SHADOW OPEN MARKET COMMITTEE

Policy Statement and Position Papers

March 8, 1976

Directive

Shadow Open Market Committee

March 8, 1976

Economic activity continues to expand at a moderate rate, and the rate of inflation continues to fall. Continued moderate growth and further gradual reduction in the rate of inflation are likely prospects for the near-term if an appropriate monetary policy is adopted and remains in effect.

Recent Monetary Policy

At its meeting today, the Shadow Open Market Committee reviewed recent developments in the economy and in economic policy and their effects on recovery and future inflation. The Committee noted that fiscal stimulus stayed within the range projected. The growth of the money stock -- currency and demand deposits -- has remained below the 5.5% rate of growth that the Committee recommended at its previous meetings as an appropriate course during the recession and the early stages of expansion.

During 1975, the annual average growth of money on a quarterly basis was 4.4%. Much of this growth was the result of a very high rate of monetary expansion in the second quarter. During the last quarter of 1975 and in early 1976, the growth rate of money was below, often far below, the growth rate we recommended and the minimum growth rate chosen by the Federal Reserve as a target.

Continuation of sluggish monetary growth would reduce the growth rate of output, slow the recovery and increase the costs of slowing inflation. A slower than expected recovery would increase the pressure for greater fiscal and monetary expansion and a return to the policies that brought high inflation.

Recent monetary growth has been defended on the ground that there has been a change in established relations between money and economic activity and inflation.

This is not the first time that policy makers have justified inappropriate actions by arguing that established relations are no longer valid. Generally, conjectures of this kind about a new and different era have proved to be vacuous -- empty justifications of past developments.

The risk of error is much too great to justify recent retardation in monetary growth. The growth of money should be brought close to the range that would have been achieved if our recommendation in September 1975 had been followed.

Reducing Long-Term Inflation

The long-term problem of inflation remains. Even if a rate of inflation of 5% is attained on the average for this year, we will enter 1977 with inflation that is high by historical standards. The rate of inflation must be reduced further in 1977 and beyond.

Inflation in 1977 depends on the policies of 1976 and earlier years. Although the rate of monetary expansion during the second half of 1975 makes the recovery slower than it would otherwise have been and raises the costs of reducing inflation, slow monetary growth also lowers inflation. It would be a mistake, we believe, to dissipate the benefit -- lower inflation -- by shifting to a highly expansive policy. That would be a return to "stop and go."

The Committee recommends that the Federal Reserve maintain a 4.5% growth rate of money from March 1976 onward. This growth rate should start from a base of $300-billion in March 1976 or a first-quarter average of $297.5-billion. Such a rate would mean the money stock would rise to $304-billion by the third quarter of 1976 and $311-billion by the first quarter of 1977. A 4.5% rate is below the rate we recommended in March and September 1975 but above the recent rate of monetary expansion. It essentially extends the annual average rate the Federal Reserve produced for 1975.

The rate of monetary expansion for the near future that we recommend is above the long-term rate consistent with zero inflation. Further reductions will be required as the economy recovers and uses resources more fully.

Instability and Control

The Federal Reserve, the Deutsche Bundesbank, and the Swiss National Bank announced target rates of expansion for monetary aggregates in 1975. The Swiss and Germans achieved their targets. For 1976 they have announced new single targets, not shifting bands.

The Federal Reserve, on the other hand, has not achieved its announced target. Federal Reserve implementation is so erratic that monetary growth strays far from the announced target. The target, furthermore, shifts. Although the Federal Reserve announces a planned range of monetary growth rates over the coming year, each quarter it proposes to follow the growth path starting from the existing level of the monetary aggregates. The base values from which the growth path is calculated thus shift each quarter. In effect, the Federal Reserve confines its operations to a quarterly target, contrary to the intent of House Concurrent Resolution 133.

High variability of monetary growth increases instability and uncertainty about the economy. We find no justification for erratic actions.

The Federal Reserve should be able to achieve what other central banks achieve -- a growth rate of money consistent with the announced target.

The Bundesbank and the Swiss National Bank achieved their targets because their operating procedures are appropriate for controlling monetary aggregates. The Federal Reserve fails to achieve its announced target because its operating procedures are inappropriate. These procedures must be changed so that monetary policy can contribute more to stability than to instability in the future.

We propose two changes in present procedures: (1) The Federal Reserve should seek to establish a direct link between monetary aggregates and the required size of open market operations, and eliminate reliance on the Federal Funds rate as a guide. (2) The Federal Reserve should reform institutional arrangements of its own devising that hamper its control of the aggregates. Examples of such arrangements are the proliferation of deposit categories subject to different interest rate ceilings, and the system of lagged reserve requirements.

Karl Brunner	University of Rochester
H. Eric Heineman	Morgan, Stanley & Company
Homer Jones	St. Louis, Missouri
Jerry L. Jordan	Pittsburgh National Bank
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
William Wolman	Business Week

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

JANUARY 28, 1976

	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	1433.6	1460.6	1528.5	1573.2	1606.0	1641.0	1681.0	1721.0	1171.1	1306.3	1406.9	1499.0	1662.2
%CH	-2.1	7.7	19.9	12.2	8.6	9.0	10.1	9.9	10.1	11.5	7.7	6.5	10.9
CONSTANT DOLLAR GNP	1158.6	1168.1	1201.5	1217.4	1226.9	1238.5	1253.5	1268.2	1171.1	1233.4	1210.7	1186.4	1246.8
%CH	-9.2	3.3	11.9	5.4	3.2	3.8	5.0	4.8	5.7	5.3	-1.8	-2.0	5.1
PRICE DEFLATOR	1.2374	1.2504	1.2721	1.2922	1.3090	1.3250	1.3410	1.3570	0.9999	1.0590	1.1625	1.2630	1.3330
%CH	7.8	4.3	7.1	6.5	5.3	5.0	4.9	4.9	4.1	5.9	9.8	8.6	5.5
CONSUMPTION EXPENDITURES	926.4	950.2	977.4	998.6	1018.5	1037.5	1062.5	1087.5	733.0	808.6	885.8	963.1	1051.5
%CH	8.2	10.7	12.0	9.0	8.2	7.7	10.0	9.7	9.7	10.3	9.6	8.7	9.2
DURABLES	118.9	123.8	131.8	136.1	138.0	140.0	147.0	152.0	111.2	123.0	121.9	127.7	144.2
%CH	5.6	17.5	28.5	13.7	5.7	5.9	21.6	14.3	14.6	10.5	-0.8	4.7	13.0
NONDURABLES	394.1	404.8	416.4	424.8	434.0	442.0	451.0	462.0	299.4	334.4	375.7	410.0	447.2
%CH	7.4	11.3	12.0	8.3	8.9	7.6	8.4	10.1	7.8	11.7	12.4	9.1	9.1
SERVICES	413.4	421.6	429.2	437.7	446.5	455.5	464.5	473.5	322.4	351.3	388.2	425.5	460.0
%CH	9.6	8.2	7.4	8.2	8.3	8.3	8.1	8.0	9.9	8.9	10.5	9.6	8.1
INVESTMENT EXPENDITURES	168.7	161.5	195.1	208.2	219.0	230.5	239.0	248.5	188.2	220.4	212.2	183.4	234.2
%CH	-58.5	-16.0	113.0	29.7	22.4	22.7	15.6	16.9	17.7	17.1	-3.7	-13.6	27.7
NONRES FIXED EXPEND	149.3	146.1	146.8	152.7	155.5	160.0	165.0	169.0	116.8	136.5	147.9	148.7	162.4
%CH	-4.7	-8.3	1.9	17.1	7.5	12.1	13.1	10.1	12.3	16.8	8.4	0.6	9.2
PRODUCERS DUR EQUIP	94.4	95.0	95.6	99.3	101.0	104.0	107.5	111.0	74.3	87.5	93.5	96.1	105.9
%CH	-2.5	2.6	2.6	16.4	7.0	12.4	14.2	13.7	14.7	17.8	6.8	2.8	10.2
BUSINESS STRUCTURES	54.9	51.1	51.2	53.4	54.5	56.0	57.5	58.0	42.5	49.0	54.4	52.7	56.5
%CH	-8.3	-24.9	0.8	18.3	8.5	11.5	11.2	3.5	8.1	15.1	11.1	-3.2	7.3
RESIDENTIAL STRUCTURES	44.2	45.0	50.4	55.7	62.0	65.5	70.0	71.5	62.0	66.5	54.6	48.8	67.2
%CH	-32.1	7.4	57.4	49.2	53.5	24.6	30.4	8.9	25.1	7.2	-17.9	-10.5	37.7
INVENTORY CHANGE	-24.8	-29.6	-2.1	-0.2	1.5	5.0	4.0	8.0	9.4	17.5	9.8	-14.2	4.6
NET EXPORTS	17.3	24.2	22.1	22.4	16.0	14.0	14.0	13.0	-3.3	7.4	7.7	21.5	14.3
GOVT PURCHASES	321.3	324.7	334.1	343.8	352.5	359.0	365.5	372.0	253.2	270.0	301.1	331.0	362.2
%CH	8.9	4.3	12.1	12.1	10.5	7.6	7.4	7.3	8.3	6.6	11.5	9.9	9.4
FEDERAL	119.4	119.2	124.2	129.7	134.0	136.0	138.0	140.0	102.2	102.0	111.7	123.1	137.0
%CH	4.1	-0.7	17.9	18.9	13.9	6.1	6.0	5.9	6.1	-0.1	9.5	10.3	11.3
MILITARY	81.4	82.1	84.9	87.4	90.0	91.0	92.0	93.0	73.5	73.4	77.4	84.0	91.5
OTHER	38.0	37.1	39.3	42.3	44.0	45.0	46.0	47.0	28.6	28.6	34.3	39.2	45.5
STATE & LOCAL	201.9	205.5	209.9	214.1	218.5	223.0	227.5	232.0	151.0	168.0	189.4	207.9	225.2
%CH	11.9	7.3	8.8	8.2	8.5	8.5	8.3	8.1	9.8	11.2	12.8	9.7	8.4

NOTE: PERCENTAGE CHANGES AT ANNUAL RATES; PRELIMINARY DATA FOR 75:4

ECONOMIC OUTLOOK
(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/	83.4	101.6	119.6	127.0	129.0	133.0	139.0	144.0	89.6	98.6	93.6	107.9	136.2
%CH	-12.0	120.2	92.0	27.1	6.4	13.0	19.3	15.2	16.3	10.1	-5.0	15.3	26.3
INV VAL ADJ (IVA)	-13.7	-6.6	-9.9	-15.8	-13.0	-11.0	-11.0	-12.0	-6.6	-18.5	-38.5	-11.5	-11.8
PRETAX PROFITS 2/	97.1	108.2	129.5	142.8	142.0	144.0	150.0	156.0	96.2	117.0	132.1	119.4	148.0
%CH	-62.3	54.2	105.2	47.9	-2.2	5.8	17.7	17.0	17.3	21.7	12.9	-9.6	24.0
TAX LIABILITY	37.5	41.6	50.7	55.7	55.4	56.2	58.5	60.8	41.5	48.3	52.6	46.4	57.7
%CH	-66.3	51.4	120.6	45.6	-2.2	5.8	17.7	17.0	10.2	16.2	9.1	-11.9	24.5
AFTER TAX PROFITS*	59.6	66.6	78.8	87.1	86.6	87.8	91.5	95.2	54.6	68.8	79.5	73.0	90.3
%CH	-59.5	55.9	96.0	49.3	-2.2	5.8	17.7	17.0	23.3	26.0	15.6	-8.2	23.6
PERSONAL INCOME	1203.6	1223.8	1261.7	1294.8	1320.0	1345.0	1379.0	1409.0	942.6	1054.3	1154.7	1246.0	1363.2
%CH	3.0	6.9	13.0	10.9	8.0	7.8	10.5	9.0	9.7	11.9	9.5	7.9	9.4
TAX & NONTAX PAYMENT	179.6	142.1	174.6	180.4	182.5	186.9	192.8	198.1	141.2	151.2	171.2	169.2	190.1
%CH	1.6	-60.8	127.9	14.0	4.8	9.9	13.4	11.3	21.5	7.1	13.2	-1.2	12.4
DISPOSABLE INCOME	1024.0	1081.7	1087.1	1114.4	1137.5	1158.1	1186.2	1210.9	801.3	903.1	983.5	1076.8	1173.2
%CH	3.2	24.5	2.0	10.4	8.5	7.5	10.0	8.6	7.9	12.7	8.9	9.5	8.9
PERSONAL OUTLAYS	950.4	974.1	1001.3	1023.1	1045.4	1064.8	1090.2	1115.6	751.9	830.5	909.5	987.2	1079.0
%CH	7.9	10.4	11.6	9.0	9.0	7.6	9.9	9.7	9.7	10.4	9.5	8.5	9.3
PERSONAL SAVINGS	73.6	107.6	85.8	91.3	92.1	93.3	96.0	95.3	49.4	72.6	74.0	89.6	94.2
%CH	-39.6	356.8	-59.6	28.2	3.5	5.4	11.9	-2.7	-13.9	47.1	2.0	21.0	5.1
SAVING RATE(%)	7.2	9.9	7.9	8.2	8.1	8.1	8.1	7.9	6.2	8.0	7.5	8.3	8.0
EMPLOYMENT	84.146	84.311	85.283	85.410	86.000	86.500	87.200	88.000	81.671	84.408	85.971	84.787	86.925
%CH	-7.2	0.8	4.7	0.6	2.8	2.3	3.3	3.7	3.2	3.4	1.9	-1.4	2.5
LABOR FORCE	91.810	92.514	93.084	93.234	93.700	94.200	94.700	95.200	86.508	88.711	91.073	92.661	94.450
%CH	0.1	3.1	2.5	0.6	2.0	2.2	2.1	2.1	2.8	2.5	2.7	1.7	1.9
UNEMPLOYMENT RATE(%)	8.3	8.9	8.4	8.4	8.2	8.2	7.9	7.6	5.6	4.9	5.6	8.5	8.0
PRODUCTIVITY*	13.769	13.855	14.088	14.254	14.266	14.318	14.375	14.412	14.338	14.613	14.083	13.991	14.343
%CH	-2.1	2.5	6.9	4.8	0.4	1.5	1.6	1.0	2.4	1.9	-3.6	-0.7	2.5
INDUSTRIAL PRODUCTION	1.116	1.104	1.142	1.175	1.190	1.205	1.230	1.255	1.151	1.254	1.243	1.134	1.220
%CH	-28.3	-4.5	14.6	12.1	5.2	5.1	8.6	8.4	7.9	9.0	-0.9	-8.7	7.6
MONEY SUPPLY	282.6	287.8	292.9	294.7	298.0	303.5	308.0	312.5	245.6	263.3	277.7	289.5	305.5
%CH	0.6	7.6	7.2	2.4	4.6	7.6	6.1	6.0	6.4	7.2	5.5	4.3	5.5
INCOME VELOCITY OF MONEY	5.072	5.074	5.219	5.339	5.389	5.407	5.458	5.507	4.768	4.961	5.066	5.176	5.440
%CH	-2.7	0.2	11.8	9.6	3.8	1.3	3.8	3.7	4.3	4.0	2.1	2.2	5.1

NOTE: PRODUCTIVITY IS CALCULATED AS CONSTANT DOLLAR GNP PER WORKER; PROFITS FOR 75:4 ARE ESTIMATES

1/ PRETAX PROFITS MINUS INVENTORY PROFITS
2/ PRETAX PROFITS AS REPORTED, INCLUDING INVENTORY PROFITS

	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													
S&P COMP. AAA BONDS	8.610	8.610	8.670	8.630	8.400	8.200	8.000	8.000	7.263	7.557	8.250	8.630	8.150
PRIME RATE	8.98	7.32	7.56	7.58	6.50	6.75	7.00	7.50	5.25	8.02	10.80	7.86	6.94
COMMERCIAL PAPER 4-6MTS.	6.56	5.92	6.67	6.12	5.25	5.75	6.50	7.00	4.73	8.15	9.84	6.32	6.13
AUTO SALES 1/	8.3	7.9	9.1	9.1	9.1	9.1	9.9	10.2	10.9	11.5	9.0	8.6	9.6
DOMESTIC	6.6	6.3	7.4	7.8	7.8	7.8	8.4	8.7	9.3	9.8	7.6	7.0	8.2
IMPORTS	1.7	1.6	1.7	1.3	1.3	1.3	1.5	1.5	1.6	1.8	1.4	1.6	1.4
HOUSING STARTS 1/	0.995	1.068	1.258	1.372	1.500	1.600	1.650	1.700	2.361	2.047	1.337	1.173	1.612

1/ IN MILLIONS OF UNITS--SEASONALLY ADJUSTED ANNUAL RATES

MONETARY POLICY, ECONOMIC EXPANSION AND INFLATION

by

Karl Brunner
Graduate School of Management
University of Rochester
Rochester, NY 14627

Position paper for the Sixth meeting of the Shadow Open Market Committee (SOMC)
March 8, 1976

I. Introduction

The sixth meeting of the Shadow Open Market Committee (SOMC) faces policy issues involving important long-run consequences. The economic recovery initiated in the second quarter of 1975 raised real national output in the second half of 1975 by approximately 9% p.a. But the current prospects for the balance of 1976 are somewhat uncertain at this stage. Monetary growth dropped below the desired growth path for a lengthy period and possibly weakened somewhat the rate of recovery in the next quarters. On the other hand it probably lowers also the inflationary pressures built into the system.

The appropriate course of fiscal and monetary policy requires serious examination at this time. The SOMC directed in March 1975 (the fourth meeting) attention to the longer-run consequences of a persistent budget deficit and warned in September 1975 (the fifth meeting) against the dangers inherent in activist financial policies. These problems remain and their effects are reinforced by a widening uncertainty of the rules of the game confronting the private sector. The pattern of policies pursued will crucially determine whether our economy moves eventually towards gradual stagnation of real growth accompanied by comparatively high unemployment rates and permanent inflation. Some major trends in our budgetary and general economic policies point in this direction. But fortunately we are not the victims of a deterministic process. The weight of probabilities always leaves a chance and this offers the SOMC an opportunity to raise a small voice and hope.

The position paper is organized into five sections. The first section after the introduction examines recent monetary trends and considers the role of various factors shaping monetary evolution. It also describes the relative role of velocity and government expenditures in postwar cyclic patterns and particularly in early recovery phases. The next section discusses monetary policy, with particular attention to the problems emanating from the Fed's internal procedures and mode of implementation. Some of the major questions raised and assertions made by Fed officials in recent months are also considered. Section IV evaluates recent monetary trends and submits a proposal for the direction of monetary policy this year. The last section attends to the protracted issue posed by financial activism.

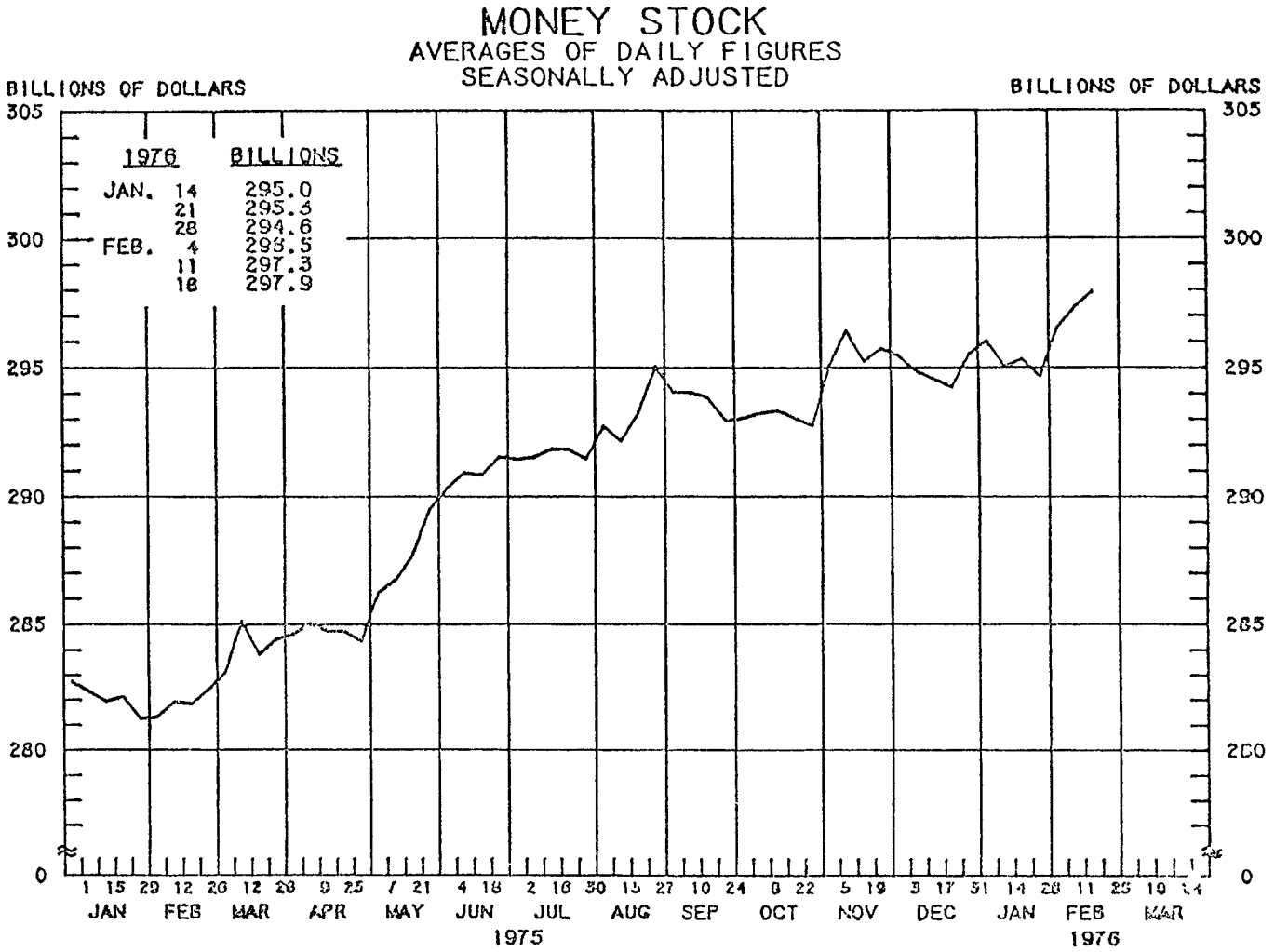
It outlines reasons for rejecting a policy conception which gradually emerged during the 1960's and still finds strong support among influential groups.

II. Monetary Trends

It is useful to review the patterns of monetary evolution observed in 1975. From February 12, 1975 to February 11, 1976 the money stock grew at 5% and the monetary base (from February 19, 1975 to February 18, 1976) by 7%. A rising currency ratio and time deposit ratio lowered the monetary multiplier over the 12 months by about 2%. The average growth rate achieved over the year is remarkably close to the proposals formulated by the SOMC in March and September 1975. The SOMC proposed at the fourth and fifth meeting a growth rate of 5% to 6% centered on 5.5%. The SOMC proposed however also on both occasions an immediate sharp increase in the money stock to a specified level in order to compensate the effects of monetary retardations in previous quarters. The "frontloading" was almost achieved in the early spring last winter. But its effect was gradually offset to some extent by the subsequent monetary trends.

The average growth rate eventually achieved covers wide variations over shorter intervals which reveal a fundamental problem in our policy institutions. The year opened with a declining money stock which continued a receding pattern initiated in November 1974. The Federal Reserve authorities attributed the monetary contraction to a falling credit demand caused by the recession. The position paper prepared for the fourth meeting of the SOMC in March 1975 emphasized the crucial role of the Federal Reserve's internal policymaking procedures converting a sagging demand for credit into a monetary deceleration. Monetary contraction or deceleration is not the automatic result of shrinking credit demand. It is produced by a policy procedure geared to an interest target policy. The traditional implementation of monetary policy transferred the falling demand for credit into last winter's monetary contraction. A policy procedure genuinely addressed to monetary control could have prevented this development which reinforced at the time the ongoing recession.

TABLE 1



LATEST DATA PLOTTED WEEK ENDING: FEBRUARY 18, 1976

CURRENT DATA APPEAR IN THE BOARD OF GOVERNORS' H.6 RELEASE.

THE MONEY STOCK CONSISTS OF DEMAND DEPOSITS PLUS CURRENCY AND COIN HELD BY THE NONBANK PUBLIC.

The contraction was succeeded by a sharp acceleration from the end of January to the middle of March followed by an essentially constant money stock until the end of April. A massive acceleration erupted in May receding rapidly into a low average growth from the end of May 1975 to the end of January 1976. Monetary growth averaged over this period about 2.6% p.a., which is only about half of the Federal Reserve's proclaimed lower boundary for the desired growth path. The period of lethargic growth was interrupted by bursts of acceleration and intervals of substantial deceleration.

The reader will find additional information describing the patterns of shorter-run acceleration and deceleration in 1975 in the tables 2 and 3. Table 2 describes peaks and troughs in monetary growth and the growth rate of the monetary base observed last year. The growth rates reported describe changes between successive and non-overlapping four week averages. The retardation of April is clearly visible. Monetary growth fell from a peak of 10.3% p.a. in late March to slightly less than 1% p.a. by the end of April. The subsequent acceleration in May carried monetary growth to 18.7% p.a. There followed two decelerations separated by one more acceleration. The magnitude of the respective accelerations and decelerations are summarized in table 3. We note that the acceleration in May dominates the other two accelerations observed in 1975. Moreover, the following deceleration of June/July 1975 also dominates the other three decelerations listed in table 4.

One frequently reads that the monetary authorities possess little, if any control over money stock and monetary growth. The financial press pursues this theme usually offered by Federal Reserve officials whenever monetary growth drifts substantially away from the anticipated path. This theme is not particularly new. We can observe its regular emergence at opportune moments over many decades. It appears unavoidable that some basic facts of monetary processes must be elaborated and emphasized with patient repetition. The determinants of monetary growth and the relative role of authorities, public and banks were discussed on several occasions in previous position papers. These discussions recognized the specific contribution made by the public's behavior expressed by changes in the currency ratio, the time deposit ratio or the bank's behavior revealed by changes in the (adjusted) reserve ratio. It was also shown however that the monetary

Table 2: The Magnitude and Timing of Extreme Values in the Growth Rate of Money Stock M_1 and Monetary Base in 1975

M_1		B	
% - Change	Date	% - Change	Date
10.3	3/26/75	12.4	3/26/75
.9	4/30/75	- 1.6	5/21/75
18.7	6/11-18/75	18.5	6/25 and 7/2/75
2.0	8/13/75	- 1.9	8/13/75
9.1	9/10/75	10.10	9/10/75
- 4.9	10/15/75	1.9	10/22/75
11.2	11/26/75	16.3	12/10/75
- 4.3	12/31/75	-10.3	1/21/76

All changes are computed between successive four week averages. The dates indicate the last week of the forward lying four week period used in the comparison. The date 3/26/75 refers thus to a comparison between the four week period ending 2/26/75 with the four week period ending 3/26/75. Average lag of extreme growth in base behind extreme growth in M_1: 1.1 week

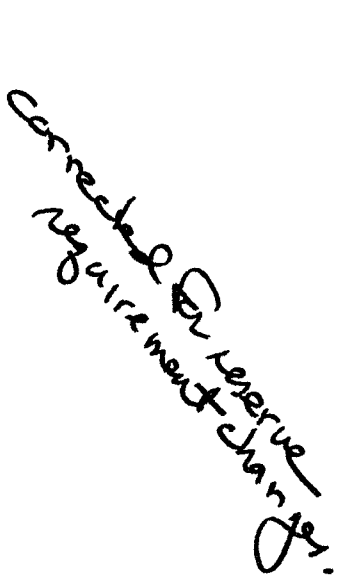
authorities affect the movements in monetary growth with a substantial margin. The behavior of the authorities (i.e. Fed and Treasury) is succinctly summarized by changes in the monetary base.

Additional information bearing on the association between monetary growth and growth rates of the base can be inferred from last year's observation. The reader is again referred to tables 2 and 3 for this purpose. We note first that the swings of the two series for M_1 and B are closely related both in time and in relative magnitude. The peaks and troughs in monetary growth lead the growth rate of the base in the average over 1975 by 1.1 weeks. This lag is well within the interval of four weeks used to average the weekly data. It should be noted here that the last deceleration of the monetary base initiated in December 1975 and carried to January 1976 overstates the relevant deceleration emanating from the authorities'behavior. The contribution made by the adjusted reserve ratio increased in late January to about 13% or 14% p.a. A portion of this increase should be added to the contribution made by the base. The estimated net result of - 19% p.a. is listed in parenthesis below the unadjusted figure for the last observed retardation. The data presented in the two tables also disclose that countermovements of M_1 and B occur only for a few weeks never exceeding the averaging period used for computations. Accelerations and decelerations in the monetary base are typically associated with accelerations and decelerations in the base. We can thus safely expect that any <u>persistent</u> acceleration or deceleration of the base will eventually dominate the other determinants reflecting the public's or the banks' behavior.

The emphasis on the monetary base and the behavior of the monetary authorities does not imply that the public's behavior in the money supply process is irrelevant. This behavior exerted an increasing effect in recent years. Pertinent information elucidating some of the important facts is presented in table 4. The first part of the table indicates that the currency ratio contributed more persistently and to a larger degree to monetary retardation than the time deposit ratio. The range of variation in the contributions to the shorter-run movements of monetary growth observed in 1975 were essentially similar for both currency ratio k and time deposit ratio t. They both ranged from about - 6% p.a. to approximately + 3% p.a. But the currency ratio contributed less than half the

Table 3: The Comparative Magnitude of Swings in the Money Stock and Monetary Base

The decelerations in M_1 and the associated decelerations in B		The sequence of accelerations in M_1 and the associated accelerations in B	
M_1	B	M_1	B
-9.4	-14	19.6	20.1
-16.7	-20.4	7.1	12.0
-14.0	-8.2	16.1	18.2
-15.5	-26.0		
	(-19)		



number of positive contributions noted for the time deposit ratio and almost one half as many negative contributions below - 3% p.a. We also remark on the lower part of the table that the positive and negative contribution to monetary growth emanating from the public's behavior were not evenly distributed over the calendar year. All the (20) positive contributions resulting from the time deposit ratio were concentrated among the first 31 weeks of the year. The same front period of the year also contains 7 out of 9 positive contributions made by changes in the currency ratio. Over the last 21 weeks both contributions were dominantly negative. The movements of short-term interest rates over the year explains to a large extent the variations in the contribution of the time deposit ratio. The behavior of the currency contribution diverges on the other hand from typical cyclic patterns observed in the past and may reflect a sense of financial uncertainty.

A decomposition of the movements exhibited by nominal GNP yields further information on the interaction between monetary growth, changes in velocity and government expenditures. This decomposition is based on the formula

$$GNP = M V + G$$

where V expresses in this case monetary velocity relative to private expenditure. Table 5 shows the contributions made to changes in GNP between successive six month periods for each postwar recovery phase. The intervals begin with the last six month period showing a decline in GNP or the period with the smallest positive change in nominal GNP. The interval ends with the six month period showing the maximal increase in nominal GNP. The data in table 5 clearly demonstrate the role of velocity over the recovery phase. Changes in velocity contribute with one exception the largest component to the increase in GNP. The exception was the recovery of the early 1970's. But the acceleration of GNP over the recovery phase dominantly reflects without exception the acceleration of velocity. It is particularly noteworthy for our purposes that the velocity increase observed thus far in the current recovery exceeds all recovery phases with the exception of the 1950 experience. The acceleration of velocity exceeded in the current experience also all the previous observations with the exception of the early part of 1950. The first six months of 1950 already showed,

Table 4: The Relative Frequency of Negative and Positive Contributions Made by Currency Ratio k and Time Deposit Ratio t to Short-Run Monetary Growth Patterns in 1975

The computation period contained 52 weeks. The growth patterns were computed between successive non-overlapping four week averages. The successive computations shift the two four week periods by one week forward in time.

	Number of contributions made by	
	The currency ratio k	The time deposit ratio
positive	9	20
negative: above - 3%	29	22
at most - 3%	14	10

The range of contributions made by the currency ratio k and the time deposit t ratio in 1975 is

for k:	- 6% to + 3%
for t:	- 5.5% to + 3.3%

The distribution of positive k and t contributions between the first 31 weeks and the last 21 weeks

	Number of positive contributions	
	k	t
the first 31 weeks	7	20
the last 21 weeks	2	none

Table 5: The Decomposition of the Growth Rate in Nominal GNP in the Recovery Phase to the Period with Maximal GNP Growth

		Percentages per annum			
	Periods	GNP	M	V	G
1.	1'st recovery				
	I/49 - III/49	- .6	- .4	- 1.5	+1.2
	II/49 - IV/49	3.3	.5	3.1	- .2
	III/49 - I/50	11.0	4.3	8.1	- 1.4
	IV/49 - II/50	17.4	5.8	12.4	- .8
	I/50 - III/50	19.6	2.4	15.5	1.8
2.	2'nd recovery				
	III/53 - I/54	- 1.8	.7	.5	- 3.0
	IV/53 - II/54	.9	1.3	3.2	- 3.6
	I/54 - III/54	4.8	2.5	4.2	- 1.9
	II/54 - IV/54	9.3	3.3	6.6	- .6
	III/54 - I/55	10.9	3.2	7.7	.1
3.	3d recovery				
	II/60 - IV/60	- .2	1.3	- 2.8	1.3
	III/60 - I/61	2.8	1.5	- .1	1.4
	IV/60 - II/61	6.6	2.1	3.0	1.5
	I/61 - III/61	8.1	2.3	4.1	1.7
	II/61 - IV/61	9.0	2.4	4.1	2.5
4.	4'th recovery				
	III/69 - I/70	4.2	3.3	- .3	1.2
	IV/69 - II/70	5.3	4.5	.1	1.0
	I/70 - III/70	4.9	4.7	- 1 0	1.2
	II/70 - IV/70	6.1	4.7	- .3	1.7
	III/70 - I/71	9.9	5.6	2.7	1.6
5.	5'th recovery				
	III/74 - I/75	2.0	2.4	- 2.2	1.7
	IV/74 - II/75	7.8	4.3	1.9	1.6
	I/75 - III/75	13.8	4.5	7.1	2.2

Remarks: the period indicated with I/49 - III/49 refers to the change from quarters I and II of 1949 to quarters III and IV of 1949. The decomposition is based on the formula

$$GNP = MV + G$$

where V is private spending velocity and G measures government expenditures on goods and services.

before the outbreak of the Korean war, an increase in V of 8.1% p.a. over the second half year 1949. The anticipations unleashed with the outbreak of the war accelerated velocity further by a large margin. The increase on V moved from 8.1% p.a. to 15.5% p.a. The further increases in velocity beyond the third period of a recovery stayed for all the other recovery phases between 1.1 and 3.5 percentage points. But a substantial further increase in velocity from the second half of 1975 to the first half of 1976 and into the second half of 1976 depends at least partly on the monetary growth path permitted or pursued by the Federal Reserve Authorities. It is not very probable at this stage that a retardation of monetary growth from the second half of 1975 to the first half of 1976 and a lower contribution of M to the growth of GNP would be offset by a sufficiently large further increase in velocity over the first and second half of the current calendar year. The probabilities weighing the course of velocity associated with the different paths of monetary growth strongly suggest a conservative pattern of monetary policy along the lines suggested by the SOMC.

This issue will be covered however in more detail in sections IV and V of the position paper. The final paragraph of section II examines several statements made by Chairman Burns at the occasion of recent Congressional Hearings. The statement presented on February 3, 1976 discusses the low level of monetary growth observed since June. The Chairman attributes this observation to a change in "regulation issued by the banking agencies last November." This change "enables partnerships and corporations to open savings accounts at commercial banks in amounts up to $150,000." The Federal Reserve Authorities investigated the effect of this regulatory change and Chairman Burns notes that "by January 7 around $2 billion had already been moved into these new accounts. Since the bulk of these funds probably were held previously as demand deposits, this shift in deposits has undoubtedly accounted for a significant part of the weakness of M_1 in late 1975 and early this year." An examination of the short-run decomposition of monetary growth between successive moving four week periods indicates an increase in the negative contribution made by the time deposit ratio during December 1975. It is noteworthy however that this contribution fell even lower (algebraically) in October and over a somewhat longer interval. Moreover, the contribution resulting from changes in the time deposit ratio averaged beyond the comparison period ending with the first week

of January at around - 1.1% p.a., an amount about one fourth of the average contribution in October 1975 before the regulatory change. We also note that the contribution made by the base, or more appropriately for this period, by the sum of the contributions made by base and adjusted reserve ratio, declined from late November to late January. The regulatory change probably raised the time deposit ratio somewhat and retarded monetary growth this winter to some extent. But the order of magnitude involved is small compared to the variations in the contribution to monetary growth attributable to the Federal Reserve Authorities. The statement quoted thus directs attention away from the crucial determinant, viz. the behavior of the monetary authorities.

Chairman Burns also notes the bulge in monetary growth which occurred in May/June 1975. This bulge is attributed to the Treasury's management of funds. Most of the variations in Treasury balances occur with the Treasury's deposits at the Federal Reserve Banks. Changes in Treasury balances thus immediately affect the monetary base. Chairman Burns essentially argues that large amounts of "tax rebate checks and supplemental social security payments" were disbursed by the Treasury. Such disbursements simultaneously raise deposits at commercial banks and the monetary base. The concurrent acceleration of the two magnitudes can be clearly noted in table 1. The essentially similar order of acceleration for both M_1 and B also shows that the accelerated injection of base money was rapidly diffused over the system and suggests that the amplifying response occurred with comparatively small lag. Chairman Burns' description how the bulge disappeared is particularly interesting in this context. We read that "the explosion of the monetary aggregates subsided as individuals disposed of their additional funds." This is a most remarkable statement. It asserts that the money stock declines or decelerates whenever individuals spend money. The bulge disappeared of course as soon as the decline in Treasury balances, not offset by a decline in Federal Reserve Credit was terminated. We should thus clearly recognize that the Federal Reserve Authorities permitted the bulge to occur and were similarly responsible for the subsequent retardation in the second half of 1975. But this aspect of our story should be examined in the next section.

III. Monetary Policy; Targets and Procedures

Congress expressed early in 1975 an explicit interest in monetary policymaking. The result of this interest was codified in House Concurrent Resolution 133 adopted by Congress in February 1975. The importance of this resolution was discussed in the two previous position papers prepared for March and September 1975. The Federal Reserve Authorities were obliged by the resolution to present a target range of monetary growth for a period of 6 to 12 months into the future. They announced in April a target range of 5% to 7½% based on March 1975. The range has been widened in February 1976 to 4½% to 7½% per annum. The target range remained thus fixed for almost a year and Chairman Burns saw no reason in late summer 1975 to modify this range. But a growth path is not fixed by its growth rate alone. The growth rate determines the slope, but the position of the growth line still depends on the base chosen. The Federal Reserve Authorities initiated the new procedures imposed by Congress with a base equal to the data for March 1975. The resulting target cone is drawn in graph 2 attached at the end of the paper. The broken line describes the actual path of the money stock since January 1975. By June monetary growth pushed the money stock substantially above the target cone. Monetary growth subsided beyond June and the growth path moves across the target cone and drops after December below the range targeted in April 1975. This range was soon changed however. The base was shifted in early summer to the average of the second quarter placed in graph 3 on the line indicating the month of May. We note that the monetary path drops in October below the target range and falls beyond November even further below the desired growth pattern. The early February data indicate a minimal shortfall of about $3.5 billion in the money stock. Relative to the early February data the money stock would have to grow from February to March by at least $6.5 billion in order to satisfy the policy targets deemed appropriate by Chairman Burns late last summer. But the base was again shifted in the fall. It was moved from the second quarter to the third quarter. The result is depicted in graph 4. One single month lies now within the desired target range. And the last shift in basis to the fourth quarter 1975 barely improves matters. All points of the path are far below the policy cone.

At the last meeting of the SOMC preliminary data including August and the first week ending in September were just available. My position paper acknowledged at the time that the monetary path moved beyond June quite appropriately according to the Fed's announced target range. The money stock was pulled back into the planned range With six months more information available we note at this stage that the Federal Reserve Authorities allowed the monetary path to drift across and even to drop below the target range.

The relative short fall in monetary growth under the four different selections of a basis made by the Fed and the SOMC's proposals advanced in March 1975 and reaffirmed in the meeting of September 1975 is presented in table 6.

Table 5· The Minimal Increase of M_1 from February 1976 to March 1976 Required to Move the Path into the Target Range in Billions of $

Fed Basis				SOMC Basis
March	2'nd Q	3'd Q	4'th Q	March (= $290)
3	4.5	5	3.5	8.7

The reader should be reminded that the SOMC proposed in March 1975 that the Fed immediately raise M_1 to $290 billion in March and proceed thereafter at a growth rate of about 5.5% p.a. The frontloading policy implicit in the SOMC proposal explains the comparatively large short-fall of M_1 compared to the Fed's policy programs. The SOMC proposed moreover in September that the money stock be raised by about $2.5 billion within a month in order to move the monetary path into the SOMC's target range proposed at the March meetings.

The persistent and substantial deviation of monetary evolution from the Federal Reserve Authorities' programs requires some attention. The actual performance is particularly noteworthy when we read Chairman Burns' satisfied evaluation at the Hearings of February 3, 1976. "Since last spring, growth rates of the major monetary aggregates . . . have generally been within the ranges specified by the Federal Reserve." Such satisfaction appears most remarkable. Chairman Burns attempts however to justify the low rate of monetary growth observed since June 1975. The statement prepared for the Hearings before the House Committee on Banking, Currency and Housing (February 3, 1976) attributes to a shifting money demand a major role. Chairman Burns explains that "the relatively slow rate of growth in money balances during recent months has been watched carefully, and at times with considerable concern, by the Federal Reserve. . . . we have been inclined to view the recent sluggish rate of expansion in M_1 as reflecting the influence of various factors that are reducing the amount of narrowly defined money needed to finance economic expansion." This theme is elaborated on several occasions in the Chairman's statement. We are informed that "numerous financial innovations and regulatory changes have facilitated the process of economizing on the sums held in the form of demand deposits. These developments have included the spread of overdraft facilities in banks, increased use by consumers of general purpose credit cards, the growth of NOW accounts . . . the emergence of money market mutual funds, the development of telephonic transfers of funds from savings to checking accounts and the growing use of savings deposits to pay utility bills, mortgage payments and other obligations." The regulatory changes opening savings accounts at commercial banks to partnerships and corporations is added to this list by Burns. Some of these changes indeed raise the opportunity cost of holding money balances for any given level of yields and wealth, and others lower transaction costs. In either case money demand may be lowered by these developments. But others, e.g. the NOW account, do not involve "shifts in money demand" but the proper measurement of monetary aggregates A plausible description offers of course no assurance of relevant explanation. But Chairman Burns refers also to the econometric work undertaken at the Board. He notes

that "since the third quarter of 1974 . . . (the money demand) equation (used at the Board) has persistently and increasingly overpredicted the amount of money demanded by the public to finance transactions." The shift in money demand is thus inferred from observations contradicting the Federal Reserve's preferred hypothesis. Such inferences are of course widely used and they were already applied by the Fed during the 1930's in order to justify its position. The conflict between traditional beliefs, expressed by the inherited Federal Reserve theory, and observations, was interpreted to reveal in the 1930's the "breakdown of an orderly world" or "that the world had changed." There is of course an alternative interpretation, viz. that the theory involved is poorly designed and should be rejected. But we do have a problem here and the Federal Reserve's conjecture based on its econometric work deserves some attention. It was unfortunately not possible in the short time available since the House Committee Hearings to examine the Fed equation and compare its performance with alternative specifications involving a different lag structure, long term interest rates and possibly even equity yields. I conjecture that alternative specifications of money demand probably yield no support for the Chairman's contention It would seem highly inappropriate to justify a low rate of monetary growth, which deviates substantially from the planned path still found acceptable late last summer, in terms of the residuals obtained from an essentially uninterested hypothesis. If the Federal Reserve Authorities had initiated a systematic examination and comparison of available money demand hypotheses and dominantly found the same pattern we could certainly assign more weight to their conjecture. But we observe no signs of such studies and Chairman Burns offers certainly no information in this respect. The reader should also be reminded that several years ago the Fed told us a reverse tale. When monetary growth spurted in the spring of 1972 the Fed assured us subsequently that money demand had increased. A study prepared by Michael Hamburger and published in the Journal of Money, Credit and Banking (May 1973) found no evidence of the contention made at the time The positive correlation between assertions of shifting money demand and observations of "unanticipated" or "unplanned" monetary growth is perhaps the most reliable regularity in this context

Chairman Burns concludes his evaluation of changes in money demand with the following comments: "However, since we could not be entirely certain of our views, we have taken steps recently to insure that the rate of monetary expansion does not slow too much or for too long. During the past three months or so, open market policies have therefore been somewhat more accommodative in the provision of reserves to the banking system." The time profile of the monetary base shows however the following pattern: The base increased from about $119 billion to about $120.5 billion during November, moved between $120 billion and $121 billion during December, declined to $119.5 billion by the middle of January and surged to $120 billion by February 10. We can find no evidence of a more expansionary policy between the end of November and the middle of January. The monetary base actually declined over this interval and only increased after the middle of January. The observable record yields thus little support for the Chairman's contention. The Chairman may have been misled on this point by the traditional misconception cultivated among Federal Reserve officials. This misconception follows from the indicative interpretation assigned to the movement of short-term rates, and most particularly to movements of the Federal Funds rate. This interest rate drifted from the beginning of November until the end of January downwards by about 50 basis points, the commercial paper rate by about 80 and the Treasury bill rate by about 70 basis points. This drift was probably attributed to the Fed's "more accommodative policy." Actually the Fed's "accommodative policy" geared in a traditional procedure to a short-run control over the Federal funds rate tends to convert changing market pressures on short-term rates into accelerations or decelerations of the monetary base The falling market pressures between early November and the middle of January were accommodatingly translated into a retardation of the monetary base reflected by a deceleration of the money stock.

Chairman Burns also expresses substantial uncertainty about the measurement of the money stock. Such uncertainties do affect our judgment bearing on the desired target path of measured M_1, or on the interpretation of the observed target path relative to the planned range. The Chairman conjectures in particular that broader aggregates may be more appropriate for monetary analysis and policymaking in the future. This

may indeed be the case and the SOMC should share the Chairman's concern. But I find it difficult to sympathize with the Chairman's position. The Board of Governors of the Federal System has vast resources at its disposal for useful research bearing on non-contrived policy problems. There also exist Federal Reserve Banks with reasonably competent research staffs. I see no evidence that the Board encourages these staffs to examine an important issue for policymaking. The clues available to an outsider seem to reflect more discouragement than encouragement in this respect. The Committee assembled by the Board to examine issues associated with the proper measurement of the money stock may have finished its work. No report is available so far and we cannot judge the quality and the relevance of the work performed. Once the report is published the SOMC will have more information to judge the substantive relevance of the measurement problem. Repeated references to a measurement problem may be valuable as a political smokescreen They could be a memento of a substantive and possibly important problem. But that would be shown by the Board's investment of resources in a substantial and prolonged examination of measurement problems and the behavior patterns associated with the diverse monetary aggregates quoted by Chairman Burns.

The variety of arguments used by Federal Reserve officials to remove attention from a particular monetary aggregate spans a considerable range. We find in Chairman Burns' statement presented to the House Committee on Banking, Currency and Housing on July 24, 1975 the following passage "... the narrowly defined money supply, M_1, can actually be a misleading guide to the degree of monetary ease or restriction. For example, in periods of declining economic activity both the transaction demand for cash and the private demand for credit will tend to weaken and thus slow the growth rate of M_1." It is also noted that during economic downswings lower market rates tend to raise the time deposit ratio and to retard M_1 still further. Several points should be noted in this context. Falling money and credit demand affect monetary growth essentially via the interest mechanism This interest mechanism operates on the time deposit ratio and the monetary base. The effect on the base is a consequence of the Federal Reserve's interest target policy and would disappear with proper monetary

control. Moreover, the channel operating via the time deposit has been confined for more than 50 years to moderate proportions compared to the joint influence of monetary base and the behavior of the currency ratio. Lastly, even representing a highly endogeneous monetary growth, still induced accelerations and deceleration of M_1, impose variations in monetary impulses forcing an accommodation of output in the shorter-run and price-levels over the longer-run. Such consequences cannot be exercised by the simple ascription of "endogeneity."

IV. What Happened and What Should Be Done

So what happened really since Congress passed HC133 and requested that the Federal Reserve Authorities attend more effectively to control monetary growth? Our monetary authorities responded to some extent with the announcement of a planned range of growth rates. The stability of this range was made somewhat irrelevant with the observed instability of the base used for computation. Four different base values have been used within one year. This means that contrary to the idea expressed by Congress with HC133 the Federal Reserve Authorities effectively confine their operation to a quarterly program. This involves a substantial erosion of the longer-run monetary control and stability of monetary growth addressed by HC133. We also noted that the actual path performed poorly relative to the targeted range. This performance was unavoidably accompanied by numerous explanations or justifications adducing appropriate shifts in money demand, measurement problems or the irrelevance of M_1. We cannot reject the possible relevance of this contention, but we should reserve a substantial modicum of doubt about these conjectures. We should invite the Federal Reserve to foster an extensive research program at the Board (and even some Federal Reserve Banks) attending to these questions. We should be ready and willing to be convinced – provided such material is presented in a competitive professional context. But it seems prudent to suspend these doubts and interpret the data to show some retardation of monetary growth conflicting with the planned objective of the Fed and also conflicting of course with the SOMC's proposals made last March and last September.

How do we explain this retardation relative to the planned objective? The basic reason still lies in the internal procedures used to implement policy. This aspect has been discussed many times in numerous contexts since we described the problem for the first time in our joint report on Federal Reserve Policy-Making to the House Committee on Banking, Currency and Housing in 1963/64. The problem results from an execution of policy couched in terms of a short-run target for the Federal funds rate. The account manager adjusts his daily (or hourly) operations according to the relation of the market rate with the targeted band. Whenever the market rate tends to drift below the target band open market purchases are retarded (or sales increased), and a tendency to drift above the target band induces increased open market purchases. The target band is of course adjusted to changing market conditions. Such adjustments frequently lag behind evolving events however and produce under the circumstances accelerations (or decelerations) in the rate at which base money is injected into the system. Moreover the Federal Reserve staff usually prepared profiles of Federal funds rates associated with desired or planned paths of the money stock. This procedure was not so much used in recent years as an instrument to implement an explicit interest target policy. It was presented as a device to translate the monetary goals of the FOMC into operational standards for the account manager. The experience since 1970 suggests however that this implementation procedure endangers an adequate control of monetary growth. The attention directed towards monetary aggregates emerging in the early 1970's never involved a major change in internal procedures. It was simply integrated with the aid of translation procedures developed by the staff. The problems typically associated with the inherited arrangement thus continued in a possibly muted form. This issue remains particularly important as influential groups inside and outside the Federal Reserve System attempt to move the Federal Reserve to an explicit policy of controlling levels of selected interest rates. There are some indications which suggest that the Fed may shift the weight of attention somewhat further towards interest rates.

The recent experience raises again a fundamental issue bearing on the quality of monetary control. Chairman Burns emphasized in his statemend presented on July 24, 1975 to the House Committee on Banking, Currency and Housing the basic "imprecision"

of monetary control. Such imperfection certainly exists and will continue to plague us. There remains however the question about the nature of this imperfection and the causes shaping the degree of achievable control. The Chairman properly refers to variations in the public's behavior expressed by currency and time deposit ratio, the changes in the excess reserve ratio and shifts of deposits between member and non-member banks' deposits. All these aspects contribute to lower the degree of control below perfection. But Chairman Burns' list of problems affecting the degree of control over monetary growth is incomplete. Institution arrangements in various countries obstruct the achievable degree of monetary control. We should note for the USA in this context the specification of reserve requirements, the prohibition of interest rates on demand deposits, and most particularly the FOMC's internal procedures governing the making and implementation of policy. It is for this reason that I include below proposals 2 and 3 originally advanced in my position paper prepared for the September meeting of the SOMC. Proposal 1 tentatively suggests to the SOMC a course of monetary policy to be followed for the balance of the current calendar year.

1. It is proposed that a portion of the accumulated short-fall of M_1 be removed. The money stock should be raised to about \$299 or at most \$300 for March 1975. This would imply relative to early data for February 1976 an increase of M_1 from February to March by about \$3 to \$4 billion. The average increase of the monetary base required for this purpose is approximately \$1.2 to \$1.6 billion. Beyond March the Federal Reserve Authorities should hold monetary growth (determinedly) to a path of 5% per annum for at least six months and probably to the end of this year. This proposal combines again a measure of "frontloading" with an avowedly conservative course followed subsequently. The frontloading is designed to offset the probably retarding effect of a low monetary growth held over 7 months, and the modest growth rate for the balance of the year should help to retard inflation gradually further.

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.

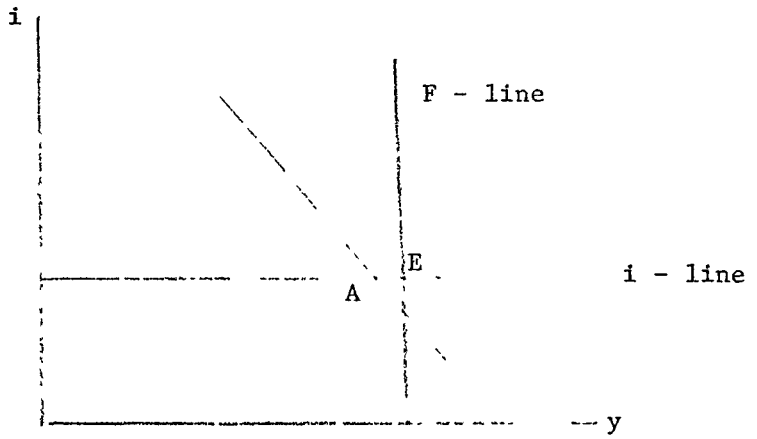
V. The Protracted Issue

The last section of my position paper prepared for the meeting in September 1975 discussed basic and persistent issues with the "Keynesian establishment." Two major alternative strands dominated professional thinking over many years. One view advocates an activist exploitation of fiscal and monetary instruments in order to guide effectively and in some detail the global course of our economy. The other view cautions against such activism and attributes a good part of the problems encountered in past years to the longer-run consequences of such activist policies. It argues therefore for a set of stable rules designed to confine economic fluctuations and changes in the price-level to a tolerable margin The alternative views are again reflected in the proposals for macro-policies debated since last summer. One group, centered around the Brookings Institution, argues the necessity for a highly expansionist fiscal and monetary policy. A large nominal expansion is desired in order to lower the unemployment to an "acceptable" or its natural longer-run level. Moreover, the large gap between potential and actual output (or the actual and the natural rate of unemployment) can be expected to moderate inflation even in contexts of a large nominal expansion. The SOMC on the other hand approached the problem over the past three years in a substantially different

manner. It argues and still argues that a moderate and stable monetary growth and a substantially lower deficit should be the goal of our policies.

The differences between the proposals are immediately visible and easily recognizable. It seems useful however to explore the background of these differences. Two fundamental conditions shape the conflicting views. These conditions pertain to the degree of reliable information about economic dynamics and the interpretation of the government sector's behavior. These basic differences deserve a fuller discussion at another occasion. This holds in particular for the second aspect bearing on government. We note here only that the activist thesis is essentially based on a public interest hypothesis of "government behavior." It is assumed that legislators and bureaucracies will generally be guided in their actions by an obvious public interest. This contrasts sharply with an entrepreneurial hypothesis of the behavior of bureaucracies, legislative bodies and even courts of law. This thesis states that legislators and members of bureaucracies compete in a market with programs and proposals designed to optimize their long-run private interest. The alternative hypothesis about the behavior of political institutions crucially determine the approach to stabilization policy. Adherents of a public interest hypothesis are usually inclined towards an activist conception of policy, whereas advocates of the alternative view maintain the importance of stable rules confining an essentially unstable political process yielding "stabilization policies" as an essentially haphazard side-product of the competitive political game.

The information problem and the inherent uncertainties confronting us are the second major conditions affecting the differences in policy conception. This aspect may be elaborated in terms of the standard analysis used by the profession and couched in terms of the IS-LM diagram presented in figure I. The vertical axis measures the



rate of interest and the horizontal describes national product. The vertical F-line represents full employment output and the horizontal i - line describes the inherited level of interest rates prevailing in the economy. The LM-line describes the locus of (i, y) values equilibrating money demand with money supply, whereas the IS line summarizes the locus of (i, y) combinations equilibrating the output market. It seems to be argued that we know the position of full employment F and our current position A We also "know," it appears, that inflation rates fall at any position to the left of F. It follows that the best policy combination relies on fiscal policy to move IS to the right and apply monetary policy to hold interest rates constant until the IS line intersects the F at the point E. This policy implies of course a monetary expansion of some order, but the resulting level of monetary growth is barely assigned much further significance in this argument.

We should have little doubt that all this could be done, possibly and maybe. But the probabilities of a useful outcome are murky and the probabilities of a repetition of the increasing cycles of inflation and unemployment too large. The crucial condition of the argument depends on the implicit assumption that we know at any time with a sufficient measure of reliability the position of the IS line and its motion over the nearer future (say up to one or two years). Should we possess such knowledge we indeed could determine in some detail and reliably the time profile of policy. We would know when to open the faucets and how to regulate the runoffs and when to start closing some faucets. The IS line moves however with a momentum determined by the system's internal dynamics and this profile is not known with sufficient reliability. It is quite probable that we open the faucets too much and too long. We simply do not know in sufficient detail and with the reliability required the dynamic patterns involved. By the time the expansionist stance is modified the IS line may have a momentum carrying it substantially beyond the desired position. Moreover, the subsequent reversal in policy introduces a new range of instabilities into the system. These uncertainties are real and noncontrived in my judgment. Any particular econometric model will give us of course a definite answer to these questions. But the time profile and orders of magnitudes of these answers differ quite substantially between model. Moreover, we possess little evidence supporting the cognitive claims of any particular econometric model. It appears thus wiser to admit

our lack of detailed information and pursue a stable longer-range course designed to lower gradually both the inflation rate and the rate of unemployment. And most importantly, this course (hopefully) adopted by the SOMC will prevent the trend towards ever increasing cycles of rates of inflation and unemployment experiences since 1965.

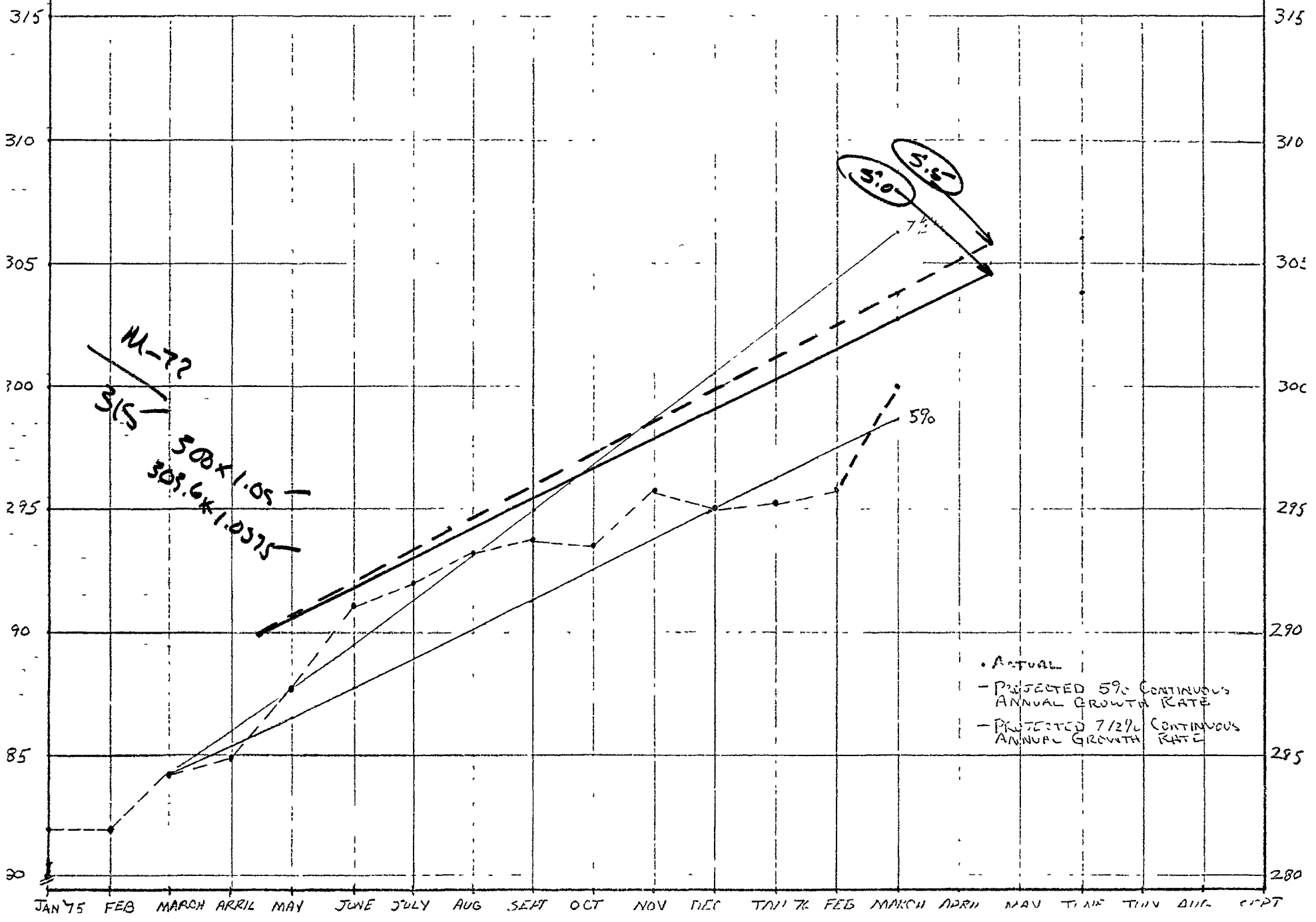
Two additional considerations reinforce the general argument outlined above. The last section of the position paper prepared for the September meeting questions the validity of the standard measures of the "potential gap" in national output. It is generally acknowledged that external (or real) shocks substantially raised the inflation rate in 1974/75 for a time. But it would appear that these shocks also affect measures of potential output. One should wonder therefore whether the usual measures do not exaggerate the actual "gap" in our resource utilization. The relevant occurrence of real shock effects on the level of potential output would disrupt over some period the operation of "Okun's law." It also implies that the unemployment rate would not be a good proxy of the "gap" appropriately guiding the magnitude of nominal expansion. The non-vanishing probability of a smaller gap reinforces the uncertainty discussed above. They are supplemented with an additional question concerning the precise position of the vertical full output line Lastly, the uncertainties encumerated in detail by Chairman Burns, bearing on falling (or lowered) money demand and measurement errors in monetary aggregates offer additional reasons to move conservatively and avoid large variations in the course laid out for monetary policy. These reasons, grounded in our unfortunate uncertainty, determine the proposal submitted to the SOMC and formulated in the previous section.

One last aspect of the protracted [illegible] is noteworthy at this time. It was suggested during the debate on the appropriate course of "stabilization policies" last summer that a monetary growth confined to 5% or 6% p.a. would probably abort or at least seriously endanger the recovery. It was argued that a large monetary expansion, probably exceeding 10% p.a. would be necessary in order to support a viable upswing for 1975/76. We should note in retrospect that the unfolding events eventually supported the SOMC's position in this respect and surely refuted the expansionist statements made last summer.

DOLLARS

MONEY STOCK - M1

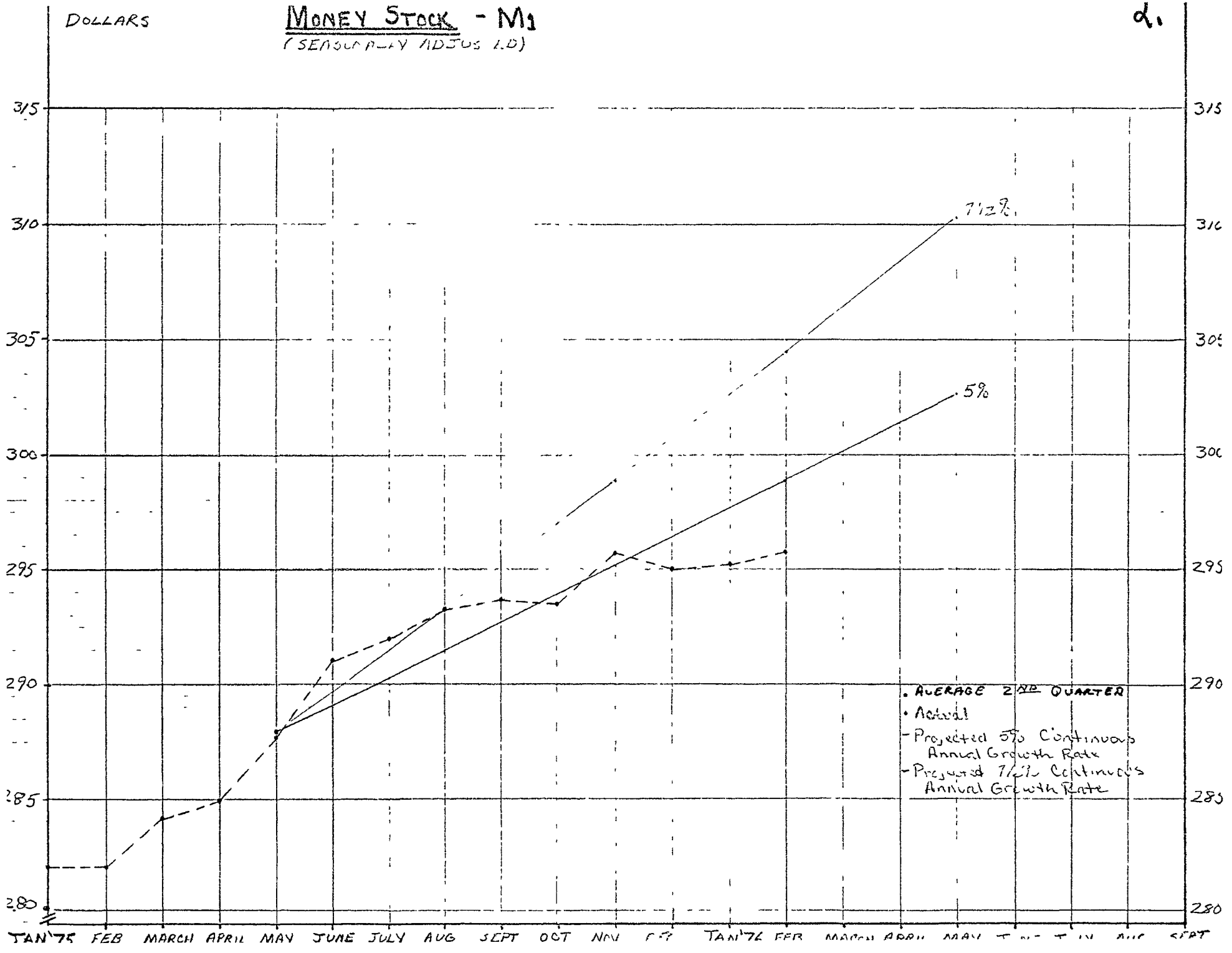
(SEASONALLY ADJUSTED)



DOLLARS

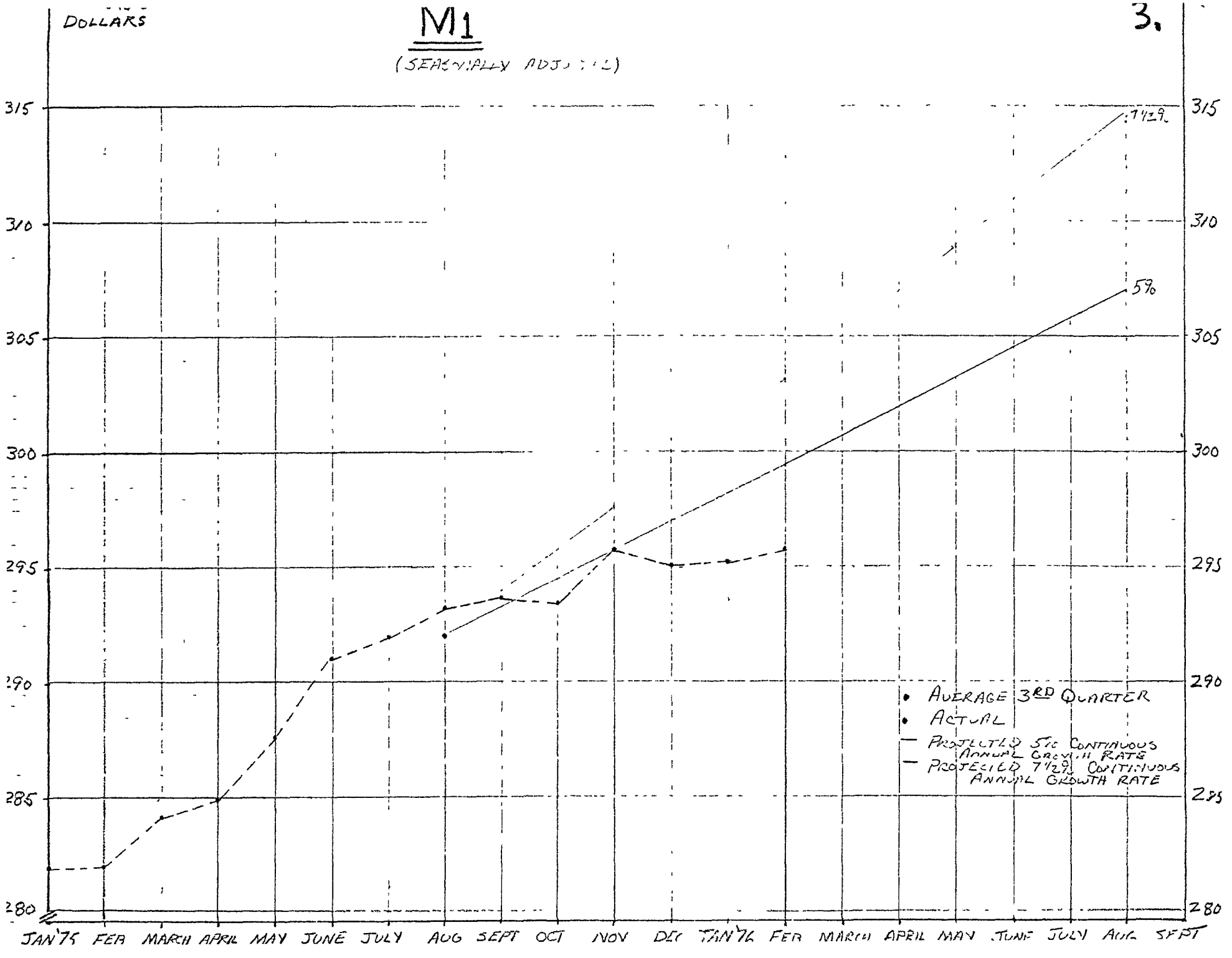
MONEY STOCK - M_1

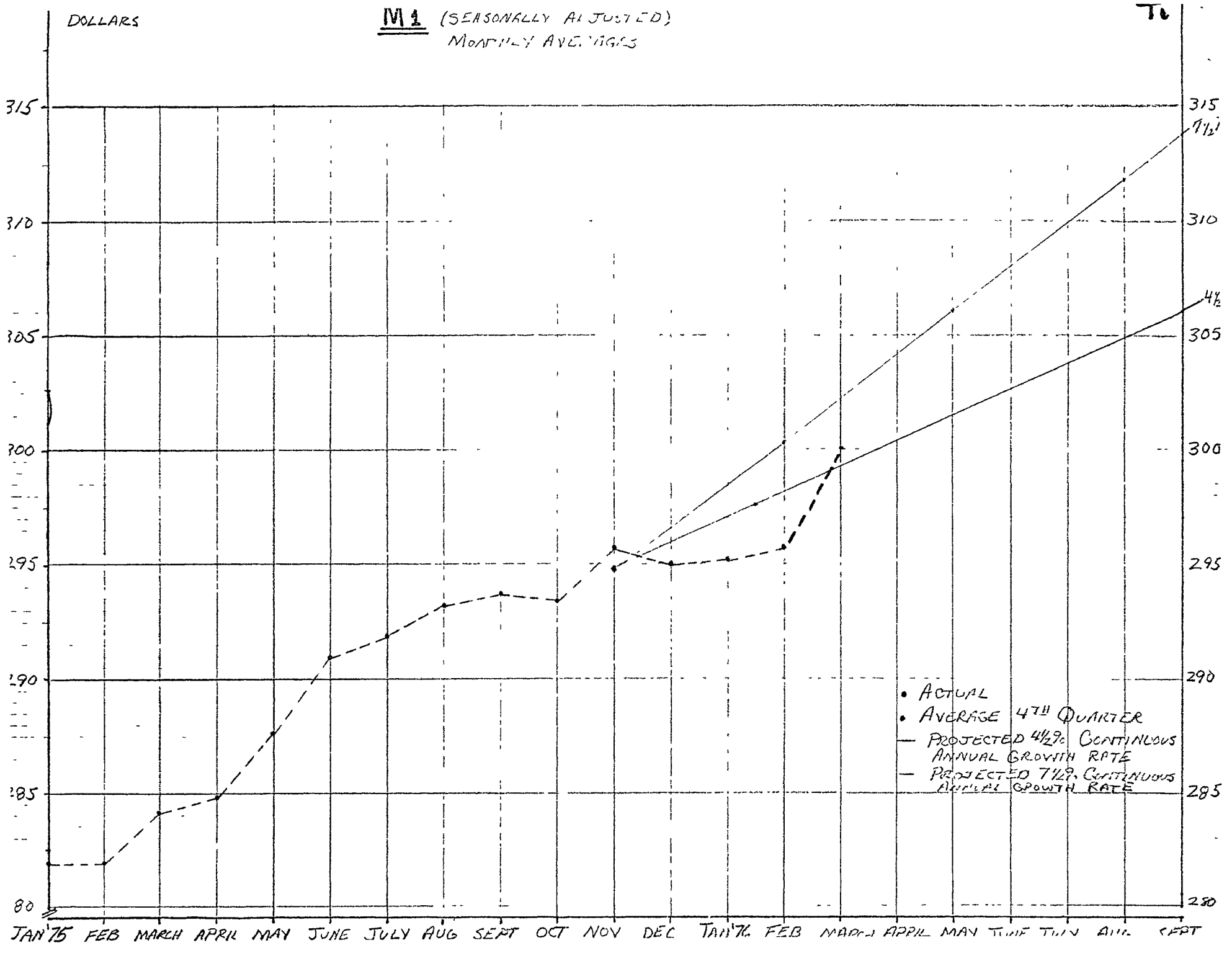
(SEASONALLY ADJUSTED)



M1

(SEASONALLY ADJUSTED)




DOLLARS
M1 (SEASONALLY ADJUSTED)
MONTHLY AVERAGES
T6
315
310
305
300
295
290
285
280
7½%
4½%
• ACTUAL
• AVERAGE 4TH QUARTER
— PROJECTED 4½% CONTINUOUS ANNUAL GROWTH RATE
— PROJECTED 7½% CONTINUOUS ANNUAL GROWTH RATE
JAN'75 FEB MARCH APRIL MAY JUNE JULY AUG SEPT OCT NOV DEC JAN'76 FEB MARCH APRIL MAY JUNE JULY AUG SEPT

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 March 8, 1976

From: A. James Meigs

Re: Implications of Possible Monetary Growth Targets

The attached tables summarize the results of simulations run on a monetary forecasting model at the Applied Financial Economics Center. The main objective of this project was to indicate some of the relative costs and benefits of various monetary policies that might be pursued by the Federal Reserve during the period from fourth quarter 1975 through the fourth quarter 1977.

At the September 12, 1975 meeting of the Shadow Open Market Committee, we recommended that the Federal Reserve should maintain the growth rate of M_1 (demand deposits and currency) at a steady 5.5% annual rate. If this policy had been followed, the average level of M_1 in the first quarter of 1976 would have been $304.1 billion. Because the third-quarter to fourth-quarter rate was only 2.3%, the money stock would have to grow at an 11.7% annual rate from the fourth quarter of last year to the first quarter of this year to reach the $304.1 billion level. All of the simulations reported in this memo indicate that real GNP will be lower in the first half of this year than it would have been with a higher monetary growth rate in the fourth quarter of last year.

Table 1 assumes that the monetary growth rates of 1975 will be repeated in 1976 and 1977.

Table 2 assumes that money growth will fall to a 2% annual rate in the first quarter of this year and stay at that rate through 1976 and 1977.

Table 3 assumes that money growth will be maintained at a steady 4.5% annual rate through 1976 and 1977. This is the new lower target rate reported by Dr. Burns in his most recent report to the Congress.

Table 4 assumes that money growth will be maintained at a steady 5% annual rate through 1976 and 1977.

Implications of Possible Monetary Growth Targets

Table 5 assumes that money growth will be maintained at a steady 7% annual rate through 1976 and 1977.

All of the simulations assume that real Federal purchases of goods and services will be held roughly constant, in order to focus the analysis on the effects of monetary policies. There was no attempt to adjust fiscal policy to counteract effects of the various monetary policies simulated, although some of these effects probably would induce changes in fiscal policy.

The equations in the models were fit over the period from second-quarter 1953 through second quarter 1971 (to avoid distortions introduced by price-wage controls after mid-1971.)

Conclusions:

1. If M_1 growth does not accelerate from the fourth-quarter '75 rate of 2.3%, or if it declines further, the rate of growth of real GNP would be sharply reduced within this year. This is illustrated in Table 2, which assumes a 2% M_1 growth rate for all of '76 and '77. In this model, a 2% M_1 growth rate would mean no growth in real GNP from first-quarter '76 through second-quarter '77, unless the monetary deceleration were offset by other forces in the economy. The 2% M_1 growth rate would have the benefit of putting substantial downward pressure on the inflation rate, bringing the GNP deflator to a lower level by the end of 1977 than would any of the other monetary policies simulated.

2. It is, of course, highly unlikely that the Federal Reserve would maintain such a low growth rate for M_1 for more than a brief time, expecially if symptoms of recession were to appear. Table 1 illustrates a policy of repeating the 1975 pattern of monetary growth rates, with a quarter of low growth followed by two quarters of much greater growth and a final quarter of low growth. From fourth quarter to fourth quarter the assumed compound annual rate of growth is 4.4%.

This policy apparently would avert the recession, implied by a steady 2% monetary growth rate, although it would produce wide swings in quarterly growth rates of both nominal GNP and real GNP. It also would continue to push the inflation rate down, to a level of around 4% per year during 1977.

3. The anti-inflationary benefits of the 1975 pattern of monetary growth rates could be produced also by a steady 4.5% annual rate of M_1 growth with less variation in quarterly changes in GNP. The fourth-quarter-'77 levels are almost identical under both sets of money-growth assumptions.

4. The higher M_1 growth rates simulated--5% and 7%--do increase the growth rates of real GNP. However, they also raise the inflation rate. The 7% M_1 growth indicates substantially higher interest rates in 1977 than would result from the lower monetary growth rates. This is partly because money-supply growth rates influence inflation expectations directly in this model. The 7% money-growth rate would be interpreted by lenders and borrowers as a sign that inflation would be rising again in 1978, even though the inflation rate had risen very little in '77.

5. The growth rates for real GNP in all of the simulations are disappointingly low. I don't know why that is so. It may be that the equations underestimate the growth of income velocity, because they were fit over the period mid-'53 to mid-'71 and so do not reflect more recent experience. Nevertheless, they do indicate velocity growth of more than 3% per year, which is not low by past standards. The large rise in velocity from second-quarter '75 to fourth-quarter '75 occurred over too brief a period to be taken as evidence of a new, higher trend-rate of velocity growth that can be relied on to persist. The slow growth in real GNP may also reflect the slowness of adjustment in the price level.

Implications of Possible Monetary Growth Targets

During 1975, the inflation rate fell to the trend-rate indicated by the deceleration in money growth after mid-'73. Part of the '73-'74 rise in the price level, furthermore, was a one-time upward step produced by the removal of price controls, the devaluation of the dollar, and the increase in energy prices. Reductions in the inflation rate may be slower from here on.

6. Behavior of both velocity and prices may be more favorable to the prospects for growth in real GNP than these simulations indicate. And the recent deceleration in growth of M_2 (demand deposits plus time deposits other than large CDs plus currency) may partially compensate for a slowing in growth of M_1. However, I do not think we should view a substantial deceleration in the growth of M_1 as something that can be safely ignored. From first-quarter '71 to second-quarter '74, M_1 grew at a 6.9% annual rate. The deceleration to a 2.4% annual rate of M_1 growth from second-quarter '74 to first-quarter '75 certainly contributed to the severity of the recession, if it was not the primary cause. The very high 8.9% and 7.1% monetary growth rates of the second and third quarters of '75 surely contributed to the recovery from the recession directly and through inducing a rise in velocity in the fourth quarter. A 7% M_1 growth rate clearly is too high to be consistent with continuing reduction in the inflation rate. But I believe that too low a rate of monetary expansion in 1976--2% per year for instance--would raise a serious risk of recession.

IMPLICATIONS OF MONETARY GROWTH TARGETS

Table 1

	Actual 1975				1975 Money Growth Rates							
					1976				1977			
	I	II	III	IV	I	II	III	IV	I	II	III	IV
M_1 (bil $)	283.0	289.1	296.1	295.8	295.6	302.0	307.2	308.9	308.7	315.4	320.8	322.7
ΔM_1 (% ann. rate)	-0.3	8.9	7.1	2.3	-0.3	8.9	7.1	2.3	-0.3	8.9	7.1	2.3
GNP (bil $)	1434	1461	1528	1572	1591	1620	1658	1690	1713	1747	1790	1825
ΔGNP (% ann. rate)	-2.1	7.7	19.9	12.0	4.9	7.8	9.7	7.9	5.6	8.3	10.0	8.2
Real GNP (bil 72$)	1159	1168	1201	1216	1216	1224	1238	1247	1249	1259	1274	1283
ΔReal GNP (% ann. rate)	-9.2	3.3	12.0	4.9	0.1	2.6	4.6	3.0	0.6	3.3	4.9	2.8
GNP Deflator (1972=100)	123.7	125.0	127.2	129.3	130.8	132.3	133.8	135.3	136.6	138.0	139.4	140.8
ΔDeflator (% ann. rate)	7.8	4.3	7.1	6.8	4.8	4.6	4.7	4.4	4.0	4.0	4.2	4.1
4-6 mo. Comm. Paper Rate (%)	6.56	5.92	6.67	6.12	4.87	4.73	4.87	5.21	5.34	5.28	5.44	5.67
AAA Long-term Corporate Bond Yield (%)	8.71	8.87	8.91	8.81	8.38	8.48	8.62	8.54	8.33	8.55	8.76	8.65

IMPLICATIONS OF MONETARY GROWTH TARGETS

Table 2

	Actual				2% M_1 Growth Assumption							
	1975				1976				1977			
	I	II	III	IV	I	II	III	IV	I	II	III	IV
M_1 (bil $)	283.0	289.1	296.1	295.8	297.3	298.7	300.2	301.7	303.2	304.7	306.2	307.8
ΔM_1 (% ann. rate)	-0.3	8.9	7.1	2.3	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
GNP (bil $)	1434	1461	1528	1572	1594	1614	1634	1651	1670	1691	1713	1737
ΔGNP (% ann. rate)	-2.1	7.7	19.9	12.0	5.7	5.1	4.8	4.6	4.7	5.0	5.4	5.7
Real GNP (bil 72$)	1159	1168	1201	1216	1219	1218	1218	1218	1218	1219	1222	1225
ΔReal GNP (% ann. rate)	-9.2	3.3	12.0	4.9	0.9	-0.1	-0.2	-0.1	0.1	0.4	0.8	1.1
GNP Deflation (1972=100)	123.7	125.0	127.2	129.3	130.9	132.3	133.6	134.8	135.9	137.0	138.0	138.9
ΔDeflation (% ann. rate)	7.8	4.3	7.1	6.8	4.9	4.4	4.1	3.7	3.3	3.1	2.9	2.8
4-6 mo. Comm. Paper Rate (%)	6.56	5.92	6.67	6.12	4.88	4.78	4.63	4.50	4.31	4.11	3.91	3.71
AAA Long-term Corporate Bond Yield (%)	8.71	8.87	8.91	8.81	8.47	8.23	8.03	7.90	7.77	7.65	7.52	7.37

IMPLICATIONS OF MONETARY GROWTH TARGETS

Table 3

	Actual 1975				4 1/2% M_1 Growth Assumption 1976				1977			
	I	II	III	IV	I	II	III	IV	I	II	III	IV
M_1 (bil $)	283.0	289.1	296.1	295.8	299.1	302.4	305.7	309.1	312.5	316.0	319.5	323.0
ΔM_1 (% ann. rate)	-0.3	8.9	7.1	2.3	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
GNP (bil $)	1434	1461	1528	1572	1600	1629	1659	1690	1722	1755	1790	1824
ΔGNP (% ann. rate)	-2.1	7.7	19.9	12.0	7.2	7.5	7.7	7.7	7.8	7.9	8.0	8.0
Real GNP (bil 72$)	1159	1168	1201	1216	1223	1230	1238	1247	1255	1264	1273	1281
ΔReal GNP (% ann. rate)	-9.2	3.3	12.0	4.9	2.4	2.3	2.6	2.8	2.8	2.8	2.8	2.6
GNP Deflation (1972=100)	123.7	125.0	127.2	129.3	130.9	132.4	133.9	135.3	136.7	138.1	139.5	140.9
ΔDeflation (% ann. rate)	7.8	4.3	7.1	6.8	5.0	4.7	4.6	4.4	4.2	4.1	4.1	4.1
4-6 mo. Comm. Paper Rate (%)	6.56	5.92	6.67	6.12	4.90	4.95	5.06	5.23	5.37	5.48	5.58	5.63
AAA Long-term Corporate Bond Yield (%)	8.71	8.87	8.91	8.81	8.63	8.55	8.51	8.55	8.59	8.62	8.66	8.65

IMPLICATIONS OF MONETARY GROWTH TARGETS

Table 4

	Actual				5% M_1 Growth Assumption							
	1975				1976				1977			
	I	II	III	IV	I	II	III	IV	I	II	III	IV
M_1 (bil $)	283.0	289.1	296.1	295.8	299.4	303.1	306.8	310.6	314.4	318.3	322.2	326.1
ΔM_1 (% ann. rate)	-0.3	8.9	7.1	2.3	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
GNP (bil $)	1434	1461	1528	1572	1600	1631	1664	1697	1731	1766	1802	1839
ΔGNP (% ann. rate)	-2.1	7.7	19.9	12.0	7.4	7.9	8.2	8.3	8.3	8.4	8.4	8.4
Real GNP (bil 72$)	1159	1168	1201	1216	1224	1232	1241	1251	1262	1271	1281	1290
ΔReal GNP (% ann. rate)	-9.2	3.3	12.0	4.9	2.7	2.6	3.0	3.3	3.3	3.2	3.1	2.9
GNP Deflator (1972=100)	123.7	125.0	127.2	129.3	130.9	132.4	133.9	135.4	135.3	136.8	138.2	139.7
ΔDeflator (% ann. rate)	7.8	4.3	7.1	6.8	5.1	4.8	4.7	4.5	4.4	4.3	4.3	4.3
4-6 mo. Comm. Paper Rate (%)	6.56	5.92	6.67	6.12	4.90	4.98	5.13	5.35	5.54	5.71	5.86	5.95
AAA Long-term Corporate Bond Yield (%)	8.71	8.87	8.91	8.81	8.65	8.60	8.59	8.66	8.72	8.79	8.84	8.87

IMPLICATIONS OF MONETARY GROWTH TARGETS

Table 5

	Actual				7% M_1 Growth Assumption							
	1975				1976				1977			
	I	II	III	IV	I	II	III	IV	I	II	III	IV
M_1 (bil $)	283.0	289.1	296.1	295.8	300.9	306.0	311.2	316.5	321.9	327.4	333.0	338.7
ΔM_1 (% ann. rate)	-0.3	8.9	7.1	2.3	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
GNP (bil $)	1434	1461	1528	1572	1605	1644	1686	1731	1777	1823	1870	1916
ΔGNP (% ann. rate)	-2.1	7.7	19.9	12.0	8.7	10.0	10.7	11.0	11.0	10.9	10.7	10.3
Real GNP (bil 72$)	1159	1168	1201	1216	1228	1242	1258	1276	1293	1310	1326	1340
ΔReal GNP (% ann. rate)	-9.2	3.3	12.0	4.9	3.9	4.7	5.4	5.7	5.6	5.3	4.9	4.2
GNP Deflator (1972=100)	123.7	125.0	127.2	129.3	131.0	132.6	134.3	135.9	137.6	139.4	141.2	143.0
ΔDeflator (% ann. rate)	7.8	4.3	7.1	6.8	5.2	5.1	5.1	5.1	5.1	5.2	5.3	5.4
4-6 mo. Comm. Paper Rate (%)	6.56	5.92	6.67	6.12	4.92	5.13	5.48	5.96	6.42	6.86	7.25	7.55
AAA Long-term Corporate Bond Yield (%)	8.71	8.87	8.91	8.81	8.78	8.87	8.99	9.20	9.40	9.60	9.79	9.94

BRIEFING FOR THE SHADOW OPEN MARKET COMMITTEE MEETING

March 8, 1976

by

Wilson E. Schmidt*

The reform of the international monetary system is now virtually complete. Upon the approval of parliaments, floating will be legalized in the Articles of Agreement of the International Monetary Fund. The United States Government is on the verge of wiping out the concepts and the measurement of the balance of payments surplus and deficit, a move strongly recommended by this committee. The balance of payments will no longer be a problem.

This is not to say that the reform is wrapped up. One problem for example is the possible threat that a powerful interest group, the multinational corporations, may press, through no fault of its own, for return to some form of the old international financial system or increased central bank intervention.

The formal part of the reform was achieved in two meetings, one at Rambouillet, France where six countries participated and the other in Kingston, Jamaica attended by the Interim Committee of the Board of Governors of the International Monetary Fund. The product of the meeting was a proposed Article IV which, without mentioning floating, legalizes it. Since President Ford was attacked by flies in Rambouillet and the hotel in Kingston was named The Pegasus, this article will surely be called the Horse-Fly Consensus.

The key paragraph in the Article says "Under an international monetary system of the kind prevailing on January 1, 1976, exchange arrangements may

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

include . . . other exchange arrangements of a member's choice." The proposed article does permit the introduction of a widespread system of "stable but adjustable par values." But this requires an 85% vote, which gives the United States a veto because we will have about 20% of the votes.

In settling on the new article, some important agreements were apparently reached, particularly between the French and the Americans. That the two agreed may itself be important because it may bring some peace to future meetings in international forums, which seems to be what other nations had in mind when they pressed the pair to settle their differences. Billed by the press as a compromise of the French and American positions, it appears to be more a French surrender.

There appears to have been agreement at Rambouillet on the economics of stable exchange rates: If countries stabilize the underlying economic conditions, stable exchange rates will be the derivative. To this end, more consultations among countries are to be arranged, presumably leading to more coordination of policies.

This makes good sense in terms of economics. But there is increasing evidence that we live in a world of the political business cycle. In its narrowest form, this says that politicians in power will increase government spending as their reelection date approaches and reduce it thereafter. If correct, consultation and coordination will fail to produce stable rates unless elections are set around the same date at least among the major powers.

The idea of increased consultation may seem superfluous given the frequent consultation amoung central banks that has prevailed for years. But what is new is that the increased consultation will be among ministries of finance. Since information is ammunition in bureaucratic battles, the

U. S. Treasury Department will presumably find its position strengthened. Though some may object that this introduces a greater political element into intervention policy, it seems likely, for the present, to portend less U. S. intervention in foreign exchange markets and perhaps that of other central banks as well.

There also was agreement at Rambouillet that central bank intervention shall only be to avoid disorderly market conditions or erratic fluctuations in exchange rates. Each country will be its own judge whether such conditions prevail. Central banks are not supposed to resist fundamental factors. This has been U. S. policy --- whatever it means. Unfortunately, these elusive terms remain undefined. But it is a relief to know that Rambouillet did not include a consensus on target or zone rates for exchange rates as originally planned in June 1974. The recent experience with the Italian lira shows how miserably intervention can fail. And it is important that the Fed and Treasury are apparently agreed that interest rate differentials among countries are considered fundamental factors so that intervention to offset exchange rate movements induced by them is presumably precluded. All this raises doubts about the view, as expressed in some press stories, that Rambouillet would lead to more central bank intervention.

Unfortunately, the legalization of floating cost us something --- which of course is not surprising since it is the result of carefully balanced international agreement. Twenty-five million ounces of gold in the International Monetary Fund will be sold over a period of four years by the Fund with the profits transferred to the less developed countries. Our share of that gold, had it been returned to the members in proportion to their quotas (as will be the case for another 25 million ounces) so we

could sell it at home or abroad would be 5.4 million ounces which at present prices would be worth about $700 million.

The sale of gold is part of the U. S. effort to get gold out of the system. Under the agreement the Fund cannot buy gold without an 85% vote. And the Fund won't knowingly sell gold to central banks. Central banks agreed not to peg the price of gold. Whether central banks will buy gold in the private market remains to be seen.

The world may also have paid a price in terms of future inflation. The agreement will expand the quotas of the members in the IMF by about $11.7 billion, a sum equal to more than 5% of present reserves. While this impact awaits ratification, the Fund has announced its willingness to increase its lending by 45% on the same criteria it has used in the past until the increase in quotas is ratified. While there is no mechanical relationship between quotas, lending policies, and reserves, it is obvious which direction the world price level moves as a result of this.

The agreement calls for the continued study of a substitution account. Whether it is for gold or for dollars or both is not yet clear. If it is a device by which central banks can exchange their gold for SDRs at the Fund, it is essential that the Fund be ordered to sell the gold so that it may be used for private purposes rather than be locked up in the Fund's vaults. If it is a device by which central banks can exchange their dollars for SDRs at the Fund, then American agreement to the scheme would be unpatriotic; after all, we gain seigniorage by virtue of printing the money the world uses.

Until recently, it has been quite clear that the business community of the United States was quite content with the floating rate system now being

ratified. For example, in a recent poll, the National Association of Business Economists found that 83% of its responding membership preferred floating to fixing. But in December a group of accountants, the Financial Accounting Standards Board, decided upon a rule which could induce multinational corporations to oppose floating. It decided that exchange rate gains and losses, whether realized or not, should be reported in current profits or losses. (Heretofore, there was no hard and fast rule.) Specifically, virtually all liabilities of a foreign affiliate of a parent American corporation should be reported at the current exchange rate for the dollar when the parent consolidates its return. Likewise, all assets should be reported at current rates of exchange except fixed assets (for which the historic rate will be used) and inventories (for which a historic rate or current rate will be used). This appears to insure that when the dollar depreciates on the foreign exchange market the multinationals as a group will show losses that are unrealized because liabilities subject to the depreciated dollar rate will exceed assets subject to the same conversion rate.

The problem this creates is obvious. If one assumes that the officials of multinationals are risk-averse, they will become discontented with fluctuations in the exchange rate. That is, while they might like the paper profits that an exchange rate appreciation brings, they will dislike even more the paper losses accompanying depreciation. As a consequence they may press for more stability (fixing) of rates. There is growing evidence of this (Business Week, January 26, 1976). Of course fixing would not be in their long run interest; it was the fixing of exchange rates which led to the U. S. government controls on private foreign investment in the 1960's.

Fortunately, this need not be a problem unless the multinationals want to make it a problem. There is considerable evidence that changes in accounting techniques, such as a switch from LIFO to FIFO, which do not change underlying economic facts have little or no impact on stock prices. [A summary of the literature appears in Thomas R Dyckman, et. al., Efficient Capital Markets and Accounting, (Englewood Cliffs: Prentice Hall, 1975). Apparently the market figures out what is real and what is unreal. If the multinationals come to understand this, they won't press for more exchange rate stability which in the end will lead to their control by the Federal Government.

Comments on Past, Current, and Future Fiscal Policy Developments

Robert H. Rasche

Michigan State University

February 26, 1976

In the various summaries which I have prepared for past meetings of this Committee, I have attempted on several occasions to summarize what has happened with respect to fiscal policy and the implications of these developments for monetary policy. I must admit that I have not yet settled on a presentation with which I am totally satisfied, and so I have tried yet another format. Table1, with information on 1971-1975.3, represents an initial step towards a hopefully comprehensive summary statement.

The first five columns on Table 1 present information from the National Income and Products Accounts budget for the Federal Sector. These figures are on a seasonally adjusted basis, but, at the risk of confusing everyone, I have stated them at quarterly rates to make them comparable with the flow figures on the right hand side of the table. The story here is very much a continuation of the post-Vietnam period. In terms of its demand on the productive resources of the economy, the Federal Government has shown virtually no growth over the past five years. This can be seen from the constant (58) dollar figures on government purchases of goods and services in column 2. Second, transfer payments continue to grow at an extremely rapid rate. Prior to mid 1974 this was primarily because of inflation; in the past year it has been a combination of continuing inflation and high levels of unemployment. Finally,

	NATIONAL INCOME ACCTS. CONCEPTS. S.A.					CHANGES IN CASH ACCTS								
	G$	G	TRANS.	RECEIPTS	Def.(-)	OUTLAYS	RECEIPTS	Def(-)	FINANCING	F R.	T&L ACCTS	OTHER	BOGG-FR.	BOGG ACCTS
71.1	24.0	15.0	29 1	48.7	-4.4	52.307	44 108	-8.199	-4.626	-.298	-3.273	.518	2.018	-.445
2	24.2	15.0	31.2	49 4	-5.9	54 935	56.722	1.788	2.336	.416	3.811	-.464	1.358	.069
3	24.6	15.3	31.1	49.9	-5.8	56.534	48.560	-7.775	-9060	.828	.391	-1.224	2.048	7.007
4	25.3	15.6	31.7	50.9	-6.1	55.222	44.620	-10.361	-11.205	-.082	1.410	5.346	2.652	15.227
72.1	26 4	15.7	32.7	55.2	-5.7	58.560	48.072	-10.488	-6.748	-.909	-2.782	.691	-.029	3.717
2	26.5	15.6	34 4	56.0	-4 9	61.760	67.398	5.637	10.277	1.051	1.543	1.938	1 428	-7.173
3	25.7	14 9	33.7	57.1	-2.5	57.643	55.603	-2.041	-7.076	-.949	.171	-1.560	-1.482	6.220
4	26.3	14 8	39.4	58 9	-6.4	60.941	50.458	-10.435	-10.932	.461	.802	3.152	.032	12.315
73.1	26.6	14 7	38.5	62.3	-2.8	64.664	55. 184	-9.481	-6.722	1.026	.357	-.197	4.370	4.018
2	26.6	14 4	39.1	63 8	-1.9	63.355	70.948	7.593	6.574	1.156	-1.311	.234	.746	-1.241
3	26 3	14 1	39 5	65.5	-.4	65.482	64.419	-1.062	-3.631	-1.616	1.903	-.219	1 148	1.[illegible]
4	27.1	14 1	40.6	67 1	-.6	64.877	59.832	-5.044	-4.772	.917	1.178	-.146	2.902	3.214
74.1	27 9	14 1	42.4	69 5	-7	67.606	60.520	-7.085	-4.742	-1.171	-.713	.650	.967	2.541
2	28.6	14 1	44 3	72.2	-.8	70.426	80.159	9.732	7.619	1.547	-.798	.457	1.001	-7.414
3	29.3	14 1	46.9	75.7	-.5	74.531	72.936	-1.593	-4.746	.077	2.158	.226	.551	6.656
4	31 1	14.3	48 7	73.7	-6.1	78.867	66.871	-11.996	-13.027	-.098	-2.639	-1.053	-.534	9.771
751	31.6	14.4	53 0	70.0	-13 6	83 120	65.129	-17.991	-18.281	1.158	-.603	.622	.917	18.241
2	32.1	14 6	56.7	63.0	-25 8	88.083	76.061	-12.023	-14.477	1.502	-.667	1.294	3.331	13.275
3	32.6	14.7	58.1	74.0	-16.8	90.802	72.274	-18.531	-21.701	2.301	.687	-1.004	2.249	21.436
4														
Σ					-109 7				-114940	7.317	2.105	6 261	25.668	104 955

TABLE 1.--Assumed Values for Effective Reserve Requirement Ratios.

Years	Reserve Requirements
1891-1923	.08
1924-1933	.09
1934-1935	.10
1936	.15
1937	.20
1938-1940	.175
1941	.20
1942	.175
1943-1947	.15
1948	.175
1949-1950	.14
1951-1952	.16
1953	.15
1954-1957	.14
1958-1970	.13

Sources:

col 1-5: National Income and Product Accounts, Survey of Current Business, Tables

col 6-8: Federal Fiscal Operations: Summary, Federal Reserve Bulletin, p A32

col 9: Federal Fiscal Operations: Summary, Federal Reserve Bulletin, p A32: US Budget Surplus or Deficit Plus Other Means of Financing, Net (Net Outlays of Off Budget Federal Agencies, Plus Accrued Interest Payable, Plus Seigniorage.

col 10-11: Federal Fiscal Operations: Summary, Federal Reserve Bulletin, p A32:Selected Balances (End of Quarter - Beginning of Quarter)

col 12: Federal Fiscal Operations: Summary, Federal Reserve Bulletin, p A32 Selected Balances - Other Depositories (End of Quarter-Beginning of Quarter) + Other Cash and Monetary Assets

col 13: Consolidated Condition Statement of all Federal Reserve Banks, Federal Reserve Bulletin, p A10, Total U.S. Gov't. Securities (End of Quarter-Beginning of Quarter)

col 14: (Col. 10 + Col. 11 + Col. 12 - Col. 9 - Col. 13)

as is well known, the pattern of Federal receipts has changed drastically over the past year. In previous years receipts had grown quite rapidly because of the high income elasticity of the tax laws; in 1975, the recession plus the adjustments to the tax laws in late Spring (subsequently extended in December, 1975) have caused a sharp V pattern in receipts for the year. The result has been record deficits.

The center part of the table indicates the unified budget account information and the recorded financing requirements. Much of the difference between the financing column and the unified budget deficit column is the result of off-budget agencies and accrued interest liabilities. I have not yet attempted to reconcile the financing column with the National Income Accounts Deficit/Surplus column. The reconciliation items fall into three general classes: 1) difference of definition; to the extent that there are definitional differences between the two, adjustments will be necessary to the financing column and the borrowing from the public column. 2) Timing differences; the National Income Accounts Budget is primarily on an accrual basis, while the financing column, with the exception of the interest accruals is on a cash basis. Again adjustments to the financing and borrowing from the public columns will be necessary with government accounts payable treated as short-term loans from the public and government accounts receivable treated as short-term borrowing from the public. Finally 3) there will remain one reconciliation item because asset transactions are not included in national income accounting. It should also be noted that the figures in the center and to the right of the table are not seasonally adjusted.

In the absence of these reconciliations, the financing requirements of fiscal policy, as measured by National Income Accounts concepts is not accurately represented by the column headed financing.[1] This column, however, can be allocated to changes in cash accounts, borrowing from the Federal Reserve System, and borrowing from the non Federal Reserve Public. This allocation is indicated in the five right columns of Table 1.[2] The figures in these columns indicate that since the beginning of 1971, the Federal Government has required approximately 115 billion of financing. During this period of time, it has run up its cash balances by approximately 15.6 billion, thus requiring it to issue slightly more than 130 billion dolllars of debt. Twenty-five billion, or slightly less than one-fifth of this has been picked by the Fed.

In the first three quarters of 1975 the financing requires amounted 54.5 billion dollars. In addition, the Treasury increased its cash balances during this period by 5.3 billion dollars, so that total borrowing amounted to 59.8 billion dollars. You may recall that one year ago we estimated that borrowing for the period from the beginning of 1975 through the end of fiscal 1976 would probably be in excess of 100 billion, and quite likely as large as 125 billion. At this point, it would appear that the available data are roughly consistent with those estimates. Of the 59.8 billion through the first three quarters, 6.5 billion was absorbed by the Federal Reserve. This indicates a considerable change in the Fed's behavior in monetizing the deficit relative to the period 1971-74. In those four years, approximately 20 percent of the total borrowing was absorbed into the Federal Reserve portfolio; in the last three

quarters for which the data is available only 9 percent of the total borrowing was absorbed into the Federal Reserve portfolio.

Budget Projections

Two years ago projections about the future state of the Federal government budget were rather hard to come by. Currently there are numerous products to choose among; the problem is to evaluate the product which is being pushed. As in the past, rather than attempt to generate a competing product of my own, I shall attempt to evaluate some of these alternatives; in particular those presented by the administration (O.M.B.) and the Congressional Budget Office (C.B.O.).

All soothsaying regarding the Federal Budget is critically dependent on the path of economic activity. Two (not equally valid) alternatives are currently in vogue. The first, which I shall call budget forecasting is distinguished by the use of an implicit or explicit model which recognizes a simultaneous relationship between the outcome for economic activity and the outcome for Federal receipts and outlays. In this case the paths of economic activity and the budget outlays and receipts are mutually consistent forecasts, given the assumptions regarding the variables under policy control and other 'exogenous' variables. The second, which I shall call budget projection is distinguished by the development of assumptions about the path of economic activity independent of fiscal policy parameters, and then uses the constructed path of economic activity to derive projections about the path of budget measures. There is no presumption that the path of economic activity would actually be realized if the fiscal policy parameters were set consistent with the budget projections.[3]

TABLE 2.--Economic Assumptions--O.M.B. Budget Projections.

	1975	1976	1977	1978	1979	1980	1981
A. January 1975[1]							
1. GNP--Current $	1498	1686	1896	2123	2353	2606	n.a.
2. GNP--58$	794	832	879	936	997	1061	n.a.
3. Percent Change in CPI	11.3	7.8	6.6	5.2	4.1	4.0	n.a.
4. Unemployment Rate	8.1	7.9	7.5	6.9	6.2	5.5	n.a.
B. January 1976[2]							
1. GNP--Current $	1499	1684	1890	2124	2376	2636	2877
2. GNP--72$	1187	1260	1332	1411	1503	1600	1679
(GNP--58$)	(805)	(854)	(903)	(957)	(1019)	(1085)	(1139)
3. Percent Change in CPI	9.1	6.3	6.0	5.9	5.0	4.2	4.0
4. Unemployment Rate	8.5	7.7	6.9	6.4	5.8	5.2	4.9
5. Treasury Bill Rate	5.8	5.5	5.5	5.5	5.5	5.0	5.0
6. Corp. Profits	118	156	181	201	223	247	271
7. Personal Income	1246	1386	1538	1727	1930	2138	2331

Source

[1]The Budget of the United States Government, Jan. 1975

[2]The Budget of the United States Government, Jan. 1976, pp. 25-26. Data for 1975-77 are forecasts of economic developments, consistent with assumed path of fiscal and monetary developments. Data for 1978-81 are mechanical projections which are not functionally related to derived value offiscal policy measures.

The O.M.B. economic assumptions are presented in Table 2. The second part of the table indicates those presented with the current budget document, and the corresponding projections from last year are indicated in the first part of the table. The current estimates are true forecasts for the period through 1977; thereafter they are projections in the senseof the above definitions. Note that in terms on nominal GNP there has been essentially no change in the O.M.B.forecasts through 1978. On the other hand, real output has been revised upward for this period; correspondingly the inflation rate has been revised downward. After 1978 the O.M.B. projections have become more pessimistic on the decline in the inflation rate than they choose to be a year ago. The unemployment rate is projected to fall slightly faster than was assumed a year ago, but still is assumed to remain above five percent through 1979.

The C.B.O. economic assumptions are presented in Table 3. Two paths for economic activity are given; both are projections in the sense of the above definitions; both are used to attempt to evaluate the cost of the current services budget and the revenues which would be raised under the present tax laws.

Path A is constructed so that it averages out to approximately six percent real growth over the period through 1981; Path B is constructed to average out at approximately five percent real growth over the same period. In real terms, Path A and the O.M.B. projections get to approximately the same place at the end of the period; the difference is that O.M.B. has faster real growth in the initial years which slows down considerably in the last few years of the projection period. In real terms, the Path A projection is not much different from that prepared for

TABLE 3.--Economic Assumptions--C.B.O. Budget Projections.

	1975	1976	1977	1978	1979	1980	1981
A) April 1975--Fast Alternative							
1) GNP--Current $	1460	1642	1852	2092	2323	2558	n.a.
2) GNP--58$	793	835	892	960	1023	1085	n.a.
3) Percentage Change in C.P.I.	8.7	7.0	5.8	5.2	4.4	4.0	n.a.
4) Unemployment Rate	8.4	7.6	6.7	6.0	5.5	4.9	n.a.
B) 2nd Concurrent Resolution (12/12/75)							
1) GNP--Current $	1472	1675					
2) Corp. Profits	119	163					
3) Personal Income	1241	1390					
C) Budget Projections 1/26/76 Path A							
1) GNP--Current $	1476	1695	1933	2205	2485	2780	3075
2) GNP--58$	796	856	916	980	1036	1085	1126
3) Percentage Change in C.P.I.	9.2	7.2	7.1	7.0	6.8	6.6	6.6
4) Unemployment Rate	8.5	7.4	6.4	5.4	4.8	4.5	4.5
5) Treasury Bill Rate	5.9	6.1	6.3	6.5	6.8	7.1	7.5
6) Corp. Profits	122	170	215	245	271	297	323
7) Personal Income	1242	1407	1608	1800	2014	2250	2490
D) Budget Projections 1/26/76 Path B							
1) GNP--Current $	1476	1675	1845	2050	2270	2500	2755
2) GNP--58$	796	847	880	922	968	1015	1065
3) Percentage Change in C.P.I.	9.2	7.2	6.9	5.9	5.6	4.8	5.0
4) Unemployment Rate	8.5	7.7	7.5	7.1	6.7	6.3	5.9
5) Treasury Bill Rate	5.9	6.1	6.3	6.5	6.8	7.1	7.5
6) Corp. Profits	122	163	188	205	226	250	275
7) Personal Income	1242	1390	1530	1700	1860	2045	2248

Source

[1] 1976 Budget: Alternatives and Analyses, Prepared for Congressional Budget Committees, April 6, 1975

[2] 1976 Congressional Budget Scorekeeping, Congressional Budget Office, Dec, 1975 p. 3

[3] Five Year Budget Projections Fiscal Years 1977-81, Congressional Budget Office, Jan. 26, 1976, pp 4, 31, 45. Neither path is functionally related to the derived value of fiscal policy variables. Path A is a projection at 6% average real growth; Path B is a projection at 5% average real growth.

the Congressional Budget Committees last April; it shows somewhat faster growth in the earlier years, but comes out at the same place by 1980.

The interesting discrepancies among these projections concern the inflation rate represented here by the annual rate of change in the C.P.I. Path A of the C.B.O. shows virtually no decline in the inflation rate over the entire projection period (inflation declines from 7.2 percent in 1976 to 6.6 percent in 1981). Even under the slower real growth assumptions of Path B, the inflation rate declines slowly relative to the projections prepared for the Congressional Budget Committees a year ago. The administration seems equally pessimistic about declining inflation through 1978, but then projects rapid declines through 1981. In every current projection, the unemployment rate is assumed to hang in the 5.5+ percent range at least through 1978.

In summary, it seems appropriate to conclude that the budget projectors are counting on a world of high and persistent inflation and high and persistent unemployment in spite of real growth rates which are assumed to be high by historical standards.

Defining the economic assumptions allows derivation of the fluctuations in government receipts and outlays which are essentially caused by the functioning of 'automatic stabilizers'. In addition, it is necessary to define assumptions with respect to discretionary action on expenditures and tax laws. Congressional Budget Office projections are all constructed on the basis of the Current Services Budget. On the outlay side, this means that current programs are maintained in real terms; any erosion of purchasing power is assumed to be made up through increases in appropriations. (Maybe this should be viewed as cost-plus as

constrasted with fixed-price budgeting). On the tax side, it assumes maintenance of the existing tax laws. In the present case, this means the assumption that the modifications to the tax laws which were enacted on a temporary basis last December are assumed to be extended before July 1, 1976 for the remainder of the projection period. No one is trying to sell the current services budget as a forecast of the path of the government budget. Rather it is presented as a what if standard against which changes resulting from Congressional action can be compared. Unfortunately, the system of presentation does not seem to allow for the separation of the direct effects of congressional actions from the effects through induced changes in economic activity. A second unfortunate side effect is that there appears to be the tendency in public discussion to lose sight of the fact that these are not current services budget forecasts, and to act as thought the projections of outlays and receipts are highly probably outcomes for the future which can be used to justify changes in the levels of programs or provisions of the tax laws. This kind of discussion is analagous to that of the 'fiscal dividend' of the end of the Vietnam war which was popular during the late 1960's. As Table 1 clearly indicates, the 'fiscal dividend' never materialized because the economic environment turned out to be different than the assumptions of the 'fiscal dividend' projections.

The O.M.B. combined forecast-projections take a considerably different tack. On the outlay side, the assumption is that programs will remain fixed in <u>current dollar</u> terms, except where specific recommendations are made for changes in program levels (mainly in defense), or where there are cost of living provisions in program benefits or Federal pay scales, or where there will

be increased costs because of cost of goods purchased from the private economy.[4] It would appear that these assumptions are closely approximated by the statement that Federal purchases of goods and services are assumed to be constant in real terms, while transfers, with the exception of Social Security, are assumed to be steadily declining in real terms. Past congressional behavior suggests that the latter assumption is wishful thinking on the part of the administration.

On the receipts side of the budget, the administration's projections include a specific tax revision program to be effective on July 1, 1976. The provisions included in the assumptions involve:

1) an increase in the personal exemption from 750 to 1000 dollars
2) the substitution of a flat standard deduction (2500 on joint returns; 1800 on single returns) for the long standing percentage deduction and the low income allowance introduced in 1975
3) reduction in the personal income tax rates. The budget is vague on the details of the rate changes, but an example is indicated in Table 4.
4) reduction of the corporate income tax rate from 48 to 46 percent
5) a tax credit of from 1.5 to 3.8 percent on interest income from residential mortgages effective 1/1/77.
6) temprorary high write-off's of real investment in high unemployment areas (1/2 of useful life on structures; 5 year maximum on equipment)

Tax Liabilities for Family with 2 Dependents
Filing Joint with Itemized Deductions of
16 Percent of Adjusted Gross Income
(If standard deduction exceeds itemized
deduction, family uses standard deduction.)

Adjusted Gross Income	1972-74 law	1975 law	1976 Revenue Adjustment Act	1976 Revenue Adjustment Act Extended *	1976 President's Proposal	1977 President's Proposal
$ 5,000	$ 98	$ 0	$ 0	$ 0	$ 0	$ 0
7,000	402	186	268	135	89	60
10,000	886	709	797	651	555	485
15,000	1,732	1,612	1,642	1,552	1,446	1,325
20,000	2,710	2,590	2,620	2,530	2,405	2,280
25,000	3,820	3,700	3,730	3,640	3,507	3,370
30,000	5,084	4,964	4,994	4,904	4,781	4,648
40,000	8,114	7,994	8,024	7,934	7,799	7,664
50,000	11,690	11,570	11,600	11,510	11,345	11,180

Note: Effects of the earned income credit are excluded. If this family were fully eligible for the earned income credit, i.e., all AGI is earned income, then the table rows would be:

$ 5,000	$ 98	$ -300	$ -150	$ -300	$ 0	$ 0
7,000	402	86	218	35	89	60

Where a negative number is indicated, a rebate would be paid. These rebates are treated in the budget as outlays rather than reductions in receipts.

* Estimates based on a hypothetical extension of the tax cuts provided for the first 6 months of 1976 by the Revenue Adjustment Act of 1975.

Source: Seventy Issues' Fiscal Year 1977 Budget, O.M.B. 1/21/76

7) increase in the combined employer/employee social security tax rate to 12.3 percent from the present 11.7 percent effective 1/1/77

8) increase in the unemployment insurance tax rate to 0.65 percent from the present 0.5 percent and the base to 6000 dollars of wages per annum from the present 4200 dollars of wages per annum effective 1/1/77

Provisions 7) and 8) are projected to generate an additional 5.4 billion dollars of revenue during fiscal 1977. The forecast - projections of outlays and receipts for fiscal years 1976 through 1981 are indicated in Table 5. Section C, with proposed changes indicates the projections under the assumption that the above tax program is enacted. Section B, current programs is not analagous to the Current Services projections of C.B.O. since it assumes that the tax provisions which were extended last December will be allowed to lapse in July, and the tax law will revert back to the provisions in effect before May, 1975.

It seems highly probable considering that 1976 is an election year, that some sort of tax revisions will be enacted which either extend the current temporary provisions, or something very similar will be enacted. Thus section B of Table 5 which shows a decline in the deficit to less than 20 billion dollars in fiscal 1977 is completely unrealistic.

The C.B.O. current services projections are given in Table 6. Path A, which is constructed for six percent real growth is probably not worth considering, at least in the later years, because it does not seem that that rate of real growth is sustainable over that period of time (certainly not with the Federal budget kept at current service levels), and I am unprepared to

TABLE 5.--O.M.B. Budget Projections (Fiscal Years).

	1975	1976	T.Q.	1977	1978	1979	1980	1981
A. January 1975								
1. Outlays	313.4	349.4	1	393.1	4.254	451.9	476.7	
2. Receipts	278.8	297.5		362.5	405.8	452.3	501.7	
3. Deficit	-34.7	-51.9		-30.6	-19.6	.4	25.0	
B. January 1976 (Current Programs)								
1. Outlays	324.6	373.7	98.2	391.9	420.4	441.8	465.0	489.2
2. Receipts	281.0	297.3	87.3	374.1	430.1	491.7	551.1	623.9
3. Deficit	-43.6	-76.4	-10.9	-17.8	9.7	49.9	86.1	134.7
C. January 1976 (With Proposed Changes)								
1. Outlays	324.6	373.5	98.0	394.2	429.5	455.7	482.5	509.9
2. Receipts	281.0	297.5	81.9	351.3	406.7	465.3	523.1	585.4
3. Deficit	-43.6	-76.0	-16.1	-43.0	-22.8	9.6	40.6	75.5

TABLE 6.--C.B.O. Budget Projections (Fiscal Years).

	1975	1976	T.Q.	1977	1978	1979	1980	1981
A. Path A								
1. Outlays	324.6	374.9	101.7	419.9	448	480	518	560
2. Receipts	281.0	300.8	86.0	383.3	445	509	577	652
3. Deficit	-43.6	-74.1	-15.7	-36.6	-3	29	58	92
B. Path B								
1. Outlays	324.6	374.9	101.7	424.9	464	495	530	563
2. Receipts	281.0	300.8	86.0	360.0	401	448	497	550
3. Deficit	-43.6	-74.1	-15.7	-64.9	-63	-47	-33	-13

Source: Congressional Budget Office, Five Year Budget Projections, p. 9.

accept the presumption that we will be plagued by inflation continually in excess of six percent per year through 1981. This leaves us with a comparison of the C.B.O. path B and the O.M.B. projections with proposed changes. I shall concentrate on the projections through fiscal 1978. The O.M.B. has faster real growth, a faster decline in unemployment, and an initially lower inflation rate (though by 1978 both projections are assuming 5.9 percent inflation). The slower inflation, the lower unemployment, and the assumption about the declining real value of government transfers are jointly responsible for the lower dollar value of outlays in fiscal 1977 and 1978 in the O.M.B. projections.

Of the three, I am inclined to belive the first two, and discount the latter. Thus if I had to make an estimate of the dollar value of current services through fiscal 1978, I would place it between the two estimates. On the other hand, I think that we have to allow for increases in government activity beyond the current services levels over this period of time, particularly in such areas as health insurance legislation, which would further increase the level of outlays.[5]

If we compare the receipts projections, they are strikingly similar for fiscal 1978, but the O.M.B. projections are lower in fiscal 1977 and the transition quarter. This cannot really be attributed to differences in economic assumptions, since in spite of the differences in the projections of the two agencies for inflation and real income growth, their projections for the paths of personal income and corporate profits are almost identical (see Table 2 and Table 3). It is these latter two which are crucial for determining the yield of the Federal Tax laws. This difference in revenue projections is something of a mystery.

It could be written off to the proposed tax law changes in the President's budget, but since those proposals include major increases in the revenue expected to be generated by the social security and unemployment insurance taxes (5.4 billion), it seems hard to account for the difference of almost 9 billion dollars in the revenue projections in fiscal 1977.

Both of these revenue projections are conditional on inflation rates not declining signficantly, or even increasing from present epxerience. As we have learned from the experience of the early 1970's, tax revenue projections are extremely elastic with respect to the assumed inflation rate. If we look forward to a continuing decline in the inflation rate, then both revenue projections should probably be revised downward, and more than proportionally to any downward revision in the outlay side of the budget.

My conclusion from all of this is that the financing problem, even on a current services basis, will be substantial through the end of fiscal 1978. Projections such as that of O.M.B. and the C.B.O. path A which suggest a return to near budget balance by around fiscal 1979 and the development of 'budget margins' thereafter seem highly suspect. My projection would be that we can expect that somewhere in the order of 100 to 125 billion will have to be financed in the 2 1/4 years starting July 1, 1976. How soon therafter a 'budget margin' might develop is really impossible to forecast at the present time. The actual size of the budget as measured by total outlays is probably best estimated somewhere between the O.M.B. projections and the C.B.O. path B, at least through fiscal 1978.

Footnotes

[1]Most, if not all, of the information required to do the reconciliation of the financing column and the borrowing from the public column is available in Table 3.12 of the National Income and Product Accounts.

[2]There probably exists a minor problem with this allocation. I have taken the figures on borrowing from the Federal Reserve from the Consolidated Condition Statement which appears in the Federal Reserve Bulletin. It is my suspicion that this statement values the Fed's portfolio of governments at par, rather than at transactions prices. Since the borrowing from the public column is obtained as a residual, any errors in evaluation of changes in the Fed's portfolio will contaminate this column also.

[3]To illustrate a particularly simple case, assume that the economic assumptions are derived from a mechanical forecasting rule which projects real growth and inflation at constant rates. A current services budget projection (constant outlays in real terms) would indicate nominal outlays growing at the inflation rate, and receipts growing at a rate faster than nominal income. Thus receipts would be growing faster than outlays and the deficit (surplus) would decline (rise) over time. On the other hand, there is no presumption that the constant services budget is exactly what is required to produce the constant real growth and constant inflation rate.

[4]see The Budget of the United States Government, January, 1976, p. 27

[5]For example see the proposals recently offered by Rep. Brock Adams, Chairman of the House Budget Committee, for fiscal 1977 expenditures totalling 410.3 billion, compared with the administrations 394.2 billion. (reported in Wall Street Journal, February 19, 1976)