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MONETARY POLICY ALTERNATIVES

Prepared for the Federal Open Market Committee

By the staff Board of Governors of the Federal Reserve System

January 29, 1982

MONETARY POLICY ALTERNATIVES

Recent developments

(1) Growth in M1, which was relatively rapid in November and December, is estimated to have accelerated considerably further in January to somewhat above a 21 percent annual rate, and is on a track well above the FOMC's short-run target path of 4 to 5 percent growth from November 1981 to March 1982 for this aggregate. Largely reflecting strength in M1, the broader M2 measure--which expanded at about an 11½ percent average rate over December and January--has grown somewhat above the Committee's 9 to 10 percent target for the November-March interval. The same pattern is evident in the newly revised money supply data reflecting the annual benchmark and seasonal factor review. On the revised basis, estimated January growth in M1 was at about a 22 percent annual rate, and growth in M2 was 11½ percent.^{1/} (Recent data on reserves and monetary aggregates on a revised basis are shown in the table on the next page. Subsequent references to the aggregates in this blue book are on a revised basis).

(2) The surge in M1 growth in November and December reflected expansion in the currency, demand, and OCD components of the aggregate.

^{1/} The impacts of the annual benchmark and seasonal factor revisions, on a preliminary basis, as well as minor modifications in the definition of M2, are indicated in appendix I, where growth rates for the old and revised series are compared. The definitional changes consist mainly of excluding from M2 the "institution only" money market mutual funds (which remain in M3) and including in M2 retail RP's (which previously were included in M3 but excluded from M2). The revised aggregates are confidential until officially released after Chairman Volcker testifies on February 10. As discussed more fully in Appendix I, the revision of the monetary aggregates does not result in a substantially different overall pattern for 1981 or early 1982. M1 growth for 1981 is still well below the low end of the longer-run range and shows a substantial acceleration from October to January. Revised M2 growth for 1981 is only slightly lower, and is still above the upper end of its range.

KEY MONETARY POLICY AGGREGATES
(Seasonally adjusted annual rates of growth)

	1981		1982	Jan. '82 ^{1/} over Nov. '81	Growth in Preceding Years			
	Nov.	Dec.	Jan. ^{1/}		(QIV over QIV basis)		(Year over Year basis)	
					1980	1981	1980	1981
<u>Money and Credit Aggregates</u>								
M1 (Shift-adjusted)	9.7 (7.7)	11.5 (9.9)	22.3 --	17.0 --	7.2 (6.7)	5.0 (2.3)	6.2 (5.9)	7.0 (4.7)
M2	13.7	7.8	11.2	9.6	9.1	9.4	8.3	9.8
M3	13.2	7.0	9.4	8.3	9.9	11.3	9.3	11.6
Bank Credit	3.4	11.1 ^{2/}	n.a.	n.a.	8.0	8.8 ^{2/}	8.5	9.6
<u>Reserve Measures^{3/}</u>								
Nonborrowed reserves ^{4/}	7.4	16.6	-13.0	4.0	7.5	6.8	7.0	5.8
Total reserves	-0.1	16.1	11.1	13.7	6.8	3.7	6.4	5.7
Monetary base	5.8	9.8	9.2	9.6	8.4	5.0	8.4	6.7
Memo: (Millions of dollars)								
Adjustment borrowing	498	488	1,274	--	--	--	--	--
Excess reserves	259	308	322	--	--	--	--	--

^{1/} January 1982 estimated on the basis of partial data.

^{2/} Adjusted for shifts of assets from U.S. offices to IBFs.

^{3/} Growth rates for reserve measures are adjusted to remove the effects of discontinuities resulting from phased changes in reserve ratios under the Monetary Control Act. In addition, reserve data for QIV '80 have been adjusted to remove the distorting effects of the reduction in weekend reserve avoidance activities that occurred in late 1980.

^{4/} Nonborrowed reserves include special borrowing and other extended credit from the Federal Reserve.

N.B. The data in this table reflect seasonal and benchmark revisions, as well as minor definitional changes. See appendix I. Revised data are confidential until released officially after Chairman Volcker testifies on February 10.

The accelerated OCD growth contributed more than two-thirds of the November-December growth in M1, and probably reflects the same precautionary motives that contributed to growth in savings deposits beginning in November following a year of continual monthly declines. In January, the surge of demand deposits in the first statement week of the month (which included the year-end statement date for banks and businesses) in large part reversed as the month progressed.^{1/} Meanwhile, other checkable deposits continued to exhibit substantial strength and apparently have expanded even more rapidly than in November and December.

(3) A pick-up in M1 growth during a period of declining economic activity is not without precedent.^{2/} Some part of the recent very rapid expansion in money demand probably reflects a delayed response to earlier declines in interest rates. In addition, uncertainties about the outlook for income and interest rates likely have increased the precautionary demands for highly liquid assets, including, as noted above, the OCD component of narrow money and savings deposits included in M2. The strengthening of savings and transactions deposits has been accompanied in December and January by a decline of small time deposits and a slowing in expansion of money market funds.

(4) Bank credit growth, adjusted for shifts to IBFs, picked up to an 11 percent annual rate in December after two months of weakness. The December acceleration was due mainly to a quickened pace in loans, led

^{1/} This statement is based on the unrevised weekly seasonal factors because, as of this writing, the revised weekly factors are not available.

^{2/} Since 1970 growth rates of narrow money have both accelerated and been positive in five out of the seven quarters in which real GNP growth was both decelerating and negative.

by a significantly higher growth of business loans (adjusted for shifts to IBFs). Large bank data for early January suggest continued strength for business loans, in large part reflecting a shift in corporate borrowing from long-term markets. In December and January, commercial banks supplemented their other deposit flows by stepping up issuance of large time deposits, while S&Ls continued to issue such deposits at an appreciable pace.

(5) Total reserves expanded over December and January at about $13\frac{1}{2}$ percent annual rate on average, reflecting the increase in required reserves associated with the strength in the aggregates. Most of the increased demand for reserves in December was, consistent with the reserve path, accommodated by open market operations. By January, however, constraint on reserve provision by the Desk led to a sizable increase in adjustment borrowing at the discount window as required reserves strengthened markedly relative to path. The increase in borrowings was reinforced, given continued strength in the aggregates, by a mid-January lowering of the nonborrowed reserve path.^{1/} Nonborrowed reserves declined in January at an estimated 13 percent annual rate. Over the last four statement weeks, adjustment borrowing has averaged about \$1.3 billion, in contrast to the \$300 million initially assumed in construction of the nonborrowed reserve path.

(6) Given the tightening of bank reserve positions, short-term market interest rates have risen about $\frac{1}{2}$ to $1\frac{1}{2}$ percentage points, on balance, since the December FOMC meeting. The federal funds rate has moved up to the 14 percent area. Markets also have focused on the large current and prospective borrowing requirements of the federal government.

^{1/} Reserve paths and adjustments made since the last Committee meeting are shown in Appendix II.

Since the December meeting, the Treasury has increased the size of the weekly bill auction twice, boosted the monthly bill auction, and issued 126-day cash management bills. For its mid-February refunding, the Treasury has announced an offering of \$10 billion of new coupon issues (which will raise \$5½ billion of new cash). Bond rates rose substantially after the December FOMC meeting, but the recent rally has cut the increase to about ¼ to ½ percentage point. In January corporate bond issuance declined to minimal levels, increasing the already sizable backlog of issues overhanging the market. Since the last meeting, rates on fixed rate mortgages in the primary market have risen almost ¾ of a percentage point.

(7) The dollar has risen by 2 percent on a weighted average basis,

. The strength of the dollar was primarily in response to the recent rise in short-term U.S. interest rates, coupled with a slight decline in foreign interest rates, which increased the differential between U.S. and a weighted average of short-term foreign interest rates from ½ to 2 percentage points over the period.

Alternative longer-run monetary strategies

(8) Broad economic and financial considerations affecting the Committee's decision with respect to long-run targets for 1982 were discussed in the previous blue book. In this blue book, quantitative impacts on key economic variables are estimated for alternative money growth strategies looking out over the next three years. Of the three strategies shown in the table on the next page, Strategy 1 would have M1 grow from its QIV '81 level at the 4 percent midpoint of the Committee's tentative $2\frac{1}{2}$ to $5\frac{1}{2}$ percent range for 1982 and then decelerate gradually to $3\frac{1}{2}$ percent in 1983 and 3 percent in 1984. M2 growth in 1982 would be about 8 percent, in the upper part of the FOMC's tentative 6 to 9 percent range. This strategy embodies the monetary policy assumption underlying the staff's judgmental GNP forecast detailed in the Greenbook. Strategy 2 specifies faster M1 growth--at the $5\frac{1}{2}$ percent top of tentative range for 1982 and then decelerating one-half percentage point per year in 1983 and 1984. Strategy 3 represents a more stringent monetary policy, with M1 growing at the $2\frac{1}{2}$ percent low end of the tentative 1982 range and continuing at that same rate in 1983 and 1984.

(9) As may be seen in the table, the extension of the Strategy 1 monetary path through 1984 produces a continuation of the moderate real GNP growth in the Greenbook forecast for 1983 and a further slowing of inflation. Unemployment remains in the 9 percent area. The higher M1 growth in Strategy 2 permits a considerably faster expansion of nominal GNP. (Projections associated with Strategies 2 and 3 were derived as differences from the judgmental base forecast as calculated by the Board's quarterly econometric model.) Given the structure of the economy, as captured in the model, within the three year forecast horizon the bulk of the increment to

Economic Projections Associated
with Alternative Long-run
Monetary Growth Strategies

	<u>1982</u>	<u>1983</u>	<u>1984</u>
<u>Nominal GNP (percent change, Q4/Q4)</u>			
Strategy 1	7.9	7.6	6.8
Strategy 2	8.7	9.2	10.2
Strategy 3	6.9	6.0	5.1
<u>Real GNP (percent change, Q4/Q4)</u>			
Strategy 1	1.3	2.3	2.5
Strategy 2	2.0	3.6	4.6
Strategy 3	0.5	1.1	1.7
<u>Implicit GNP Deflator (percent change, Q4/Q4)</u>			
Strategy 1	6.4	5.1	4.2
Strategy 2	6.5	5.4	5.3
Strategy 3	6.4	4.9	3.3
<u>Unemployment Rate (Q4 average)</u>			
Strategy 1	9.3	9.1	8.9
Strategy 2	9.0	8.2	6.9
Strategy 3	9.6	10.1	10.5
<u>Treasury Bill Rate (Q4 average)</u>			
Strategy 1	13.0	12.5	11.0
Strategy 2	9.7	8.3	8.4
Strategy 3	16.7	15.6	11.9

Note: Strategy 1: M1 grows 4 percent in 1982, 3½ percent in 1983, 3 percent in 1984
 Strategy 2: M1 grows 5½ percent in 1982, 5 percent in 1983, 4½ percent in 1984
 Strategy 3: M1 grows 2½ percent in 1982, 1983 and 1984.

nominal GNP under strategy 2 shows up in greater output. However, by the third year inflation is no longer slowing, and upward price pressures are likely to be strengthening, given the level of plant and manpower resource utilization. Strategy 3, on the other hand, forces a more rapid deceleration in nominal GNP; real GNP growth is very sluggish, causing the unemployment rate to move above 10 percent, but the inflation rate drops to around 3 percent by 1984.

(10) It should be noted that the staff's judgmental forecast, represented by the Strategy 1 results, implies a substantial continuing shortfall in the demand for M1 relative to the patterns obtaining before the mid-1970s (according to the standard formulation in the Board model). The failure of such weakness to materialize would result, at least in the earlier part of the period, in higher interest rates, with negative consequences for economic activity. On the other hand, the projection for Strategy 3 does not allow for the possibility that a tendency for short-term rates to rise toward record levels might prompt a still greater degree of innovation in cash management; such a development would mean that attainment of the specified M1 growth would be less restrictive than indicated. Finally, it also should be noted that these figures do not make allowance for the possibility that wages might adjust more quickly than in the past to labor market slack or that inflation expectations, as reflected in wage decisions or in bond rates, might improve markedly owing to a greater public confidence in governmental policies. Such developments could yield better outcomes for both real output and prices, but would have to be major departures from past patterns in order to materially alter the picture.

Near-term targets

(11) Attainment of the Committee's short-run target calling for growth in M1 at a 4 to 5 percent annual rate from November to March requires M1 to decline on average on the order of 8 percent, at an annual rate, over February and March. Such an average rate of decline for a two-month period would be very unusual, though not without precedent in the period since 1959 for which we have monthly daily average data. So rapid a two-month rate of decline developed in March-April of 1980, but at that time money supply behavior was affected in large part by the ramifications of the newly imposed credit control programs. However, there was a two-month decline of similar magnitude in 1981 that seemed more related to monetary policy actions. In May-June of last year M1-B (shift adjusted) declined at almost a 7 percent annual rate, following a 19½ percent rise in April, while the funds rate rose from a low of 13½ percent in late March to over 19 percent in June.^{1/} Under current circumstances, it seems plausible that there will be a sharp deceleration in money demand at around current interest rates, and possibly even some decline, in part as the public begins to invest or spend funds that had been temporarily placed in NOW accounts and also demand deposits. But the very sharp decline over a 2-month period required to attain the FOMC's previous target seems unlikely to occur without a further rise in the funds rate. A contraction in total reserves at about a 7 percent annual rate from January to March would be needed. Non-borrowed reserves would decline at about a 30 percent annual rate, if borrowing were set at around \$3 billion on the ground that a rise in the funds rate of around 3 percentage points is likely to develop.

^{1/} Not-shift adjusted M1-B declined at a 6½ percent annual rate in May-June following a 25 percent rise in April.

(12) Continuation of the short-run policy toward M1 adopted at the last meeting is shown as alternative A in the table below. This option would bring M1 into the upper half of the 2½ to 5½ percent longer-run range by March, assuming this long-run range is based, as has been the case in the past, on the actual average level of M1 in the fourth quarter of the previous year.^{1/} The risk of sharp interest rate fluctuations that might be associated with alternative A, accompanied by potentially adverse implications for economic activity and financial markets, might be reduced by extending beyond the first quarter the horizon over which the Committee targets the return of M1 to within the tentative 2½ to 5½ percent longer-run range--as is contemplated by the three other alternatives in the table. (More detailed and longer-run data for the alternatives are contained in the table and charts on the following pages).

	<u>Alt. A</u>	<u>Alt. B</u>	<u>Alt. C</u>	<u>Alt. D</u>
Growth from Jan. to March				
M1	-8	1	2½	4
M2	5½	8	8½	9
Implied growth from Nov. '81 to March '82				
M1	4½	9	10	10½
M2	7½	9	9	9½
Federal funds rate range	13 to 19	12 to 16	11 to 15	10 to 14

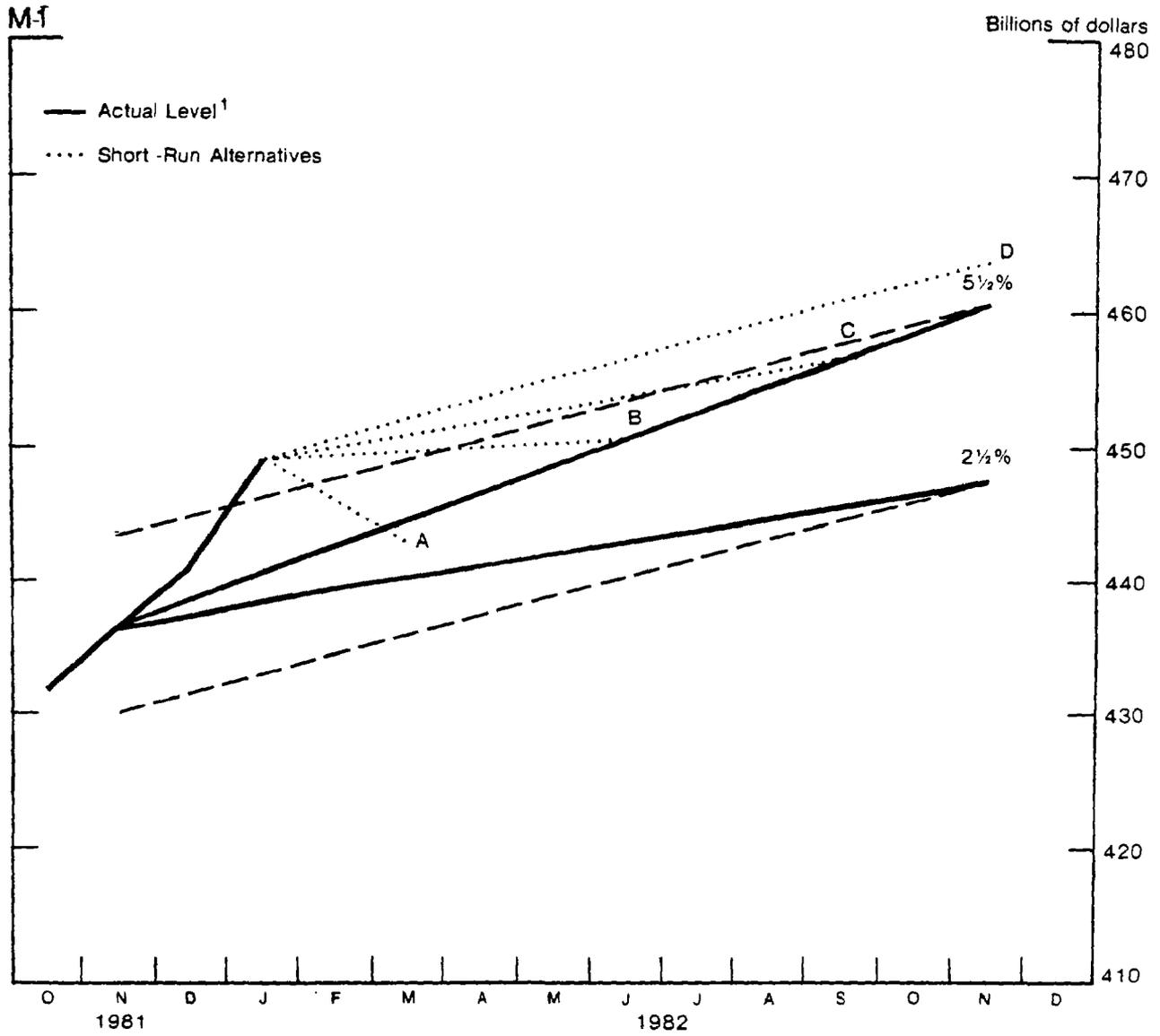
^{1/} Even if the Committee wished to aim at the upper limit of that longer-run range by March, M1 would have to contract at about a 5½ percent annual rate over the remaining months of the quarter.

Alternative Levels and Growth Rates for Key Monetary Aggregates

	<u>M1</u>				<u>M2</u>				<u>M3</u>			
	<u>Alt. A</u>	<u>Alt. B</u>	<u>Alt. C</u>	<u>Alt. D</u>	<u>Alt. A</u>	<u>Alt. B</u>	<u>Alt. C</u>	<u>Alt. D</u>	<u>Alt. A</u>	<u>Alt. B</u>	<u>Alt. C</u>	<u>Alt. D</u>
1981--November	436.5	436.5	436.5	436.5	1809.4	1809.4	1809.4	1809.4	2174.3	2174.3	2174.3	2174.3
December	440.7	440.7	440.7	440.7	1821.5	1821.5	1821.5	1821.5	2187.0	2187.0	2187.0	2187.0
1982--January	448.9	448.9	448.9	448.9	1838.5	1838.5	1838.5	1838.5	2204.2	2204.2	2204.2	2204.2
February	446.0	449.3	449.9	450.4	1847.0	1850.8	1851.5	1852.3	2217.6	2221.4	2221.7	2222.2
March	443.0	449.6	450.9	451.9	1855.4	1863.0	1864.5	1866.1	2230.9	2238.5	2239.1	2240.2
<u>Growth Rates</u>												
<u>Monthly</u>												
1981--November	9.7	9.7	9.7	9.7	13.7	13.7	13.7	13.7	13.2	13.2	13.2	13.2
December	11.5	11.5	11.5	11.5	8.0	8.0	8.0	8.0	7.0	7.0	7.0	7.0
1982--January	22.3	22.3	22.3	22.3	11.2	11.2	11.2	11.2	9.4	9.4	9.4	9.4
February	-7.8	1.1	2.7	4.0	5.5	8.0	8.5	9.0	7.3	9.4	9.5	9.8
March	-8.1	0.8	2.7	4.0	5.5	7.9	8.4	8.9	7.2	9.2	9.4	9.7
Nov. '81 - March '82	4.5	9.0	9.9	10.6	7.6	8.9	9.1	9.4	7.8	8.9	8.9	9.1
Dec. '81 - March '82	2.1	8.1	9.3	10.2	7.4	9.1	9.4	9.8	8.0	9.4	9.5	9.7
Jan. '82 - March '82	-7.9	0.9	2.7	4.0	5.5	8.0	8.5	9.0	7.3	9.3	9.5	9.8
<u>Quarterly Averages</u>												
QIV '81 - QI '82	8.5	11.5	12.1	12.5	8.9	9.8	9.9	10.1	8.7	9.4	9.4	9.5
QIV '81 - QIV '82	4.0	4.0	5.0	6.2	8.0	8.0	8.3	9.0	9.0	9.0	9.0	9.5
<u>Annual Averages</u>												
1981 over 1980	7.0	7.0	7.0	7.0	9.8	9.8	9.8	9.8	11.6	11.6	11.6	11.6
1982 over 1981	4.5	5.1	5.8	6.4	8.6	8.8	9.0	9.3	9.5	9.8	9.8	10.0

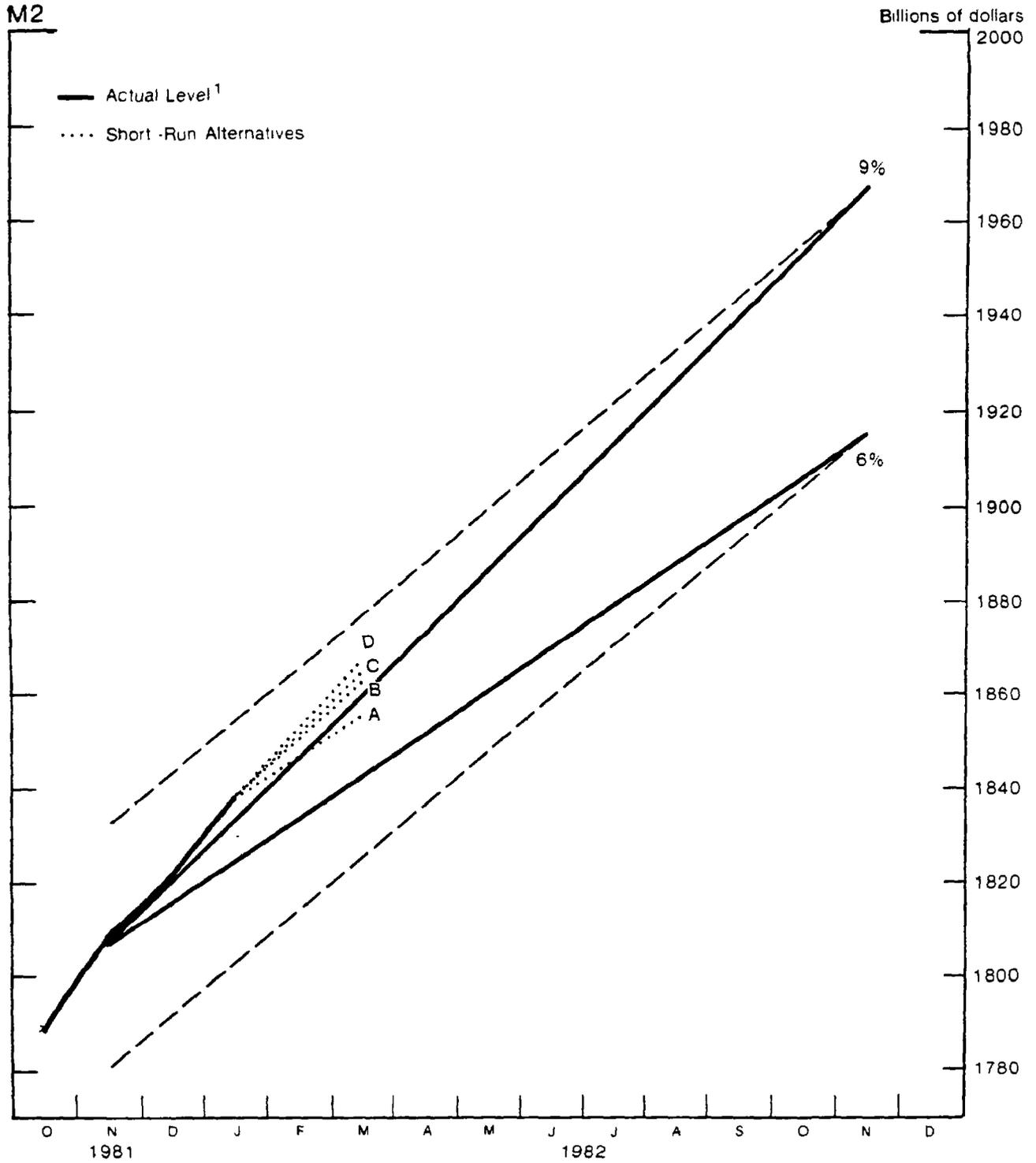
NOTE: Bank credit would be expected to grow approximately 8 percent between QIV '81 and QIV '82 under alternatives A, B, and C, and somewhat faster under alternative D -- after adjustment for the impact of shifts of assets from domestic offices to IBFs. The need for such an IBF adjustment could be avoided by basing the annual range for bank credit on the actual December-January average; such a base would yield virtually the same 1982 growth rates.

Actual and Targeted M1



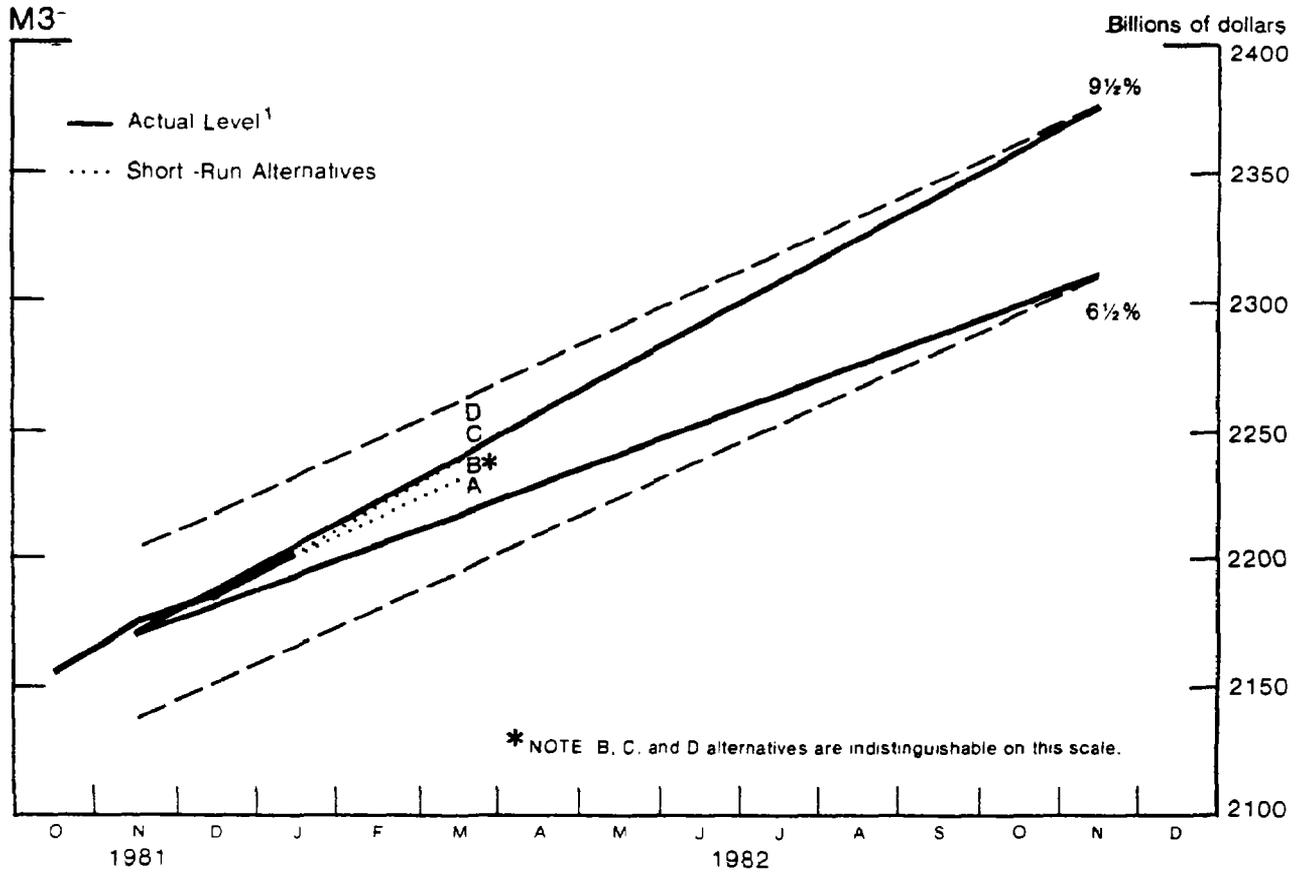
¹ January level is projected.

Actual and Targeted M2



¹ January level is projected.

Actual and Targeted M3



¹ January level is projected

(13) Alternative B is designed to attain the upper limit of the $2\frac{1}{2}$ to $5\frac{1}{2}$ percent range for M1 by June. That would be achieved, as shown in Chart 1, by extending the January to March annual growth rate of 1 percent, suggested for this alternative, through June. This approach, like alternative A, would be consistent with growth for 1982 at around the midpoint of the longer-run range. Alternative C, which involves about a $2\frac{1}{2}$ percent annual rate of growth over the last two months of the current quarter, is designed to reach the upper end of the M1 range by September. Such an approach would be more consistent with growth for the year in the upper half of the longer-run range.

(14) Alternative D specifies a 4 percent annual rate of growth for February and March. Continuation of that growth rate over the balance of the year would result in growth of M1 from QIV '81 to QIV '82 at about $6\frac{1}{2}$ percent, above the $5\frac{1}{2}$ percent upper limit of the 1982 range based on the actual QIV '81 average level. Such a trajectory would be consistent with a Committee decision to raise the upper limit of the tentative 1982 range or a decision to base the $2\frac{1}{2}$ to $5\frac{1}{2}$ percent range, not on the actual QIV '81 level, but on, say, the lower limit of last year's longer-run target range.^{1/} When the Committee established its tentative range for 1982 last July, it had anticipated that M1 would reach the lower limit of the long-run range for 1981 by the fourth quarter; an upward shift in

^{1/} To derive a base consistent with the current M1, which is not shift-adjusted, the level in QIV '81 implied by the $3\frac{1}{2}$ percent lower limit of the target range for M1-B shift-adjusted has to be raised by the \$11.3 billion of estimated shifts into NOW accounts from non-demand deposit sources in 1981. This derived level would be \$5.1 billion, or 1.2 percent, higher than the actual (not shift-adjusted) level of M1-B in the fourth quarter of 1981.

the base for the 1982 range would in that context indicate the Committee was not willing to accept last year's undershoot and viewed the recent increase in M1 as at least in part a desirable offset to the earlier short-fall. With such a rebasing of the $2\frac{1}{2}$ to $5\frac{1}{2}$ percent longer-run range for 1982, the specifications of alternative D if extended for the year would bring M1 into the upper half of the rebased range by the fourth quarter of this year. If alternative C were adopted in conjunction with a rebasing of the long-run range, growth by the fourth quarter would be around the midpoint of the range.

(15) In all of the alternatives, except for A, M2 would probably be above the top of its tentative longer-run range by March, essentially reflecting the strength of M1 growth over the last three months. Given the slowing in M1 growth that is targeted for the balance of the year, the staff expects that M2 growth over the year as a whole will fall within its longer-run range for alternatives A, B, and C, and will be at the top of the range under the more expansive alternative D. Such behavior would be consistent with the unchanged income-velocity of M2 over the past two years.

(16) Alternative B calls for growth in M1 at about a 1 percent annual rate over the two months January to March, a considerable deceleration from the rapid pace of the previous three months. The staff believes that such a slowing in narrow money growth is consistent with only rather modest further upward pressure on interest rates, if any. Given the staff's projection of nominal GNP growth during the current quarter at only about a $2\frac{1}{2}$ percent annual rate, the rapid increase in money that has already occurred would appear quite sufficient to finance transactions needs over the quarter, even assuming that a substantial part of the

increase represented precautionary balances. Indeed, even with virtually no money growth over the balance of the quarter, the velocity of M1 would decline in the quarter at a postwar record annual rate of about 9 percent.

(17) The alternative B specifications would entail little change in total reserves over the period from January to March. Assuming adjustment borrowing of around \$1½ billion, nonborrowed reserves would decline at a 3 percent rate and, at the present discount rate, the federal funds rate in the intermeeting period would likely fluctuate in a 13½ to 14½ percent range.^{1/} Demands for short-term credit are likely to remain quite strong over the balance of the quarter, with businesses continuing to avoid the bond market at the relatively high rate levels likely to prevail over the near-term under this alternative.

(18) Treasury credit demands will remain sizable in all maturity sectors. The 3-month bill rate may be in a 12½ to 13½ percent range over the next few weeks. However, both short- and long-rates might show downward tendencies as the quarter progresses, as the market responds to slow money growth and also if economic indicators show unexpected economic weakness. Residential mortgage rates are likely to remain near their current advanced levels, and this may work to restrain demand for mortgage commitments--the supply of which might also be constrained by cautious behavior of thrifts in face of continued operating losses.

(19) Alternative C, which calls for growth of M1 at about a 2½ percent annual rate from January to March, would involve an increase in total reserves over the balance of the quarter at about a 2 percent

^{1/} Such an interest rate is consistent with the near-term financial conditions assumed in the Greenbook GNP projection. Appendix III shows the quarterly pattern of interest rates over 1982 and 1983 associated with the Greenbook projection.

annual rate. Assuming a decline in adjustment borrowing from recent levels to about \$1 billion, nonborrowed reserves would rise at 2 percent rate. A federal funds rate of about 13 percent would be implied. The 3-month bill rate would likely decline from present levels to around 12 percent or a bit lower as expectations of further monetary ease tend to develop. Bond yields may edge down from current levels, inducing a pick-up in bond issuance from recent depressed levels.

(20) Alternative D, involving a 4 percent rate of growth of M1 on average in February and March, would require a growth in total reserves at about a 4 percent annual rate. Given the staff's expectations for weak money demand, such reserve growth would probably be associated with a decline in borrowing to about \$500 million, given the current discount rate, and with growth in nonborrowed reserves at a 15 percent annual rate over the balance of the quarter. The federal funds rate may drop to near 12 percent, and the 3-month bill rate decline into the 10½ to 11 percent area. A sizable rally in bond markets would also tend to develop, but marketing of the large overhang of corporate bonds would tend to moderate the extent of rate decline. Cost pressure on thrift institutions would be eased, which would probably be reflected in a downward adjustment in mortgage rates and in a greater willingness on the part of institutions to make mortgage commitments. M2 growth is likely to be strengthened under this alternative, particularly in the near-term, as yields on MMMFs lag the drop in open market rates.

Directive language

(21) Given below are two suggested operational paragraphs for the directive. Alternative I, in which the specifications adopted at the meeting on December 21-22 are shown in strike-through form, is the more standard form. It could be adapted to growth rates either continuing to be based on November, as at the last meeting, or updated to January to take account of recent developments. Alternative II need not have different substantive implications than alternative I. However, its language relates the short-run objectives more explicitly to achievement of the longer-run target over time, and indicates that a more rapid return than the basic short-run path that might be selected by the Committee would be acceptable in an environment of easier market conditions.

Alternative I

In the short run, the Committee seeks behavior of reserve aggregates consistent with growth of M1 and M2 from ~~November 1981 to March~~ ____ TO ____ at annual rates of around ~~4 to 5~~ ____ percent and ~~9 to 10~~ ____ percent respectively. ~~The target for M1 no longer reflects the "shift adjustment" for conversion of outstanding interest-bearing assets into new NOW accounts; formerly estimated in the "shift-adjusted" M1-B series. -- In setting the M1 target, the Committee took account of the relatively rapid growth that had already taken place through the first part of December; it also recognized that interpretation of actual money growth may need to take account of the significance of fluctuations in NOW accounts, which have recently been growing relatively rapidly.~~ The Chairman may call for Committee consultation if it appears to the Manager

for Domestic Operations that pursuit of the monetary objectives and related reserve paths during the period before the next meeting is likely to be associated with a federal funds rate persistently outside a range of ~~10-14~~ ____ TO ____ percent.

Alternative II

The Committee seeks behavior of reserve aggregates over the balance of the quarter consistent with bringing M1 and M2 over time into their longer-run target ranges for the year. For the January to March period growth in M1 and M2 at annual rates of around ____ and ____ percent, respectively, is sought. A slower growth, or in the case of M1 some decline, would be associated with more rapid attainment of the longer-run range and would be acceptable in the context of declining market interest rates. [Same federal funds rate sentence as in alternative I].

APPENDIX I

MONEY STOCK REVISIONS

Measures of the money stock have been revised to incorporate annual seasonal adjustment and benchmark changes, as well as minor definitional changes. This appendix briefly describes these changes, to be considered confidential until published after the Chairman's testimony, and compares growth rates of the revised series, which are still preliminary, with the old series.

Revisions to seasonal factors

Seasonal adjustment factors have been updated using data for 1981 and, in accordance with a recommendation of the Committee of Experts on Seasonal Adjustment Techniques, an X-11-ARIMA method was used to compute seasonal factors for 1982. For the deposit component of M1, seasonal factors were calculated using data preadjusted to reduce distortions to deposit flows accompanying the Special Credit Restraint Program of 1980 and shifts to NOW and ATS accounts; a similar procedure had been used in 1981. Seasonal factors for transactions deposits and demand deposits were estimated separately, giving implicit factors for other checkable deposits. Revisions due to seasonal factors were relatively small for most months; however, in May, August and November of last year seasonal revisions lowered M1 growth by 2½, 2 and 4 percentage points at an annual rate, respectively, while in June and September they raised M1 growth by 3½ to 2½ percentage points, respectively.

Benchmark revisions

Several benchmark revisions were made.

- Commercial bank deposits data were benchmarked to the March, June and September 1981 call reports. The impact of these adjustments was relatively small, both on levels and growth rates.

- A consolidation adjustment has been made to remove at the M1 level the portion of thrift institutions' holdings of vault cash that is estimated to be used for servicing their other checkable deposit (OCD) liabilities; this lowers the currency component of the money stock that previously included all vault cash at thrift institutions. The remainder of thrift institution vault cash has been removed at the M2 level. This consolidation adjustment lowers M1 by less than \$.2 billion and M2 by \$2.1 billion in December 1981; this adjustment affects growth rates minimally.
- Cash items in the process of collection (CIPC) of thrift institutions has been netted against transactions deposits at the M1 level, lowering the level of the aggregates by about \$1.1 billion in December 1981 and affecting growth rates negligibly. Owing to lack of data availability, CIPC of thrift institutions previously had not been deducted from measures of the money stock.
- Daily deposits data for savings and time deposits at thrift institutions--reported since November 1980 as a consequence of the Monetary Control Act of 1980--have been incorporated, making these components for thrifts comparable to those of commercial banks in terms of frequency of data and definition. Incorporation of these new data has raised the level of small time and savings deposits at thrifts by about \$3 billion in December 1981, although growth of M2 in 1981 was affected only slightly.

- Revisions to deposits data of quarterly reporting institutions and travelers check data have been incorporated. The principal impact of revisions to quarterly reporters was to raise M1 growth in September and October of 1981 while revisions to travelers checks reduced narrow money growth a bit in the fourth quarter of last year.

Compositional changes

In the revised measures, retail RPs at all depository institutions-- issued in denominations of less than \$100,000--appear in the small denomination time deposit component of M2; in the old measures, retail RPs entered at the M3 level as a component of term RPs. Institution-only money market mutual funds are removed from the money market mutual fund component of M2 and enter the money stock at the M3 level, along with large-denomination time deposits and large denomination term RPs. The inclusion of retail RPs raises the level of M2 by \$12.5 billion in December 1981 while the removal of institution-only money funds lowers M2 by \$30.1 billion (after a consolidation adjustment to the overnight RP component of M2 reflecting RPs held by such money market funds) in that month. For the QIV '80 to QIV '81 period, the retail RP adjustment raised the M2 growth rate by 0.7 percent, while the removal of institution-only money market funds reduced this aggregate's growth rate by 0.9 percent.

Tables I-1, I-2 and I-3 compare growth rates of revised and old M1, shift-adjusted M1, and M2. At this writing, revised M3 data are not available.

Table I-1

COMPARISON OF REVISED AND OLD M1 GROWTH RATES^{1/}
 (percent changes at annual rates)

	<u>Revised M1</u> (1)	<u>Old M1</u> (2)	<u>Difference</u> (1-2) (3)
1980--October	14.6	13.1	1.5
November	5.5	8.1	- 2.6
December	- 9.2	-10.0	.8
1981--January	9.8	10.4	- .6
February	4.6	5.7	- 1.1
March	14.3	12.8	1.5
April	25.2	21.4	3.8
May	-11.4	- 5.5	- 5.9
June	- 2.2	- 7.0	4.8
July	2.8	3.6	- .8
August	3.9	7.5	- 3.6
September	1.4	- 2.8	4.2
October	4.7	3.3	1.4
November	9.7	13.6	- 3.9
December	11.5	11.0	.5
1982--January (proj.)	22.3	21.2	1.1
<u>Quarterly</u>			
1980--QIV	11.2	10.8	.4
1981--QI	4.4	4.8	- .4
QII	9.3	8.6	.7
QIII	.2	.4	- .2
QIV	5.8	5.6	.2
<u>Annual</u>			
1981--QIW '81 over QIV '80	5.0	4.9	.1

^{1/} M1 is defined to include currency, travelers checks, demand deposits and other checkable deposits.

Table I-2

COMPARISON OF REVISED AND OLD SHIFT-ADJUSTED M1 GROWTH RATES^{1/}
 (percent changes at annual rates)

	Revised Shift-adjusted M1 <u> </u> (1)	Old Shift-adjusted M1 <u> </u> (2)	Difference <u>(1-2)</u> (3)
1981--January	-0.3	-.2	-.1
February	-2.6	-1.4	-1.2
March	9.9	8.1	1.8
April	19.6	16.4	3.2
May	-9.9	-4.3	-5.6
June	-3.7	-8.5	4.8
July	2.0	2.9	-.9
August	3.4	6.6	-3.2
September	0	-3.7	3.7
October	4.8	3.1	1.7
November	7.7	11.4	-3.7
December	9.9	9.6	.3
<u>Quarterly</u>			
1981--QI	-1.1	-.9	-.2
QII	5.8	5.2	.6
QIII	-0.5	-.4	-.1
QIV	4.9	4.6	.3
<u>Annual</u>			
1981--QIV '81 over QIV '80	2.3	2.1	.2

^{1/} Shift-adjusted M1 is defined to include currency, travelers checks, demand deposits, and other checkable deposits excluding estimated inflows to other checkable deposits in 1981 from sources other than demand deposits.

Table I-3

COMPARISON OF REVISED AND OLD M2 GROWTH RATES
(percent changes at annual rates)

	<u>Revised M2</u> (1)	<u>Old M2</u> (2)	<u>Difference</u> <u>(1-2)</u> (3)
1980--October	8.2	6.6	1.6
November	10.1	10.5	- .4
December	Ø	.6	- .6
1981--January	9.7	8.2	1.5
February	11.3	10.6	.7
March	16.5	16.1	.4
April	15.4	13.5	1.9
May	1.4	3.8	-2.4
June	5.9	4.2	1.7
July	6.4	7.4	-1.0
August	11.6	11.7	- .1
September	7.7	6.5	1.2
October	7.6	8.1	- .5
November	13.6	17.2	-3.6
December	8.0	10.9	-2.9
1982--January (proj.)	11.1	11.5	- .4
<u>Quarterly</u>			
1980--QIV	6.8	8.1	-1.3
1981--QI	8.7	8.3	.4
QII	11.1	10.6	.5
QIII	7.1	7.2	.1
QIV	9.5	10.6	-1.1
<u>Annual</u>			
1981--QIV'81 over QIV'80	9.4	9.5	- .1

Appendix II

RESERVE TARGETS AND RELATED MEASURES
INTERMEETING PERIOD
(millions of dollars; not seasonally adjusted)

Date Reserves Path Constructed	Reserve Targets for Intermeeting Period (6-week avg. basis)		Projection of Reserves Demanded (6-week Average Basis)			Implied Adjustment Borrowing	
	Total Reserves	Nonborrowed Reserves	Total Reserves	Required Reserves	Excess Reserves	On a 6-week Average Basis	For Remaining Statement Weeks of Intermeeting Period ¹
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
December 28	42,684	42,384	42,684	42,459	225	300	300
January 4	42,573 ²	42,184 ^{2,3}	42,779	42,443	336	595	465
8	42,536 ⁴	42,147 ⁴	42,860	42,522	338	713	577
15	42,534 ⁵	41,958 ^{5,6}	43,020	42,659	354	1,062	1,200
22	42,459 ⁷	41,883 ⁷	42,976	42,611	366	1,093	1,513
29	42,323 ⁸	41,747 ^{8,9}	42,964	42,611	353	1,217	1,500

^{1/} Represents borrowing in remaining statement weeks (as intermeeting period progresses) implied by each weekly updating of the 6-week average nonborrowed reserves path. The movement in implied borrowing represents deviations in total reserves from target as well as any compensation for misses in nonborrowed reserves from target in earlier weeks of the intermeeting period.

^{2/} Total and nonborrowed reserves paths adjusted downward by \$111 million due to change affecting the reserves multiplier.

^{3/} Nonborrowed reserves path adjusted downward an additional \$89 million to offset the unusually large borrowing in the January 6 holiday week.

^{4/} Total and nonborrowed reserves paths adjusted downward by \$37 million due to changes affecting the reserves multiplier.

^{5/} Total and nonborrowed reserves paths adjusted downward by \$2 million due to changes affecting the reserves multiplier.

^{6/} Nonborrowed reserves multiplier adjusted downward by an additional \$187 million due to strength in total reserves.

^{7/} Total and nonborrowed reserves paths adjusted downward by \$75 million due to changes affecting the reserves multiplier.

^{8/} Total and nonborrowed reserves paths adjusted downward by \$108 million due to changes affecting the reserves multiplier.

^{9/} Total and nonborrowed reserves paths adjusted downward by \$28 million to smooth the transition to the forthcoming reserve period.

NOTE: The intermeeting period consisted of the 6 weeks from the statement week ended December 30 to the statement week ended February 3.

APPENDIX III

INTEREST RATES CONSISTENT WITH THE GREENBOOK GNP PROJECTION ^{1/}

Based on 4 percent growth of M1 in 1982 and
3-1/2 percent growth in 1983

(Quarterly averages, in percent)

	<u>Federal Funds</u>	<u>3-Month Treasury Bills</u>	<u>Aaa Corporate Bonds</u>	<u>Fixed- Rate Mortgages</u>
1982--Q1	13-1/2	12-3/8	15-3/4	17-3/8
Q2	13	11-3/4	15-1/4	16-3/4
Q3	14	12-1/2	15-3/4	17
Q4	14-1/2	13	16	17-1/4
1983--Q1	14	12-1/2	15-3/4	17
Q2	13	11-1/2	15	16-1/2
Q3	13-1/2	12	15	16-1/4
Q4	14	12-1/2	15-1/4	16-1/2

^{1/} For the current quarter, the monetary assumption was roughly in line with short-run alternative B in this Bluebook.