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MONETARY AGGREGATES AND MONEY MARKET CONDITIONS

Prepared for the Federal Open Market Committee

By the staff Board of Governors of the Federal Reserve System

MONETARY AGGREGATES AND MONEY MARKET CONDITIONS

Recent developments

(1) Adjusted for estimated shifts of funds from nontransactions to NOW accounts, growth in M-1B accelerated in April to about a 14 percent annual rate. $\frac{1}{2}$ To some extent, this pick-up in M-1 growth may reflect a realignment in the public's stock of money holdings toward more normal relationships with income and interest rates following the nearrecord increase in velocity earlier this year. Growth of M-1B in April was substantially more rapid than the pace implicit in the Committee's 5½ percent target for the March to June period. Even so, given the weak performance of M-1B in the winter, the level of M-1B in April was well within the Committee's longer-run range--about at the midpoint. Growth of M-2 remained relatively rapid last month, and its level continued to be above the upper end of its longer-run range. Growth in the nontransaction component of M-2 slowed markedly, however. The total of savings and small time deposits did not expand in April, and MMMF growth slowed as market rates rose substantially above average MMMF yields around midmonth. M-3 in April expanded at almost a 10 percent rate, and its level remains above the upper end of the Committee's longer-run range.

Growth in Monetary Aggregates First Four Months of 1981 Seasonally Adjusted

	<u>April</u>	Dec. to April	QIV '80 to April
M-1B (Shift adjusted)	13.9	6.5	4.5
M-2	11.8	11.7	10.2
M-3	9.8	11.7	11.2

^{1/} All monetary aggregates data reflect revised seasonal factors, as described in Appendix III.

(2) Nonborrowed reserves declined sharply in April, as banks were forced to borrow more to meet their reserve needs; they also reduced their excess reserves by a sizable amount. By the statement weeks ending April 29 and May 6 average borrowings had increased to the \$2.3 to \$2.5 billion area, and the funds rate had moved higher--by late April and early May tending to exceed the upper end of the 13 to 18 percent range for consultation adopted at the March meeting. After consultation in early May, the Committee agreed to adhere to the previously adopted money targets, recognizing that the federal funds rate would probably fluctuate above the upper limit of the funds rate range. 1/2 Most recently, the rate has been in the 18 to 19 percent area. The basic discount rate and the surcharge were raised 1 percentage point each, effective May 5.

Reserve Aggregates and Related Measures

	Seasonally Adjusted Annual Rates of Growth		
	DecMarch	<u>April</u>	
Nonborrowed Reserves	5.9	-12.1	
Total Reserves	-1. 3	-1.6	
Monetary Base	4.7	7.1	
	Weekly Average	s, Not Sea-	

sonally Adjusted (\$ Billions) Excess Federal Week ended funds rate <u>Borrowings</u> Reserves April 8 15.43 887 51 15 1,142 15.33 318 22 864 -23415.55 29 2,278 105 16.28 6 2,471 396 18.91 May 1,734 5 18.21 13

(3) In response to the strength of money demand relative to the Committee's short-run targets, and to the discount rate action, short-

^{1/} With total reserves above target, the nonborrowed reserve path was reduced twice in early May. See Appendix I for all adjustments made to the reserve paths during the intermeeting period.

term market rates generally rose sharply over the intermeeting period. While still below their December highs, Treasury bill rates have increased 2½ to 4 percentage points since the March FOMC meeting, and rates on private money market obligations have risen by even larger amounts. The bank prime rate was raised in steps from 17½ percent at the end of March to 19½ percent, but these increases lagged the rising commercial paper and Eurodollar rates, contributing to a shift of credit demands toward U.S. offices of large banks in late April and early May.

- (4) Treasury and corporate bond yields have risen about 1 percentage point since late March to record levels. Despite the increase in longer-term yields, and an increase in the number of postponements, public offerings of corporate and municipal notes and bonds have remained relatively large. The Treasury has raised about \$8½ billion in note and bond sales, including around \$2 billion in its recently completed quarterly refunding auctions. The average commitment rate on primary conventional mortgages at S&Ls increased to more than 16 percent in the intermeeting period.
- (5) Since the last FOMC meeting, the dollar has risen against all major currencies, increasing on a weighted-average basis by 9 percent to the highest level since late 1977.

U.S. authorities have not been in the market. The dollar's strength over this period primarily reflected the sharp rise in U.S. interest rates.

(6) The table on the next page shows seasonally adjusted annual rates of change, in percent, for selected monetary and financial flows over various time periods. M-1A and M-1B data in parentheses are not adjusted for the estimated impact of nationwide NOW accounts.

	1 /	1 /	1 /	Mar. '81 over	Apr. '81 over
	1978 [±] ′	1979 ±'	1980 ± ⁷ _	Dec. *80	Dec. '80
Nonborrowed reserves	6.3	0.3	7.8	5.9	1.3
Total reserves	6.2	2.6	7.1	-1.3	-1.4
Monetary base	9.2	7.8	8.8	4.7	5.3
Concepts of Money					
M-1A (Currency plus demand deposits) 2/	7.4	5.0	5.0	$4.0\frac{5}{(-20.2)}$	6.6 <u>5/</u> (-15.1)
M-1B (M-1A plus other check- able deposits)	8.1	7.6	7.3	4.0 <u>5</u> / (11.3)	6.5 <u>5</u> / (13.3)
M-2 (M-1B plus small time and savings deposits, money market mutual fund shares and overnight RPs and Eurodollars)	8.3	8.9	9.9	11.6	11.7
M-3 (M-2 plus large time deposits and term RPs)	11.2	9.7	10.0	12.2	11.7
Bank Credit					
Loan and investments of all commercial banks $3/$	13.4	12.6	8.0	11.8	6.9 p
Managed Liabilities of Banks (Monthly average change in billions)					
Large time deposits	4.2	1.2	2.5	4.4	4.0
Net borrowing from own foreign branches	0.7	1.8	-1.7	-1.5	-2.1 p
Other borrowings $4/$	1.7	1.1	1.1	1.2	.9 p

p - Preliminary estimates.

^{1/} QIV to QIV.

^{2/} Other than interbank and U.S. Government.

 $[\]overline{3}$ / Includes loans sold to affiliates and branches.

 $[\]frac{2}{4}$ / Primarily federal funds purchases and securities sold under agreements to repurchase.

^{5/} Adjusted for nationwide NOW accounts. Numbers in parentheses are observed changes unadjusted for shifts.

NOTE: All items are based on averages of daily figures except for data on total loans and investments of commercial banks, commercial paper, and thrift institutions—which are derived from either end-of-month or Wednesday statement date figures. Growth rates for reserve measures in this and subsequent tables are adjusted to remove the effect of discontinuities from breaks in the series when reserve requirements are changed.

Prospective developments

(7) Shown below for Committee consideration are three alternative policy strategies for the current quarter. The upper panel of the table shows growth rates for the two-month April to June period, and the lower panel gives consistent growth rates for the March to June interval covered by the Committee's short-run target adopted at the last meeting. The M-1B growth targets abstract from the estimated impact of nationwide NOW accounts, as do the Committee's longer-run targets. 1/2 (More detailed and longer-run data for the aggregates, on both an adjusted and unadjusted basis, including those for M-1A, are shown in the tables on pp. 6 and 7.)
The last line of the table indicates federal funds rate ranges thought by the staff to be consistent with the three alternatives.

	Alt. A	<u>A1t. B</u>	Alt. C
Growth from April to June M-1B M-2	4¾	3	1호
	7¾	6½	5호
Growth from March to June M-1B M-2	7 킬	6년	5월
	9	8년	7월
Intermeeting federal funds rate range	15 to 20	16 to 21	17 to 22

^{1/} The estimated portion of NOW growth coming from demand deposits is 72.5 percent in March and April. This ratio for April is slightly higher than earlier expected. With no evidence of a drop in the ratio for the past three months, as noted in appendix IV, the staff has assumed that the ratio will remain between 70 and 75 percent over the balance of the year. In addition to more of the increase in NOW accounts coming out of demand deposits, the total increase in NOW accounts thus far this year is proceeding at a faster pace than had been assumed when the Committee set its long-run target for 1981 in February. At that time, the observed increase in M-1B consistent with the shift-adjusted M-1B target for the year of 3½ to 6 percent was expected to be 6 to 8½ percent (assuming an increase above trend in NOW related accounts of about \$40 billion, close to the increase that has already occurred). We would now estimate that the longer-run range for observed M-1B may have to be increased by about 1 percentage point to 7 to 9½ percent for 1981 (with an increase in NOW and related accounts for the year of about \$55 billion). The consistent observed M-1A range will probably be reduced by about 2½ percentage points to a range of -7 to -4½ percent for 1981.

Chart 1

Actual and Targeted M-1B

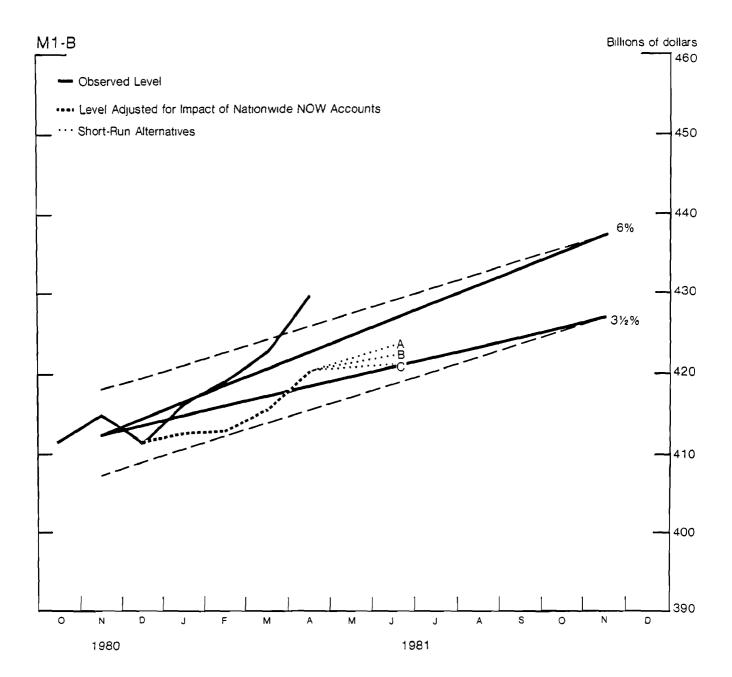
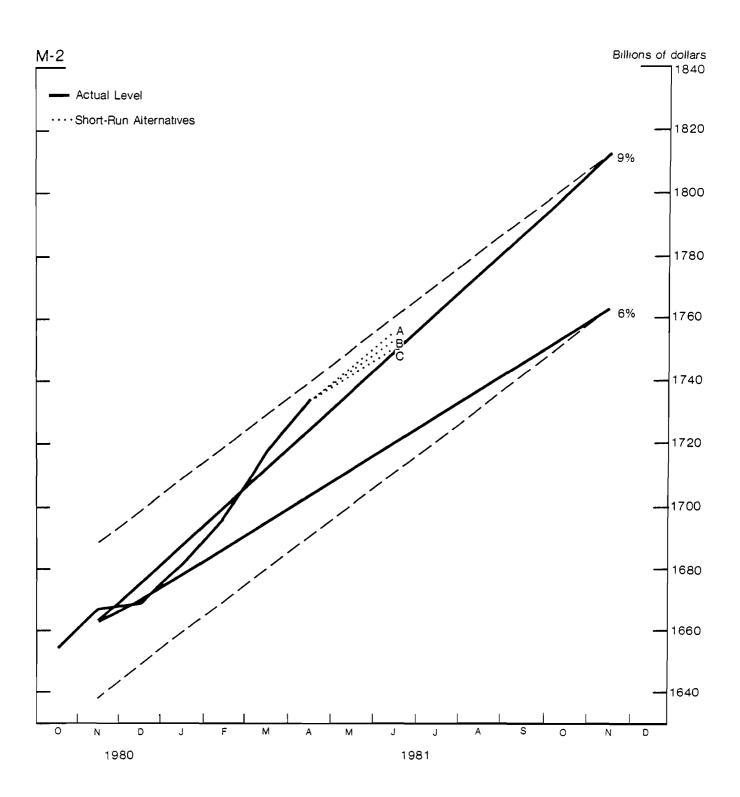
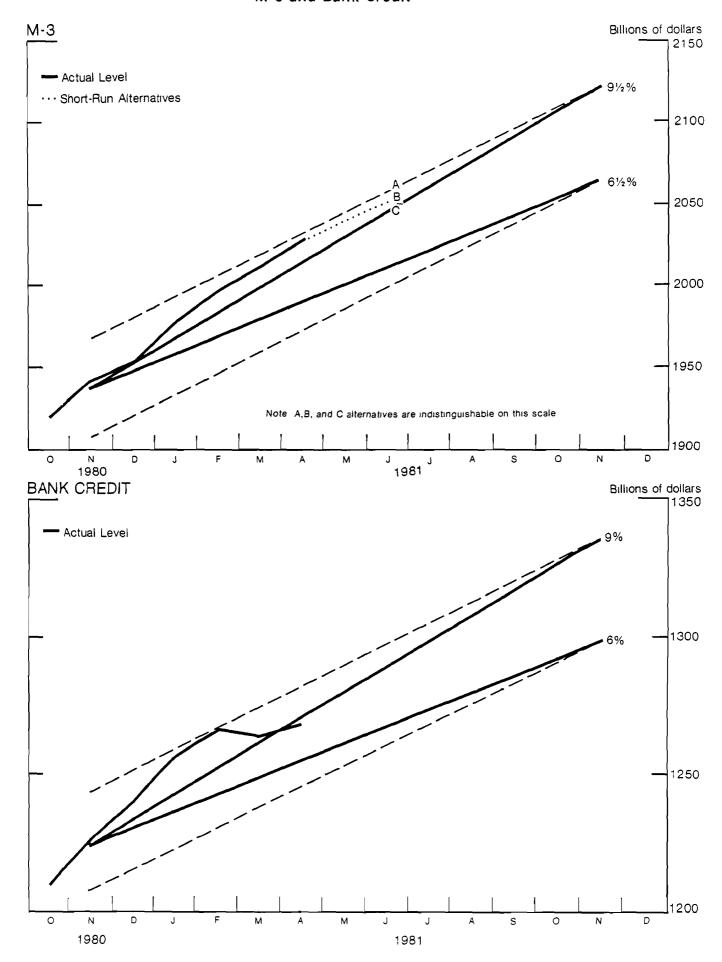


Chart 2

Actual and Targeted M-2



M-3 and Bank Credit



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Alternative Levels and Growth Rates for Key Monetary Aggregates

	M-1A			M-1B			
	Alt. A	Alt. B	Alt. C	Alt. A	Alt. B	Alt. C	
1981March	388.2	388.2	388.2	415.4	415.4	415.4	
April	392.8	392.8	392.8	420.2	420.2	420.2	
May	394.9	394.8	394.6	422.5	422.4	422.2	
June	395.6	394.4	393.2	423.5	422.3	421.1	
Growth Rates Monthly							
1981Apri1	14.2	14.2	14.2	13.9	13.9	13.9	
	(0.3)	(0.3)	(0.3)	(18.7)	(18.7)	(18.7)	
May	6.4	6.1	5.5	6.6	6.3	5.7	
	(3.9)	(3.6)	(3.0)	(6.4)	(5. 9)	(4 . 7)	
June	2.1	-1.2	-4. 3	2.8	-0.3	-3.1	
	(1.3)	(-2.3)	(-5.6)	(4.7)	(1.7)	(-1,1)	
April '81 - June '81	4.3	2.4	0.6	4.7	3.0	1.3	
	(2.6)	(0.7)	(-1.3)	(5.2)	(3.9)	(2.2)	
March '81 - June '81	7.6	6.4	5.2	7.8	6.6	5.5	
	(1.9)	(0.4)	(-0.8)	(9.7)	(8.9)	(7.8)	
Quarterly Average							
1981QI	0.3	0.3	0.3	1.0	1.0	1.0	
QII	8.1	7.7	7.2	8.2	7.8	7.4	
•							

NOTE: Growth rates shown in parentheses are for the observed levels of the aggregates.

Alternative Levels and Growth Rates for Key Monetary Aggregates (cont'd)

	M-2			<u></u>	M-3	
	<u>Alt. A</u>	<u>Alt. B</u>	<u>A1t. C</u>	<u>Alt. A</u>	<u>Alt.</u> B	<u>Alt. C</u>
1981March April May June	1716.9 1733.8 1743.4 1756.1	1716.9 1733.8 1743.3 1752.6	1716.9 1733.8 1743.1 1749.1	2011.8 2028.3 2042.5 2058.4	2011.8 2028.3 2042.4 2056.7	2011.8 2028.3 2042.2 2054.9
Growth Rates Monthly						
1981April May June	11.8 6.6 8.7	11.8 6.6 6.4	11.8 6.4 4.1	9.8 8.4 9.3	9.8 8.3 8.4	9.8 8.2 7.5
April '81 - June '81	7.7	6.5	5.3	8.9	8.4	7.9
March '81 - June '81	9.1	8.3	7. 5	9.3	8.9	8.6
Quarterly Average						
1981QI QII	8.4 10.9	8.4 10.6	8.4 10.4	12.0 9.5	12.0 9.4	12.0 9.3

- (8) Alternative C is based on continuation of the $5\frac{1}{2}$ percent annual rate of growth for M-1B over the March to June period targeted by the Committee at its last meeting—a growth rate which, as shown in chart 1, would result in a June level about at the lower end of the Committee's longer—run range. To achieve this short—run target would require growth of narrow money at a $1\frac{1}{4}$ percent annual rate on average in May and June, with June probably needing to show a contraction in the outstanding level of money.
- (9) Given the sharp rise of M-1B in April the Committee may wish to consider alternatives that in effect avoid squeezing out all of the excess April growth over the balance of the quarter. Alternative A targets M-1B growth in May and June at the 4½ percent midpoint of its longer-run range, a rate of growth that would keep the level of M-1B just below its midpoint by June. Alternative B calls for a growth rate of 3 percent over the two months, which would bring the level of M-1B well into the lower half of its range by June.
- than expected at the time of the Committee's previous meeting, when a March to June M-2 target of 10½ percent was considered acceptable.

 We would now expect growth of M-2 at about a 7 to 8 percent annual rate over the March-June period for alternative C. Somewhat higher growth rates would be expected under alternatives A and B. The slower March-June growth projected for M-2 essentially reflects the unexpectedly sharp deceleration recently in growth of its nontransactions component, including both small time and savings deposits and money market funds.

 Money market fund growth is expected to remain weak over the near-term, and particularly so if market interest rates rise and thereby temporarily

widen their spread over MMMF yields. As shown in chart 2, the level of M-2 in June would be at the upper bound of its longer-run range for the year under alternative C, while it would remain somewhat above the range under the other two alternatives.

- (11) The projected slowing of real and nominal GNP this quarter, as well as the recent increases in interest rates, should tend to retard narrow money growth from the extremely rapid April pace. However, money demand may remain fairly strong, and interest rates under upward pressure, unless the economy is considerably weaker than the staff now anticipates or unless the current level of interest rates induces another shift to more intensive cash management. Even under alternative A--which involves growth in total reserves from April to June at an 8 percent annual rate-the federal funds rate seems likely to remain in a 17 to 20 percent range over the balance of the quarter. 1/ Assuming the present discount rate structure, adjustment borrowing would probably be around $\$1\frac{1}{2}$ to \$2 billion. Continued high long-term rates may tend to induce firms to focus their growing credit demands on banks and other sources of short-term credit over the near term--although the limited flexibility of many borrowers and a desire to stem the deterioration of balance sheets likely will maintain bond issuance at a high level.
- (12) Alternatives B and C would call for a growth in total reserves over the April to June period at annual rates of 6 and 4 percent, respectively. A federal funds rate around 20 percent or a bit higher is

^{1/} Projections of federal funds rates for the year 1981 under all three alternatives are shown in appendix II.

likely to emerge over the next few weeks under alternative B, while the funds rate under C could rise further. Given current discount rates, borrowing at the discount window might rise to around the \$2½ billion area under alternative B and to around \$3 billion under alternative C. Of course, any increase in the present discount rate level and structure would work to reduce the demand for borrowing. Other short-term rates would probably rise substantially further under these alternatives, with upward pressures particularly intense under alternative C. Long-term interest rates would also rise further over the weeks ahead, probably inducing a large volume of postponements and cancellations of bond financings.

(14) The outlook for interest rates under all three alternatives suggests continued weakness in mortgage demands and also intense earnings pressures on thrift institutions, with alternative C implying a higher probability of a number of failures this summer. Moreover, with their deposit flows weak--and less than they may have anticipated--some institutions may find it necessary to draw down their stock of liquid assets. Although the new mortgage instruments recently approved by the FHLBB are likely to be translated into an increased willingness of thrifts to make mortgage loans, their impact on interest income will be modest for some time.

Directive language

(15) Given below is a suggested operational paragraph for the directive consistent with the form of the directives adopted at recent meetings. The specifications adopted at the meeting on March 31 are shown in strike-through form.

In the short run the Committee seeks behavior of reserve aggregates consistent with A SUBSTANTIAL DECELERATION OF growth in M-1B from March APRIL to June at TO an annual rate of 5½ ___ percent or-semewhat-less, after allowance for the impact of flows into NOW accounts, and WITH growth in M-2 at an annual rate of about 10½ ___ percent. It is recognized that shifts into NOW accounts will continue to distort measured growth in M-1B to an unpredictable extent, and operational reserve paths will be developed in the light of evaluation of those distortions. If it appears during the period before the next meeting that fluctuations in the federal funds rate, taken over a period of time, within a range of 13 ___ to 18 __ percent are likely to be inconsistent with the monetary and related reserve paths, the Manager for Domestic Operations is promptly to notify the Chairman, who will then decide whether the situation calls for supplementary instructions from the Committee.

Appendix I

RESERVE TARGETS AND RELATED MEASURES Intermeeting Period

(\$ millions, not seasonally adjusted)

Targets for

	Target	s ior					
	4-week Average Projection of 4-week Average				rage		
	April 8 to	April 29		April 8 to April 20			
		Non-					
	Tota1	borrowed	Tota1	Required	Excess	Adjustment	
	Reserves	Reserves	Reserves	Reserves	Reserves	Borrowing	
	(1)	(2)	(3)	(4)	(5)	(3)-(2)	
As of	(-)	(-)		()	(-)	(-) ()	
A5 01							
April 1							
(FOMC Meeting)	40,006	38,856	40,006	39,706	300	1,150	
(Forto meeting)	40,000	50,050	40,000	55,700	300	2,230	
A:1 2	40,006	38,856	40,006	39,706	300	1,150	
April 3	40,000	30,030	40,000	39,700	300	1,150	
A 10	$40,132^{\frac{1}{2}}$	$38,982^{\frac{1}{2}}$	40,165	39,926	239	1,183	
April 10	40,132	30,902	40,103	39,920	239	1,105	
	40 100	20 002	40,229	39,997	232	1,247	
April 17	40,132	38,982	40,229	39,997	434	1,447	
		00 000	/0.100	40.000	0.4	1 1/0	
April 24	40,132	38,982	40,122	40,038	84	1,140	
Actual 4-week Avg.	40,110	38,817	40,110	40,050	60	1,293	
	Targe	ts for					
	3-week	Average	Pro	jection of	3-week Ave	rage	
	May 6 t	o May 20		May 6 t	o May 20		
							
As of							
	0.1	0.40	1				
May 1	$40.407^{\frac{2}{2}}$	$39,007^{\frac{2/3}{3}}$	[/] 40,960	40,660	300	1,953	
y -				, , , , , , ,		,	
May 8	$40.362^{\frac{4}{6}}$	$38,726\frac{4/5}{}$	$\frac{76}{40.735}$	40,435	300	2,009	
- M. J. O	-		1	, ,		-,	
May 15	40.294 [/]	38,660 ⁷ /	40,683	40,450	233	2,023	
THY IJ	-			•			
Actual 3-week Avg.	40,683 ^e	38,660 ^e	40,683 ^e	40,450	233 ^e	2,023 ^e	
Actual 3-week Avg.	-,0,000	,		, +		, -	
			I				

^{1/} Total and nonborrowed reserves paths adjusted upward by \$126 million to reflect changing sources of NOW accounts and deposit strength in week of April 8, 1981, that increases the March base level of M-1B and required reserves for the week of April 15.

^{2/} Total and nonborrowed reserves paths adjusted downward by \$345 million on May 1, 1981 due to multiplier changes.

Nonborrowed reserves path adjusted downward by another \$250 million on May 1, 1981 because total reserves were running above target.

Total and nonborrowed reserves paths adjusted downward by \$45 million on May 8, 1981 due to multiplier changes.

^{5/} Nonborrowed reserves path adjusted downward by another \$120 million on May 8, 1981 because total reserves were continuing to run above target.

Nonborrowed reserves path adjusted downward by another \$115 million to prevent shortfall in nonborrowed reserves path in week of May 6 from distorting the subsequent two weekly paths in the same intermeeting period.

Total and nonborrowed reserves path adjusted downward by \$67 million on May 15, 1981 due to multiplier changes.

e--estimated

Appendix II

Federal Fund Rates Under Alternative Short-Run Monetary Targets, Assuming Attainment of Midpoint of 1981 M-1B Range in Fourth Quarter

	Bluebook Alternative				
	_ <u>A*</u>	<u>B</u>	<u></u>		
Q2	17考	18表	19월		
Q3	19	19	19		
Q4	19	18½	18		

^{*}Alternative A path is that embodied in the Greenbook GNP forecast.

APPENDIX III

NEW SEASONAL ADJUSTMENT PROCEDURE

Seasonal adjustment factors for the monetary aggregates recently were updated on the basis of data available through 1980. In the process, other checkable deposits (OCD) were put on a seasonally adjusted basis for the first time. In calculating the new seasonal factors, observations for several components over the spring and summer of 1980 were preadjusted by a time series modeling technique to eliminate the effect of the unusual—and likely nonrecurrent—patterns of deposit flows that accompanied the imposition and subsequent removal of the Special Credit Restraint Program. 2

Revised seasonally adjusted M1-B in 1981 is constructed by adding the following seasonally adjusted components: currency; the sum of demand deposits and of OCD (apart from trend growth) estimated to have been shifted or diverted from demand deposits; OCD (apart from trend growth) estimated to have come from sources other than demand deposits; and a relatively small trend growth in OCD, amounting to an increase of

^{1.} The new seasonal factors were published as appendix tables to the H.6 Federal Reserve statistical release on May 1, 1981.

^{2.} A preadjustment technique also was applied to the demand deposit component of M1-A to remove the distortions in early 1979 caused by the introduction of ATS nationwide and NOW accounts in New York State.

^{3.} Based on information currently available from a number of sources—such as samples of depository institutions and households and econometric cross-section analysis—the share of not seasonally adjusted OCD growth apart from trend since the beginning of the year attributable to demand deposits is estimated to be: about 75 to 80 percent in January, and 70 to 75 percent in February, March, and April.

\$200 million per month in the first several months of the year. Trend growth represents the expansion in OCD balances associated with accounts in existence prior to the nationwide extension of NOW accounts on December 31, 1980 and is reflected in the FOMC's ½ percent differential in the shift adjusted 1981 growth ranges for M1-A and M1-B. Shift-adjusted M1-B is derived by subtracting from seasonally adjusted M1-B an estimate of seasonally adjusted inflows into OCD (apart from trend growth) from non-demand deposit sources. Seasonally adjusted OCD equals seasonally adjusted M1-B less seasonally adjusted M1-A.

Table 1 compares seasonally adjusted M1-B on the previous and revised basis. Differences mainly reflect the seasonal adjustment of OCD for the first time, rather than updated seasonal adjustment factors for other components. The December and April levels were both revised downward a bit and average growth over this period was only moderately affected. However, the monthly growth pattern has been affected more significantly. Growth in January and February of this year has been raised while growth in April, and to a lesser extent March, has been lowered. Growth in shift-adjusted M1-B in the first quarter—shown on the right-hand side of the table—was slightly in excess of 1 percent at an annual rate under the new procedure, about 1½ percentage points more than under the previous one.

^{1.} Such amounts are derived by cumulating monthly inflows from non-demand deposit sources (not seasonally adjusted). These amounts in turn are estimated by multiplying the monthly increase in OCD (not seasonally adjusted) in excess of trend in end-of-year OCD balances (not seasonally adjusted) by the mid-points of the monthly ranges for the share estimated to have come from non-demand deposits. Cumulative amounts are then seasonally adjusted by applying the seasonal factor for commercial bank savings deposits.

Table 2 presents revisions to M-2. Changes in M-2 reflect revisions to M1-B as well as changes in seasonal adjustment factors for non-transaction deposits at banks and thrifts. Growth in the first four months of 1981 is smoother under the revised procedure, as relatively slow growth in January and February has been boosted while growth in March and April has been lowered.

Table 1

Effects of 1981 Revisions to Seasonal Adjustment Procedure and Factors on MI-B Levels and Growth Rates

		ACTUAL			SHIFT ADJUSTED	
	Revised	Previous	Difference	Revised	Previous	Difference
	Procedure	Procedure	(1) - (2)	Procedure	Procedure	(4) - (5)
	(1)	(2)	(3)	(4)	(5)	(6)
Levels (billions of dollars)						
1980December	\$411.3	\$411.9	-\$0.6	\$411.3	\$411.9	-\$0.6
1981January	416.0	416.0	0.0	412.4	412.4	+0.0
February	419.0	417.3	+1.7	412.9	411.6	+1.3
March	422.9	421.6	+1.3	415.4	414.4	+1.0
Aprı1	429.5	429.8	-0.3	420.2	420.5	-0.3
Percent changes (at annual rates)						
Annual						
1979 4th quarter1980						
4th quarter	7.3	7.3	0.0			
Quarterly average						
19801st quarter	6.8	5.8	+1.0			
2nd quarter	-2.9	-2.6	-0.3			
3rd quarter	13.9	14.6	-0.7			
4th quarter	10.9	10.8	+0.1			
1981lst quarter	6.6	5.1	+1.5	1.1	-0.2	+1.3
Monthly Average						
1980January	6.8	4.3	+2.5			
February	12.7	9.6	+3.1			
March	-1.2	0.0	-1,2			
April April	-16.8	-15.0	-1.8			
May	1.2	-0.6	+1.8			
June	12.7	16.2	- 3.5			
July	13.5	12.9	+0.6			
August	21.5	21.8	-0.3			
September	13.4	15.8	-2.4			
October	13.6	11.8	+1.8			
November	9.0	8.7	+0.3			
December	-9.8	-9.0	-0.8			
1981January	13.7	11.9	+1.8	3.2	1.5	+1.7
February	8.7	3.8	+4.9	1.5	-2.3	+3.8
March	11.2	12.4	-1.2	7.3	8.2	-0.9
April	18.7	23.3	-4.6	13.9	17.7	-3.8
December 1980 - April 1981	13.3	13.0	+0.3	6.5	6,3	+0,2

^{1.} Adjusted for shifts in 1981 into other checkable deposits from savings and other non-demand deposit sources.

Table 2

Effects of 1981 Seasonal Adjustment Procedure and Factors on M-2 Levels and Growth Rates

	Revised	Previous procedure	Difference
	procedure	•	(1) - (2)
	(1)	(2)	(3)
evels			
(billions of dollars)			
1980December	\$1,668.7	\$1,673.4	-\$4.7
1981January	1,681.7	1,681.3	+0.4
February	1,695.4	1,692.1	+3.3
March	1,716.9	1,714.6	+2.3
April	1,733.8	1,734.2	-0.4
Percent changes			
(at arnual rates)			
Annual			
1979 4th quarter1980			
4th quarter	9.9	9.8	+0.1
Quarterly averages			
19801st quarter	8.9	7.3	+1.6
2nd quarter	5.4	5.6	-0.2
3rd quarter	15.7	16.0	-0.3
4th quarter	8.1	9.1	-1.0
19811st quarter	8.4	7 .0	+1.4
Monthly average			
1980January	10.9	6.8	+4.1
February	12.3	10.1	+2.2
March	4.5	5.4	-0.9
April	-4.2	-3.2	-1.0
May	11.6	10.3	+1.3
June	16.4	18.3	-1.9
July	19.3	18.8	+0.5
August	14.6	14.9	-0.3
September	8.5	8.7	-0.2
October	6.8	8.8	-2.0
November	9.8	10.4	-0.6
December	1.2	1.9	-0.7
1981January	9.3	5.7	+3.6
February	9.8	7.7	+2.1
March	15.2	16.0	-0.8
April	11.8	13.7	-1.9
Documbon 1000 - 41 1001		•	_
December 1980 - April 1981	11.7	10.9	8 .0+

APPENDIX IV

ESTIMATES OF THE SOURCES OF GROWTH IN OTHER CHECKABLE DEPOSITS

To put recent movements in the transaction component of the narrow money stock in an economically meaningful perspective requires that observed data for M1-A and M1-B be adjusted for the distorting effects of the public's response to the authorization of nationwide NOW accounts. The magnitudes of the adjustments each month are computed on the basis of estimates of the sources of funds deposited in other checkable deposits (OCD). Available evidence suggests the following fractions of net inflows to OCD were shifted or diverted from demand deposits: 75 to 80 percent in January and 70 to 75 percent in February, March, and April. Application of the midpoints of the estimated ranges to observed deposit flows for each month yields an adjusted measure of M-1B in the first quarter of 1981 that rose 1 percent at an annual rate from the observed level of the preceding quarter (Table 1). 1

The estimated proportion of growth in OCD coming from demand deposits may be viewed as a weighted average of that fraction applicable to inflows at commercial banks and that applicable at thrifts, with the weights being the institutions' respective shares of growth in OCD. Table 2 displays key results of sample surveys conducted by the Federal Reserve Banks and the Federal Home Loan Bank Board and results of cross-

^{1.} To derive seasonally adjusted M1-B that abstracts from shifts in 1981 into OCD from non-demand deposit sources, an estimate of seasonally adjusted inflows to OCD from these sources must be subtracted from M1-B. For a description of this procedure, see Appendix III.

section regression analyses of deposit flows. The figures in the final column provide the primary basis for the range of the estimated proportions of inflows to OCD that originated in demand deposits.

Both regression analysis of deposit flows at individual commercial banks and special surveys of commercial banks conducted by the Reserve Banks suggest a slight drop in the proportion of OCD growth at commercial banks coming from demand deposits after January. On the other hand, the FHLBB surveys indicate that the proportion of growth in OCD at thrifts coming from outside such institutions rose somewhat—from 59 percent in January to 66 percent in March. Assuming the composition of these funds from outside thrifts is the same as the overall composition of inflows to OCD at commercial banks, the estimated fraction of OCD at thrifts coming from demand deposits appeared to stay in the vicinity of 50 percent. Consideration was also given to results of three surveys of households conducted by the Survey Research Center of the University of Michigan in February, March, and April. Taking combined results of the three surveys, households estimated on average that about 71 percent of

^{1.} The sample surveys elicited estimates by commercial banks and savings and loan associations of the sources of inflows to their new NOW accounts. Respondents consisted of 9 banks in each Federal Reserve district and 8 S&Ls in each Federal Home Loan Bank district. In the regression analyses, estimates of the proportion of OCD growth coming from demand deposits were obtained by regressing (across commercial banks) changes in demand deposits on changes in OCD, using data from about 9,000 banks that report weekly for reserve requirement purposes. The estimated slope coefficient represents the share of OCD growth accounted for by intrabank shifts from demand deposits. A similar technique was used to estimate intrabank shifts from savings deposits. The regression results were combined with information from the sample surveys to obtain estimates of the proportion from interbank and other sources.

the funds used to open new interest-bearing transaction accounts in 1981 originated in demand deposits.

^{1.} Although about 700 households were interviewed in each survey, the number of new interest-bearing transaction accounts opened since year-end by the respondents in the three surveys combined was only 170. In light of the small sample size, less weight was given to the household surveys than to other results. Current plans are to conduct an expanded one-time survey in June that will include about 5,000 households, likely providing a sample of about 500 NOW accounts opened this year.

Table 1

ML-A AND M1-B

ADJUSTED FOR THE IMPACT OF NATIONWIDE NOW ACCOUNTS

	· · · · · · · · · · · · · · · · · · ·				·	
					Adjusted usi	
				sumed	of range for	or assumed
				new NOW balances	fraction of new	
	Unadjus		shifted from	demand deposits	shifted from de	mand deposits
		Annual			Ī	Annual
		growth				growth
	Level	<u>rate</u>			Level	<u>rate</u>
	(\$billions)	(percent)	Range	(Midpoint)	(\$billions)	(perœnt)
Ml_A						
1981—January	373.3	-34.7	.750800	(.775)	385.6	3.8 ¹
February	366.6	-21.5	.700750	(.725)	385.9	0.9
March	365.0	- 5.2	.700750	(.725)	388.2	7.2
April	365.1	0.3	.700750	(.725)	392.8	14.2
May (projected)	366.3	3.9	• 100 • 130	.725 ²	394.9	6.4
Q1	368.3	-18.6		*	386.6	0.3
M1_B						
1981—January	416.0	13,7	.750800	(.775)	412.4	3.2 ¹
February	419.0	8.7	.700750	(.725)	412.9	1.5
March	422.9	11.2	.700750	(.725)	415.4	7.3
April	429.5	18.7	.700750	(.725)	420.2	13.9
May (projected)	431.8	6.4	• 100-• 130	.725 ²	422.5	6.6
Q1	419.3	6.6		*	413.6	
~=		J.3			413.0	1.1

^{*} Not estimated separately.

^{1/} The adjusted growth rates in January reflect changes from the observed December 1980 levels (unadjusted for the impact of shifting to ATS accounts last year) to January levels adjusted to eliminate the estimated effects of shifts to new NOW accounts. Such adjustment facilitates consistent comparison with target ranges for growth in 1981, which are expressed in terms of changes from observed (unadjusted) levels outstanding in the fourth quarter of 1980 to adjusted levels in the fourth quarter of 1981.

2/ Point estimate.

Table 2

Various Methods for Estimating the Fraction of Growth in OCD Coming from Demand Deposits (Percent)

	Fraction	Fraction		
	Applied to	Applied to	Commercial Bank	
	Inflows to	Inflows	Share of	Weighted
	OCDs at	to OCDs ,	Monthly Inflows	Average
	Commercial Banks	at Thrifts 1	to OCDs	Fraction
	Reserve Bank	and FHLBB Su	rvevs ²	
(assuming all	funds from other con	mmercial bank	s are from demand	deposits ³)
1981January	82.5	48.7	84.6	77.3
February	79.0	52.1	84.8	74.9
March	79.0	52.1	82.8	74.4
April	79.8	52.5	82.7	75.1
	Reserve Rank	and FHLBB Su	TVEVS	
(assuming only	a portion of funds			re from
(d deposits ⁴)		
1981January	82.1	48.4	84.6	76.9
February	77.6	51.2	84.8	73.6
March	77.6	51.2	82.8	73.0
Apri1	78.5	51.8	82.7	73.9
-	Regression Result	r for Commore	dol Bonka	
	(coupled with s			
	•	-		
1981January	85.2	50.3	84.6	79.8
February		47.6	84.8	68.4
March	78.3	51.7	82.8	73.7
April	77.0	50.8	82.7	72.5

- 1. S&Ls provided estimates for the proportion of growth in OCDs that came from outside their institutions, but they did not estimate the fraction coming specifically from demand deposits. Each method below assumes the proportion of these funds from outside thrifts that came from demand deposits to be equal to the overall fraction estimated for commercial banks. For example, in January S&Ls estimated that 59 percent of their new OCDs came from outside their institutions. Thus, the thrift fraction used in the top line of the table—48.7—is the product of 59 percent and the 82.5 percent fraction at commercial banks.
- 2. Commercial bank surveys were conducted for the January period, for the February to early March period, and for the April period; S&L surveys were conducted for January and for March.
- 3. For inflows to OCDs at commercial banks estimated to have come from other commercial banks, this method assumes all were shifted or diverted from demand deposits.
- 4. For inflows to OCDs at commercial banks estimated to have come from other commercial banks, this method assumes the same proportion was shifted or diverted from bank deposits as was the case for shifts within the banks.

Table 1
SELECTED INTEREST RATES
(Percent)

		Short-Term						Long-Term								
Period	Federal funds	Treasury Bills			CDs		Ī			Constant		p. Aaa	Muni-		ome Mort	
		İ			Secondary	Comm.	Bank	Maturity		Yields	Utility					y Market
	runas	Market		Auction	Market	Paper	Prime					Recently	Bond	Conv.	FNMA	GNMA
		3-mo.	<u>l-yr.</u>	6-mo.	3-mo,	3-mo.	Rate	3-yr.	10-yr.	30-yr.	Issue	Offered	Buyer		Auc.	Sec.
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1980High	19.83	16.73	14.39	15.70	20.58	19.74	21.50	14.29	13,36	12.91	14.51	15.03	10.56	16.35	15.93	14 17
Low	8.68	6.49	7.18	6.66	8.17	7.97	11.00	8.61	9.51	9.54	10.53	10.79	7.11	12.18	12.28	10.73
1981Nigh	20.06	15.73	14.03	15.53	18,70	18.04	20.64	15,10	14.38	13.86	16.12	16.26	10.94	15.82	16.61	15.46
Low	13.48	12.64	11.83	12.08	13.47	12.87	17.00	12.55	12,27	11.81	14.05	13.98	9.49	14.80	14.84	13.18
.980Apr.	17.61	13.20	11.97	13.62	16.14	15.78	19.77	12.02	11.47	11,40	12,90	12.91	8.63	16,33	14.61	12.64
May	10.98	8.58	8,66	9.15	9.79	9,49	16,57	9.44	10.18	10,36	11.53	11.64	7.59	14.26	12.88	11.30
June	9.47	7.07	7.54	7.22	8.49	8.27	12.63	8.92	9.78	9.81	10.96	11,00	7.63	12.71	12.35	11.07
July	9.03	8.06	8.00	8.10	8.65	8.41	11.48	9,27	10.25	10.24	11,60	11.41	8.12	12.19	12.66	11.53
Aug.	9.61	9.13	9.39	9.44	9.91	9.57	11.12	10.63	11.10	11.00	12.32	12.31	8,67	12.56	13.92	12.34
Sept.	10.87	10.27	10.48	10.55	11.29	10.97	12.23	11.57	11.51	11.34	12.74	12.72	8.94	13.20	14.77	12.84
Oct.	12.81	11.62	11.30	11.57	12.94	12.52	13.79	12.01	11.75	11.59	13.18	13,13	9.11	13.79	14.95	12,91
Nov.	15.85	13.73	12.66	13.61	15.68	15.18	16.06	13.31	12.68	12.37	13.85	13.91	9.56	14.21	15.53	13.55
Dec.	18.90	15.49	13.23	14.77	18.65	18.07	20,35	13.65	12.84	12.40	14.51	14.38	10.11	14.79	15.21	13.62
1981Jan.	19.08	15.02	12.62	13,88	17.19	16.58	20.16	13,01	12.57	12.14	14.12	14.17	9.66	14.90	14.87	13.55
Feb.	15.93	14.79	12.99	14.13	16.14	15.49	19.43	13.65	13,19	12.80	14.90	14.58	10.10	15.13	15.24	14.13
Mar.	14.70	13.36	12.28	12.98	14.43	13.94	18.05	13.51	13,12	12.69	14.71	14.41	10.16	15.40	15.74	14.18
Apr.	15.72	13.69	12.79	13.43	15.08	14.56	17.15	14.09	13.68	13.20	15.68	15,48	10.62	15.58	16.54	14.59
1981Mar, 4	15,73	14.35	13.06	14.13	15.59	15.09	19.00	14.01	13.48	13.03	14.55	14.53	10,40	15.40	15.88	14,46
11	15.53	14.17	12.76	14.43	15.40	14.89	18,71	13,70	13,18	12.76	14,42	14.18	10.34	15.40		14.17
18	14.13	13.06	11.96	12.10	14.10	13.64	17.86	13.24	12.80	12.37		13.98	9.81	15.40	15.39	13.96
25	13.48	12.64	11.83	12.27	13.47	12.87	17.50	13.30	15.02	12.59	15.07	14.71	10.09	15,40		14.23
Apr. 1	14,93	12.70	11.93	12.08	13.75	13.38	17.50	13,45	13.24	12.79	14.87	14.89	10,21	15.40	15.74	14.18
8	15.43	13.37	12.31	13.78	14.35	13.93	17.00	13.75	13.48	13.03		15.19	10.45	15.50		14.69
15	•	13.58	12.67	13.65	15.24	14.66	17.00	13.97	13.61	13.16		15.36	10.70	15.65	16.47	14.64
22		13.70	12.97	13,62	15.51	14.99	17.00	14.23	13.75	13.24	15.85	15.78	10.80	15.77		14.61r
29	16.28	14.16	13.29	14.04	15.48	14.92	17.43	14.49	13.92	13.38	16.12	16.26	10.94	15.82	16.61	14.81r
May 6		15.73	14.03	15.10	17.44	16.84	18.43	15.10	14.38	13.86	15.94	15.62	10.90	16.12		15.46r
13 20		16.72	14.65	15.53	18.70	18.04	19.21	15.36	14.37	13.88	15.83p	15.73p	10.83	n.a.	17.21	15.37
27																
ailyMay 8	18.14	16.48	14.50		18,73	18.04	19.00	15.21	14.23	13.76						
13	18.26	17.01	14.82		18.67	18.19	19.50	15.52	14.49	13.95						
14	18.88p	16.67	14.65	_	19.01	18,29	19.50	15.35p	14.33p	13.63p						

Table 2 NET CHANGES IN SYSTEM HOLDINGS OF SECURITIES $\frac{1}{2}$ (Millions of dollars, not seasonally adjusted)

	775	Treasury Coupons								Net Change Outright Holdings	Ne t RPs		
	Treasury Bills Net Change <u>2</u> /	Net Purchases 3/											
Period		l-year	1 - 5	5 - 10	Over 10	Total	1-year	1 - 5	5 - 10	Over 10	Tota1	Total 5/	<u>6</u> /
1976	863	472	3,025	1,048	642	5,187	105	469	203	114	891	6,227	3,607
1977	4,361	517	2,833	758	553	4,660		792	428	213	1,433	10,035	-2,892
1.978	870	1,184	4,188	1,526	1,063	7,962	-47	45	104	24	127	8,724	-1,774
1979	6,243	603	3,456	523	454	5,035	131	317	5		454	10,290	-2,597
198 0	-3,052	912	2,138	703	811	4,564	217	398	29	24	668	2,035	2,462
980Qtr. I	-2,945	292 110 <u>7</u> /	355,,	107	81	836			~			-2,114	362
II	3,249	$110^{\frac{1}{L}'}$	355 <u>7</u> /	359	410	2,395	217	398	29	24	668	6,307	2,373
III	-3,298	137	541	236	320	1,234		~-				-2,157	-1,383
IV	-58	100				100						-1	1,10
1981Qtr. I	-2,514	-23				-23						-2,555	-1,694
.980Nov.	-1,100											-1,100	332
Dec.	1,282	100				100						1,360	-492
.981Jan.	-3,764											-3,764	-1,696
Гeb.	-357	-23				-23						-382	832
Mar.	1,607											1,592	-831
Apr.	1,141	115	469	164	89	836						1,975	- > 3 .
1981Mar. 4	209											209	-1,019
11												-4	459
18	1,399											1,399	1,892
25													730
Apr. 1												-11	-2,320
8	171											171	1,353
15	150	115	469	164	89	836						985	-444
22	819										~ ~	819	6,191
29													3,035
May 6 13 20 27	241		==	==			** ** **	==	ΞΞ		==	241	-3,225 -4,735
EVELMay 13	45.9	12.1	35.0	13.9	15.4	76.4	2.4	4.7	1.0	0.6	8.7	131.0	-6.0

^{1/} Change from end-of period to end-of-period.

 $[\]overline{2}$ / Outright transactions in market and with foreign accounts, and redemptions (-) in bill auctions.

^{3/} Outright transactions in market and with foreign accounts, and short-term notes acquired in exchange from maturing bills. Exclude redemptions, maturity shifts, rollovers of maturing coupon issues, and direct Treasury borrowing from the System.

^{4/} Outright transactions in market and with foreign accounts only. Excludes redemptions and maturity shifts.

^{5/} In addition to the net purchases of securities, also reflects changes in System holdings of bankers' acceptances, direct Treasury borrowing from the System and redemptions (-) of agency and Treasury coupon issues.

^{6/} Includes changes in RPs (+), matched sale-purchase transactions (-), and matched purchase-sale transactions (+)

^{7/} Maturing 2-year notes were exchanged on June 2, 1980, for special 2-day bills At their maturity the bills were exchanged for new 2-year notes

TABLE 3
SECURITY DEALER POSITIONS AND BANK POSITIONS
(Millions of dollars)

	,	I C Court	Securities		Underwriting Syndicate Positions		-	Member Bank Reserve Positions Borrowing at FRB				
		Dealer Po					Excess Reserves	_			Adjustment	
	Cas		Futures & Forwards			Municipal		Tota1	Seasona1	Special		
	Bills	Coupons	Bills	Coupons	Bonds	- I						
1980Iligh	8,838	2,263			299	466	881	3,438	174	816	3,298	
Low	1,972	-1,482			0	22	19	215	5	0	12	
1981High	15,668	4,633	-12,865	-3,599	60	268	741p	2,471p	226p	214p	2,273p	
Low	1,132p*	1,105	-5,930*	-2,560	0	28	-234p	768p	105p	0	581p	
1980Apr.	7,838	167	-5,227	-1,488	48	89	197	2,455	155	552	1,748	
May	4,008	1,372	-772	-1,563	69	138	178	1,018	63	743	212	
June	3,724	1,429	3,526	-1,880	112	264	203	379	12	307	61	
Ju1y	4,581	634	2,438	-1,015	154	310	284	395	6	253	136	
Aug.	5,108	7 98	3,081	-1,974	91	153	302	658	9	241	408	
Sept.	3,681	-416	414	-1,185	24	171	256	1,311	25	91	1,196	
Oct.	2,447	143	-1,556	-1,685	14	114	206	1,310	66	0	1,244	
Nov.	3,047	149	-7,068	-2,663	17	57	498p	2,059p	97p	0	1,963p	
Dec.	4,287	20	-9,812	-2 ,7 51	4	70	552p	1,690p	116p	0	1,574p	
1981Jan.	9,985	1,584	-11,976	-2,884	8	68	544p	1,395p	120p	48p	1,226p	
Feb.	13,317	1,812	-12,203	-2,798	8	95	183p	1,303p	148p	0	1,156p	
Mar.	13,579	3,415	-11,561	-3,251	46	124	381p	1,000p	196p	0	804p	
Apr.	8,518*	3,149*	-7,277	-3,050%	1 5	194	93p	1,338p	162p	0	1,170p	
1981Mar. 4	14,314	2,736	-11,203	-2,753	30	153	697p	1,299p	176p	0	1,123p	
11	14,944	2,878	-12,865	-3,160	40	80	230p	768p	185 _P	0	583p	
18	13,662	2,641	12,436	-3,387	60	28	343p	774p	193p	0	581p	
25	12,183	4,233	-10,498	-3,237	53	233	160p	888p	200p	0	688p	
Apr. 1	13,177	4,633	-10,508	-3,599	19	268	650p	1,464p	220p	0	1,244p	
8	12,220	4,063	-8,809	-3,107	0	171	51p	887p	162p	0	725p	
15	9,276	2,769	-6,538	-2,859	25	172	318p	1,142p	149 p	0	993p	
22	8,280*	2,390*	-6,698*	-3,022*	16	165	-234p	864p	149p	0	715p	
29	4,432*	2,914*	-6,504*	-3,156*	0	126	105p	2,278p	175p	0	2,103p	
May 6	2,070*	2,580*	•	-2,873*	0	83	396p	2,471p	198p	0	2,273p	
13 20 27	1,132p*	2,833p*	-6,654p*	-2,750p*	15	84	5p	1,734p	226p	0	1,508p	

NOTE: Government securities dealer cash positions consist of securities already delivered, commitments to buy (sell) securities on an outright basis for immediate delivery (5 business days or less), and certain "when-issued" securities for delayed delivery (more than 5 business days). Futures and forward positions include all other commitments involving delayed delivery; futures contracts are arranged on organized exchanges. Underwriting syndicate positions consist of issues in syndicate, excluding trading positions.

Weekly data are daily averages for statement weeks, except for corporate and municipal issues in syndicate, which are Friday figures. Monthly averages for excess reserves and borrowing are weighted averages of statement week figures. Monthly data for dealer futures and forwards are end-of-month figures for 1980.

^{*} Strictly confidential.