



BOARD OF GOVERNORS  
OF THE  
FEDERAL RESERVE SYSTEM  
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CONFIDENTIAL (FR)  
CLASS II FOMC

TO: Federal Open Market Committee

FROM: Arthur L. Broida *ALB*

Attached for your information is a copy of a memorandum dated April 14, 1977, and entitled "On achieving growth rates for the monetary aggregates consistent with longer-run price stability." This memorandum is being distributed to the Committee at the suggestion of Chairman Burns.

Attachment

BOARD OF GOVERNORS  
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# Office Correspondence

Date April 14, 1977

To Chairman Burns

Subject: On achieving growth rates for the  
monetary aggregates consistent with  
longer-run price stability

From Arthur L. Broida *ALB*

The original purpose of this memorandum was to consider, on the basis of the record for the past 2 years, how long it might take the FOMC to achieve longer-run growth rates for M-1 and M-2 that are consistent with longer-run stability of prices--assuming for the purpose that these were 1 per cent for M-1 and 3-1/2 per cent for M-2. For reasons explained below, it was not found possible to approach this question directly. Instead, a different question is addressed: whether circumstances during coming years are likely to be more or less conducive to progress toward the stated goal than have been those of the past 2 years.

The first section below reviews the record with respect to the growth ranges established by the Committee at quarterly intervals and the growth rates achieved. The second section is concerned with the outlook.

## I. The record of the past 2 years

Since April 1975, when the FOMC established its initial 1-year targets for monetary aggregates, it has engaged in seven quarterly reviews--in July and October 1975, January, April, July, and November 1976, and January 1977. Table 1 shows the ranges adopted on each of these occasions for M-1 and M-2, and the midpoints of these ranges.

In the course of the seven reviews, the range for M-1 was left unchanged 4 times and reduced 3 times. All of the reductions occurred in 1976 (in January, April, and November), and each had the

Table 1

FOMC growth ranges and midpoints

<u>Meeting Date</u>	<u>Period</u>	<u>M-1</u>		<u>M-2</u>	
		<u>Range</u>	<u>Midpoints</u>	<u>Range</u>	<u>Midpoints</u>
April 1975	March '75 - March '76	5 to 7-1/2	6-1/4	8-1/2 to 10-1/2	9-1/2
July 1975	QII '75 - QII '76	5 to 7-1/2	6-1/4	8-1/2 to 10-1/2	9-1/2
Oct. 1975	QIII '75 - QIII '76	5 to 7-1/2	6-1/4	7-1/2 to 10-1/2	9
Jan. 1976	QIV '75 - QIV '76	4-1/2 to 7-1/2	6	7-1/2 to 10-1/2	9
April 1976	QI '76 - QI '77	4-1/2 to 7	5-3/4	7-1/2 to 10	8-3/4
July 1976	QII '76 - QII '77	4-1/2 to 7	5-3/4	7-1/2 to 9-1/2	8-1/2
Nov. 1976	QIII '76 - QIII '77	4-1/2 to 6-1/2	5-1/2	7-1/2 to 10	8-3/4
Jan. 1977	QIV '76 - QIV '77	4-1/2 to 6-1/2	5-1/2	7 to 10	8-1/2

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effect of lowering the midpoint by  $1/4$  of a percentage point. Thus, over the seven quarters from April 1975 to January 1977, the midpoint of the M-1 range was reduced by  $3/4$  of a percentage point. This corresponds to an annual rate of reduction of 0.428 of a percentage point.

For M-2, the range was left unchanged twice, reduced 4 times, and raised once. One of the reductions (in October 1975) lowered the midpoint by  $1/2$  of a percentage point; the others (in April and July 1976 and January 1977) were by  $1/4$  of a point. The increase (in November 1976) was by  $1/4$  of a point. On balance, therefore, the midpoint of the M-2 range was reduced over the period by 1 percentage point, or at an annual rate of .572 of a percentage point.

To achieve midpoints of 1 and  $3-1/2$  per cent for M-1 and M-2, respectively, further reductions of  $4-1/2$  and 5 percentage points would be needed. Thus, if the Committee maintained the average rates of movement toward lower ranges evidenced thus far, it would arrive at ranges with the indicated midpoints in  $10-1/2$  years for M-1 and  $8-3/4$  years for M-2.

Despite the gradual reduction in the growth ranges for the aggregates over the past 2 years, the Committee has made little or no progress toward the objective of achieving actual growth rates in M-1 and M-2 that are consistent with longer-run price stability. Indeed,

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some simple comparisons suggest retrogression over this period. For example, the actual growth rates over the 1975 and 1976 calendar years (from fourth quarter to fourth quarter) were as follows:

	M-1	M-2
1975	4.4	8.3
1976	5.7	10.8

An alternative comparison--of the actual growth rates in the first four-quarter period the Committee used (QII '75 to QII '76) and the latest complete four-quarter period (QI '76 to QI '77)--leads to the same conclusion:

	M-1	M-2
QII '75 to QII '76	5.2	9.6
QI '76 to QI '77	6.2	10.7

When the 1975-76 growth rates are considered for semi-annual periods, the picture is a bit more mixed; while the growth rates for M-2 rose steadily over the period, those for M-1 leveled off in the second half of 1976:

	M-1	M-2
H1 '75	3.8	7.9
H2 '75	4.8	8.4
H1 '76	5.6	10.3
H2 '76	5.6	10.8

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About the only basis for suggesting recent progress for both M-1 and M-2 is a comparison of their growth rates in the first quarter of 1977 (4.8 and 9.4 per cent, respectively) with their growth rates in the fourth quarter of 1976 (6.7 and 12.2 per cent). Given the volatility of the quarterly growth rates, this comparison does not offer much encouragement.

One explanation of the failure of the actual growth rate in M-1 to decline pari passu with the reduction in the Committee's ranges might be sought in the fact that actual growth has tended to be low relative to the midpoint of these ranges. Thus, as indicated in Table 2, actual growth in M-1 usually has been below the midpoint of its range, and sometimes below the lower limit. However, as indicated in the same table, actual growth in M-2 usually has been above the midpoint of its range, and often above the upper limit.

Moreover, the relatively low recent growth rates in M-1 in themselves offer little encouragement, since they are attributable in part to a process of rapid financial innovation, which (according to staff estimates) has been reducing actual growth rates by about 1-1/2 percentage points since late 1975. Insofar as M-1 growth rates are reduced as a consequence of financial innovation, the reductions make no contribution to the goal of longer-run price stability; from the viewpoint of price effects, the M-1 growth rate should be taken as the sum of the actual rate plus the reduction due to financial innovation.

Table 2

FOMC growth ranges and actual growth rates

	<u>Period</u>	<u>M-1</u>	<u>M-2</u>
Growth range	March '75 to March '76	5 to 7-1/2	8-1/2 to 10-1/2
Actual growth rate	same	4.9	9.6
Growth range	QII '75 to QII '76	5 to 7-1/2	8-1/2 to 10-1/2
Actual growth rate	same	5.2	9.6
Growth range	QIII '75 to QIII '76	5 to 7-1/2	7-1/2 to 10-1/2
Actual growth rate	same	4.5	9.3
Growth range	QIV '75 to QIV '76	4-1/2 to 7-1/2	7-1/2 to 10-1/2
Actual growth rate	same	5.7	10.8
Growth range	QI '76 to QI '77	4-1/2 to 7	7-1/2 to 10
Actual growth rate	same	6.2	10.7
Growth range	QII '76 to QII '77	4-1/2 to 7	7-1/2 to 9-1/2
Actual growth rate	QII '76 to QI '77	5.4	10.5
Growth range	QIII '76 to QIII '77	4-1/2 to 6-1/2	7-1/2 to 10
Actual growth rate	QIII '76 to QI '77	5.8	10.9
Growth range	QIV '76 to QIV '77	4-1/2 to 6-1/2	7 to 10
Actual growth rate	QIV '76 to QI '77	4.8	9.4

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(Alternatively, the M-1 growth rate consistent with price stability should be taken not as 1 per cent but as that figure less the reduction to be expected from ongoing financial innovations.)

Financial innovations have had some tendency to increase the growth rate of M-2. The magnitude of the effect is much smaller than in the case of M-1; according to staff estimates, innovations may have been adding about 1/2 of a percentage point to the M-2 growth rate since late 1975.

As a result of the disparate tendencies in growth ranges and growth rates, the relations between the two have changed markedly for both M-1 and M-2. During the first four-quarter period used by the Committee (QII '75 to QII '76), M-1 growth--at 5.2 per cent--was at the lower end of the range of 5 to 7-1/2 per cent, and M-2 growth--at 9.6 per cent--was at the midpoint of the 8-1/2 to 10-1/2 per cent range. In contrast, during the latest complete four-quarter period (QI '76 to QI '77) M-1 growth--at 6.2 per cent--was above the midpoint of its 4-1/2 to 7 per cent range, and M-2 growth--at 10.7 per cent--was above the upper limit of its 7-1/2 to 10 per cent range.

## II. The outlook

Since the reductions in growth ranges over the past 2 years have not been reflected in lower growth rates, information on the pace at which the Committee has been reducing the ranges is not particularly



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useful in assessing the outlook. The question that will be considered in this section is not whether progress in any sense is likely to slow down or speed up, but whether circumstances are likely to be more or less conducive to progress in coming years than they have been in the past 2 years.

The pace at which the Committee will find it feasible to move toward lower (actual) rates of growth in M-1 and M-2 in any period will be influenced by, among other things, (a) the strength of real economic activity in that period and (b) the concurrent rate of price advance and strength of inflationary expectations. In both cases, however, the direction of influence will depend on the balance of conflicting tendencies.

For example, if over coming years the economy tends to be relatively weak--if recessions are frequent and deep, average rates of unemployment and unutilized capacity high, and average rates of growth in real GNP low--the Committee probably would be less inclined to seek slower growth in the monetary aggregates than it would if the economy were relatively strong. On the other hand, in a weak economy the demand for money would also tend to be weak (other things, including price changes, equal), so that the achievement of relatively low growth rates in the aggregates would not be likely to involve substantial upward pressure on interest rates. For this reason, it might be easier to pursue policies consistent with slow growth in the aggregates.

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Similarly, if over coming years inflation is rapid and inflationary expectations strong, the urgency of anti-inflationary monetary policy measures would be considered great, and there probably would be substantial public support for such measures. On the other hand, rapid inflation would increase the nominal demand for money and therefore the magnitude of the interest rate increases required to slow monetary growth by particular amounts. Moreover, strong inflationary expectations would add to interest rate levels. Under such circumstances, the Committee might well be reluctant to incur the short-run costs of further increases in interest rates, in terms of disintermediation and its consequences for housing, depressant effects on business capital investment, and so forth.

It is hard to say with confidence how much weight the Committee would put on each of the conflicting sets of considerations in connection with either real economic activity or prices. However, one might hazard the guesses that the Committee would be able to make more progress toward lower monetary growth rates (a) when the economy is relatively strong and (b) when inflationary pressures are relatively weak. In periods of weak activity, the immediate concerns about high unemployment and slow real growth are likely to override the longer-run concerns about price stability. And in periods of strong inflationary pressures, the cost of efforts to slow monetary growth, in the form of sharply rising

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interest rates, probably would outweigh the more remote--and therefore more speculative--benefits of slower rates of price advance.<sup>1/</sup>

If these guesses are correct, one's answer to the question of whether circumstances will be more or less conducive to progress toward lower monetary growth rates in coming years than in the past 2 years would depend on whether one expected conditions with respect to real economic activity and prices to be better or worse, on the average, than they have been. It seems reasonable to expect real economic conditions to be better, if only because the past 2 years have been characterized on the average by secularly high rates of unemployment and unutilized plant capacity. While the rate of price advance also has been high by historical standards, the grounds for expecting improvement on this score may be weaker.

It might be noted, however, that the conditions suggested here as likely to facilitate progress toward lower monetary growth rates--strength in real activity and a slower rate of price advance--also describe the objectives for which slower monetary growth is sought. In other words, progress should beget progress; once the process is well under way, its advancement should become decreasingly difficult.

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<sup>1/</sup> The Committee's reaction to rapid price advances might be affected by whether they appear to originate in demand or supply conditions; i.e., the Committee might be less willing to "accommodate" demand-induced inflationary pressures than those that originate, for example, from rising costs of imports or crop failures.

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This suggests that there is a high premium on the Committee's taking advantage of any opportunities that might emerge to slow monetary growth without substantially retarding real economic activity. It also suggests that the Committee's task would be facilitated to the extent that other types of policies--such as structural policies--contribute to the goals of reducing unemployment and slowing the rate of price advance. In addition to their direct benefits, such policies could have important indirect benefits in accelerating the movement toward lower monetary growth rates. Conversely, policies that have opposite effects--such as increases in prices or taxes on energy items in the interest of conservation--could have important indirect costs in slowing progress toward a noninflationary monetary policy.

A word might be added on the implications of financial innovation for the pace at which progress might be made in coming years. As noted above, financial innovation recently has served to reduce growth rates in M-1 somewhat (and to raise growth rates in M-2 slightly) at prevailing levels of interest rates. Financial innovation may well continue for a time at about the recent pace or possibly even faster. However, the assumption made here that growth rates of 1 and 3-1/2 per cent in M-1 and M-2 will ultimately prove appropriate reflects in part the premise that over the longer run velocity will grow at its secular rate--i.e., that the pace of financial innovation will eventually slacken to historic rates. If and when that happens, the growth rate

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of M-1 associated with any given level of interest rates would tend to rise, and efforts to keep M-1 growth from accelerating from its relatively low rate (other things equal) would create upward pressure on interest rates.

To put the point another way, the cost--in terms of higher interest rates--of maintaining relatively low growth rates in M-1 is being deferred during the current period of rapid financial innovation, but it will have to be paid at the end of that period. This factor, by itself, will work toward making conditions in coming years less conducive to progress toward slower monetary growth than they have been recently. It may, of course, be offset by the effects of more favorable factors.