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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

March 23, 1990

MONETARY POLICY ALTERNATIVES

Recent Developments

(1) Open market operations since the last FOMC meeting have been aimed at maintaining reserve pressures at the level prevailing since late last year. The federal funds rate stayed mostly around 8-1/4 percent. Abstracting from special situation borrowing by the Bank of New England, initially classified as adjustment borrowing, the allowance for adjustment plus seasonal borrowing incorporated in the nonborrowed reserve objective during the intermeeting period was \$150 million. Seasonal plus adjustment borrowing averaged \$160 million in the three maintenance periods since the February meeting.¹ Borrowing generally has run well below this level, except for occasional surges on settlement Wednesdays owing to unexpected movements in the supply and demand for reserves; not only was adjustment borrowing usually quite low, but the increase in seasonal borrowing has been somewhat less than typical over this part of the year. Market concerns about financial strains on some institutions evidently have made banks even more chary of being seen at the window, and needs for liquidity have been held down by sluggish loan demand and robust inflows of retail deposits.

(2) Although the federal funds rate was steady over the intermeeting period, other short-term rates edged higher as have yields on

1. This average excludes the adjustment credit of the Bank of New England in the first maintenance period. This borrowing was classified as extended credit on February 21, the last day of that period.

intermediate-term issues, maintaining a modest upward tilt to the Treasury yield curve out to 3 years. Somewhat mixed economic information received over the intermeeting period evidently was interpreted as pointing, on balance, to some firming of economic activity and the persistence of price pressures. The Federal Reserve, consequently, is now seen as unlikely to ease policy any further in the near term, especially against the background of its stated commitment to reducing inflation gradually, and possibly even having to tighten over a somewhat longer horizon. Treasury bond yields, though fluctuating over a fairly wide range, fell slightly on balance over the period, despite increases in long-term rates in other major countries, which reflected importantly increases in inflation expectations, as discussed below in paragraph (3). Indeed, bond yields may have been held down to an extent by shifting demands toward dollar assets, as evidenced also by a rise in the foreign exchange value of the dollar. Stock prices also were firm, with major indexes rising 1 to 2 percent over the intermeeting period. The collapse of Drexel Burnham Lambert had little impact on financial markets outside the noninvestment-grade sectors. Its collapse, along with potential sales by some large institutional holders, contributed to a widening of the spread between yields on junk bonds and other long-term securities. In addition, some corporations that had been issuing low-grade or unrated commercial paper through Drexel were unable to roll over maturing issues.

(3) The dollar's exchange value has appreciated by about 3 percent on a weighted-average basis since the last Committee meeting, rising 6 percent against the yen and sterling and 3 percent against the mark.

The dollar's strength generally seemed to reflect various political and financial difficulties in foreign countries. Despite a favorable result for the ruling LDP in the Japanese parliamentary elections, a generally bearish mood continued to prevail in Japanese financial markets. Stock prices declined by about 20 percent while long-term bond yields rose by more than 50 basis points. Three-month interest rates in Japan also rose by 50 basis points, all in advance of the Bank of Japan's one percentage point increase in its discount rate on March 20. In Germany, increased inflation expectations, related to monetary unification, propelled bond rates more than 50 basis points higher, while 3-month German rates rose by 30 basis points. German stock prices rose slightly, on balance, over the period. In the United Kingdom, an uncertain political situation combined with a more pessimistic outlook for inflation and the external deficit to depress sterling.

the Desk accounted for nearly \$1.7 billion, \$1.5 billion against yen and \$200 million against DM. All of the Desk's sales of dollars after March 2--\$830 million--were for the Treasury's account.

(4) M2 accelerated to a 9-1/2 percent rate of increase in February but, based on partial deposit data through March 19, is estimated to be slowing to a 6 percent rate this month. This pattern would bring the rate of increase from December to 6-1/2 percent, a bit below the 7 percent path specified by the Committee for the December-to-March period. Demands for M2 this quarter likely have been boosted by strength in nominal income, by some acceleration in personal income tax refunds, and, perhaps

earlier in the quarter, by a reluctance to commit funds to junk bond and stock markets in view of unsettled conditions. However, the opportunity costs of holding M2 instruments have risen over the first three months of the year, as retail deposit offering rates have remained relatively flat, especially at shorter maturities, while most market rates have risen. In addition to the usual lag of deposit behind market rates, depository institutions may have held down offering rates as core deposits remained fairly strong relative to asset growth. The damping influence on M2 demand of higher opportunity costs is evidenced by the recent strength in noncompetitive tenders at Treasury auctions, and, along with the ebbing effects of earlier market rate decreases, has contributed to a small estimated increase in M2 velocity in the first quarter, after two quarters of substantial declines.²

(5) Following a 5-1/2 percent rate of expansion in February, growth of M3 is estimated at a 1-1/2 percent rate in March. Over the first three months of the year, M3 has grown at a 3 percent rate, 1/2 percentage point below the pace specified by the Committee for the December-to-March period. Expansion of M3 thus far this year has been curbed by continued contraction of the thrift industry, though apparently the rate of decline has been slower than in the fourth quarter. In addition, a variety of influences have damped M3 growth at banks: growth of

2. Currency growth, though moderating, remained strong in March, following three months of expansion averaging 11 percent; foreign demands appear to account for the unusual strength in currency. Even so, M1 growth was held down to only about 4-1/2 percent over the first three months of the year by slow growth in transaction deposits. Reflecting rapid increases in currency, the monetary base expanded at a 10 percent rate from December to March.

bank credit was weak in January, while the financing of stronger asset growth in February and March relied heavily on non-M3 managed liabilities and government deposits. Although banks have tapped the Eurodollar deposit market for funds this year, holdings of those deposits by U.S. residents--a component of M3--has continued to decline, further depressing growth of this aggregate. Apparently, U.S. residents have found these investments less attractive at the unusually narrow spreads prevailing relative to returns on domestic investments.

(6) Growth in the debt of nonfinancial sectors over the first quarter is estimated to have continued at about the 7-1/2 percent pace of the last three months of 1989, leaving this aggregate around the middle of its monitoring range. Treasury borrowing has picked up, seasonally adjusted, in anticipation of funding RTC working capital needs; borrowing by private sectors, however, evidently moderated slightly. Business borrowing remained subdued. Equity retirements dropped further, reflecting inhospitable conditions in the junk bond market and more stringent credit standards by banks and other lenders; on the other hand, business needs for external funds to finance increases in capital spending widened as internal funds dropped further. A survey of large banks also suggested they were taking a more cautious approach to lending to below investment-grade business borrowers for other purposes; however, recent business-loan price information does not provide any evidence of widespread increases in spreads of loan rates over funding costs. For the first time in the current expansion, banks showed virtually no overall increases in their willingness to extend consumer installment loans over recent months, and a

substantial proportion have tightened standards on home equity lines of credit. Nevertheless, consumer credit extended by banks and others so far this year appears to be expanding at around its moderate fourth-quarter pace, maintained in part by generous auto incentive packages. Mortgage rate spreads suggest that credit for residential first mortgages is generally available, but survey evidence coupled with Call report data indicate that banks have reduced the availability of commercial real estate credit, particularly for construction and land development purposes.

MONEY, CREDIT, AND RESERVE AGGREGATES
(Seasonally adjusted annual rates of growth)

	Jan.	Feb.	Mar. pe	Dec. to Mar. pe	QIV' 89 to Mar. pe
<u>Money and credit aggregates</u>					
M1	-0.2	10.0	4-1/4	4-3/4	5
M2	3.8	9.4	6	6-1/2	6-3/4
M3	1.8	5.5	1-1/2	3	3
Domestic nonfinancial debt	5.4	8.0	n.a.	6-3/4 ¹	6-1/2 ¹
Bank credit	2.7	8.6	7-1/4	6-1/4	5-1/2
<u>Reserve measures</u>					
Nonborrowed reserves ²	-6.1	-3.5	18-1/2	3	4
Total reserves	-2.7	6.5	3-1/4	2-1/4	3
Monetary base	10.9	9.4	9-3/4	10	9
Memo: (Millions of dollars)					
Adjustment plus seasonal borrowing	414	913	159	--	--
Excess reserves	1016	988	862	--	--

n.a. - Not available.

pe - Preliminary estimates.

1. Through February.

2. Includes "other extended credit" from the Federal Reserve.

NOTE: Monthly reserve measures, including excess reserves and borrowing, are calculated by prorating averages for two-week reserve maintenance periods that overlap months. Reserve data have been revised to reflect annual revisions to seasonal factors and to adjust for discontinuities associated with the annual indexations of the reserve requirement exemption and low reserve tranche.

Policy Alternatives

(7) Three policy alternatives are presented for Committee consideration. Under alternative B, maintaining federal funds trading around 8-1/4 percent is anticipated to be associated with about \$150 million of adjustment plus seasonal borrowing, the assumption used since the last FOMC meeting in constructing reserve paths. Although seasonal borrowing should increase over coming weeks, underlying demands for adjustment borrowing, absent unusual settlement day pressures, are likely to remain weak. Alternative A embodies a 7-3/4 percent federal funds rate and a borrowing assumption of \$100 million, while the 8-3/4 percent funds rate of alternative C reflects borrowing of \$200 million. Predicting the relationship between the federal funds rate and discount window borrowing remains difficult, however, justifying continued flexibility in the Desk's approach to the borrowing objective.

(8) Projected growth rates for the monetary aggregates from March to June under the three policy alternatives are given in the table below. (The table and charts on the following pages show more detailed data.) Under all the alternatives, M2 and M3 are likely to remain within the upper and lower halves of their respective annual growth ranges through June. The monthly pattern of monetary growth is highly uncertain because of normal difficulties in assessing the effects of individual tax payments around the mid-April tax season. Last year, liquid balances were depressed by tax payments in April and by still more in May, before rebounding sharply over the summer. We have assumed that the element of surprise in tax payments reflected in the behavior of money in 1989 will

be absent this year, so that deposit flows will be better captured by the current seasonal factors and hence will be smoother, seasonally adjusted. Still, with total individual nonwithheld tax payments expected to exceed last year's elevated pace by a little, the possibility of above-normal reductions in liquid balances to pay those taxes poses a downside risk to the money paths given below. Another such risk, particularly at the M3 level, is the possibility of very large expenditures by the RTC. These expenditures tend to depress M3 by, in effect, substituting Treasury financing for monetary liabilities. The staff has assumed a substantial pickup in RTC activity in the second quarter, though by less than the announced plans of the RTC.

	<u>Alt. A</u>	<u>Alt. B</u>	<u>Alt. C</u>
Growth from March to June			
M2	7	6	5
M3	4-1/2	4	3-1/2
M1	6	4-1/2	3
Associated federal funds rate ranges	6 to 10	6 to 10	7 to 11

(9) Financial market participants evidently expect no monetary policy change in the near term, meaning that a funds rate around the 8-1/4 percent level of alternative B is built into the current structure of market interest rates. Even so, alternative B would involve some easing in Treasury bill rates from most recent levels to the extent that supply pressures in the market dissipate. That will depend to some extent on the pace of RTC activity and associated working capital needs. Greater RTC

Alternative Levels and Growth Rates for Key Monetary Aggregates

	M2			M3			M1		
	Alt. A	Alt. B	Alt. C	Alt. A	Alt. B	Alt. C	Alt. A	Alt. B	Alt. C
Levels in billions									
1990 January	3232.0	3232.0	3232.0	4047.1	4047.1	4047.1	794.7	794.7	794.7
February	3257.2	3257.2	3257.2	4065.8	4065.8	4065.8	801.3	801.3	801.3
March	3273.4	3273.4	3273.4	4070.8	4070.8	4070.8	804.1	804.1	804.1
April	3291.1	3289.8	3288.5	4085.0	4084.4	4083.8	807.7	807.1	806.5
May	3310.1	3306.2	3302.3	4100.0	4098.0	4096.0	811.6	810.1	808.6
June	3330.8	3322.6	3314.4	4116.6	4111.5	4106.4	816.1	813.1	810.1
Monthly Growth Rates									
1990 January	3.8	3.8	3.8	1.8	1.8	1.8	-0.2	-0.2	-0.2
February	9.4	9.4	9.4	5.5	5.5	5.5	10.0	10.0	10.0
March	6.0	6.0	6.0	1.5	1.5	1.5	4.2	4.2	4.2
April	6.5	6.0	5.5	4.2	4.0	3.8	5.4	4.5	3.6
May	6.9	6.0	5.1	4.4	4.0	3.6	5.9	4.5	3.1
June	7.5	6.0	4.4	4.9	4.0	3.0	6.7	4.4	2.2
Quarterly Ave. Growth Rates									
1989 Q2	1.6	1.6	1.6	3.2	3.2	3.2	-4.4	-4.4	-4.4
Q3	6.9	6.9	6.9	3.9	3.9	3.9	1.8	1.8	1.8
Q4	7.1	7.1	7.1	1.8	1.8	1.8	5.1	5.1	5.1
1990 Q1	6.6	6.6	6.6	3.2	3.2	3.2	4.7	4.7	4.7
Q2	6.9	6.4	5.8	3.9	3.6	3.4	5.9	5.1	4.2
Dec. 89 to Mar. 90	6.4	6.4	6.4	2.9	2.9	2.9	4.7	4.7	4.7
Mar. 90 to June 90	7.0	6.0	5.0	4.5	4.0	3.5	6.0	4.5	3.0
Q4 88 to Q4 89	4.6	4.6	4.6	3.2	3.2	3.2	0.6	0.6	0.6
Q4 89 to Q1 90	6.6	6.6	6.6	3.2	3.2	3.2	4.7	4.7	4.7
Q4 89 to Q2 90	6.8	6.6	6.3	3.6	3.4	3.3	5.3	4.9	4.5
Q4 89 to Mar. 90	6.8	6.8	6.8	3.1	3.1	3.1	5.1	5.1	5.1
Q4 89 to June 90	6.9	6.5	6.1	3.7	3.5	3.3	5.5	4.9	4.2
1990 Target Ranges:	3.0 to 7.0			2.5 to 6.5					

Chart 1
ACTUAL AND TARGETED M2

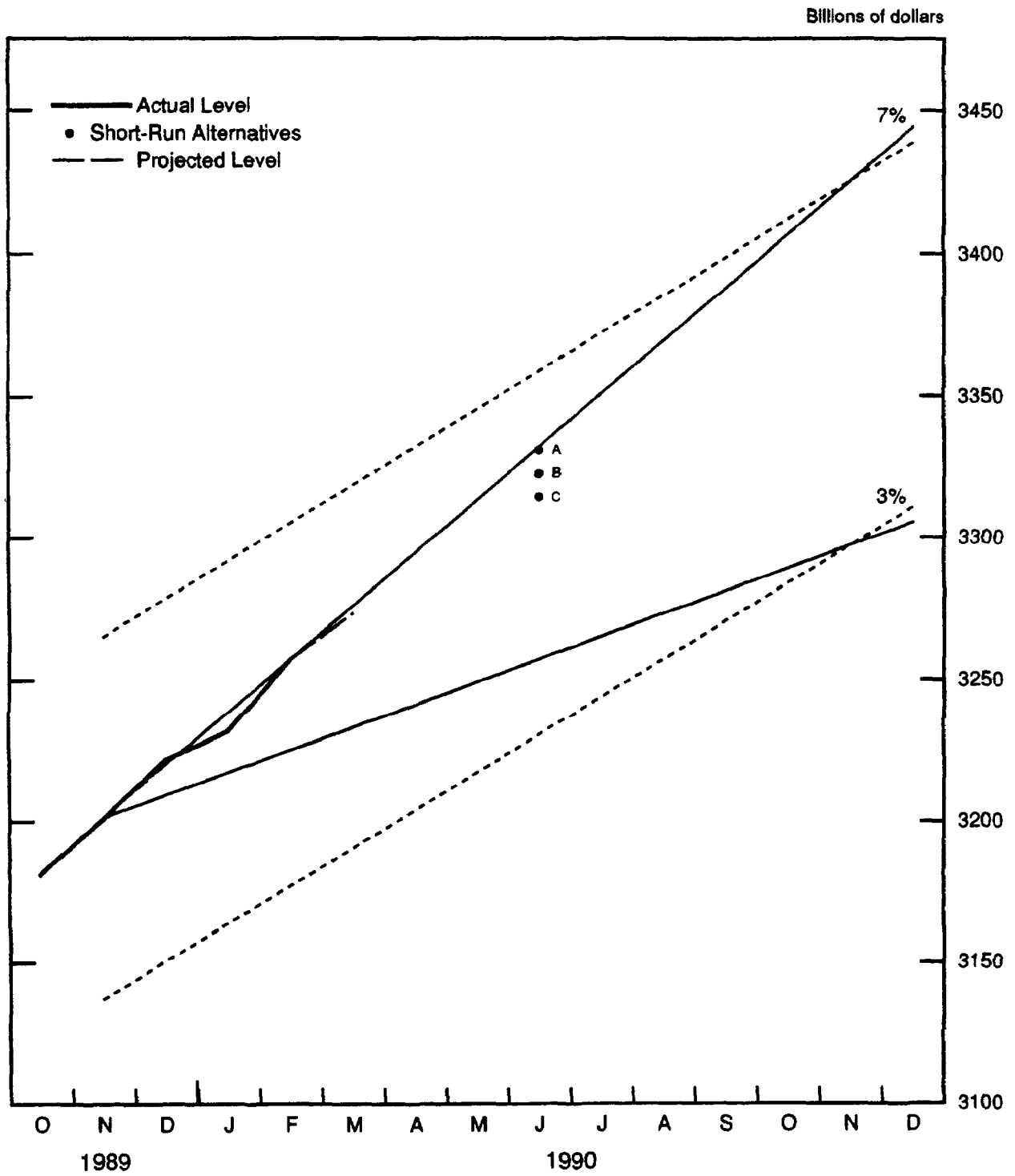


Chart 2
ACTUAL AND TARGETED M3

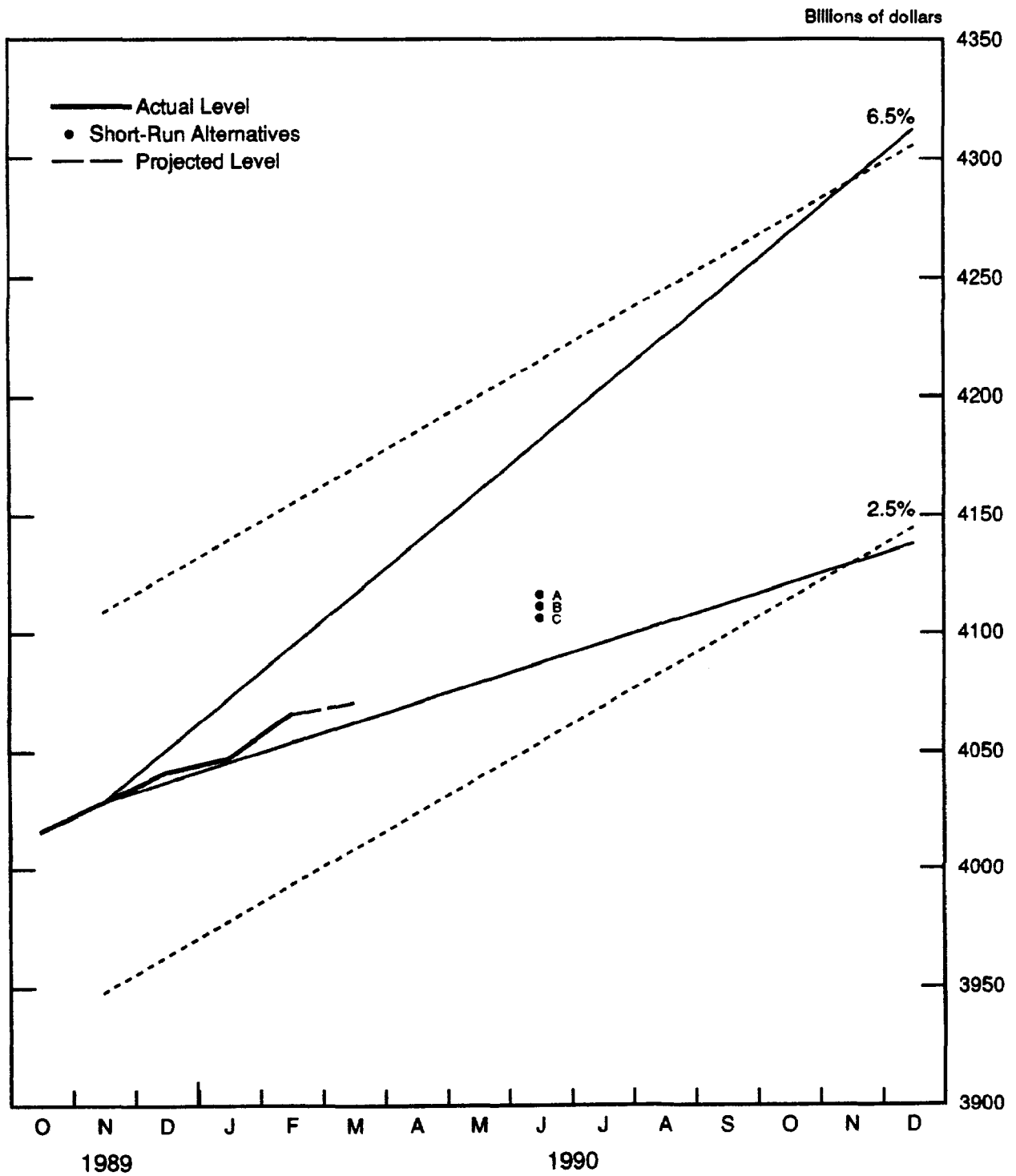


Chart 3
M1

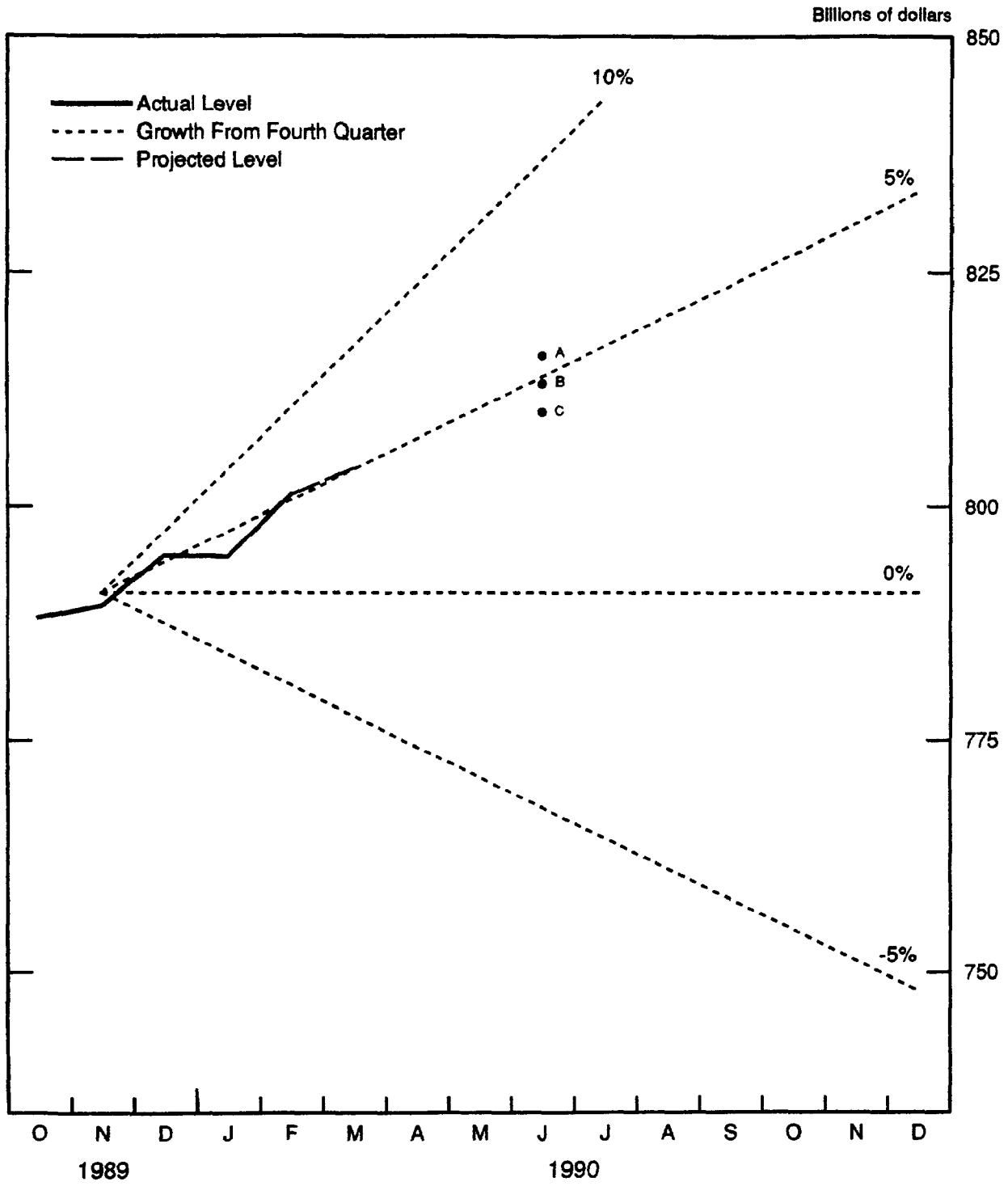
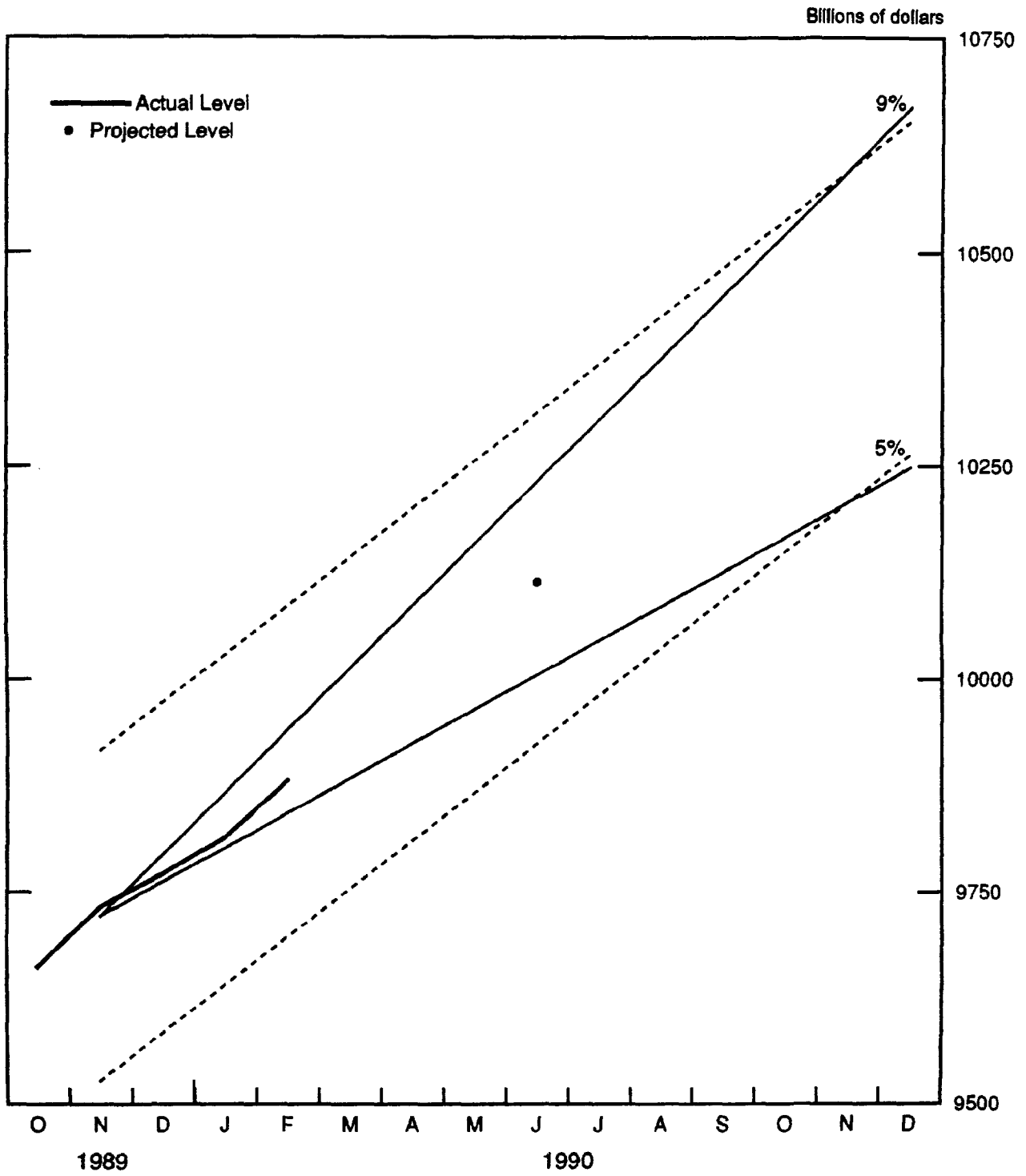


Chart 4
DEBT



funding needs would be met in the first instance by a drawdown in Treasury cash balances--since some RTC working capital usage has already been financed--and only subsequently by augmenting Treasury borrowing. Consequently, we are projecting a substantial paydown in Treasury bills over the intermeeting period after the tax date. Moreover, central bank sales of Treasury securities to fund their dollar sales in foreign exchange markets could drop off at any time should intervention activity decline. The staff anticipates relative stability in the exchange value of the dollar under alternative B. Decisions regarding economic and monetary union of East and West Germany, which are to be made by the end of April, could affect the dollar's value against the mark. If those decisions heighten expectations of German inflation, the dollar could continue under upward pressure against the mark; increases in German interest rates owing solely to such expectations would not necessarily affect real and nominal interest rates in the United States. Bond prices in the U.S. will remain most sensitive to prospects for U.S. economic growth and inflation. Incoming data on prices and the economy about in line with staff expectations should not change market expectations that Federal Reserve policy will remain essentially unchanged for a time, and consequently would be associated with only minor movements in bond yields.

(10) An immediate policy easing under alternative A that brought the federal funds rate down to 7-3/4 percent would run counter to market sentiment and ripple through the money market, with other short-term rates likely declining a similar amount. Lower short-term funding costs also should engender reductions in lending rates on business and consumer credit. The exchange value of the dollar would tend to adjust downward.

A dollar depreciation might combine with prospects for somewhat stronger U.S. economic activity to heighten domestic inflationary expectations, limiting the declines in longer-term yields.

(11) The rise in the federal funds rate under alternative C to 8-3/4 percent also would surprise market participants, inducing an across-the-board increase of comparable size in other short-term rates. Recent upward pressure on the exchange value of the dollar would continue. Bond yields would tend to rise, though with inflation expectations lessened by the monetary policy tightening, the increases could be muted. The additional policy restraint might reinforce current concerns about default risk on some loan categories, and would tend to encourage a further firming in credit standards, implying additional restraint on economic activity.

(12) Under alternative B, M2 growth from March to June is projected at a 6 percent annual rate--about 1/2 percentage point below its average growth rate over the first three months of the year. Nominal income growth is projected to slow next quarter. Opportunity costs may narrow only a little from recently elevated levels. Thrifts are discouraging deposit inflows as part of their effort to trim balance sheets; many of these deposits are going to banks instead, and these deposit shifts would be augmented as the RTC steps up the rate at which it resolves institutions. Banks may be unwilling, however, to expand their assets in line with deposit inflows, given concerns about loan quality and the capital requirements associated with a pickup in asset growth. In such circumstances, offering rates on retail deposits are likely to stay somewhat depressed relative to Treasury bill rates. With opportunity costs

little changed, velocity probably will be about flat in the second quarter.³ M1 is expected to continue expanding at a 4-1/2 percent annual rate from March to June, as a slowing of currency growth is offset by a little faster inflow to transactions deposits than over the first quarter.⁴

(13) M3 growth under alternative B is projected at a 4 percent pace, somewhat higher than the December-to-March rate of advance. The acceleration primarily owes to some pickup in bank credit growth from 6-1/2 percent over the first quarter to around a 7-1/4 percent pace, reflecting a resumption of business lending; as a consequence, the decline in large time deposits at commercial banks should cease. In addition, the runoff of the term Eurodollar component of this aggregate is likely to ebb. Greater RTC activity would tend to hold down M3 growth to the extent that such activity necessitated additional government borrowing; the expenditure of funds previously borrowed by the Treasury would not affect M3 because such funds are already on deposit at commercial banks. Thrifts are assumed to continue trimming their large time deposits at about the 25 percent annual rate of the first quarter, while their runoffs of term RPs abate a bit because the outstanding stock of these liabilities has fallen to a rather low level.

3. Revisions to the staff greenbook forecast for 1990 have counter-vailing effects on projected growth rates of the monetary aggregates for the year as a whole. Projected M2 and M3 growth remains unchanged at 6-1/2 and 4 percent, respectively, as the impact of stronger GNP growth is about offset by higher nominal interest rates.

4. Owing to the outlook for slower currency growth, the monetary base is projected to record a 4-3/4 percent annual rate of change from March to June, compared with the 10 percent increase from December to March.

(14) Domestic nonfinancial debt is projected to grow at a 6-1/2 percent annual rate from March to June, down from an estimated 7-1/2 percent pace over the previous three months.⁵ The slowing is attributable to net federal borrowing, which is projected to slacken substantially, despite some borrowing to finance RTC working capital. The household, business, and state and local sectors are all expected to maintain debt growth at about their first-quarter rates. Some continued restraint on business credit expansion is assumed to derive from a further reduction in net equity retirements. Overall debt growth from the fourth quarter of last year to June is foreseen at the middle of its 5 to 9 percent monitoring range.

(15) Under the less restrictive policy posture of alternative A, M2 and M3 growth from March to June would be boosted to 7 and 4-1/2 percent rates, respectively. M2 would be close to the 7 percent upper limit of its annual range, and on a trajectory that would carry it above its upper bound in the third quarter. M3 would remain well below its midpoint in June, reflecting both the downsizing of the thrift industry and a lower responsiveness than M2 to movements in market interest rates. Under the tighter financial market conditions of alternative C, M2 and M3 growth from March to June likely would slow to 5 and 3-1/2 percent rates, respectively. M2 growth from the fourth-quarter base of its annual range

5. Projections of debt growth for 1990 also have been left unchanged; however, the composition of borrowing differs. Federal debt increases significantly faster than projected in the last greenbook, owing to the decision to finance RTC working capital through the Federal Financing Bank. The assumed added borrowing in this calendar year of around \$35 billion boosts overall debt growth in 1990 by about 1/4 percentage point. However, anticipated growth of nonfederal debt in 1990 has been reduced, reflecting the recent trend of lower business borrowing for corporate restructuring and slower growth of household debt.

to June would be 6 percent. The associated growth for M3 by June would be 3-1/2 percent, compared with the 2-1/2 percent lower bound of its annual growth cone.

Directive Language

(16) Draft language for the operational paragraph, including the usual options and updating, is shown below.

OPERATIONAL PARAGRAPH

In the implementation of policy for the immediate future, the Committee seeks to DECREASE SOMEWHAT/maintain/ INCREASE SOMEWHAT the existing degree of pressure on reserve positions. Taking account of progress toward price stability, the strength of the business expansion, the behavior of the monetary aggregates, and developments in foreign exchange and domestic financial markets, slightly (SOMEWHAT) greater reserve restraint (WOULD/ MIGHT) or slightly (SOMEWHAT) lesser reserve restraint would (MIGHT) be acceptable in the intermeeting period. The contemplated reserve conditions are expected to be consistent with growth of M2 and M3 over the period from December through March THROUGH JUNE at annual rates of about __ AND __ 7 and 3-1/2 percent respectively. The Chairman may call for Committee consultation if it appears to the Manager for Domestic Operations that reserve conditions during the period before the next meeting are likely to be associated with a federal funds rate persistently outside a range of __ TO __ 6 to ±0 percent.

SELECTED INTEREST RATES
(percent)

	Short Term								Long Term							
	federal funds	Treasury bills secondary market			CDs secondary market 3-month	comm paper 1-month	money market mutual fund	bank prime loan	U.S. government constant maturity yields			corporate A utility recently offered	conventional home mortgages			
		3-month	6-month	1-year					3-year	10-year	30-year		municipal Bond Buyer	secondary market fixed rate	primary market fixed rate	ARM
		1	2	3					4	5	6						7	8	9	10	11	12	13	14	15	16
89 -- High	9.95	9.04	9.07	8.96	10.23	9.98	9.19	11.50	9.77	9.46	9.26	10.47	7.95	11.73	11.22	9.41
89 -- Low	8.38	7.54	7.35	7.15	8.24	8.35	7.87	10.50	7.60	7.78	7.85	9.26	7.19	9.92	9.68	8.34
90 -- High	8.32	7.96	7.89	7.82	8.40	8.48	8.06	10.50	8.69	8.65	8.63	10.00	7.55	10.67	10.34	8.56
90 -- Low	8.20	7.54	7.45	7.28	8.11	8.14	7.62	10.00	7.90	7.94	8.00	9.55	7.35	10.13	9.80	8.35
Monthly																
Mar 89	9.85	8.82	8.85	8.82	10.09	9.88	8.89	11.50	9.61	9.36	9.17	10.37	7.85	11.47	11.03	9.09
Apr 89	9.84	8.65	8.65	8.64	9.94	9.77	9.14	11.50	9.40	9.18	9.03	10.33	7.73	11.32	11.05	9.40
May 89	9.81	8.43	8.41	8.31	9.59	9.57	9.13	11.50	8.98	8.86	8.83	10.09	7.51	10.90	10.77	9.30
Jun 89	9.53	8.15	7.93	7.84	9.20	9.34	8.96	11.07	8.37	8.28	8.27	9.65	7.35	10.39	10.20	9.03
Jul 89	9.24	7.88	7.61	7.36	8.76	8.95	8.72	10.98	7.83	8.02	8.08	9.54	7.28	10.11	9.88	8.74
Aug 89	8.99	7.90	7.74	7.61	8.64	8.79	8.32	10.50	8.13	8.11	8.12	9.55	7.36	10.38	9.99	8.65
Sep 89	9.02	7.75	7.74	7.65	8.78	8.87	8.25	10.50	8.25	8.19	8.15	9.55	7.52	10.44	10.13	8.71
Oct 89	8.84	7.64	7.62	7.45	8.60	8.66	8.21	10.50	8.02	8.01	8.00	9.39	7.48	10.19	9.95	8.62
Nov 89	8.55	7.69	7.49	7.25	8.39	8.47	8.00	10.50	7.80	7.87	7.90	9.28	7.39	10.06	9.77	8.51
Dec 89	8.45	7.63	7.42	7.21	8.32	8.61	7.90	10.50	7.77	7.84	7.90	9.36	7.31	10.06	9.74	8.39
Jan 90	8.23	7.64	7.55	7.38	8.16	8.20	7.74	10.11	8.13	8.21	8.26	9.63	7.43	10.30	9.90	8.39
Feb 90	8.24	7.74	7.70	7.55	8.22	8.22	7.64	10.00	8.39	8.47	8.50	9.84	7.52	10.49	10.20	8.46
Weekly																
Dec 6 89	8.52	7.57	7.35	7.19	8.24	8.51	7.94	10.50	7.74	7.83	7.89	9.29	7.35	10.07	9.76	8.39
Dec 13 89	8.47	7.66	7.39	7.25	8.32	8.57	7.89	10.50	7.78	7.84	7.90	9.33	7.29	9.98	9.75	8.39
Dec 20 89	8.52	7.62	7.41	7.15	8.41	8.72	7.91	10.50	7.70	7.78	7.85	9.40	7.28	10.01	9.69	8.34
Dec 27 89	8.38	7.66	7.51	7.23	8.32	8.60	7.87	10.50	7.83	7.87	7.93	9.54	7.33	10.17	9.78	8.39
Jan 3 90	8.32	7.61	7.52	7.28	8.23	8.48	8.06	10.50	7.90	7.94	8.00	9.55	7.36	10.13	9.83	8.35
Jan 10 90	8.22	7.54	7.45	7.28	8.15	8.19	7.79	10.29	7.94	8.01	8.08	9.57	7.35	10.18	9.80	8.41
Jan 17 90	8.20	7.60	7.50	7.31	8.11	8.14	7.74	10.00	8.04	8.13	8.20	9.65	7.49	10.34	9.90	8.39
Jan 24 90	8.23	7.72	7.60	7.45	8.20	8.20	7.70	10.00	8.24	8.30	8.33	9.75	7.52	10.53	10.05	8.41
Jan 31 90	8.24	7.72	7.67	7.52	8.19	8.21	7.70	10.00	8.37	8.47	8.51	9.83	7.52	10.50	10.17	8.45
Feb 7 90	8.22	7.80	7.74	7.58	8.22	8.24	7.65	10.00	8.41	8.51	8.53	9.75	7.50	10.36	10.21	8.46
Feb 14 90	8.21	7.70	7.66	7.50	8.21	8.19	7.65	10.00	8.29	8.38	8.42	9.84	7.49	10.50	10.10	8.48
Feb 21 90	8.25	7.74	7.72	7.59	8.22	8.22	7.64	10.00	8.43	8.52	8.56	9.94	7.55	10.60	10.31	8.44
Feb 28 90	8.27	7.72	7.70	7.55	8.24	8.22	7.64	10.00	8.42	8.49	8.52	9.91	7.50	10.55	10.23	8.48
Mar 7 90	8.28	7.84	7.79	7.69	8.27	8.27	7.62	10.00	8.55	8.59	8.60	10.00	7.50	10.67	10.29	8.50
Mar 14 90	8.27	7.96	7.87	7.82	8.38	8.33	7.64	10.00	8.69	8.65	8.63	9.92	7.55	10.63	10.34	8.55
Mar 21 90	8.27	7.94	7.89	7.78	8.40	8.35	7.66	10.00	8.66	8.59	8.53	9.82	7.54	10.55	10.26	8.56
Daily																
Mar 16 90	8.22	7.92	7.86	7.76	8.40	8.34	..	10.00	8.62	8.59	8.55	..	..	..	..	..
Mar 22 90	8.28	7.90	7.83	7.73	8.38	8.35	..	10.00	8.60	8.53	8.49	..	..	..	..	..
Mar 23 90	8.27 _p	7.88	7.83	7.71	8.35	8.34	..	10.00	8.59 _p	8.52 _p	8.48 _p	..	..	..	..	..

NOTE: Weekly data for columns 1 through 11 are statement week averages. Data in column 7 are taken from Donoghue's Money Fund Report. Columns 12, 13 and 14 are 1-day quotes for Friday, Thursday or Friday, respectively following the end of the statement week. Column 13 is the Bond Buyer revenue index. Column 14 is the FNMA purchase yield, plus loan servicing fee, on 30-day mandatory delivery commitments. Column 15 is the average contract rate on new commitments for fixed-rate mortgages (FRMs) with 80 percent loan-to-value ratios at major institutional lenders. Column 16 is the average initial contract rate on new commitments for 1-year, adjustable-rate mortgages (ARMs) at major institutional lenders offering both FRMs and ARMs with the same number of discount points.

p -- preliminary data

Money and Credit Aggregate Measures

Seasonally adjusted

MAR. 26, 1990

Period	Money stock measures and liquid assets						Bank credit	Domestic nonfinancial debt ¹		
	M1	M2	nontransactions components		M3	L	total loans and investments	U.S. government ¹	other ¹	total ¹
			in M2	in M3 only						
	1	2	3	4	5	6	7	8	9	10
ANN. GROWTH RATES (%) :										
ANNUALLY (Q4 TO Q4)										
1987	6.3	4.3	3.6	12.0	5.8	5.6	7.9	9.0	10.2	9.9
1988	4.3	5.2	5.5	10.6	6.3	7.1	7.8	8.0	9.4	9.1
1989	0.6	4.6	5.9	-1.5	3.2	4.4	7.1	7.4	8.1	8.0
QUARTERLY AVERAGE										
1989-1st QTR.	-0.1	2.3	3.2	9.6	3.9	5.2	6.6	7.7	8.3	8.2
1989-2nd QTR.	-4.4	1.6	3.7	9.1	3.2	5.0	6.7	6.9	7.9	7.7
1989-3rd QTR.	1.8	6.9	8.7	-6.9	3.9	4.2	7.0	4.6	7.9	7.2
1989-4th QTR.	5.1	7.1	7.7	-17.3	1.8	2.7	7.6	9.5	7.4	7.9
MONTHLY										
1989-FEB.	1.4	1.8	1.9	8.7	3.3	4.4	12.5	9.0	8.6	8.7
MAR.	-1.8	3.4	5.2	15.2	6.0	8.2	7.5	11.7	6.7	7.9
APR.	-5.2	1.0	3.1	8.4	2.6	6.3	4.3	5.6	7.9	7.4
MAY	-9.1	-1.6	0.9	6.3	0.2	-0.1	6.6	4.2	8.8	7.7
JUNE	-3.9	6.3	9.8	4.1	5.8	5.6	6.3	4.3	7.6	6.9
JULY	8.4	9.8	10.3	-4.2	6.7	6.3	7.9	-0.1	8.3	6.4
AUG.	2.0	7.6	9.5	-20.3	1.4	3.4	7.1	9.1	8.0	8.2
SEP.	3.8	6.3	7.0	-23.0	0.0	1.3	5.5	10.9	6.1	7.2
OCT.	8.0	6.9	6.6	-19.8	1.3	2.1	11.4	9.5	8.0	8.4
NOV.	2.0	7.3	9.0	-10.1	3.7	3.8	7.1	10.9	8.2	8.8
DEC.	8.2	7.8	7.7	-12.0	3.8	4.6	1.6	3.7	5.2	4.8
1990-JAN.	-0.2	3.8	5.1	-6.3	1.8	0.3	2.7	5.7	5.3	5.4
FEB. p	10.0	9.4	9.2	-9.7	5.5		8.6	10.8	7.2	8.0
LEVELS (\$BILLIONS) :										
MONTHLY										
1989-OCT.	788.1	3181.4	2393.4	834.7	4016.2	4831.2	2562.6	2238.2	7423.1	9661.3
NOV.	789.4	3200.8	2411.4	827.7	4028.5	4846.4	2577.7	2258.5	7474.0	9732.5
DEC.	794.8	3221.7	2426.9	819.4	4041.1	4864.8	2581.2	2265.4	7506.2	9771.6
1990-JAN.	794.7	3232.0	2437.3	815.1	4047.1	4865.9	2585.0	2276.1	7539.4	9815.5
FEB. p	801.3	3257.2	2456.0	808.5	4065.8		2603.5	2296.5	7584.8	9881.3
WEEKLY										
1990-FEB. 5	798.6	3249.5	2450.9	810.0	4059.5					
12	798.9	3252.5	2453.5	810.1	4062.6					
19	800.5	3256.7	2456.2	809.6	4066.3					
26	804.9	3264.7	2459.8	806.6	4071.3					
MAR. 5 p	807.0	3269.7	2462.7	803.0	4072.7					
12 p	802.2	3269.3	2467.0	800.1	4069.4					

1. Debt data are on a monthly average basis, derived by averaging end-of-month levels of adjacent months, and have been adjusted to remove discontinuities.
p-preliminary
pe-preliminary estimate

Components of Money Stock and Related Measures

seasonally adjusted unless otherwise noted

MAR. 26, 1990

Period	Currency	Demand deposits	Other checkable deposits	Overnight RPs and Eurodollars NSA'	MMDAs	Savings deposits	Small denomination time deposits'	Money market mutual funds		Large denomination time deposits'	Term RPs NSA'	Term Eurodollars NSA'	Savings bonds	Short-term Treasury securities	Commercial paper'	Bankers acceptances
								general purpose and broker/dealer'	Institutions only							
								1	2								3	4	5	6	7	8	9	10	11	12	13	14	15	16
LEVELS (\$BILLIONS) ; ANNUALLY (4TH QTR.)																
1987	195.0	291.5	260.5	87.6	529.3	416.2	903.6	220.5	87.2	482.3	107.4	92.4	99.8	262.1	258.4	44.5
1988	210.7	287.6	280.4	83.3	504.9	428.2	1021.6	237.5	86.7	538.0	123.2	102.7	108.9	267.0	326.2	40.7
1989	220.8	279.5	283.1	75.6	480.0	407.7	1138.9	308.3	101.5	560.7	103.4	79.6	116.8	311.8	349.7	40.6
MONTHLY																
1989-FEB.	214.1	284.9	280.2	83.3	485.6	421.0	1054.2	247.2	86.9	553.3	126.7	100.1	110.7	268.1	343.6	40.6
MAR.	215.3	283.9	279.1	82.1	479.9	417.9	1066.4	253.4	86.3	560.1	128.9	105.7	111.5	274.2	348.3	41.4
APR.	215.7	281.3	277.9	78.5	473.2	412.0	1084.1	257.8	88.3	568.3	126.3	100.3	112.2	280.0	358.2	41.5
MAY	216.6	279.6	272.8	77.8	463.1	405.4	1103.0	261.2	92.1	573.1	127.5	97.2	112.8	288.1	348.8	41.2
JUNE	217.2	276.3	273.0	79.6	460.9	403.4	1114.0	268.3	96.3	574.9	128.4	93.4	113.6	289.6	349.4	41.2
JULY	217.8	279.6	274.5	81.0	463.9	403.3	1122.4	277.7	99.0	574.7	123.8	91.8	114.3	290.9	349.5	41.9
AUG.	218.6	278.5	276.0	78.3	468.2	404.0	1130.0	287.8	101.4	570.5	116.9	89.6	115.0	293.3	354.3	42.6
SEP.	219.3	278.1	278.4	74.9	471.9	405.5	1132.6	295.9	101.6	565.6	112.9	85.3	115.7	303.7	350.3	41.0
OCT.	220.0	280.0	280.8	75.3	475.3	406.1	1135.9	302.7	101.1	562.7	108.3	80.0	116.2	308.9	350.0	40.0
NOV.	220.4	278.8	282.8	74.8	480.8	407.9	1138.5	309.1	101.1	561.0	107.2	78.9	116.8	309.3	351.3	40.5
DEC.	221.9	279.7	285.7	76.8	483.8	409.0	1142.2	313.1	102.3	558.3	94.8	79.9	117.5	317.1	347.9	41.2
1990-JAN.	224.6	277.3	285.3	80.7	484.9	410.3	1142.5	320.8	103.2	554.1	91.4	74.3	117.7	317.0	343.3	40.7
FEB. p	226.6	280.2	286.8	81.6	489.3	413.7	1141.2	329.1	103.7	549.6	94.9	70.7				

1. Net of money market mutual fund holdings of these items.
 2. Includes retail repurchase agreements. All IRA and Keogh accounts at commercial banks and thrift institutions are subtracted from small time deposits.
 3. Excludes IRA and Keogh accounts.
 4. Net of large denomination time deposits held by money market mutual funds and thrift institutions.
- p-preliminary

March 26, 1990

NET CHANGES IN SYSTEM HOLDINGS OF SECURITIES¹
 Millions of dollars, not seasonally adjusted

STRICTLY CONFIDENTIAL (FR)
CLASS II-FOMC

Period	Treasury bills			Treasury coupons						Federal agencies redemptions (-)	Net change outright holdings total ⁴	Net RPs ⁵
	Net purchases ²	Redemptions (-)	Net change	Net purchases ³				Redemptions (-)	Net change			
				within 1-year	1-5	5-10	over 10					
1984	11,479	7,700	3,779	826	1,938	236	441	--	3,440	256	6,964	1,450
1985	18,096	3,500	14,596	1,349	2,185	358	293	--	4,185	162	18,619	3,001
1986	20,099	1,000	19,099	190	893	236	158	--	1,476	398	20,178	10,033
1987	12,933	9,029	3,905	3,358	9,779	2,441	1,858	70	17,366	276	20,994	-11,033
1988	7,635	2,200	5,435	2,177	4,686	1,404	1,398	--	9,665	587	14,513	1,557
1989	1,466	12,730	-11,264	327	946	258	284	500	1,315	442	-10,391	-1,683
1988--Q1	319	2,200	-1,881	--	-800	-175	--	--	-975	155	-3,011	-3,514
Q2	423	--	423	1,092	3,661	1,017	966	--	6,737	130	7,030	5,220
Q3	1,795	--	1,795	--	--	--	--	--	--	77	1,717	1,393
Q4	5,098	--	5,098	1,084	1,824	562	432	--	3,903	224	8,776	-1,541
1989--Q1	-3,842	2,200	-6,042	--	-228	-20	--	--	-248	188	-6,477	-5,591
Q2	2,496	2,400	96	172	1,361	287	284	--	2,104	125	2,075	924
Q3	-6,450	3,200	-9,650	--	-163	-9	--	--	-172	99	-9,921	-893
Q4	9,263	4,930	4,333	155	-24	--	--	500	-369	30	3,934	3,877
1989--June	-571	1,200	-1,771	--	--	--	--	--	--	--	-1,771	10,002
July	-5,516	2,400	-7,916	--	-13	-9	--	--	-22	45	-7,983	-5,152
August	-934	800	-1,734	--	-150	--	--	--	-150	--	-1,884	617
September	--	--	--	--	--	--	--	--	--	54	54	3,641
October	-1,414	1,400	-2,814	--	-24	--	--	500	-524	30	-3,368	463
November	8,794	3,530	5,264	155	--	--	--	--	155	--	5,419	-453
December	1,883	--	1,883	--	--	--	--	--	--	--	1,883	3,867
1990--January	-1,065	1,000	-2,065	--	--	--	--	--	--	--	-2,065	-8,435
February	-3,277	400	-3,677	--	--	--	--	--	--	--	-3,677	4,417
Feb. 7	-3,384	400	-3,784	--	--	--	--	--	--	--	-3,784	-2,139
14	--	--	--	--	--	--	--	--	--	--	--	2,844
21	--	--	--	--	--	--	--	--	--	--	--	502
28	108	--	108	--	--	--	--	--	--	--	108	3,210
Mar. 7	488	--	488	100	100	--	--	--	200	--	688	4,201
14	--	--	--	--	--	--	--	--	--	--	--	-5,353
21	--	--	--	--	--	--	--	--	--	--	--	3,112
Memo: LEVEL (bil.\$) ⁶												
March 21	--	--	101.4	27.0	56.6	12.6	26.2	--	122.4	--	230.3	-2.0

1. Change from end-of-period to end-of-period.
2. Outright transactions in market and with foreign accounts.
3. Outright transactions in market and with foreign accounts, and short-term notes acquired in exchange for maturing bills. Excludes maturity shifts and rollovers of maturing coupon issues.

4. Reflects net change and redemptions (-) of Treasury and agency securities.
5. Includes change in RPs (+), matched sale-purchase transactions (-), and matched purchase sale transactions (+).
6. The levels of agency issues were as follows:

within 1-year	1-5	5-10	over 10	total
2.2	3.1	1.0	0.2	6.5