and is about one-tenth in magnitude of the decline in 1929-33. The decline in industrial production with no allowance for the real shocks ranks second in severity after the

1957-58 recession; with such an allowance, it would probably rank fourth also. The decline is about one-quarter of the magnitude of the decline in 1929-33.

A distinction between a decline attributable to real shocks and a decline attributable to cyclical forces is important for rational policy making. A cyclical decline creates an output gap. Real shocks reduce potential output and capacity.

A disregard of the distinction magnifies estimates of the potential gap to be eliminated by expansionary policies.

Appropriate Size of Expansionary Policies:

Those who view the recession as exceptionally severe have urged the Federal Reserve to produce a rapid expansion of money at an annual rate of 10 to 15 per cent, so that a year from now the money stock would total between $325-340 billion. They argue that with existing high levels of unemployment and under-utilization of resources, a large monetary expansion will simply mop up the economic slack and draw unused resources into use without raising the rate of inflation. This scenario is conceivable, but it is more likely that a rapid nominal expansion will endanger the retardation of inflation in two ways. Should there be a rapid acceleration of nominal income it would induce revisions of expectations concerning prices. These revisions are likely to be reinforced by growing awareness of the policy of rapid monetary growth. Market participants after ten years of rising inflation are acutely sensitive to large changes in monetary growth rates. Inflation is hence likely to be substantially higher by late 1976 and in 1977, with little change in real output, if this option is chosen.

We would once again face the problem of bringing the growth rate of money from the proposed 10 to 15 per cent rate to a noninflationary rate, with the probable result of another recession in late 1977 accompanied by higher inflation than now exists. We reject this course and applaud the Federal Reserve's declared opposition to it.

At the opposite extreme is a proposal to reduce the growth rate of money quickly to a path consistent with price stability and to keep it at this noninflationary level. A year from now the money stock would be less than $305 billion. At first, unemployment would increase and recovery would give way to a deeper recession. By late 1976 or 1977, the economy would begin to recover from a lower level of output with a low rate of inflation.

The cost of thus ending quickly an inflation as protracted as the one we have experienced is too high. The Committee has always argued that we should consider social costs of achieving price stability, and we find no merit in proposals that ignore the costs of restoring stability.

A third option is the one the Federal Reserve has proposed to make money grow between 5 and 7.5 per cent over the year from the second quarter of 1975. At the lower end of the range, the money stock a year from now would total $309, and at the upper end of the range, $319 billion. Whether Federal Reserve actions will match its declared policy target remains to be seen.

In March this Committee urged the Federal Reserve to raise the money stock to $290 billion by April 15, the level that would have been reached if sharp monetary deceleration had been avoided over the preceding 9 months and a 5.5 per cent annual growth rate had been maintained. By the end of May,

1975, the Federal Reserve reached the level we recommended. Currently, the actual money stock is about the same as our target, and about equal to the third quarter Federal Reserve target at the upper end of its range. Thereafter, as the accompanying table shows, the Federal Reserve monetary targets diverge from ours by progressively increasing amounts. At the low end, the Federal Reserve target figures fall short of the Committee's by $1.9 to $3.3 billion. At the top of the range the Federal Reserve target figures exceed the Committee's by $1.6 to $6.4 billion.

Target Levels of Money Stock

	Federal Reserve Growth Rates	SOMC Growth Rate
	5	7.5	5.5
Base 1975 II	290.3	290.3	291.6
1975 III	293.9	295.7	295.6
1975 IV	297.6	301.3	299.7
1976 I	301.3	306.9	303.8
1976 II	305.1	312.7	308.0
1976 III	308.9	318.6	312.2

Starting from the level of the money stock in August 1975, the Federal Reserve should maintain the growth rate of money at steady 5.5 per cent annual rate, so that the level in the first quarter of 1976 totals $304 billion. Such a growth rate will be adequate to support recovery but with a lower rate of inflation than more expansionary policy will produce.

Threat of the Federal Deficit

The proportion of the stock of the Federal debt held by the Federal Reserve was more or less constant at 11 per cent in the 1950's and the proportion doubled

over the 1960's. The ratio rose to 23.5 in 1973/4; now 22 per cent of the Federal debt is held by the Federal Reserve. Under circumstances, the explosion of the Federal Deficit from the beginning of fiscal 1976 through the end of fiscal 1977 by an estimated $135 billion threatens to undo the policy of moderate monetary growth. The marginal percent of Federal debt to be acquired by the Federal Reserve over the current fiscal year must be substantially below the average resulting from its past actions. If monetary growth were limited to the upper end of the Federal Reserve target range, the volume of new debt it would absorb is less than half the amount associated with a 22 per cent ratio. This Committee's proposal lowers the admissible ratio even more. The difference between the Federal Reserve and the Committee in this regard however, pales compared to the massive money creation that would result if past patterns of acquisition of Federal debt were observed. Our differences are of a small order relative to the dangers inherent in the growth of the Federal deficit. We therefore approve Chairman Burns' frequently expressed concern about the long-run development of the budget. The experience of most countries suggests that longer-run budgetary control is a necessary condition for effective monetary control.

International Economic Policy

The virtues of the floating exchange rate system are now widely acknowledged. We no longer experience foreign exchange crises. Countries that wish to pursue independent monetary policies to reduce inflation now have that option.

There has been increasing intervention in the New York foreign exchange market by the Federal Reserve since July 1973 to affect exchange rates. It is not evident that the Federal Reserve accomplishes anything beneficial by such action.

Discussion of international economic policy, often proceeds as if fixed exchange rates prevailed. The price effects of grain sales to the Soviet Union demonstrate the superiority of the flexible rate system. Under both floating and fixed exchange rates, the increased demand for grain raises grain prices. With fixed exchange rates, the sales increase foreign exchange reserves, expand domestic money, and raise the domestic price level. Under floating exchange rates, grain sales increase the exchange value of the dollar and reduce the effective price we pay for imports to the United States. The lower cost of imports offsets all or part of the higher price of grain.

Appropriate Rate of Monetary Growth for Long-Term Price Stability

The rate of monetary growth is a principal determinant of the rate of price change. The 5.5 per cent monetary growth rate that we recommend currently is too high for long-term price stability. If the recovery proceeds fairly smoothly over the next half year, the next step will be to reduce the rate of monetary growth gradually to a lower level consistent with the long-term growth of real output.

Karl Brunner	University of Rochester
Homer Jones	St. Louis, Missouri
Thomas Mayer	University of California
A. James Meigs	Claremont College
Allan Meltzer	Carnegie-Mellon University
Robert Rasche	Michigan State University
Wilson Schmidt	Virginia Polytechnic Institute
Anna Schwartz	National Bureau
Beryl Sprinkel	Harris Bank & Trust Company
William Wolman	Business Week

MONETARY POLICY, ECONOMIC POLICY AND INFLATION

Karl Brunner

University of Rochester and
Universitat Bern

Position Paper prepared for the fifth meeting of the

Shadow Open Market Committee, September 12, 1975.

The Shadow Open Market Committee was initiated in the summer of 1973. It was designed to offer an organized forum for a systematic appraisal of U.S. stabilization policies. A deep concern over policies pursued in the past ten years motivated the initiative. The financial policies dominantly patterned in the past years threaten, in our judgment, the future welfare of our country. The budgetary policies endanger economic growth and the continued rise in our living standards. The evolution of the budget also conditions monetary policy and the resulting monetary growth. This linkage between budget and money operated in the past ten years to generate a pattern of world wide inflation. The experiences made since our first meeting in September 1973 dramatically confirm our motivating concerns. The policies pursued over many years contributed to the largest peace inflation observed in the U.S.A., followed by a substantial downswing in economic activity in 1974/75.

The heritage of past error and mismanagement affected in recent months public awareness. Congress initiated in late winter a new approach to monetary policy making. We certainly hope that this approach, codified under House Concurrent Resolution 133, contributes to a comparatively stable and less inflationary monetary growth in the future. The financial behavior of Congress exhibited unfortunately a pattern barely designed to comfort our expectations. Still, some attempts to constrain the budget seem to emerge. Congress also set up institutions hopefully assuring a more systematic overview over the budget and also a more explicit acknowledgment of responsibility with respect to the magnitude of budget and deficit. But the basic properties of the political process have

barely been touched by these attempts and the political rewards and penalties associated with the budget process have been little changed so far.

The danger of long-run inflation remains and has actually been augmented by the threat of long-run "crowding out" of private capital formation resulting from persistent large budget deficits. Both dangers loom in the proposals recently advanced by the "Keynesian Establishment" to cope with the current recession. These proposals center on a continued large deficit supported by a large monetary growth reaching probably well into the two-digit range. This "activist financial policy" with the usual overtones of "fine-tuning" confronts us after ten years with the same basic issues already encountered in the 1960's. It is indeed remarkable to note that the policies mostly responsible for the sorry state of the U.S. economy should be proposed, on a larger scale of course, as useful means to cope with their own bad consequences. Financial policy, and particularly monetary policy making, thus faces in the fall of 1975 a critical test shaping the economic affairs for many future years. The fundamental issue will be discussed in the last section of the position paper. The first section summarizes recent monetary trends and the second section examines the policy targets proposed by the monetary authorities and advances a tentative suggestion for the SOMC.

I. Recent Monetary Trends

The broad movement of the money stock over the 1970's can be inferred from table I. This pattern has been discussed in previous position papers and is simply introduced for the current occasion to

define the historical context of contemporary policy-making. The table presents peaks and troughs of monetary growth computed between corresponding months in successive years. We notice since the January 1969 to January 1970 period (indicated by 1/1970) three acceleration periods and two deceleration phases. The long deceleration from 6/1973 until 2/1975 is particularly noteworthy in this respect. We also note early this year the initiation of a new acceleration. A comparison shows that the current acceleration exceeds until June 1975 the average rate of the previous accelerations. But an interpretation of this movement should be suspended until the next section.

Attention is directed at this stage to another aspect of the table. The patterns of monetary growth exhibit a remarkable difference before and after 6/1973. The combined contributions made by the currency ratio and the time deposit ratio (columns 5 and 6) before 6/1973 are comparatively negligible relative to the magnitude of monetary growth. Beyond the middle of 1973, however, the public's behavior dominated the broader variations in monetary growth. The acceleration noticed in the first half of the current calendar year was largely due to the moderation in the negative contribution emanating from increases in the time deposit ratio. Between 1/1970 and 2/1974 the contribution made by the currency ratio to monetary growth was confined to the range (-1.37, + .37). It continuously dropped below this range after early 1974 and moved since 11/1974 between -2% and -3%. A comparison with the time deposit ratio in the last column indicates furthermore that the break in the patterns was heavily concentrated around the public's behavior centered on the currency ratio.

The data in table II cover a shorter horizon. They show monetary trends between successive (non-overlapping) three month periods at annual rates. The first row shows the monetary growth and its decomposition into contributory components from February/March/April 1973 to May/June/July of the same year. The table presents the peaks and troughs of the short-term movements. We observe over the last two years two intervals with decelerations and two accelerations. The table confirms the prevalence of a dominantly deflationary deceleration of substantial magnitude from the middle of 1973 until early this year. The acceleration over seven months from 10/1973 until 5/1974 is however also noteworthy. It contributed to maintain the activity level over the first segments in last calendar year at a substantial level, retarded the onset of the cyclic downswing and probably maintained the inflationary momentum. Still, the acceleration was smaller and proceeded at a lower rate than the sharp and large deceleration in the second half of 1973. Lastly, we note again the emergence of a new acceleration phase of pronounced magnitude early this year. Monetary trends thus reenforced the economic retardation emerging in 1974 and also encouraged this year a reversal in the direction of economic activity. The role of the public's behavior is again clearly revealed by the decomposition. The currency ratio and the time deposit ratio contributed substantially to the variations in monetary growth, particularly over the recent acceleration phase. The first acceleration period (10/1973-5/1974) forms in this respect somewhat of an exception.

The third table summarizes the monetary trends over an even shorter horizon since the turn of the year. The movements describe percentage

TABLE I: MOVEMENT OF MONETARY GROWTH OVER 12-MONTH PERIODS AND CONTRIBUTIONS MADE BY PROXIMATE DETERMINANTS

12 Months ending in	Money Stock	Monetary Base	Adjusted Reserve Ratio	Currency Ratio	Time Deposit Ratio
1/1970	3.72	2.68	.17	-1.05	1.92
7/1971	7.80	8.10	2.27	.26	-2.85
5/1972	5.24	6.76	1.34	- .60	-2.10
6/1973	8.36	7.98	2.68	- .19	-2.10
2/1975	3.74	7.19	1.91	-2.63	-2.92
6/1975	4.91	6.85	+1.69	-2.39	-1.37

TABLE II: MOVEMENT OF MONETARY GROWTH BETWEEN NON-OVERLAPPING THREE MONTH PERIODS

Middle Months of Second 3 Month Period/ Comparison	Money Stock	Monetary Base	Adjusted Reserve Ratio	Currency Ratio	Time Deposit Ratio
6/1973	9.38	7.40	2.61	.45	-1.70
10/1973	2.15	6.09	.98	-2.21	-2.76
5/1974	7.26	8.83	2.66	-1.37	-3.02
2/1975	1.03	4.45	3.88	-3.94	-3.70
6/1975	9.91	7.55	1.24	.08	1.06

Remarks: The date 6/1973 refers to the change from (2,3,4) to (5,6,7).

TABLE III: CONTRIBUTION OF PROXIMATE DETERMINANTS TO MONETARY GROWTH BETWEEN SUCCESSIVE NON-OVERLAPPING FOUR-WEEK PERIODS[1)]

Date of terminal week of terminal four week period in comparison[2)]	Money Stock	Monetary Base	Adjusted Reserve Ratio[3)]	Currency Ratio	Time Deposit Ratio
12-18-1974	10.42	11.30	1.19	-1.18	-0.29
1-29-1975	- 9.99	- 5.87	13.08	-9.07	-8.81
3-26-1975	13.24	12.38	- 2.17	.31	2.98
4-30-1975	1.25	4.36	- 1.77	- .08	- .57
6-18-1975	21.57	14.32	1.29	2.77	3.66
8-10-1975	1.32	- 1.98	5.41	-3.01	.36

Remarks:

1) The numbers are percentages per annum

2) The date 12-18-1974 refers to the change in M_1 to the four weeks ending at 12-18-1974 from the previous (non-overlapping) four week period.

3) The adjusted reserve ratio contains the "liberated reserves" per unit of total deposits.

All data are seasonally adjusted.

changes at annual rates between successive four week periods. The first row states that the money stock increased to the four week period ending on December 18, 1974 from the immediately previous four week period at an annual rate of 10.4%. The table exhibits three periods of deceleration and two with accelerations. It is also noteworthy that the accelerations and decelerations of the monetary base match the general order of the movements in monetary growth. The contribution made by the time deposit ratio reflects the evolution on the credit markets. In particular, rising short-term rates in the late summer lowered substantially the contribution emerging from the time deposit ratio. The large decline over the recent months in the component defined by the currency ratio is somewhat surprising. It seems most probable at this stage that this component will increase again in the near future and contribute to raise monetary growth over the balance of the year. It is expected moreover that the decline in the contribution made by the time deposit ratio will remain quite limited and not reach very deep levels over the next months. It should be noted lastly that recent variations in monetary growth were negligibly affected by the Treasury's management of its bank deposits. This management actually offset the recent deceleration by a fractional amount (less than 1%), and also offset the previous acceleration by a minor amount. Contrary to some allusions occasionally encountered, recent trends of monetary growth cannot be attributed to the flow of Treasury funds.

II. Monetary Policy Targets

The SOMC proposed at the conclusion of its last meeting a two part target for monetary policy: the money stock should immediately be raised

to a level of $290 billion, a level it would have reached according to our previous proposals made in March and September 1974. Once M_1 was brought to an appropriate level, a moderate growth path centered on 5.5% per annum was proposed. The proposal attended thus to the two problems confronting our economy. The "frontloading" should contribute to dampen the ongoing recession and contribute to the reversal of economic trends in the second half of the current year. The moderate growth path following the "frontloading" on the other hand was designed to assure a continued reduction in the average rate of inflation.

The reader finds a graphical presentation of the SOMC target in graph I. The targeting implicit in the SOMC proposal is summarized by a cone starting in March 1975 at $290 billion. The lower boundary of the cone corresponds to a monetary growth of 5% and the upper boundary to a growth of 6%. The jump from February to March in comparison to the proposed subsequent path clearly reveals the nature of the proposed frontloading. An inspection of the graph shows that our monetary authorities actually attended (or permitted) a good approximation to the frontloading. With a delay of three months the actual money stock touched and almost moved inside the cone. In July and August the money stock veered however below and to the right of the cone with an abrupt deceleration of monetary growth. Still, the SOMC should acknowledge the approximate realization of its front loading proposal.

Inspection of graph II offers some interpretation of recent movements in M_1 relative to the Fed's avowed monetary target. The beginning of the cone is centered in May 1975, in the middle month of the second quarter. The FOMC announced that monetary growth should proceed

from II/1975 to II/1976 (from second quarter to second quarter) at least by 5% p.a. and at most by 7.5% p.a. The FOMC cone is consequently wider than the SOMC cone. We notice that the actual May figure is quite close to the vertex of the cone. The July figure moved above the cone and was brought back inside the cone in August. The deceleration since June was thus quite appropriate relative to the target range acknowledged by the Federal Reserve authorities. We should also note however the wide latitude permitted to the money stock for the second quarter of 1976. Along the lower boundary M_1 would reach approximately $305 billion and along the upper boundary approximately $313 billion. This $8 billion difference amounts to about 2.7% of the lower boundary value. Such a range of admissible monetary values seems too large and the monetary authorities should design procedures, institutions and assessments permitting a somewhat tighter targeting for monetary policy.

Another aspect of Federal Reserve policy requires our attention. The official target suffered between April and July substantial shifts. The first targeting range announced in April was based on March 1975. The base of the target range was subsequently moved to June 1975. This shift occurred in June itself. The last adjustment, basing the target on a second quarter average, occurred in July 1975. These shifts are somewhat unsettling and one wonders unavoidably about the reliability and quality of policy making under the circumstances. One also wonders to which extent the target is adjusted ex post facto to the emerging outcome. The reader will find some comparisons between the three targets in graph III and IV. The March to March target is juxtaposed to the quarterly target in graph III. We note that the quarterly target

is shifted up relative to the March target. This shift affects foremost the lower boundary of the range and much less the upper boundary. A much larger difference appears between the quarterly and the June target. The quarterly target has thus been placed between the first two attempts at targeting and somewhat nearer to the original March target. The last two graphs compare the SOMC target range with the FOMC's June and quarterly target. The reader should note in graph V that the SOMC's target range is completely contained, beyond June, within the FOMC's June targeting. Graph VI depicts on the other hand the comparison between the SOMC proposal and the FOMC's quarterly target. Until October 1975 the SOMC target remains completely above the FOMC's target range. We note however that by January 1976 the upper boundary of the FOMC target pierces beyond the SOMC range. The Federal Reserve authorities are thus willing to admit beyond January 1976 monetary growth patterns deemed inadvisable according to the SOMC's previous judgments and evaluations.

The implicit admission by the FOMC of monetary trends excluded by our previous proposals should encourage a careful reexamination of the issue on our part. My tentative suggestion to be submitted to the SOMC covers three aspects. The first point is immediately directed to the appropriate choice of a target range. The other two points address aspects of policymaking which will require, in my judgment, the serious attention of the Federal Reserve authorities. Neglect of these aspects will endanger the successful execution of future monetary policies. It is not sufficient to formulate a target range. Suitable adjustments of institutions and policy making procedures are necessary to create an

effective framework for monetary policy making.

1. It is proposed that the money stock M_1 for September be brought back into the target cone formulated at the SOMC's meeting in March. This implies an increase of the money stock of (at least) about $2.5 billion in September over August. The monetary base would have to be raised by approximately $1 billion for this purpose. Moreover, from September 1975 to March 1976 the money stock should be held within the SOMC cone exhibited in graph I. A reexamination will be necessary next March. If we assume an actual development confined to our proposal we may well judge it appropriate to lower somewhat the growth target for spring and summer of 1976. But the proposal definitely rules out a higher range of M_1 values admitted by the FOMC for the first half of 1976. This range is too expansionary for a persistently anti-inflationary policy in my judgment.

2. The shifting targets and the wide range admitted by the FOMC directs our attention to the policy making procedures. The SOMC should emphasize in my judgment the importance of suitable modifications in the Fed's internal procedure. The FOMC should be made responsible for the development of a useful targeting of monetary growth. This involves in particular the development of more reliable and more appropriately defined measures of the money stock. The Fed has recently enlarged the number of money stock measures to eight. One wonders of course whether this is an attempt at obfuscation to assure a sufficient supply of numbers. The larger the range of possible numbers available for selection, the greater the probability that the Fed will find a number, ex post facto, which fits its political purpose. This reservation associated with the manner in which the numbers appeared should not distract us

however from the fact that a serious examination of the measurement problem is quite urgent. Some elements of current measurements seem barely appropriate and poorly designed to yield the analytically desired measure. The SOMC should certainly await with great interest the findings of the special committee instituted by the Board of Governors to review the measurement problem. In view of the variety of measures listed by the Chairman of the Board and the sense of uncertainty recently conveyed in this matter by an article in the Wall Street Journal, the SOMC should explicitly state that the Fed be advised to assess systematically the relative usefulness of the various measures for purposes of monetary control and monetary policy. I would also contend that we are not lost in a fog of diffuse uncertainty in this matter. We do possess some information. No evidence has been submitted thus far to the profession that any of the more inclusive measures beyond M_2 offer useful information for purposes of monetary control. The best measures still seem to center around M_1 and M_2, and I expect this situation to persist. This does not mean that I expect the present measures of M_1 or M_2 to be really adequate for our purposes. I suspect on the contrary definite modifications of these measures once the Fed seriously proceeds to untangle the measurement problem.

The targeting of monetary growth forms the basis for the FOMC's determination of the required growth of the monetary base. This involves additional staff work under the FOMC's responsibility. The required growth path of the base should then form the centerpiece of the directive to the account manager. The responsibility for monetary policy is divided in this manner in a specific way between account manager and FOMC. The account manager is responsible for the growth path of the monetary base

over a specified interval of time. The discharge of this responsibility can be regularly assessed by the FOMC. The latter, on the other hand, is made responsible for the choice of monetary growth target and its translation into a targeting range for the monetary base. The FOMC would also be responsible for the proper development of facilities and procedures necessary for its assigned task. It appears to me that this division of responsibilities would improve the Fed's policy making procedures.

3. Lastly, the Federal Reserve authorities should be urged to review the existing arrangements and examine their usefulness for purposes of monetary control. I suspect that numerous institutions, including the present manner of computing required reserves, ceiling rates, etc., lower the controllability of the money stock. The FOMC should immediately initiate a study systematically reviewing the institutional changes under the Board's power which can be expected to improve monetary control.

III. Recession, Inflation and the Keynesian Establishment.

Economic recovery and the gradual reduction of the rate of inflation face two major and closely associated dangers. These dangers are posed by the budget, more specifically, the large deficit, and the advice emanating from the Keynesian Establishment centered around the Brookings Institution. Subsections 2 and 3 attend to the nature of the issues confronting us in this respect. The first subsection attends to a question affecting one's view bearing on the appropriate magnitude of financial expansion required for economic recovery.

1. Timing and Magnitude of the Recession

A prevalent judgment places the onset of the recession around November 1973. The lower turning point may well be located in early summer of 1975. Measured in this way the recession of 1973/75 easily appears as the largest and longest recession since the economic downswing of 1937/38. Some facts seem incontestable. Real national product and industrial production peaked in late 1973 and reached a low in the summer of 1975. But a more detailed examination reveals some peculiar patterns not usually occurring during a cyclic recession. The behavior of production, unemployment, employment, quit rates, the evolution of financial markets, delivery times for manufacturing products and the frequency of suppliers unilaterally raising prices in violation of customer contracts, etc. suggests that the interval from November 1973 to the summer of 1975 really contains two very distinct phases with radically different interpretations. Industrial production fell from November 1973 to January 1974 and then rose gradually again until September 1974. Total employment rose continuously until the fall of 1974 and so did the market sensitive quit rates. Similarly, unemployment rose over this initial segment by comparatively little. It inched somewhat nearer to 6%. All these patterns, and others, differ quite substantially from the patterns usually associated with a cyclic decline. The standard observations of a cyclic decline clearly prevailed on the other hand from September 1974 until the summer 1975.

These shifting patterns are difficult to reconcile with the view that the (hopefully and probably) now defunct cyclic decline emerged in November 1973 and controlled over one and a half years the course of

the U.S. economy. An alternative interpretation is suggested. The first segment lasting from November 1973 until September 1974 reflects the adjustment imposed by a variety of real shocks. These real shocks (oil, agriculture, devaluation, extensive legislation bearing on pollution, safety, health hazards, etc.) lower real income and real wealth, but neither do they generate a pattern of sagging employment levels or nor do they weaken the labor markets. On the other hand, the large load of resource reallocation imposed on the economy by such real shocks raises the "natural" or "normal" rate of unemployment at least for some time. The real shocks supplemented with the concurrent acceleration of monetary growth noted in table II on previous pages also explains a portion of the accelerating inflation observed in 1974. The cyclic decline properly comparable to previous postwar recessions emerged around September 1974, fostered by the simultaneous acceleration of price-levels and the pronounced deceleration of the money stock observed in table II. The conjecture advanced here has been examined in further detail by Norman Bowsher in the June 1975 issue of the Review published by the Federal Reserve Bank of St. Louis. It seems appropriate to quote the conclusions of this study for our purposes:

> "The current recession has been severe by post World War II standards, with output contracting by a greater magnitude and for a longer period than in any of the four previous recessions experienced since 1950. Not only has the current contraction been deep and prolonged, but it has been, in effect, two recessions. The first, induced largely by constraints on supply, had characteristics which differ strikingly from prior experience.

Previous recessions were preceded, and accompanied for a time, by a slow (relative to trend) rate of money growth. By contrast, money expansion in the current cycle continued to be rapid, except for a brief period, through the first two quarters of the recession. However, from the second quarter of 1974 to the first quarter of this year, the rate of money growth slowed markedly. Fiscal actions, on the other hand, have been expansive since a quarter before the current cyclical peak.

Total spending for goods and services rose substantially during the first three quarters of the current recession, pausing only moderately after the cyclical peak. However, spending growth slowed significantly after the third quarter of the contraction, causing the recession to enter the second stage.

Until last fall, the chief cause of the downturn came from the supply side. The nation's ability to produce was reduced by increased energy costs, unfavorable weather, costs of environmental and safety programs, the impact of dollar devaluation, and the effects of price controls. The quantity of goods and services available for consumption thus declined. Much of the current recession and the persistence of inflation have reflected the process of adjustment that the economy has been making to the constraints placed on production.

Recovery from the current recession depends on the overcoming or removal of constraints on supply. Elimination of wage and price controls was a significant step in attaining greater output, since production tends to expand when profits are enhanced. With normal

weather, agricultural production should increase, placing downward pressures on the price of food. While some adjustment to the higher cost of fuel has taken place, a full adjustment will take additional time.

Economic recovery is also dependent on a pick-up in demand growth. In view of the projected sizable Federal deficits, and the probable monetary creation that will occur in financing them, total demand is likely to receive a substantial boost from fiscal and monetary developments in the near future. Since January the money stock has again risen sharply. Expansionary developments are now welcome, because demand is inadequate. Yet, a stimulation of demand in excess of the ability of the economy to produce would likely result in a re-intensification of inflationary pressures at a later date."

The alternative interpretations bear on our current policy problem. The distinction between a "real shock decline" in output and a "cyclic decline" in output seems to me important for rational policy making. The latter creates an "output gap" really absent from the former. A disregard of the two distinct processes thus magnifies estimates of the "potential gap" to be removed by expansionary policies. An inadequate analysis of the decline in output observed since November 1973 thus reenforces the danger of inflationary financial responses on the part of policy-makers.

2. The Threat of the Deficit

The history of numerous Central Banks suggests a connection between the growth patterns of the monetary base and the magnitude of the deficit

in the government's budget. This association has also been observed for the U.S.A. Periods experiencing a surplus (early postwar years) generated a pronounced retardation of the base, or periods exhibiting small increases in public debt (as during portions of the Eisenhower Administration) showed a small and stunted growth of the monetary base. Phases with larger and expanding deficits, exemplified by the experiences since 1965, were prone to produce a larger growth of the base. The volume of public debt held by the Fed behaved quite differently during the 1950's and the 1960's. The volume changed relatively little over the 1950's and even declined over four years in the middle 50's. With the turn of the decade came an uninterrupted increase in the volume of public debt held by the Fed. The turn of the decade also unleashed a persistent increase in the percentage of the public debt absorbed by the Fed. This percentage fluctuated between 1951 and 1960 around 11% and rose from 1960 until 1971 uninterruptedly to 22%. It held near this level for about 2 1/2 years and shot in 1973/74 to about 23 1/2% but fell by the summer of 1975 again to 22% of outstanding public debt. The proportion of public debt absorbed by the Fed was more or less constant in the 1950's and doubled over the 1960's. The contemporary explosion of the federal deficit seriously threatens under the circumstances the future course of moderate monetary growth.

The problem can be usefully appraised with an enquiry into the implications of past patterns extended to the current state. Suppose that the recent absorption ratio (i.e. 22%) determines the proportion of the current deficit financed by the Fed. We also assume for our purposes that the deficit over fiscal year 1975/76 will approximate $85 billion.

This deficit and the recent absorption ratio imply together an increase of about 17% in the monetary base over the fiscal year. This implies an approximately equal monetary growth over this period. The expectation of a deficit for 1976/77 still around $60 billion would naturally produce under the circumstances expectations of continued high double digit monetary growth. This acceleration in monetary growth with the partial revision of inflationary expectations over the next 12 months would generate a new wave of double digit inflation and double digit interest rates by 1977.

With the present deficit predetermined by Congressional actions the Fed can only operate on the absorption of public debt in its portfolio. The marginal percentage applicable to the issues over the current fiscal year must be held substantially below the average resulting from past actions of the Fed. Even with a monetary growth of 7.5% at the upper boundary of the Fed's targeting range, the volume of new debt absorbed by the Fed would be only about $8.5 billion. This is less than half the roughly $19 billion associated with a 22% absorption ratio of new debt. The SOMC proposal lowers the admissible absorption to at most $7 billion. The difference between the Fed's and the SOMC's admissible upper range pales however compared to the massive financing required in accordance with past patterns. The SOMC's position with respect to this matter seems rather clear. We should fully support the Fed's attempt to hold a moderate course. I suspect that the SOMC has a natural propensity to prefer its proposal over the Fed's policy target. But we should explicitly acknowledge that our differences are of a small order relative to the dangers inherent in the evolution of the budget. The Federal Reserve's position in this respect deserves our full approval. Even

more, we should be quite sympathetic to the Chairman's frequently expressed concern about the longer-run development of the budget. The experience of most countries suggests that longer-run budgetary control is a necessary condition for effective monetary control.

3. And the Keynesian Establishment

The monetary policy proposed in this position paper is in substantial conflict with the views presented by leading Keynesians (Okun and Heller) on the policy-making agencies. The New York Times of July 14 summarized their position as follows: "They believe the Board has focussed too much on controlling the nation's money supply rather than managing interest rates....(and) the Fed should be guaranteeing the country a period of flat interest rates. (Moreover), because of the weak economy, (there is) the lack of risk of inflation". Andrew Brimmer, a former Governor of the Board supports the basic Keynesian view and adds that the Fed should keep the Federal funds rate for some time in the range between 5% and 5.5%.

The views summarized in the New York Times present a very traditional Keynesian conception of policymaking. It centers on the control of interest rates, the use of interest rate targets, as a means to guide the policy responses of the Central Bank. Moreover, this interest target policy occurs in the context of an activist application of financial policies which relies (implicitly) over one or two years on large variations in monetary growth and explicitly on large changes in fiscal policy. These issues confronted us already more than ten years ago and it is remarkable to observe the conservative pattern of the issues raised in the current struggle for an economic policy assuring a recovery without unleashing a new wave of inflation.

Since Allan Meltzer and I prepared our report on Federal Reserve Policy Making for the Committee on Currency and Banking of the U.S. House of Representatives we have argued extensively against the use of an interest target policy. We argued in particular that this policy bears a major responsibility for the emergence of both deflations and inflations. It converts a decrease in aggregate demand into a retardation of the money stock and unleashes in this manner a deflationary feedback. Similarly, an expanding aggregate demand induces under an interest target policy an acceleration of the money stock and introduces an inflationary feedback. This policy of interest orientation obstructed appropriate stabilizing action in the early 1930's by the Federal Reserve authorities, converted the federal budget surplus in 1947/48 into a decline of the monetary base and also determined a major portion of the acceleration of the money stock in the later 1960's. Quite generally, the interest target policy establishes the dangerous association discussed in the previous subsection between the deficit and the movement of the monetary base. A Central Bank's attempt or willingness to prevent interest rates from rising under the pressure of large financing requirements by the government has on many occasions been a major source of inflationary monetary growth. It is also noteworthy that this alleged "Keynesian policy" is not a logical consequence of Keynesian analysis. An acceptance of Keynesian analysis does not impose the choice of this policy. The proper application of an interest target policy depends on very restrictive conditions about the relative order of underlying disturbances and impulses operating on an economy. We note in particular that the advocates of an interest target policy have not made their case in this respect

and did not progress beyond a repetition of the old positions. Even the simulations from an econometric model pertaining to a specific initial state are somewhat irrelevant in this context. We face essentially a general strategy problem under substantial uncertainty with respect to the precise responses and structural properties of the economic process. It seems under the circumstances quite inappropriate to rely on the short-run simulations of an econometric model with uncertain and frequently untested reliability concerning short-run analysis of economic events. The SOMC should also invite the Keynesian Establishment to present their analytic and empirical case for the choice of an interest rate target for the execution of monetary policy so that the public discussion may move beyond a repetition of the old lines.

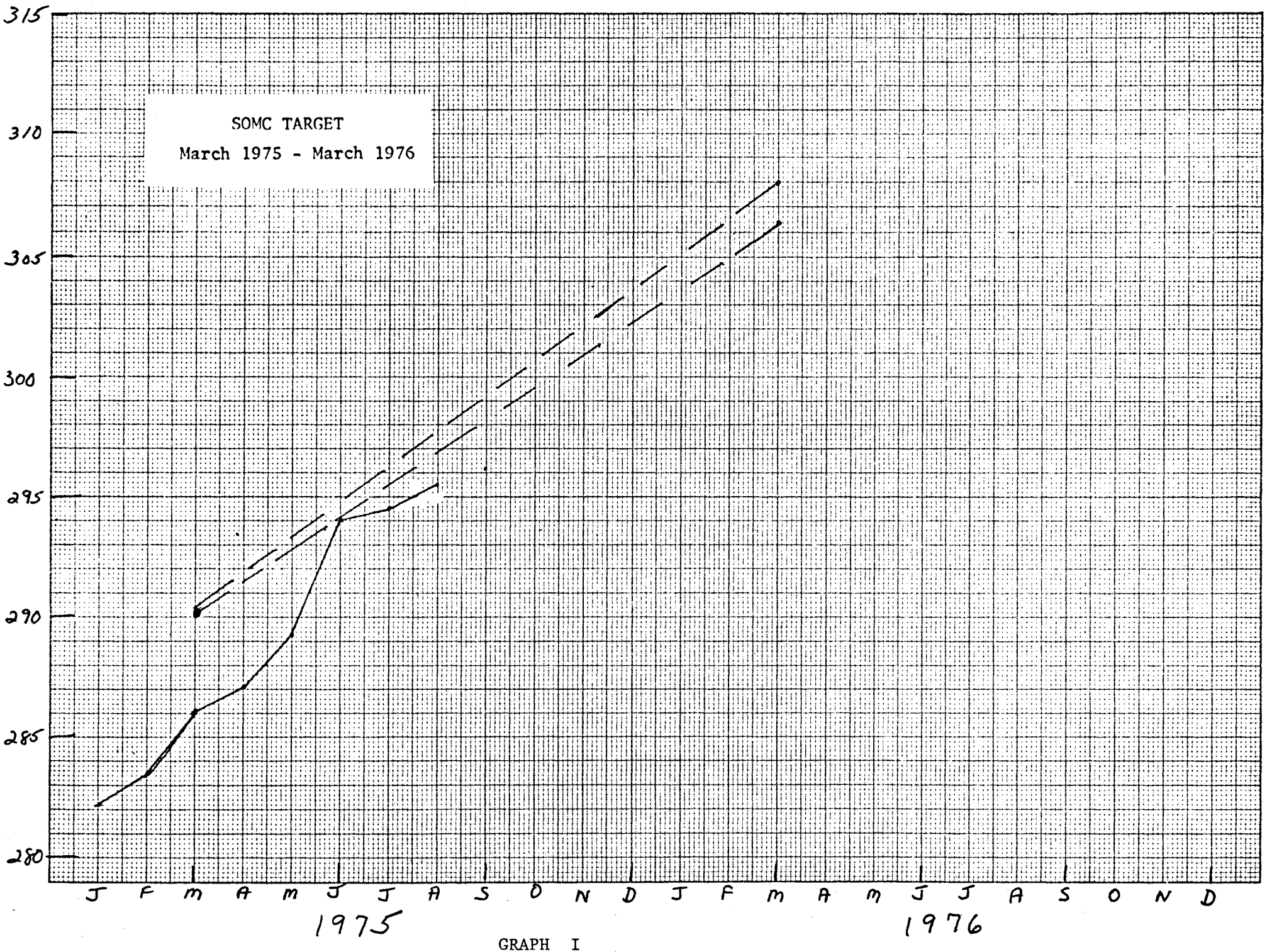
Closely associated with the currently proposed interest rate target is the view that we require for a number of quarters a large monetary expansion. Several double-digit figures appeared occasionally in the discussions over recent months. This proposal, or implication of the interest target policy, is justified in terms of the existing high levels of unemployment and the under-utilization of resources. It is argued that under these circumstances a large monetary expansion simply mops up the economic slack, draws unused resources into renewed activity without raising the rate of inflation. This scenario is certainly not impossible and could actually be true. But we do not know and neither do the advocates of this policy. The activist policy of massive financial expansion involves in my judgment a serious risk of renewed inflation. The prevailing slack can be expected to retard inflation and should over the next year substantially lower the inflation rate. A rapid nominal

expansion endangers the anti-inflationary course in two ways. The initially rapid acceleration of output induces revisions of prevalent expectations. These revisions are likely to be reenforced by growing awareness about the policy of financial expansion. The initial state for the application of financial expansions differs in this respect substantially from past experiences. Ten years of rising inflation made market expectations more sensitive to evolving events. It is not necessary for this argument that the large mass of market participants attune their expectations to the new circumstances. It is sufficient that a substantial margin on output, labor, and financial markets revise their expectations sensitively to new developments.

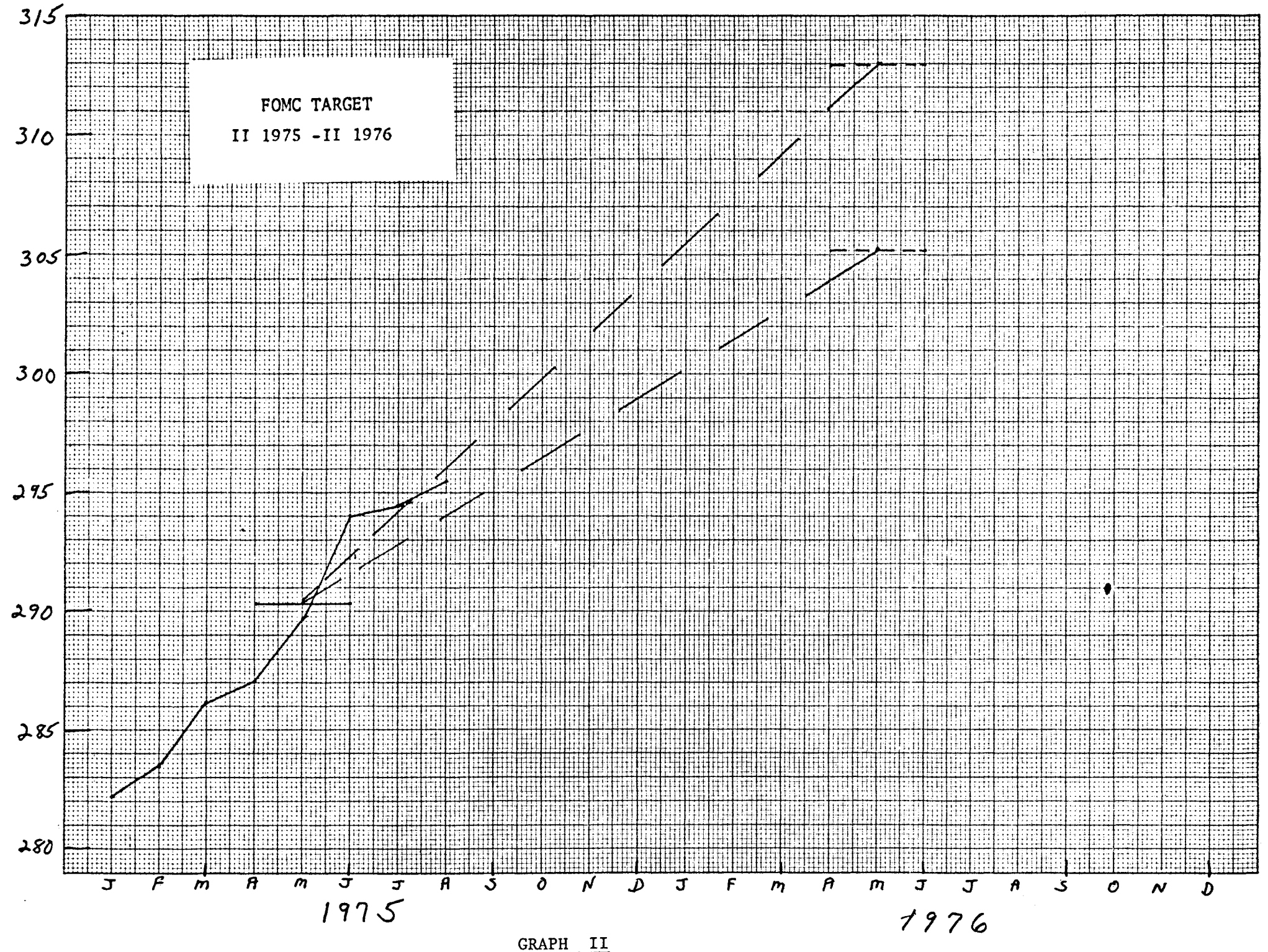
It is frequently stated that the proposal advanced in this position paper shows little concern about unemployment and is apparently more concerned about inflation. This is a politically useful misstatement of the problem. Inflation per se deserves little concern. Our concern is surely directed to the consequences of alternative policies for human welfare. In particular, we have become deeply concerned about the longer-run consequences of inflationary policies. We have been told that "inflation is a zero-sum game". This view is in my judgment singularly blind to the social, policital and economic problems created by inflationary policies in the context of our institutional arrangements. The disruptive and destabilizing consequences of inflation with the serious strains imposed on the political process suggest to me the importance of a careful, moderate and cautious approach in our financial policies. The proposal advanced in this paper is essentially designed to guard against the danger of accelerating inflation and to proceed on a course assuring

a gradual erosion of the inherited inflation.

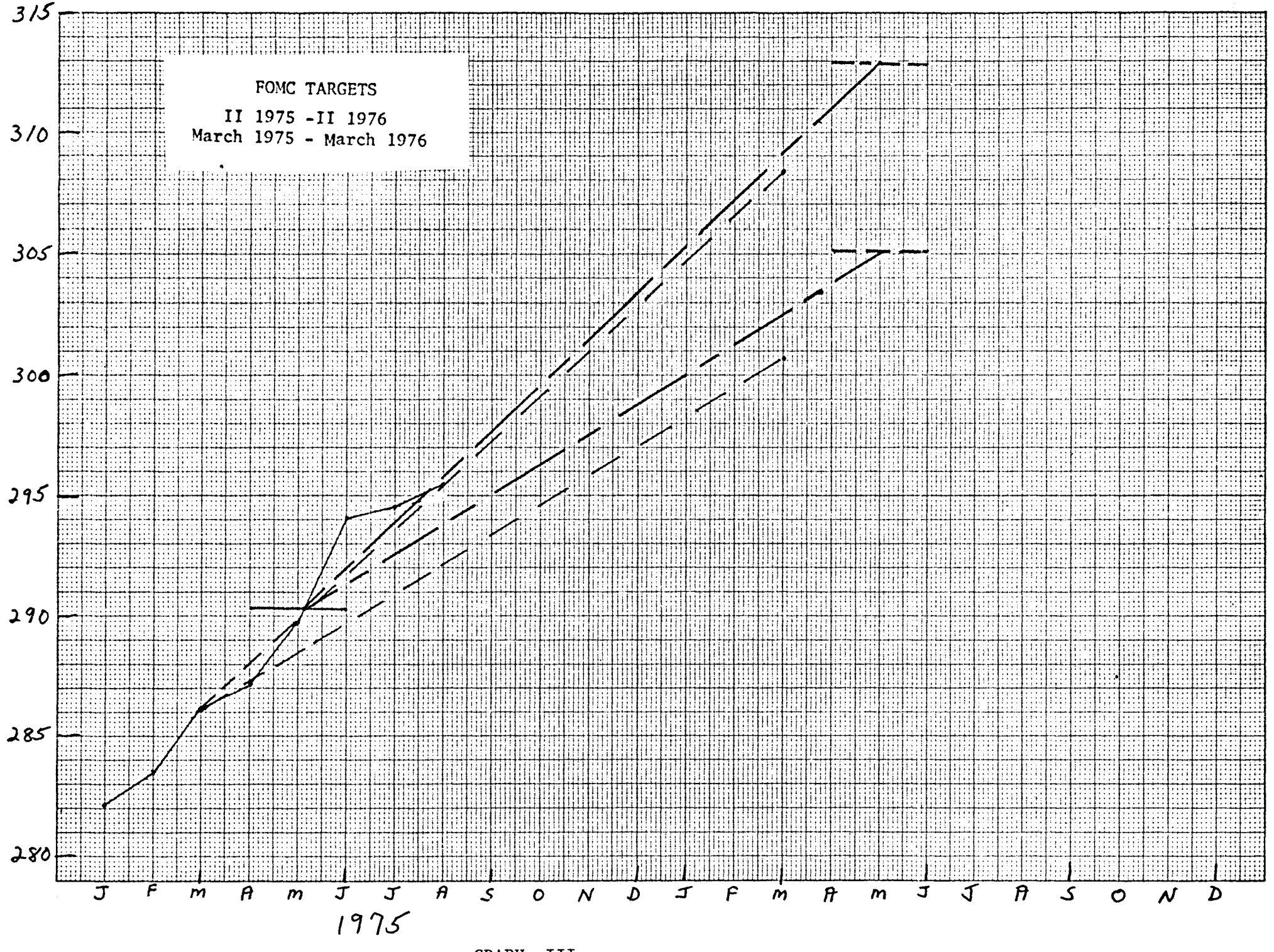
The risks and uncertainties inherent in our situation and evaluations leads me to reject emphatically Okun's assertion of (almost) perfect knowledge. According to the New York Times "he has no worries" about turning the monetary faucet at the right time in order to prevent "an addictive inflationary bias". He assured the New York Times that he knows when to stop the large monetary expansion. Did he know also in 1968 or does he know only just recently? The fact of the matter is that nobody possesses this precise knowledge and probably never will. There remains another aspect to this matter. Okun apparently speaks as if nominal expansions can be enlarged or throttled like the flow of water from a faucet without any serious problems. But a substantial reduction of monetary growth after one year of massive expansion introduces at least temporarily a pronounced retardation of economic activity at the very time that inflation probably accelerates. Okun's proposal most likely leads us to a new round of stagflation with little reduction of unemployment in the average and probably higher levels of inflation over the next years. This risk seems too large. The political and social dangers inherent in this policy seem best avoided by a moderate financial course geared to a longer-run perspective. Policies fostering unemployment and inflation in the future and yielding at best a temporary reduction in current unemployment possess little virtue. These policies increasingly dominated over the last 15 years the media and the political process. It seems time to proceed with an alternative program based on a moderate and longer-run conception avoiding the cultivation of detailed short-run responses without sufficient information.



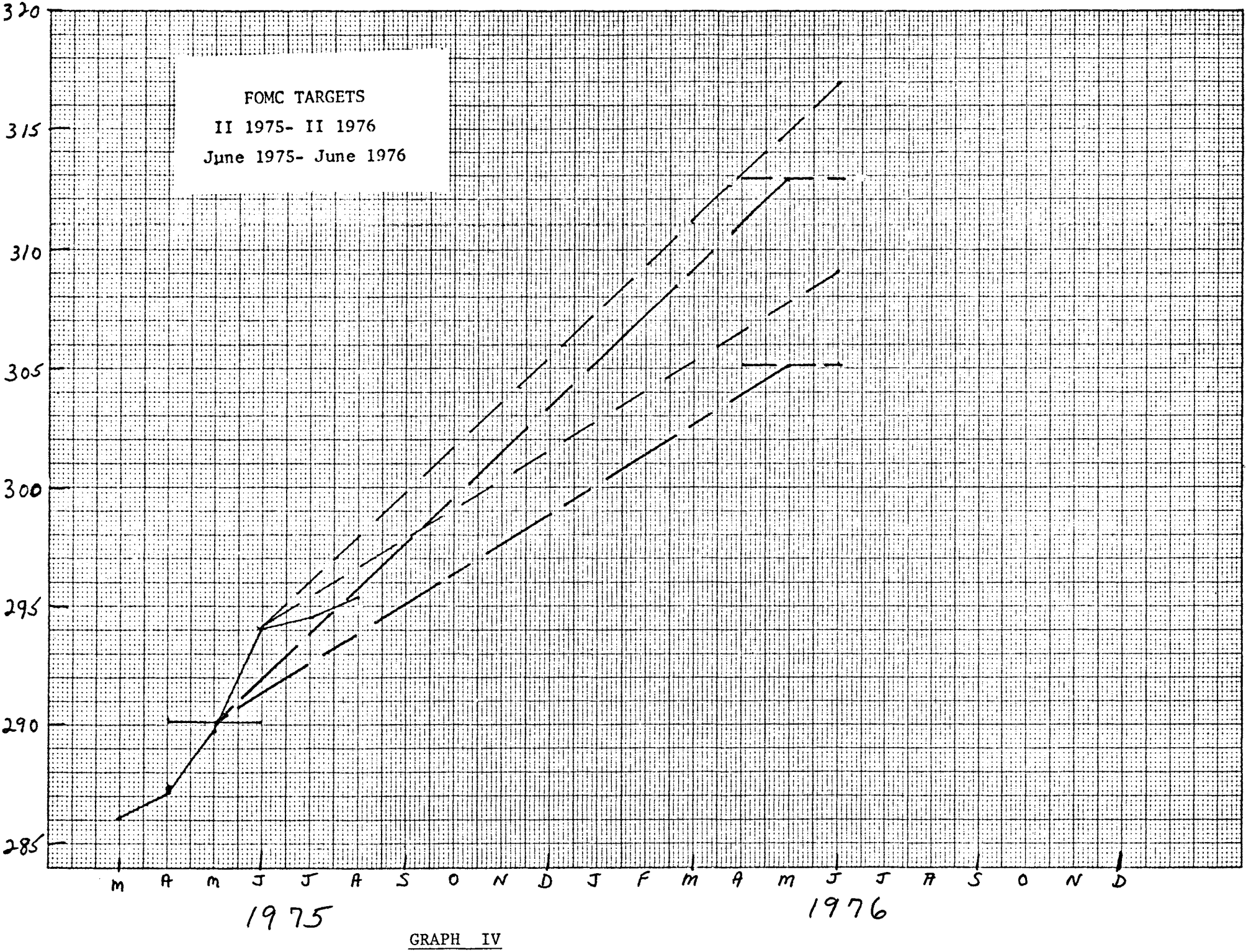
GRAPH I



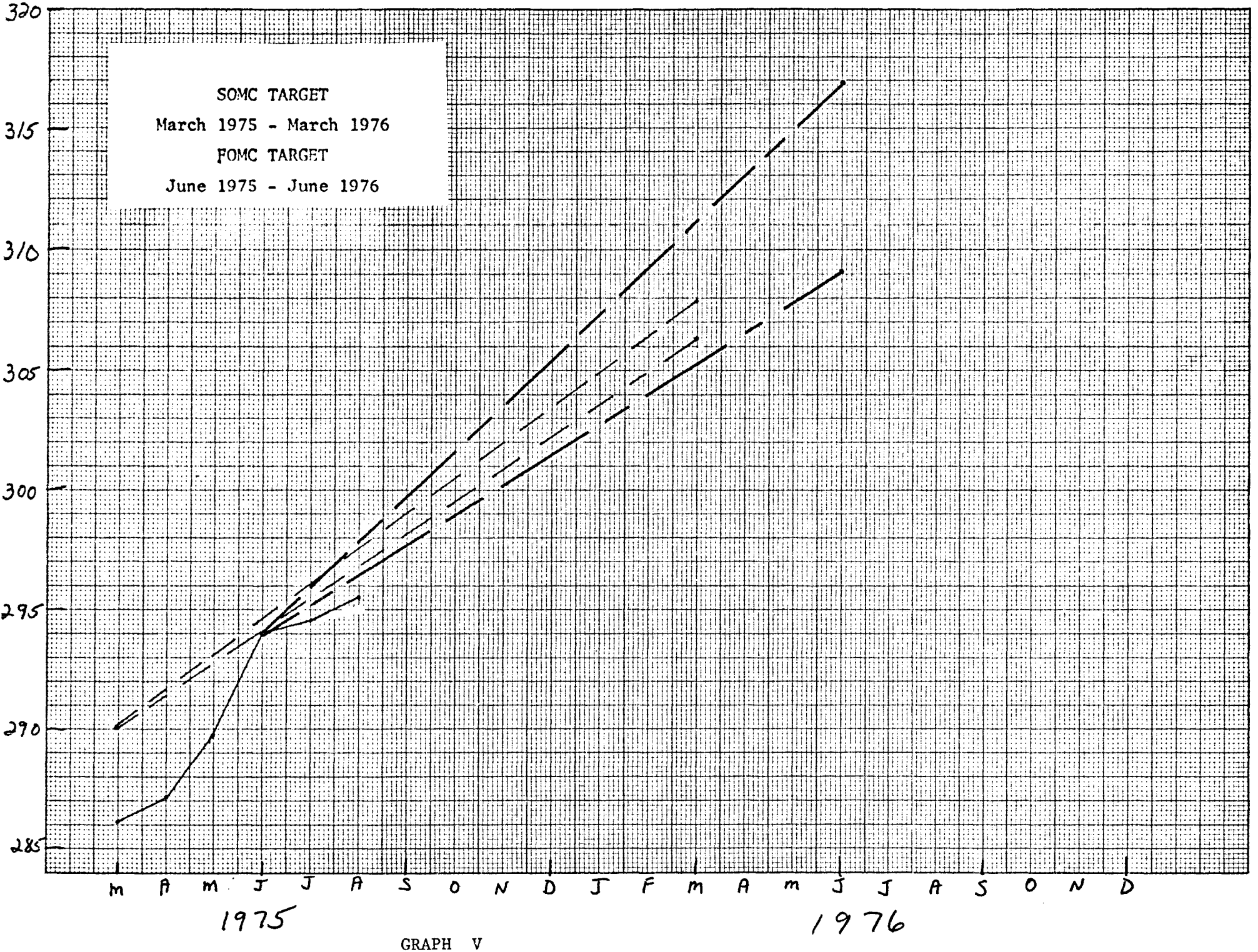
GRAPH II


FOMC TARGETS
II 1975 -II 1976
March 1975 - March 1976
315
310
305
300
295
290
285
280
J F m A m J J A S O N D J F m A m J J A S O N D
1975
CITADEL® NO. 641 - SCIENCE - 10 SQUARES TO CENTIMETER

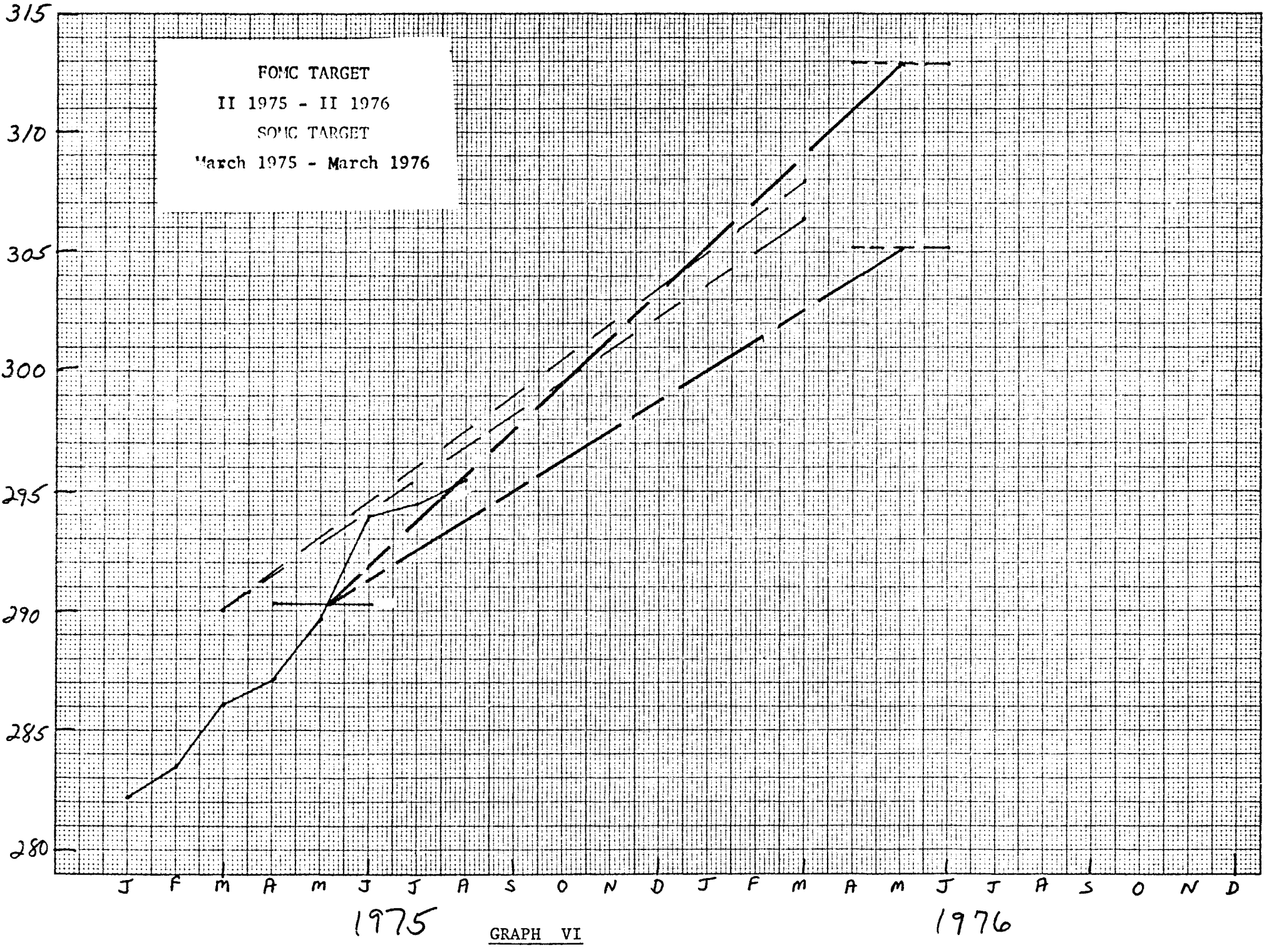
GRAPH III


FOMC TARGETS
II 1975- II 1976
June 1975- June 1976
320
315
310
305
300
295
290
285
M A M J J A S O N D J F M A M J J A S O N D
1975
1976
CITADEL® NO. 641 - SCIENCE - 10 SQUARES TO CENTIMETER

GRAPH IV



GRAPH V



GRAPH VI

Claremont Men's College

Bauer Center, Claremont, California 91711

Telephone (714) 626-8511

Applied Financial Economics Center

Memo to the Shadow Open Market Committee, for Meeting of September 12, 1975

From: A. James Meigs

Re: Implications of Possible Monetary Growth Targets

The attached tables summarize the results of simulations run on a forecasting model developed by John Rutledge, Paul Hunt, and Jerry St. Dennis at the Applied Financial Economics Center, Claremont Men's College. In order to focus on the SOMC's problem of recommending a monetary growth target, we tried five possible growth rates for M_1, while assuming that high-employment-budget Federal expenditures grow at rates projected by the Federal Reserve Bank of St. Louis.

For all five simulations, we assumed that M_1 would have an average value of $295.4 billion in the third quarter of this year. This is approximately the level M_1 would reach in the third quarter if the money stock were to grow at the FOMC's upper target rate of 7.5% per year from the first quarter of '75 to the first quarter of '76. It also is slightly lower than the $295.9 billion quarterly average implied by the March 7 recommendation of the SOMC that the money stock be raised to the growth track that it would have been on if it had grown since last September at the 5.5% rate recommended by the SOMC at its September, 1974 meeting. It is already too late in the quarter for the money stock to reach a much higher or lower quarterly average level than the one assumed. For the subsequent quarters through the end of 1976 we made the following money-growth assumptions:

1. Continuation of the recent pattern of alternation between a high rate of M_1 growth in one quarter and a much lower growth in the next quarter. For the fourth quarter 1975 we began with a 9% annual rate, followed by a 0.99% rate in the first quarter of 1976, and so on. The mean rate for '75:3 through '76:4 was 6%.
2. Extension of the SOMC recommendation for a steady 5.5% annual rate of M_1 growth from 75:4 through 76:4.
3. A 7.1% growth rate for M_1 through 1976. This is approximately the rate of growth that would keep the money stock on the FOMC's high target rate of 7.5%, after allowing for the unusually large increase in 75:2.
4. A rate of growth of 10% for M_1 through 1976.
5. A rate of growth of 15% for M_1 through 1976. We picked these two rates because they have been suggested in public discussions of monetary policy as rates that would be required to achieve various desired levels of interest rates, inflation rates, and rates of growth of real GNP.

The following table lists the quarterly levels and changes in high employment Federal expenditures that we assumed. The nominal changes were used in our St. Louis-type nominal GNP equation and changes in real expenditures were used in the inflation and interest-rate equations. The real expenditure assumptions therefore were conditional by the money growth rates assumed in each simulation.

	H E F E	% Annual Rate of Change in H E F E
1975: III	340.7	- 5.552
: IV	349.0	10.107
1976: I	355.4	7.539
: II	363.5	9.433
: III	379.9	19.305
: IV	397.0	19.305

The numbers in the simulation table are un-retouched estimates taken directly from the computer runs. To make a specific forecast for 1976, we probably would adjust the levels in light of other information. I believe these estimates are helpful, however, in assessing the benefits and costs of shifting from one monetary growth target to another. For example, they indicate how much higher the inflation rate would be in 1976:4, with a 15% money-growth rate than with a 5.5% money-growth rate, other conditions remaining the same.

Conclusions:

1. There does not appear to be any payoff in the form of lower interest rates from a policy of permitting higher growth rates in M_1 than the 5.5% rate recommended by the SOMC or the FOMC target rates. From '75:4 onward, short-term rates are substantially higher at high M_1 growth rates than at low money-growth rates. The difference in behavior of long bond yields is not so pronounced but it is significant. The highest money growth assumption implies that long term bond-holders would forfeit over twenty percent of their capital values over the next

four quarters, as compared with what would have happened to them under the 5.5% money-growth-assumption.

2. The higher rates of monetary expansion would result in higher growth rates for nominal and real GNP through 1976 than would the FOMC's 5.5% rate.

3. The higher money-growth rates would result in a sharp reacceleration of inflation in 1976, with the inflation rate heading for new highs by the end of 1976 with the 15% money-growth assumption

4. All of the money-growth rates tested would produce a re-acceleration in inflation after 76:2, which suggests the need for considering a reduction in money-growth rates early in 1976.

INCOME, INFLATION, AND INTEREST RATE SIMULATION RESULTS

	Δ GNP % Annual Rate	Inflation Rate (Deflator)	Δ Real GNP % Annual Rate	4-6 Month Commercial Paper Rate	Yield on Long AAA Corporate Bonds
Assumption 1 Alternating 9.0%-0.99% M_1 growth					
75:3	5.2	4.0	1.1	5.5	8.7
:4	7.4	4.2	3.2	4.9	8.7
76:1	4.4	1.7	2.7	3.7	8.3
:2	6.6	0.8	5.8	3.2	8.1
:3	4.6	1.0	3.6	3.5	7.9
:4	8.9	1.4	7.5	3.4	7.8
Assumption 2 Steady 5.5% M_1 growth					
75:3	5.1	4.0	1.1	5.5	8.7
:4	5.3	4.3	1.0	5.2	8.7
76:1	5.6	2.1	3.4	4.1	8.4
:2	5.5	1.4	4.1	3.9	8.2
:3	6.2	1.9	4.4	4.3	8.1
:4	8.3	2.3	6.0	4.4	8.0
Assumption 3 Steady 7.15% M_1 growth					
75:3	5.1	4.0	1.1	5.5	8.7
:4	6.2	4.4	1.8	5.3	8.7
76:1	7.3	2.4	4.9	4.4	8.4
:2	7.4	1.9	5.5	4.6	8.2
:3	8.9	2.8	6.1	5.4	8.2
:4	10.7	3.7	6.9	5.9	8.3

	Δ GNP % Annual Rate	Inflation Rate (Deflator)	Δ Real GNP % Annual Rate	4-6 Month Commercial Paper Rate	Yield on Long AAA Corporate Bonds
Assumption 4 Steady 10% M_1 growth					
75:3	5.1	4.0	1.1	5.5	8.7
:4	8.0	4.5	3.5	5.6	8.7
76:1	9.8	2.8	7.0	5.1	8.4
:2	11.3	2.9	8.4	5.8	8.4
:3	13.0	4.4	8.5	7.3	8.5
:4	16.6	6.1	9.4	8.5	8.7
Assumption 5 Steady 15% M_1 growth					
75:3	5.1	4.0	1.1	5.5	8.7
:4	10.6	4.6	6.0	5.9	8.7
76:1	15.0	3.5	11.5	6.2	8.5
:2	18.0	4.6	13.4	7.9	8.6
:3	21.6	7.3	13.3	10.5	8.9
:4	23.7	10.4	13.4	13.0	9.5

Claremont Men's College

Bauer Center, Claremont, California 91711

Telephone (714) 626-8511

Applied Financial Economics Center

Memo to the Shadow Open Market Committee, for Meeting of September 12, 1975

From: A. James Meigs

Re: Implications of Possible Monetary Growth Targets Revised 9/10/75

The attached tables summarize the results of simulations run on a forecasting model developed by John Rutledge, Paul Hunt, and Jerry St. Dennis at the Applied Financial Economics Center, Claremont Men's College. In order to focus on the SOMC's problem of recommending a monetary growth target, we tried five possible growth rates for M_1, while assuming that high-employment-budget Federal expenditures grow at rates projected by the Federal Reserve Bank of St. Louis. We also used two sets of forecasting equations. The results reported in Column #1 for each variable were estimated from equations fit over the period 1965:1 through 1975:2. The results reported in Column #2 for each variable were estimated from equations fit over the period 1953:1 through 1971:2, which were used to avoid some of the complications resulting from price controls and other unusual conditions of the period 1971:3 through 1974:4.

For all ten simulations, we assumed that M_1 would have an average value of $295.4 billion in the third quarter of this year. This is approximately the level M_1 would reach in the third quarter if the money stock were to grow at the FOMC's upper target rate of 7.5% per year from the first quarter of '75 to the first quarter of '76. It also is slightly lower than the $295.9 billion third-quarter average implied by the March 7 recommendation of the SOMC. At the March 7 meeting, the SOMC recommended that the money stock be raised to the level it would have reached if the 5.5% growth rate

recommended the preceding September had been achieved. It is now too late in the third quarter for the money stock to reach a much higher or lower quarterly average level than the one assumed, although the $2.6 billion jump in M_1 in the week ending August 27 makes our third-quarter assumption look a little low. For the subsequent quarters through the end of 1976 we made the following money-growth assumptions:

1. Continuation of the recent pattern of alternation between a high rate of M_1 growth in one quarter and a much lower growth in the next quarter. For the fourth quarter 1975 we began with a 9% annual rate, followed by a 0.99% rate in the first quarter of 1976, and so on. The mean rate for 75:3 through 76:4 was 6%.
2. Extension of the SOMC recommendation for a steady 5.5% annual rate of M_1 growth from 75:4 through 76:4.
3. A 7.1% growth rate for M_1 through 1976. This is approximately the rate of growth that would keep the money stock on the Federal Reserve's high target rate of 7.5%, after allowing for the unusually large increase in 75:2.
4. A rate of growth of 10% for M_1 through 1976.
5. A rate of growth of 15% for M_1 through 1976. We picked these two rates because they have been suggested in public discussions of monetary policy as rates that would be required to achieve various desired levels of interest rates, inflation rates, and rates of growth of real GNP.

The following table lists the quarterly levels and changes in high unemployment Federal expenditures that we assumed. The nominal changes were

used in our St. Louis-type nominal GNP equation and changes in real expenditures were used in the inflation and interest-rate equations. The real expenditure assumptions therefore were conditioned by the money growth rates assumed in each simulation.

The first set of simulations, based on equations fit over 1965-75 gave estimates of inflation for 1976 that seemed too low to be plausible. The first set also indicated a much earlier and sharper reacceleration of inflation than did the second set. We believe these differences stem from the extraordinary increase in inflation in 1973-74 and the subsequent fallback toward the trend rate in the first half of '75. These made money stock changes appear more influential than they should have been and to influence prices with shorter lags. The second set, based on equations fit over 1953-71:1, had prices responding with longer lags and gave more intuititively plausible estimates of levels. However, these naturally missed any effects on expectations that might have resulted from the public's learning about inflation between 71:2 and this year.

Despite these caveats, some conclusions can be drawn:

1. Neither set of simulations indicates that the Federal Reserve can easily depress interest rates by increasing money-growth rates. The higher rates of money growth produce higher interest rates in either set of simulations, by inducing bond traders to revise inflation forecasts.
2. Both sets of simulations reveal the temptation to policy makers to increase GNP growth by increasing growth of the money stock. The higher rates of monetary expansion would result in higher

growth rates for both nominal and real GNP through 1976 than would the SOMC's 5.5% rate. The short-lag model (#1) shows a bigger payoff than does the long-lag model. But retribution comes sooner, too, because the inflation hits bottom during '76 and is re-accelerating before the end of the year. The long-lag model makes it look as though a stimulative policy does not impose any inflation cost, but that is because the re-acceleration of inflation would not begin to appear until 1977. Less than one-fifth of the long-run effect of money growth on inflation is experienced during the first year. Money growth exerts its strongest influence on inflation after approximately two years, with full adjustment taking about five years.

3. The difficulty of adjusting for the distortions caused by the price controls, as shown by the wide differences in the two sets of simulations, illustrates the riskiness of activist policies. No one should be confident in predicting the effects of a 10%-15% money growth to be followed by a deceleration some time later. I believe the inflation risks of such a policy is greater than suggested by the long-lag simulations, although probably not as great as suggested by the short-lag simulation.

AJM:r
9/10/75

INCOME, INFLATION, AND INTEREST RATE SIMULATION RESULTS

	Δ GNP % Annual Rate		Inflation Rate (Deflator)		Δ Real GNP % Annual Rate		4-6 Month Commercial Paper Rate		Yield on Long AAA Corporate Bonds	
	#1	#2	#1	#2	#1	#2	#1	#2	#1	#2
Assumption 1										
Alternating 9.0:-0.99% M_1 growth										
75:3	5.2	4.9	4.0	4.8	1.1	0.1	5.5	5.4	8.7	8.4
:4	7.4	5.6	4.2	4.6	3.2	1.1	4.9	5.5	8.7	8.4
76:1	4.4	4.8	1.7	5.1	2.7	0.3	3.7	5.6	8.3	8.3
:2	6.6	9.3	0.8	5.0	5.8	4.3	3.2	5.7	8.1	8.3
:3	4.6	8.6	1.0	4.7	3.6	3.9	3.5	5.0	7.9	8.0
:4	8.9	7.6	1.4	4.5	7.5	3.0	3.4	4.9	7.8	8.1
Assumption 2										
Steady 5.5% M_1 growth										
75:3	5.1	4.9	4.0	4.8	1.1	0.1	5.5	5.4	8.7	8.4
:4	5.3	4.1	4.3	4.6	1.0	0.4	5.2	5.5	8.7	8.4
76:1	5.6	5.7	2.1	5.1	3.4	0.6	4.1	5.6	8.4	8.4
:2	5.5	8.5	1.4	5.0	4.1	3.5	3.9	5.5	8.2	8.2
:3	6.2	10.0	1.9	4.7	4.4	5.4	4.3	5.0	8.1	8.0
:4	8.3	7.1	2.3	4.5	6.0	2.6	4.4	4.8	8.0	8.0
Assumption 3										
Steady 7.15% M_1 growth										
75:3	5.1	4.9	4.0	4.8	1.1	0.1	5.5	5.4	8.7	8.4
:4	6.2	4.8	4.4	4.6	1.8	0.3	5,3	5.5	8.7	8.4
76:1	7.3	6.9	2.4	5.1	4.9	1.8	4.4	5.6	8.4	8.3
:2	7.4	10.0	1.9	5.1	5.5	5.0	4.6	5.6	8.2	8.1
:3	8.9	11.8	2.8	4.8	6.1	7.0	5.4	5.2	8.2	8.0
:4	10.7	8.9	3.7	4.7	6.9	4.2	5.9	5.1	8.3	8.0

	Δ GNP % Annual Rate		Inflation Rate (Deflator)		Δ Real GNP % Annual Rate		4-6 Month Commercial Paper Rate		Yield on Long AAA Corporate Bonds	
	#1	#2	#1	#2	#1	#2	#1	#2	#1	#2
Assumption 3										
Steady 10% M_1 growth										
75:3	5.1	4.9	4.0	4.8	1.1	0.1	5.5	5.4	8.7	8.4
:4	8.0	6.0	4.5	4.6	3.5	0.5	5.6	5.5	8.7	8.4
76:1	9.8	9.0	2.8	5.2	7.0	3.9	5.1	5.6	8.4	8.3
:2	11.3	12.8	2.9	5.2	8.4	7.6	5.8	5.7	8.4	8.1
:3	13.0	14.9	4.4	5.0	8.5	9.8	7.3	5.5	8.5	8.0
:4	16.6	12.1	6.1	5.1	9.4	7.0	8.5	5.6	8.7	8.1
Assumption 5										
Steady 15% M_1 growth										
75:3	5.1	4.9	4.0	4.8	1.1	0.1	5.5	5.4	8.7	8.4
:4	10.6	8.2	4.6	4.6	6.0	3.6	5.9	5.5	8.7	8.4
76:1	15.0	12.8	3.5	5.2	11.5	7.6	6.2	5.6	8.5	8.1
:2	18.0	17.7	4.6	5.4	13.4	12.3	7.9	5.6	8.6	7.9
:3	21.6	20.4	7.3	5.4	13.3	15.0	10.5	5.2	8.9	7.9
:4	23.7	17.8	10.4	5.7	13.4	12.1	13.0	5.1	9.5	8.2

FEDERAL EXPENDITURE ASSUMPTIONS

	H E F E	% Annual Rate of Change in H E F E
1975: III	340.7	- 5.552
: IV	349.0	10.107
1976: I	355.4	7.539
: II	363.5	9.433
: III	379.9	19.305
: IV	397.0	19.305

Comments on the Rate of Inflation and the Real Rate of Interest from 1961 to 1975

by Allan H. Meltzer

The relation between inflation and the growth of money is a central issue in current policy discussions. Some economists argue that a high rate of monetary expansion now -- to to 15% -- will have very little effect on the price level because there is unemployment.

The table shows that for the past fifteen years the average rate of monetary growth has provided an accurate forecast of the rate of inflation in the following year. The relation held during the recovery from 1961 to 1963, during the rising inflation from 1965 to 1971 and during the decline in inflation in 1971 and 1972.

[Insert Table 1 about here]

Column (1) shows the average rate of monetary growth for the three preceding years. (The 1961 growth rate is the average for 1958-60).

Column (2) shows the rate of change of the deflator for private product.

Column (3) is the "anticipated rate of price change" computed by subtracting 1% from column (1), and Column (4) shows the error made predicting the current rate of price change, column (2), from the "anticipated rate of price change." The only sizeable error is in 1974, a year of shortages induced by past price controls, food price increases; oil price rise and other well publicized events.

Column (6) shows the result of subtracting the "anticipated rate of inflation" from the market rate of interest on new issues of corporate bonds.

Table 1

Current Year	Average Percent Rate of Change of Money for three previous years [a] (1)	Percentage Rate of Price Change [b] (2)	Estimated Rate of Price Change Col. (1) less 1% (3)	Difference Col (2)-Col (3) (4)	Interest Rates on New AA Indust. Bonds [c] (5)	"Expected" Real Rate of Interest (6)
1961	2.0	0.9	1.0	- 0.1	4.3	3.3
1962	1.8	1.0	0.8	0.2	4.1	3.3
1963	1.7	1.1	0.7	0.4	4.1	3.4
1964	2.7	1.1	1.7	- 0.6	4.2	2.5
1965	3.2	1.5	2.2	- 0.7	4.4	2.2
1966	4.2	2.8	3.2	0.4	5.2	2.0
1967	3.8	2.9	2.8	0.1	5.6	2.8
1968	4.4	3.7	3.4	0.3	6.4	3.0
1969	5.5	4.7	4.5	0.2	7.5	3.0
1970	5.8	4.8	4.8	0	8.6	3.8
1971	5.7	4.3	4.7	- 0.4	7.5	2.8
1972	5.2	3.2	4.2	- 1.0	7.2	3.0
1973	6.8	6.3	5.8	0.5	7.5	1.7
1974	6.6	13.2	5.6	7.6	8.8	3.2
1975	6.0	6.8*	5.0	1.8		

Source: BCD, Salomon Brothers

* 2 quarters

a/ does not include current year

b/ deflator for private product

c/ from Salomon Bros. 1965-69 is utility average AA less 0.25

A crude measure of the effect of government debt finance on the real rate of interest is obtained by comparing the average "real rate of interest" in the five years of large new issues, 3.16%, with the rate in five years of low new issues, 2.46%.

Real rates of interest depend on many factors other than debt finance, so the differences should not be attributed solely to the effect of debt finance.

BRIEFING FOR SHADOW OPEN MARKET
COMMITTEE MEETING, SEPTEMBER 12, 1975

FED FOREIGN EXCHANGE INTERVENTION: SOME QUESTIONS

by Wilson E. Schmidt*

I. Introduction

Following on several years of international monetary turbulence, capped by a massive international financial crises, in March 1973 the leading nations agreed to a system of generalized floating of exchange rates. Under the new system, these nations agreed not to fix the value of their currencies in terms of the dollar. In July 1973 the Fed began to intervene in the New York foreign exchange market to affect exchange rates.

Fed intervention has increased sharply since then. From July 1973 through January 1974 the Fed's gross sales of foreign currency were $517 million. In the succeeding six months gross sales rose slightly to $527 million. By the end of the next six months, January 1975, gross sales grew to $724 million. And during the succeeding three months, February through April 1975, gross sales had jumped to $793 million, more than twice their previous annual rate.

---

*Professor and Head, Economics Department, Virginia Polytechnic Institute and State University, Blacksburg, Virginia. Deputy Assistant Secretary of the U. S. Treasury, 1970-72.

The Executive Vice President of the New York Fed, Mr. Alan Holmes, recently stated the purpose of Fed intervention: "As far as intervention policy is concerned, our current approach is to intervene solely to maintain orderly markets and not to achieve or maintain any particular rate." (June, 1975) This is quite different from Fed intervention prior to August 15, 1971 (when the tie to gold was dropped) because that intervention was chiefly designed to give foreign central banks a guarantee on the value of the dollars they held in order to ward off their requests for our gold.

Mr. Holmes goes on to offer one justification for intervention:

> There are too many occasions in the foreign exchange market where purely transitory events--the bunching of exchange orders, the misinterpretation of a current news item--can cause disproportionate movements in the exchange rate, particularly if markets are thin or if market participants are uncertain about national policies as to exchange rates. Such movements are in no sense fundamental, but they can cause a great deal of trouble if they tend--as they often do--to generate other speculative movements of the band wagon variety.

And Mr. Holmes clarifies the concept of disorderly markets and what the Fed seeks to accomplish:

> Early this year, in January and February, our activity was all one way as we sold foreign exchange to cushion in some degree a sharp decline in the dollar rate. At that time, as now, most commercial and central bankers felt that the dollar was undervalued--a view that I and my colleagues share. But other adverse factors, real or imagined, were enough to push the dollar down. Our intervention helped the market find its own footing so that reasonably good two-way trading could resume. Since that time our market activity

> has become more even-handed with market purchases and sales of foreign exchange about balancing out. While there have been occasions when sharp temporary rate declines necessitated support operations to maintain orderly markets, these operations were reversed at times when the dollar was strong, providing us foreign exchange to cut back our swap debt. While our net market purchases of exchange in the past three months were about even, we were able to repay swaps in a substantial amount through foreign exchange operations with our central bank correspondents.

II. The Mechanics

The mechanics of Fed intervention are simple. When the Fed wants to intervene, say selling German marks in order to strengthen the dollar, the New York Fed instructs one or more commercial banks to sell a given amount of marks for it. The commercial bank may call one or more of several brokers to place the offer; the broker then searches the market for a willing partner to the deal. Or the commercial bank may deal directly with commercial banks overseas. So far, since the float, all the deals have been in the spot market, none in the forwards.[1]

The New York Fed appears to have some autonomy in its interventions--

---

[1] The commercial bank that serves as the agent has to pay the Fed in Fed funds while the buyer pays the agent bank clearing house funds which in turn become Fed funds a day later. The extra cost, namely one day's interest on Fed funds is compensated in the rate of exchange charged to the Fed.

how much has never been told. There is a daily, frequent telephone contact among the New York Fed, the Board of Governors, and the Treasury. In fact, the New York Fed seeks to contact the other two prior to any intervention. This occasionally introduces some lags into the system when the appropriate officials cannot be reached.[2]

The Fed has two sources for foreign currencies. One is its own relatively small holdings, which have ranged from a high of $220 million to a low of $1 million in dollar equivalent since July 1973. The second, much larger, is a system of borrowing arrangements with foreign central banks (called swap agreements) which in principle could permit it to obtain up to $20 billion equivalent in foreign currencies for a period of three months. The funds can in principle be rolled over, though the general directive covering Fed intervention obviously seeks to limit the total length of borrowing to twelve months.

The Fed can choose among a variety of methods or styles of intervention. Because of the Fed's potentially large resources under the swap agreements, a major factor determining the effect of Fed intervention is whether and how well it is known that the Fed is intervening.

The styles range from the highly public intervention, announced by a statement by the Chairman of the Board of Governors and/or the Secretary of the Treasury to highly secret interventions. Between these extremes, the Fed has some options.

---

[2]Intervention takes place under a directive dated January 1, 1973 which sets out very general guidelines for intervention policy. It is published in the Annual Report of the Board of Governors. It is now being revised.

Though the commercial banks are pledged to secrecy when dealing on behalf of the NY Fed, the Fed may instruct the commercial bank to undertake the operations in such a manner as to make it fairly clear that the Fed is in the market. This would be the case if the bank were to spread the Fed's offers among a number of brokers in the same amounts at the same quotes, so to speak, all over the street. If foreign exchange dealers see offers in round amounts of say 5-10 million marks at repeated rates, they smell the Fed. By changing its rates, the Fed can cover its tracks. On the other hand, it can caution the bank to do the job very quietly, in which case the commercial bank might spread the funds all over the world through its branches and correspondents.

Although the NY Fed appears to rotate its intervention business among leading banks, presumably to avoid charges of favoritism, it can fine tune the degree to which its presence is known by picking a bank that it is known not to deal in large amounts normally in that currency it is offering. Alternatively, if it wants to keep it secret, it can pick a bank that is known to deal in that currency actively.

Another factor, which again is a question of style, is whether the Fed instructs the commercial bank to move aggressively--as telling the commercial bank to hit every bid in the market--in which case it clearly has tremendous power to affect the market while it is in. Less boldly, it can tell the commercial bank to hit at a certain level. Finally, it may simply tell it to sell on offer when the rate reaches a certain point.

The very public approach is easy to understand. In this approach the Fed is relying on the announcement effect. This obviously does work on occasion. For example, on May 14, 1974 it was let known that the U.S., Germany, and Switzerland had agreed on concerted foreign exchange operations. By the following day, in the "scramble"--to use the Fed's word--the mark and the Swiss franc fell 4-1/2% in respect to the dollar.

But why would the Fed want to use the secret approach? It makes sense if the Fed wants to invest relatively little money in an operation and let the market believe that private market forces are driving the rate one way or another. Putting it another way, it the market knew it was the Fed that was offering the small amounts, the market would not regard the Fed as being serious in its efforts to affect the rate. (This does not mean that small offers are of no consequence because some of the Fed's intervention is probably done to get the feel of the market.)

To put the explanation for secrecy or some degree of uncertainty still another way, if the Fed becomes the dominant factor in the market it runs the risk of having its hand called. As the dominant factor it would determine rates. If the market believes the Fed is holding the rate at a level that the market does not believe is right, the market will take all the foreign exchange the Fed has to offer, believing that when the Fed pulls out, the rate will change sharply, providing a handsome profit.

Foreign exchange traders with whom I talked believe that it is

very difficult for the Fed to hide its presence. Certain patterns in the quotes from brokers, such as the same quotations from several brokers for fairly large amounts and the repetition of the same quotes, reveal the presence of the Fed. Some traders call the commercial bank they suspect of intervening for the Fed and ask if they are; the tone of the response conveys the answer even if the words do not. Others call the Fed itself with the same results. But that leaves the quantities uncertain and these are important.

Another important factor in determining the effect of Fed intervention is whether it occurs in the morning or in the afternoon. In the morning both the foreign exchange markets in Europe (in its afternoon) and in New York are open--providing a very broad market. Whereas in the afternoon, Europe is closed and the entire market is thinner. Thus a given amount of Fed intervention will have a much stronger effect on rates in the afternoon than in the morning. The European market will normally open the next morning at the New York closing rate.

Still another factor is how the market perceives the intervention, which seems in part at least to be a function of the amounts the Fed is offering as well as its persistence in the market. What are thought to be piddling sums will be disregarded. If, after a small intervention, the Fed backs away from the market, the market pays it no heed. It is difficult to nail down what the market perceives as small because that in turn is complicated by the nature of the market at a particular time. (In a normal market, that is one undisturbed by official

announcements, not a Friday or a holiday, according to one trader 250 million German marks would be big, 50 million would be small.)

What is important here are the traders' judgments as to whether or not the Fed is right. If a trader thinks the market is long in dollars, he is apt to assume that foreign currency sales by the Fed will have no effect.

From talks with traders, it is clear that there is no automatic presumption that the Fed (or any other central bank) is right in predicting its ability to slow or speed the movements of rates. When a trader senses that the Fed is in, he quickly evaluates the situation, perhaps widening his spread to protect himself while analyzing the market. He may decide to help the Fed by doing what it wants in his own interest or he may do the reverse, in effect trying to make money off the Fed. This includes the commercial bank selected to serve as the agent of the Fed who is in the best position to evaluate the effectiveness of the Fed action. Even so, while the agent banks know the Fed is in the market and while the non-agent trader may be pretty sure the Fed is in, neither he nor the agent bank can know for sure how much it is in for. (The Fed feeds out foreign exchange sometimes in a sequence of deals and through several banks and even the agent trader will have a difficult time guessing how far the Fed will go on any sequence or at one time.)

Finally, it may be noted that the Fed has been quite selective in the currencies in which it deals. It has dealt primarily in German

marks. While it has dealt also in Dutch guilders, Swiss francs and Belgian francs, these have been in smaller amounts.

III. Some Questions

Fed intervention in the foreign exchange market raises some interesting questions. What is the impact on the domestic economy? What is the Fed trying to accomplish? Does it actually change rates? If so, should there be rules governing its intervention?

A. Domestic Monetary Impact

When the Fed sells foreign currency, it absorbs bank reserves just as when it sells U.S. Government securities. Hence, there always is a potential impact on the U.S. stock of money. But several things should be said about this.

First, the amount of intervention is small compared with other Fed operations affecting bank reserves. For example, gross outright purchases by the Fed of U.S. Government securities averaged well over $1 billion per month from July 1973 through April 1975 while gross sales of foreign exchange averaged over $100 million.

Second, the Fed, in determining its open market operations, throws its interventions in with all the other factors affecting reserves. Thus, the intervention transactions get lost in the formulation of policy. Unless the Fed wants to take account of international events and transactions in the formulation of its open market operations,

an intervention operation does not have any direct impact on the amounts of reserves it supplies.

Third, however, intervention can have an indirect effect when the Fed is focusing on interest rates as its target for monetary policy. To understand this point, one must know that when the Fed draws German marks under a swap agreement, it credits the account of the German central bank with dollars and receives a credit of marks on the books of the German central bank. When the Fed sells the marks, the effect is to reduce American bank reserves as a U.S. bank pays for the marks. When those marks are paid, they will be transferred from the German central bank to the commercial bank in Germany of the recipient of those marks. The latter raises German commercial bank reserves.

If we suppose that both central banks offset, through open market operations, the effects of these transfers, then the Fed buys U.S. Government securities to offset its sales of marks while the German central bank sells government securities to offset the transfer of marks to the German commercial bank. As a consequence, bank reserves and the money supply in each country remains unchanged.

The net effect is that the U.S. public has fewer U.S. government securities and the German public has more German government securities. As a consequence, with no change in the money supply in either country, interest rates will tend to fall in the United States and tend to rise in Germany. To the extent that the Fed hones in on interest rates to determine its policies, the decline in interest rates will signal to

it a smaller need for reserves and the Fed will cut down its effort to supply reserves. Under these circumstances, sales of marks would contract the money supply indirectly.

This indirect effect would never, however, get started if swift movements of private capital among markets here and abroad would prevent the incipient interest rate changes from occurring which would lead the Fed to misread the situation. If securities in different markets are perfect substitutes for one another, such swift movements will occur. But with floating rates and the ever present possibility of increased exchange controls securities are not likely to be perfect substitutes, and thus the point should be watched for by the Fed.[1]

Fourth, having said all this, it does not seem likely that over the long pull foreign exchange intervention, as long as it merely substitutes for domestic open market operations, that is, if it is undertaken entirely within a target for monetary growth, has any different impact than domestic open market operations. Thus, the sale of dollar securities by the Fed tends to tighten interest rates here and reduce the growth of the money stock, which will bring in foreign capital which has the effect of appreciating the dollar. Similarly, the sale of marks by the Fed tends to cause an appreciation of the dollar while reducing the growth of

---

[1]Even if securities are perfect substitutes, the sale of marks by the Fed will raise the dollar value of the mark, and Americans will enjoy an increase in their mark denominated wealth. The rise in their wealth will increase their demand for both foreign and domestic securities as well as for money which also may shift interest rates.

the stock of money here and tightening interest rates. In the longer run, the price level in the United States will conform to whatever stock of money prevails. The exchange rate will conform to that price level. As long as either domestic open market operations or foreign exchange intervention have the same effects on the stock of money, as would be the case if they occur within the framework of a given monetary target, the price level and the exchange rate will not tend to differ from what they otherwise would be no matter whether domestic or foreign exchange operations are employed.

B. What Are Disorderly Markets?

This question goes to the very core of intervention policy.

At minimum, the notion of a disorderly market is one in which there are abrupt changes in rates, where the market is only one way (supply or demand but not both), and that there are quotes without business being transacted. This suggests a very short run phenomenon, prevailing for minutes and intermittently over several hours and, at most, days.

I found no agreement among traders on the degree of abruptness in changes in rates which is required to constitute a disorderly market.

Nor is there agreement that the concept is limited to the very short run. Some private traders conceive of it as wide swings in rates over several months. Others see it as something that is very short term.

It seems quite clear from the statement of Mr. Alan Holmes, quoted earlier, that the Fed sees the concept in terms of months as

well as minutes. And in this respect it appears that other central banks agree. For example, the German central bank explains its policy as follows:

> In its intervention policy the Bundesbank's guiding principle is that interventions should be made only for the purpose of maintaining "orderly market conditions", and that fundamental trends in the markets should not (and cannot) be counteracted. However, interventions have not only served to maintain orderly market conditions and avoid hectic exchange rate fluctuations from day to day. Rather, the attempt has been made to moderate excessive fluctuations in the Deutsche Mark rate vis-a-vis the U.S. dollar over extended periods of time. This has been done not least also in the interest, and with the full consent, of the other members of the European currency bloc.

There may be still another concept. In reading Fed reports on intervention it is obvious that the Fed thinks it is more important to tell the public when it sells foreign currencies than when it buys, since the sales of foreign currencies are far easier to pinpoint in time than the repurchases. One wonders if the repurchases of foreign currencies are not made in smaller amounts and spread over a longer period of time than the sales so as to have less effect on the market. Though the evidence is slim, one wonders if the Fed may perceive purchases as being different from sale in respect to intervention, i.e., that one is intervention and the other is not. If so, perhaps there is a third concept, namely that disorderly markets exist when the Fed thinks the dollar needs support.

Obviously, there are rather significant differences among these

three concepts of disorderly markets in terms of whether or not intervention is designed to buck the trend. It is by no means clear which of the concepts prevail.

C. Are There Perverse Effects?

However defined, one cannot take it for granted that Fed intervention reduces disorderly markets. The reason is that there is the possibility of some perverse effects.

The foreign exchange market is often full of rumors, including rumors of Fed intervention when it in fact is not intervening. One foreign exchange dealer reported that on numerous occasions other dealers told him that he was intervening for the Fed when in fact he was not. The Reuters ticker, a major source of information in trading rooms, often reports the rumors. Obviously, these rumors can make the market disorderly. Unfortunately, there is no way to tell whether the orderliness achieved by Fed intervention is larger or smaller than the disorderliness created by the rumors of intervention.

Still another perverse effect may occur when the Fed pulls out of the market. Once the Fed stops selling foreign exchange, for example, those holding dollars may panic, fearing that their existing holdings of dollars will fall in value, and therefore will sell them, driving the price down. This, say the traders, does happen. The same phenomenon has been observed in the government securities market.

Still another problem may arise because under the swap arrangements

the Fed ultimately must repay the foreign exchange it borrows. In principle, the sale of marks today by the Fed should cause the value of the dollar in terms of marks in the forward market to fall because the market knows the Fed has to repurchase the marks sometime in the future. But since the market does not know when the repurchase will occur, it adds to the uncertainty about forward rates.

Finally, there can be some confusion over whether the Fed is intervening when it undertakes transactions for its customers such as foreign central banks or the U.S. Government.

Whether the perverse effects outweigh the reverse effects is extremely difficult to analyze. After experimenting with several techniques of analysis, it is apparent that there is not enough public information on the timing of Fed intervention and that of other central banks to draw strong conclusions. During the first two years of the float, foreign exchange markets appear to have followed a random walk with no tendency, as compared with chance, towards runs or bandwagons in one direction or another. But since the exchange rates have throughout the period been influenced by central banks it is not possible to conclude whether this result has been helped or hindered by intervention.

D. Rules for Management?

Recently efforts have been made to set down some rules for central bank intervention. These rules would call for intervention when reserves, exchange rates, or measure of the balance of payments change by a certain amount.

On reflection, it is clear that the effort to establish rules is mistaken, both theoretically and as a practical matter.

The theoretical objection lies in the fact that the only justification for central bank intervention in the foreign exchange market is that the central bank has better information than the market. What kind of information? Information about the future. The past is known to all. Since all of the proposed rules are tied to changes from the past, they are embedded, one way or another, in the past. Rules requiring intervention prevent the central bank from using any inside information about the future it has such as that gained about the monthly Bank for International Settlements meetings of the leading central banks and morning telephone calls.

The practical objection is that no rule can be written which is automatically consistent with the market place. If the Fed is forced to intervene or reverse its intervention at a certain time because of a rule, that rule will become known through experience. If the market does not believe that its intervention (the rule) is correct, the market will wipe the Fed out, buying all the foreign currency it sells in anticipation of a subsequent rise in its value. When the Fed repurchases the foreign exchange at a higher price to repay its borrowing under the swaps, it will suffer losses which in turn will be borne by the American taxpayer since virtually all of the profits of the Fed are returned to the Treasury. Few would condone, as our bicentennial

approaches, such taxation without representation for the benefit of speculators.[1]

---

[1]The substantial losses in foreign exchange transactions reported by the Fed for 1974 were, I believe, attributable to losses endured in repaying swaps dated before August 15, 1971.

ECONOMIC OUTLOOK
(BILLIONS OF DOLLARS--SEASONALLY ADJUSTED ANNUAL RATES)

AUGUST 8, 1975

	ACTUAL		FORECAST						ANNUAL	ANNUAL	ANNUAL	ANNUAL	ANNUAL
	75:1	75:2	75:3	75:4	76:1	76:2	76:3	76:4	1972	1973	1974	1975	1976
GROSS NATL PRODUCT	1416.6	1433.4	1470.0	1520.0	1571.0	1623.0	1670.0	1718.0	1158.0	1294.9	1397.4	1460.0	1645.5
%CH	-3.9	4.8	10.6	14.3	14.1	13.9	12.1	12.0	9.8	11.8	7.9	4.5	12.7
CONSTANT DOLLAR GNP	780.0	779.4	789.0	805.9	822.5	838.3	850.3	862.0	792.5	839.2	821.2	786.6	843.3
%CH	-11.4	-0.3	5.0	8.8	8.5	7.9	5.8	5.6	6.2	5.9	-2.1	-4.0	6.9
PRICE DEFLATOR	1.8162	1.8390	1.8630	1.8860	1.9100	1.9360	1.9640	1.9930	1.4610	1.5429	1.7024	1.8510	1.9508
%CH	8.5	5.1	5.3	5.0	5.2	5.6	5.9	6.0	3.4	5.6	10.3	8.7	5.4
CONSUMPTION EXPENDITURES	913.2	939.1	962.0	987.0	1010.0	1035.5	1061.0	1087.5	729.0	805.2	876.8	950.1	1040.5
%CH	8.0	11.4	10.6	10.8	9.7	10.5	10.2	10.4	9.3	10.4	8.8	8.4	10.4
DURABLES	124.9	130.0	136.0	142.0	147.0	152.5	158.0	162.5	118.5	130.3	127.5	133.2	155.0
%CH	14.7	17.4	19.8	18.8	14.8	15.8	15.2	11.9	14.0	10.0	-2.1	4.4	16.3
NONDURABLES	398.8	408.5	416.0	425.0	435.0	445.0	455.0	465.0	299.7	338.0	380.2	412.1	450.0
%CH	7.4	10.1	7.5	8.9	9.7	9.5	9.3	9.1	7.6	12.8	12.5	8.4	9.2
SERVICES	389.5	399.6	410.0	420.0	428.0	438.0	448.0	460.0	310.9	336.9	369.0	404.8	443.5
%CH	6.4	10.8	10.8	10.1	7.8	9.7	9.4	11.2	9.2	8.4	9.5	9.7	9.6
INVESTMENT EXPENDITURES	163.1	147.3	160.0	179.0	199.0	214.0	225.0	234.5	179.4	209.3	209.3	162.3	216.1
%CH	-63.2	-33.5	39.2	56.7	52.8	33.7	22.2	16.0	16.7	16.7	0.0	-22.5	34.4
NONRES FIXED EXPEND	147.0	144.6	144.0	146.0	150.0	154.0	158.0	165.0	116.8	136.7	149.2	145.4	156.7
%CH	-10.7	-6.4	-1.6	5.7	11.4	11.1	10.8	18.9	11.7	17.1	9.1	-2.5	7.8
PRODUCERS DUR EQUIP	94.2	94.4	95.0	97.0	100.0	103.0	106.0	110.0	75.7	89.7	97.1	96.2	104.7
%CH	-12.9	0.9	2.6	8.7	13.0	12.6	12.2	16.0	13.6	18.5	8.2	-2.0	10.1
BUSINESS STRUCTURES	52.8	50.2	49.0	49.0	50.0	51.0	52.0	55.0	41.1	47.0	52.1	50.3	52.0
%CH	-6.5	-18.3	-9.2	0.0	8.4	8.2	8.1	25.2	8.4	14.3	10.7	-3.5	3.5
RESIDENTIAL STRUCTURES	35.3	36.4	40.0	45.0	50.0	54.0	58.0	61.5	54.0	57.2	46.0	39.2	55.9
%CH	-41.7	13.1	45.8	60.2	52.4	36.0	33.1	26.4	26.0	6.0	-19.7	-14.7	42.6
INVENTORY CHANGE	-19.2	-33.7	-24.0	-12.0	-1.0	6.0	9.0	8.0	8.6	15.4	14.2	-22.2	5.5
NET EXPORTS	8.8	9.2	6.0	6.0	4.0	4.0	4.0	4.0	-6.0	3.9	2.2	7.5	4.0
GOVT PURCHASES	331.6	338.8	342.0	348.0	358.0	370.0	380.0	392.0	255.7	276.4	309.2	340.1	375.0
%CH	9.9	9.0	3.8	7.2	12.0	14.1	11.3	13.2	9.1	8.1	11.9	10.0	10.3
FEDERAL	126.5	128.6	128.0	129.0	133.0	138.0	142.0	147.0	104.9	106.6	116.9	128.9	140.0
%CH	6.2	6.8	-1.9	3.2	13.0	15.9	12.1	14.8	7.3	1.6	9.7	9.5	9.4
MILITARY	84.7	85.4	85.0	85.0	87.0	89.0	91.0	93.0	74.8	74.4	78.7	85.0	90.0
OTHER	41.8	43.2	43.0	44.0	46.0	49.0	51.0	54.0	30.1	32.2	38.2	43.0	50.0
STATE & LOCAL	205.1	210.2	214.0	219.0	225.0	232.0	238.0	245.0	150.8	169.8	192.3	212.1	235.0
%CH	12.2	10.3	7.4	9.7	11.4	13.0	10.8	12.3	10.4	12.6	13.3	10.3	10.8

NOTE: PERCENTAGE CHANGES AT ANNUAL RATES; PRELIMINARY DATA FOR 75:2

(BILLIONS OF DOLLARS--SEASONALLY ADJUSTED ANNUAL RATES)

	ACTUAL		FORECAST						ANNUAL	ANNUAL	ANNUAL	ANNUAL	ANNUAL
	75:1	75:2	75:3	75:4	76:1	76:2	76:3	76:4	1972	1973	1974	1975	1976
PRETAX PROFITS* & IVA 1/	94.3	92.0	96.0	104.0	110.0	119.0	124.0	130.0	92.2	105.1	105.6	96.6	120.7
%CH	-30.8	-9.4	18.6	37.7	25.2	37.0	17.9	20.8	17.2	14.0	0.5	-8.6	25.0
INV VAL ADJ (IVA)	-7.0	-7.9	-5.0	-5.0	-10.0	-10.0	-10.0	-10.0	-7.0	-17.6	-35.1	-6.2	-10.0
PRETAX PROFITS 2/	101.2	99.9	101.0	109.0	120.0	129.0	134.0	140.0	99.2	122.7	140.7	102.8	130.7
%CH	-64.9	-5.0	4.5	35.7	46.9	33.5	16.4	19.1	18.6	23.7	14.7	-27.0	27.2
TAX LIABILITY	39.0	37.8	38.2	41.2	45.4	48.8	50.7	52.9	41.6	49.8	55.7	39.0	48.4
%CH	-68.4	-12.1	4.5	35.7	46.9	33.5	16.4	19.1	10.7	19.9	11.8	-29.9	26.6
AFTER TAX PROFITS*	62.3	62.1	62.8	67.8	74.6	80.2	83.3	87.1	57.6	72.9	85.0	62.8	81.3
%CH	-62.3	-1.0	4.5	35.7	46.9	33.5	16.4	19.1	25.1	26.5	16.6	-26.0	27.5
PERSONAL INCOME	1193.4	1220.8	1245.0	1281.0	1318.0	1355.0	1394.0	1435.0	944.9	1055.0	1150.5	1235.0	1378.5
%CH	2.2	9.5	8.2	12.1	12.1	11.7	12.0	12.3	9.4	11.7	9.1	7.3	11.4
TAX & NONTAX PAYMENT	178.0	142.0	174.7	179.4	190.2	195.0	200.1	205.4	142.4	151.3	170.8	168.5	197.7
%CH	-0.2	-59.5	128.9	11.2	26.4	10.5	10.8	11.1	21.1	6.3	12.9	-1.4	17.3
DISPOSABLE INCOME	1015.5	1078.8	1070.3	1101.6	1127.8	1160.0	1193.9	1229.6	802.5	903.7	979.7	1066.6	1177.8
%CH	2.7	27.4	-3.1	12.2	9.9	11.9	12.2	12.5	7.5	12.6	8.4	8.9	10.4
PERSONAL OUTLAYS	939.5	964.1	989.2	1014.6	1038.0	1063.9	1089.8	1116.7	749.9	829.3	902.8	976.8	1077.1
%CH	7.7	10.9	10.8	10.7	9.5	10.4	10.1	10.2	9.3	10.6	8.9	8.2	10.3
PERSONAL SAVINGS	76.0	114.7	81.1	87.0	89.8	96.1	104.1	112.9	52.6	74.4	77.0	89.7	100.7
%CH	-40.4	418.8	-75.0	32.3	13.5	31.1	38.9	38.2	-13.1	41.6	3.5	16.5	12.3
SAVING RATE(%)	7.5	10.6	7.6	7.9	8.0	8.3	8.7	9.2	6.5	8.2	7.9	8.4	8.5
EMPLOYMENT	84.146	84.311	85.300	85.700	86.400	87.200	88.000	89.000	81.671	84.408	85.971	84.864	87.650
%CH	-7.2	0.8	4.8	1.9	3.3	3.8	3.7	4.6	3.2	3.4	1.9	-1.3	3.3
LABOR FORCE	91.810	92.514	93.500	93.800	94.300	94.800	95.400	96.000	86.508	88.711	91.073	92.906	95.125
%CH	0.1	3.1	4.3	1.3	2.1	2.1	2.6	2.5	2.8	2.5	2.7	2.0	2.4
UNEMPLOYMENT RATE(%)	8.3	8.9	8.8	8.6	8.4	8.0	7.8	7.3	5.6	4.9	5.6	8.7	7.9
PRODUCTIVITY*	9.270	9.244	9.250	9.404	9.520	9.614	9.663	9.686	9.702	9.942	9.552	9.292	9.620
%CH	-4.5	-1.1	0.3	6.8	5.0	4.0	2.0	1.0	2.9	2.5	-3.9	-2.7	3.5
INDUSTRIAL PRODUCTION	1.116	1.098	1.110	1.155	1.200	1.240	1.270	1.290	1.151	1.254	1.243	1.120	1.250
%CH	-28.3	-6.3	4.3	17.2	16.5	14.0	10.0	6.4	7.9	9.0	-0.9	-9.9	11.6
MONEY SUPPLY Saving WEFA	283.9	290.3	296.0	301.8	308.0	314.5	320.5	326.5	245.6	263.8	278.7	293.0	317.4
%CH	1.0	9.2	8.1	8.1	8.5	8.7	7.9	7.7	6.4	7.4	5.7	5.1	8.3
INCOME VELOCITY OF MONEY	4.989	4.938	4.966	5.036	5.101	5.161	5.211	5.262	4.715	4.909	5.013	4.983	5.183
%CH	-4.9	-4.0	2.3	5.8	5.2	4.8	3.9	4.0	3.1	4.1	2.1	-0.6	4.0

*NOTE: PRODUCTIVITY IS CALCULATED AS CONSTANT DOLLAR GNP PER WORKER; PROFITS FOR 75:2 ARE ESTIMATES

1 PRETAX PROFITS MINUS INVENTORY PROFITS

2 PRETAX PROFITS AS REPORTED, INCLUDING INVENTORY PROFITS

ECONOMIC OUTLOOK

	ACTUAL		FORECAST						ANNUAL	ANNUAL	ANNUAL	ANNUAL	ANNUAL
	75:1	75:2	75:3	75:4	76:1	76:2	76:3	76:4	1972	1973	1974	1975	1976
INTEREST RATES													
NEW ISSUES HI-GRADE CORP BONDS	8.69	9.06	9.00	9.00	9.50	9.50	9.50	9.50	7.16	7.65	8.96	8.94	9.50
COMMERCIAL PAPER 4-6MTS.	6.56	5.92	7.50	8.50	9.00	9.50	9.50	9.50	4.73	8.15	9.84	7.12	9.38
			~ 6.15										
AUTO SALES 1/	8.3	8.1	8.9	9.3	9.6	9.9	10.2	10.5	10.9	11.5	9.0	8.7	10.1
DOMESTIC	6.6	6.4	7.2	7.5	7.7	8.0	8.2	8.4	9.3	9.8	7.6	6.9	8.1
IMPORTS	1.7	1.7	1.7	1.8	1.9	1.9	2.0	2.1	1.6	1.8	1.4	1.7	2.0
HOUSING STARTS 1/	0.995	1.060	1.300	1.500	1.600	1.700	1.750	1.750	2.361	2.047	1.337	1.214	1.700
FEDERAL BUDGET(NIA) 2/													
RECEIPTS	284.1	247.3	282.8	293.5	310.6	321.2	330.2	342.2	227.2	258.5	291.1	276.9	326.1
EXPENDITURES	338.5	355.3	360.6	366.6	372.4	379.2	388.7	396.7	244.7	264.2	299.2	355.2	384.3
DEFICIT (SURPLUS)	-54.4	-108.0	-77.8	-73.1	-61.8	-58.0	-58.5	-54.5	-17.5	-5.6	-8.1	-78.3	-58.2

1/ IN MILLIONS OF UNITS--SEASONALLY ADJUSTED ANNUAL RATES
2/ IN BILLIONS OF DOLLARS--SEASONALLY ADJUSTED ANNUAL RATES

9/75

COMMENTS ON FUTURE FISCAL ACTIONS AND BUDGET DEVELOPMENTS

Robert H. Rasche

Michigan State University

I have been asked to attempt to provide some information on a number of issues with respect to the Federal Government Budget over the next few years. Specifically, 1) how soon will the budget get near balance again (presuming no additional discretionary fiscal policy actions, and what will it look like after that; 2) what would it look like with another tax cut; 3) should there be another tax cut; and 4) what resources will be absorbed when we get back to full employment?

The Tax Reform Act of 1969 was once characterized as the tax lawyers and accountants relief act of 1969. It might be appropriate to characterize the Congressional Budget Act of 1974 as the Soothsayers relief act of 1974. As a result of this act, OMB is required to submit long range projections of Federal Outlays and Receipts with the annual budget document. In addition, the Congressional Budget Office is mandated to provide similar projections. Although this law does not require implementation until 1976, for the most part the required information has been prepared for the current year.[1] In addition, the two Budget Committees have held hearings on the fiscal 1976 budget during which a number of private forecasts have been submitted for the record, though in these cases, the forecasting periods have usually been only through fiscal 1976.[2]

Rather than provide my own projections, which necessarily would have to be prepared with considerably less labor input than most of

the rest, I have decided to compile and comment on various projections from these sources which seem appropriate in light of the current economic situation and recent fiscal policy actions.

Table 1 presents the OMB projections through 1980 which were incorporated in the fiscal 1976 budget document, and the revisions which were announced in the 'Mid-session review of the Budget,' as reported in the July, 1975, Survey of Current Business. These projections, of course incorporate the President's fiscal and energy policy proposals initially, with allowance for the deviations of the Tax Reducation Act of 1975 from those proposals in the revisions.

In particular, they continue to incorporate the following fiscal policy proposals which seem unrealistic as of this date:

1) excise taxes of $2 per barrel on domestic oil and a tax of .37 per thousand cubic feet of natural gas (estimated revenue of 12.3 billion)

2) energy tax offsets in the form of changes in the minimum standard deduction and tax credits for energy-saving home improvements (estimated revenue loss of 12.5 billion)

3) energy equalization payments to State and Local governments and individuals with little or no tax liability (estimated payments of 5.8 billion)

4) a cut in the corporate income tax rate, effective September 1, 1975 from 48 to 42 percent (estimated revenue loss of 3.1 billion)

5) cost-of-living 'caps' of 5% on government wages and social security payments (except for the increase in social security benefits of 8% which became effective June 1)

6) expiration of the temporary provisions of the Tax Reduction Act of 1975 as scheduled on December 31, 1975[3]

If the 'Mid-session review of the Budget' estimates for fiscal 1976 are adjusted under the assumptions that 1-4 proposals will not go through (and assuming that the revenue and payments changes indicated are net, then receipts go up by 3.3 billion to

TABLE 1

President's Budget Proposals (Jan. 1975 & mid year budget review)

	1975	1976	1977	1978	1979	1980	
GNP - current $	1498	1686	1896	2123	2353	2606	
GNP - 58 dollars	794	832	879	936	997	1061	calendar years
change in CPI (percent)	11.3	7.8	6.6	5.2	4.1	4.0	
unemployment rate	8.1	7.9	7.5	6.9	6.2	5.5	
Federal outlays	313.4	349.4	393.1	425.4	451.9	476.7	
Federal receipts	278.8	297.5	362.5	405.8	452.3	501.7	fiscal years
Surplus (+)	-34.7	-51.9	-30.6	-19.6	.4	25.0	
GNP - current $	1474	1680	1892	2108	2335	2558	calendar years
Change in CPI	9.1	7.1	5.3	4.4	4.0	4.0	
Unemployment rate	8.7	7.9	7.2	6.5	5.8	5.1	
Federal Outlays	323.6	358.9	398	432	458	483	
Federal Receipts	281.0	299.0	364	412	457	505	fiscal years
Surplus (+)	-42.6	-59.9	-34	-20	-1	+22	

Source: The Budget of the U.S. Gov't: Fiscal 1976 pp 41,44. Survey of Current Business, June, 1975 pp 4-5.

302.3 billion, and payments go down by 5.8 billion to 353.1 billion, leaving a deficit of 50.8 billion dollars for fiscal 1976. Assumption 5 seems totally unrealistic at the present, particularly since the Congress has already passed a pay increase for government employees before recessing in August, which pays no attention to the idea that there should be a five percent 'cap'. Finally, most other forecasters are presently assuming that the temporary provisions of the Tax Reduction Act of 1975 will be extended beyond the present December, 1975 cutoff, at least until December, 1976. In light of recently published comments of Rep. Ullman of the House Ways and Means Committee, it seems likely that proposals for extensions of this sort will at least be reported out of committee.[4] These temporary provisions are estimated to result in a revenue loss of approximately 7.8 billion, which suggest that the estimates of revenues for fiscal 1976 should be reduced accordingly by about 7.8 revenues for the transition quarter reduced by about 4.0 and revenues for fiscal 1977 by 16 billion. Ullman's recent comments also suggest that the two year increase in the investment tax credit to 10% might be extended for an additional year, through 1977, which would further reduce fiscal 1977 and 1978 revenues below projections.

All budget projections, of course, are dependent on the assumed path of the economy, as well as the path of the economy being dependent on the assumed fiscal and monetary actions. The February projections accompanying the budget are well known: very little progress in slowing down inflation through at least calendar 1976, and a very slow tapering off to 5.5 percent unemployment by 1980. This is in part the result of the assumed effects of the energy taxes and decontrol of 'old' oil and natural gas on both the price level and

TABLE 2

Congressional Budget Committees - Fast Alternative, April, 1975

	1975	1976	1977	1978	1979	1980
GNP - current $	1460	1642	1852	2092	2323	2558
GNP - 58$	793	835	892	960	1023	1085
Change in CPI (percent)	8.7	7.0	5.8	5.2	4.4	4.0
Unemployment rate	8.4	7.6	6.7	6.0	5.5	4.9
Federal Outlays		354	396	426	450	472
Federal Receipts		288	356	413	464	518
Surplus (+)		-66	-40	-13	+14	+46

employment.

Alternative projections of the state of the budget through 1980 are provided through the Congressional Budget Committees. One of these projections, the so called 'faster recovery' option is indicated in Table 2. The 'faster recovery' option is documented in 1976 Budget: Alternatives and Analysis, prepared early last Spring. The starting point for the estimates prepared for the Congressional Budget Committees is the so called current services budget which purports to measure the outlays and revenues which could be expected to accure under existing government programs and tax laws. The faster recovery alternative presented in Table 2 essentially takes the position of the current services budget on the outlays side, namely, what will be the cost of continuing all of the existing programs in the resulting economic environment. The major differences from the Presidents budget proposals here are the absence of the energy proposals and the caps on the cost of living provisions. On the revenue side the faster recovery alternative starts with the then existing tax law provisions and assumes that certain tax law changes will be enacted. In particular it assumes a 12 billion dollar rebate of 1974 taxes, by the end of fiscal 1975. This conforms very closely to the actual aggregate rebate provisions of the Tax Reduction Act of 1975. In addition, it assumes permanent tax reductions totalling 25 billion dollars during fiscal 1976; a 20 billion dollar reduction in personal income taxes, and 5 billion dollars per year reduction in taxes through the adoption of the president's proposed increase in the investment tax credit (to 12%), but permanently extended through fiscal 1980.[5] Under a continuing extension of the temporary provisions of the Tax Reduction Act of 1975, the faster recovery alternative would not differ

much from the actual tax policy over the coming years.

The question is whether the projections are likely to be realized. Clearly, this is unlikely, if the economic environment which is projected in the top part of Table 2 is not realized. These kind of projections cannot be attempted without specifying the course of monetary policy as well as the fiscal proposals. Unfortunately, the assumptions about the course of monetary policy are rather poorly defined. For example, consider the Economic Report of the President, February, 1975:[6]

> Monetary policy faces great difficult in the year ahead and will require careful and continuous evaluation by the Federal Reserve. The uncertainities that underlie the outlook for 1975 add to the importance of a flexible monetary policy. Monetary policy must be conducted so as to encourage a near-term recovery in the economy and a resumption of sustainable economic growth. Toward this end, a reasonable growth in money and credit will be required -- growth which, one hopes, will encourage a freer flow of credit and lower interest rates in private credit markets.
>
> ...rapid monetary growth would run the risk that inflationary pressures would once again be increased, later on if not in 1975, undermining the Nation's fundamental need to regain the basis for reasonable price stability.

1976 Budget: Alternatives and Analyses, is even more vague on the assumptions regarding monetary policy over the next five years. It states:[7]

> Federal Reserve actions also have a major impact on the economy and can supplement, reinforce, or even thwart fiscal policies. The economic projections in this report assume that the Federal Reserve will accomodate to the fiscal policies that are postulated.

I can think up several ways in which to interpret this statement (the only reference to monetary policy that I have been able to find in the entire report), but the interpretation that I think is most likely to be correct, I find rather disturbing, namely, that the Federal Reserve will maintain interest rates at some target level

regardless of the fiscal policy alternative considered, and regard= less of the resulting course of monetary aggregates. If accomodating monetary policy usually means interest rate targets, interest rate targets usually means low interest rate targets.

Suppose that we interpret 'accomodating monetary policy' as keeping interest rates constant over the five year projection period. If such a policy were to be pursued, then I would expect that velocity, say of M_1 money, would remain approximately constant over the period. Thus, the rate of growth of M_1 which would appear to me to be necessary to support the projections of this faster recovery alternative is in the neighborhood of the projected growth in nominal GNP, namely in the ten to thirteen percent range. Personally, it seems highly improbable that increases in M_1 sustained at rates in excess of ten percent per annum for a five year period, are consistent with an inflation rate of the order of four percent per annum at the end of the period, and with decreasing rates of inflation throughout the period.

I think that one of two alternatives to the Congressional Budget committee projections is likely. In the first alternative, monetary policy will constrain the growth of aggregates to considerably lower rates that those which I judge to be implicit in the 'faster recovery alternative'. Under such an outcome, the inflation rates which are indicated in Table 2 may well be realized, but the unemployment rates are likely to be higher and rate of growth of real output is likely to be lower over the period from 1976 through 1980 than those indicated by the projections in Table 2. Also, interest rates are likely to be higher, at least in the earlier years of the projections, than the rates that would be realized under

my interpretation of Table 2. Under these conditions, I would expect that Federal outlays would be larger than indicated in Table 2, because of increased payments out of income maintenance programs, and increased debt service. On the other hand, Federal Receipts are likely to be less than projected in Table 2, because of the lower levels of production. Thus, under this alternative, I would expect that Federal deficits in 1978-1980 would be larger than indicated in Table 2, and the return to a near balance in the budget would be delayed until late in the decade when unemployment would return to around the five percent level. This, of course, is conditional upon the assumptions about Federal expenditure programs which are implicit in Table 2, and the assumption that no additional tax reductions would be instituted to speed up the reduction in the unemployment rate.

The second alternative to the Congressional Budget Committee projections which I consider has a good deal of credence is that something approximating the monetary policy that I have attributed to the Table 2 projections will be realized. In this case, I think that we would see a lot more inflation in the last few years of the decade than is indicated in Table 2, though the unemployment projections might well be realized. With this alternative, the effect on the Federal Budget would be likely to be just the reverse of that under the first alternative that I have proposed. With roughly the same unemployment as indicated in Table 2, but with higher inflation rates, both Federal outlays and receipts are likely to be larger than indicated there, but since tax receipts tend to have a higher elasticity with respect to the inflation rate than do outlays, it is likely that the budget deficits would be smaller. Consequently,

we might well see larger surpluses and a quicker return to near balance in the higher inflation regime than that postulated for the Budget committees.

All of this meandering through the wispish world of intermediate-run projections can be summarized as follows: 1) deficits which are large by historical standards will be with us at least through fiscal 1977; 2) what happens after that depends crucially on how impatient policy makers become to reflate; 3) with a policy of moderate monetary growth, it is likely that the Federal budget would be on the surplus side by the end of the decade.

Turning to the second question which was posed at the beginning of this paper, the question of what the budget would look like with another tax cut has in some sense been preempted. Another tax cut, at the moment, presumably means making permanent something like the temporary changes in the tax laws which were enacted in the Tax Reduction Act of 1975. The discussion centering on the projections provided for the Congressional Budget Committees has presumed that this kind of 'additional tax cut' would in fact take place. Certainly at the moment it sounds like such an action is gaining favorable support in Congress; the administration for the moment seems to be maintaining a position that these provisions should be allowed to expire, if we can judge by the OMB assumptions associated with the 'Mid-session Review of the Budget', but considering that we are approaching an election year, resistance to such extensions by the administration is likely to evaporate. Finally, there is considerable support from a wide spectrum of the economics profession that something needs to be done about the distortions which have been caused in the tax structure by the inflation of the last decade. Consider

for example the testimony of Professor Fellner before the Senate Committee on the Budget:[8]

> The tax structure has become badly distorted as a result of inflation. Tax-rate adjustments should take account of the difference that has developed between the originally intended and the actual rate of taxation in a world in which the general price level has been rising rapidly.

Professor Hymans, in testifying before the House Budget Committee states:[9]

> ...I interpret the Ways and Means tax bill as really involving on the household side and eight-plus billion-dollar permanent tax cut. That, given the rate of inflation, given the way households have moved up in the tax brackets, as their incomes have become inflated through tax increases, that is a pitifully small tax cut.
>
> Ten years ago there was a lot of discussion about fiscal drag. I think that is what we are in there now. We have found, due to inflation, we have had a increase in effective tax rates for individuals which has helped hold down the real income after taxes, and the $8 billion permanent tax status is pitifully small.

These statements are typical of many which have been voiced by economists in recent months.[10] Consequently, I think that it is likely that we will see some sort of 'permanent' tax reduction enacted in the coming months, and I am pursuaded by the arguments that have been advanced that it is appropriate to design some sort of tax reduction to offset the shifting of the effective rates which has come about through the past inflation.

The final question on the intitial list is how much in resources will be absorbed when the economy gets back to full employment. This first requires some sort of statement on what is meant by 'full employment'. For at least fifteen years there seems to have been general acceptance of the proposition that maximum employment means minimum unemployment; that is 4% unemployment. This 'goal' has been achieved in only four of the past 22 years,

1966-1969, years which are generally viewed in retrospect as a period in which Federal fiscal and monetary policies were overly stimulative with serious consequences which we are still living with. In spite of this, some would refuse to accept even 4% unemployment as the minimum level of unemployment. For example the Joint Economic Committee, in its 1975 report of the House and Senate Budget Committees states:[11]

> The use of this concept (Potential Gross National Product) is not meant to imply that the Joint Economic Committee regards a 4 percent unemployment rate as 'full employment'. The Committee has long been on record in favor of ultimately reducing the unemployment rate to 3 percent or less.

On the other hand, many opponents of the four percent full employment concept have suggested a higher unemployment level be accepted as 'full employment', something like five or five and one-half percent. Perhaps it is time that we started considering the idea of 'maximum employment' proposed by the Employment Act of 1946 in terms of the resources actually used rather than those which people report as unused under unspecified market conditions.

Actually, there seems to be less to argue about than much of the discussion would seem to suggest, at least in terms of the level of Federal expenditures. Whether one assumes 4 or 5 percent as unemployment rate which is to be associated with full employment, if one accepts the maxim that at full employment the budget should be balanced, or should run a small surplus, then with the kind of tax reductions that are presently being contemplated, the Current Services projection of expenditures comes close to hitting the target of exhausting revenues at 'full employment'. Thus, within the constraints specified, there would seem to be little room for new program initiatives by the Federal Government. The President's budget, of course, does propose an increase in real terms in defense

spending. The overall budget expenditures remain close to the Current Services budget, in his proposals, because the increases in the defense area are offset by cuts in the income maintenance area. If the President's proposals for allocating more of the budget to defense are accepted by Congress, then by the end of the decade the recent trend toward a reduction in the purchases of goods and services by the Federal government may be reversed. On the other hand, defense spending is not increased in real terms, it is likely that by the end of the decade that Federal purchases of goods and services, in real terms (i.e. resource absorption) will be no larger, and perhaps somewhat smaller, than it is today.

[1] 1976 Budget: Alternatives & Analyses, Report to the Committees on the Budget of the U.S. Congress, April 6, 1975

[2] Fiscal Year 1976 Budget and the Economy, Hearings before the Committee on the Budget, House of Representatives, Feb 20 - Mar 10, 1975 The 1976 First Concurrent Resolution on the Budget, Hearings before the Committee on the Budget, United State Senate, Mar 4 - Mar 10, 1975

[3] Survey of Current Business, June, 1975, p 5

[4] "House Tax Chief Urges Extension of Some Reductions", Wall Street Journal, August 27, 1975, p 3

[5] 1976 Budget: Alternatives & Analyses, p 25

[6] Economic Report of the President, February 1975, p 26

[7] 1976 Budget: Alternatives & Analyses, p 3

[8] The 1976 First Concurrent Resolution, p 498

[9] Fiscal Year 1976 Budget and the Economy, p 25

[10] For a discussion of indexing the tax system to prevent future inflation from introducing similar distortions into the structure see B.M. Blechman, et. al., Setting National Priorities: The 1976 Budget, Brookings Institution, pp 166-175

[11] 1975 Report of the Joint Economic Committee to the Committee on the Budget United States Senate, and Committee on the Budget, United States House of Representatives, p 3. reprinted in The 1976 First Concurrent Resolution on the Budget, Hearings before the Committee on the Budget, United States Senate, March 4-10, 1975

ADDENDUM TO SHADOW OPEN MARKET COMMITTEE
BRIEFING ON FISCAL POLICY

The Uselessness of Full Employment Budget Concepts as Indicators of Recent Changes in Fiscal Policy and as Forecasts of Future Federal Expenditure Capacity

Robert H. Rasche

Michigan State University

September 11, 1975

Consider the hypothesis of a "real shock decline" in output, caused, for example by the increase in the relative price of crude oil by the OPEC cartel. This could be interpreted as causing a downward shift in the aggregate production function, so that for every given level of employment, real output is lowered. Depending on what you postulate about the nature of the production function this could come about with reduced, unchanged, or increased employment. The domestic price level will rise.

If this is the case, then, "potential output" has suffered a shock. Also "capacity". Note that all these measures are typically constructed by peak-to-peak interpolation and extrapolation; recently at around 4% per annum for "potential output" by the CEA.

Under the "real shock decline" hypothesis then "true" potential output at every level of employment (including that associated with 4% unemployment) is lower then one would get with a naive extrapolation from the pre October 1973 experience. "Potential output" is crucial for the full employment budget exercises (see N. Teeters, "Estimation of the Full Employment Surplus," R.E. Stat, August, 1965, pp 309-321). Before any computations of full employment revenues can be computed, GNP in nominal terms must be imputed. This is usually done by computing "potential output" in real terms by the extrapolation method, and then multiplying by a price deflator (even the most avid proponents of full employment budget concepts acknowledge that there are many problems associated with the "inflation" of the real "potential output" figures - see Okun and Teeters,

Brookings Papers on Economic Activity, I, 1970.)

If the inflation is correctly guessed and applied to a real potential output that is too high, then full employment revenues will be over estimated, as wellas the full employment surplus.

One conclusion from this is that when we get back to around 5% (or4%) unemployment, even if Congress manages to stay in the range of the Current Services Budget Expenditures, we may find that we have considerably less surplus, than is cited by the administration and Congressional extrapolations which I cited in my prepared paper.

A second conclusion is that attempting to judge the stance of fiscal policy over the 1973-75 period by the behavior of the full employment surplus just doesn't make any sense.

If potential output has suffered a negative shock by the OPEC action, then one cannot look at the full employment surplus from 1973 to 1974, calculated on the usual extrapolation, and say, that since the surplus has gone down, fiscal policy, has been contractive. (See B. Blechman, et.al., Setting National Priorities: The 1976 Budget) In doing so you would be looking at the wrong numbers.

On the other hand, suppose that one had a revelation of the true impact of the OPEC action on potential output so that one could correctly start extrapolating from a new base in 1974. If one recomputed the 1974 full employment surplus on this new base, it would still not be correct to infer the behavior of discretionary fiscal policy from the change in the full employment surplus from 1973 to 1974, as this change, by its construction is a function of the external shock.

The above statements have been directed toward OPEC and 1973-74 for illustrative purposes. Clearly crop failures because of whether conditions cause the same kinds of problems for the full employment surplus concept. The only difference here is that an addition to the impact on the production function of the non-agricultural sector of the economy, there is the obvious direct effect on the potential output of the agricultural sector. Similarly, the changes in the full employment surplus are potentially confounded by any major shift in the terms of trade, such as that following the ungluing of Bretton Woods in August 1971.

Nor are we over our measurement troubles with this concept. Clearly the OPEC generated effects on "potential output" have not fully percolated through the economy, if for no other reason then we just threw out price controls on "old oil" two days ago. If the oil companies are really rid of the inefficiencies imposed by the FEA, I would expect this to have an opposite (positive) effect on "potential output". Or the other hand, if OPEC pushes through another price increase this October we will go through the negative effects all over again.

Finally, everything said about "potential poutput" here can be applied to the "capacity utilization" figures commonly cited. Since these are similarly constructed from extrapolations of past peak-to-peak trends, it is highly likely that they seriously underestimate the utilization rate of presently effective industrial capacity.

Estimates of Potential Output Growth

Source	Period	Annual Growth
EROP, Jan, 1963 p 42	55-62	3.5%
EROP, Jan, 1964, pp 37-38	55-63	3.5%
EROP, Jan, 1965 p 81	55-62IV	3.5%
	62IV -	3.75%
EROP, Jan, 1968 p 61	62IV - 65IV	3.75%
	65IV - 67IV	4.00%
EROP, Jan, 1969, p 65	65IV - 68IV	4.00%
EROP, Feb, 1970, p 85	65IV - 69IV	4.00%
	69IV - 70IV	4.30%
	70IV - 71IV	4.40%
	71IV - 75IV	4.30%
EROP, Feb, 1975	71 - 74	4.00%

EROP = Economic Report of the President