

MEMORANDUM TO: FOMC

FROM: John Balles
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SUBJECT: Errors in BlueBook Forecasts of M_1 and M_2

According to Blue Book staff forecasts, M-1 and M-2 growth will increase to 6.7 and 7.5 percent, respectively, in April, if the funds rate is maintained. If these forecasts were considered to be reliable, they might be important evidence to support the view that the FOMC should not reduce the funds rate even though the aggregates are now low relative to the long-run targets.

I have been impressed by the systematic errors in over-forecasting M-1 and M-2 in recent months and asked my staff to look into the history of those forecasts to see if such systematic errors have occurred before. This is important because if the staff forecasts are in systematic error for extended periods of time it can delay the FOMC taking action on changing the Funds rate.

But as shown in Table 1 and Chart 1, there are periods when staff forecasts have been in systematic error. The errors presented represent the percentage point difference between M-1 and M-2 estimates in the Blue Book for that month and actual money growth. The staff has over-forecasted M-1 and M-2 growth in all of the previous six-months (October 1978 - March 1979). These errors have averaged 5.1 percentage points for M-1 growth and 2.8 percentage points for M-2 growth.

Furthermore, there appears to be a pattern in forecast errors. In addition to consistently over-forecasting money in today's high interest rate period, M-1 and M-2 were consistently under-forecasted in August 1976 through August 1977, when interest rates were low (Chart 1). In this period, M-1 and M-2 were under-forecasted in 10 of 13 months and 11 of 13 months, respectively. On average, errors in forecasting M-1 and M-2 growth were -1.9 and -1.8 percentage points, respectively.

The staff no doubt faces formidable difficulties in the monthly forecasts of the aggregates, and the range of error is certain to be wide for any given month. As long as these errors are somewhat random and offset each other in succeeding months, no great difficulties are posed. However, in periods when the errors tend to be systematic, it is vital to make appropriate adjustments in order to avoid unintended degrees of tightness or ease. This memo suggests that systematic errors do occur at or near peaks or troughs in interest rates.

From the third quarter of 1976 to the third quarter of 1977, when the Blue Book forecasts of M-1 and M-2 for the then current month were systematically too low, both M-1 and M-2 ended up systematically above the midpoints of the long-term ranges. Thus, the systematic under-forecasts may have delayed FOMC decisions to raise the funds rate in order to avoid excessive monetary growth.

-2-

Similarly, for the past six months (October through March), when the current Blue Book forecasts of M-1 and M-2 have systematically been too high, those aggregates have ended up well below the midpoint of the long-term ranges and more recently below even the lower end of the ranges. Thus, the recent systematic over-forecasts may be leading to an unintended degree of tightness.

Table 1
Blue Book Staff Errors in
Forecasting M_1 and M_2

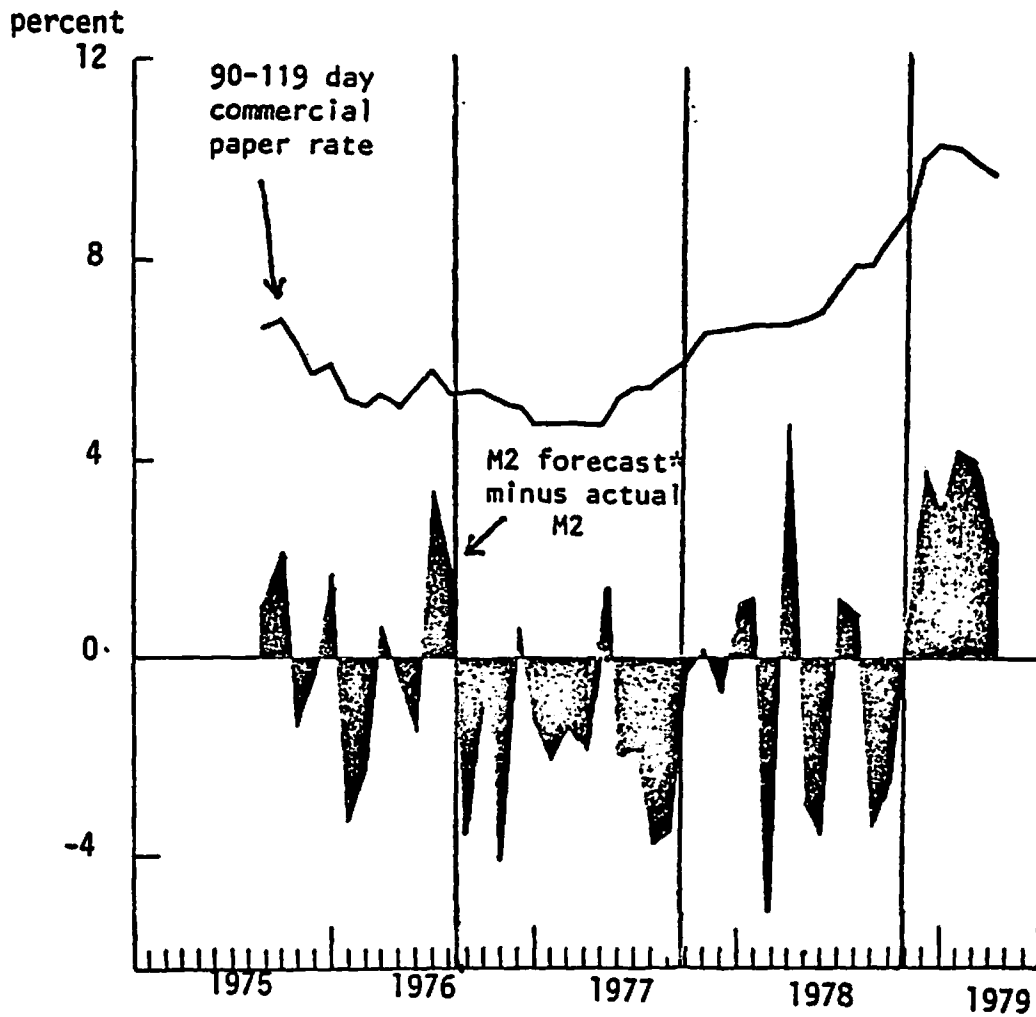
	Forecasted* M_1 Minus Actual M_1	Forecasted* M_2 Minus Actual M_2
1976		
August	-1.8	-3.6
September	0.7	-0.1
October	-4.1	-4.2
November	-0.1	0.6
December	-3.3	-1.3
1977		
January	-3.0	-2.1
February	-2.5	-1.3
March	-0.5	-1.8
April	2.3	0.9
May	0.7	-2.0
June	-4.6	-1.8
July	-5.8	-3.6
August	-2.1	-2.5
Average during August-August	-1.9	-1.8
1978		
October	2.0	0.8
November	4.3	3.9
December	0.3	2.9
1979		
January	9.2**	4.1**
February	9.6	4.0
March	5.0***	1.3***
Average during October-March	5.1	2.8

* The forecast for any given month is the one which assumes no funds rate change and is available in the Blue Book during that month.

** There was no Blue Book in January. The forecasts used for January were the latest ones prior to the telephone FOMC meeting in January.

*** Forecast minus most recent preliminary numbers.

Chart 1
Blue Book Staff Errors in
Forecasting M_2



*The forecast for any given month is the one which assumes no funds rate change and is available at the FOMC meeting during that month.