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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

September 17, 1993

MONETARY POLICY ALTERNATIVES

Recent Developments

(1) The federal funds rate averaged close to the Committee's expectation of 3 percent during the intermeeting period.¹ Short-term interest rates have edged down since the August meeting, while intermediate- and long-term rates have decreased 20 to 30 basis points, on balance.^{2 3} These declines extended the drop in longer-term rates since their recent highs, posted just after the July Humphrey-Hawkins testimony, to nearly 3/4 percentage point. A sizable portion of these reductions in rates appears to incorporate a moderation in inflation expectations, a notion supported by survey data. Revisions to the inflation outlook were probably prompted by generally favorable data on broad price indexes and evidence of continuing sluggishness in economic activity. The market response to the cast of data on aggregate demand and to greater assurance of fiscal restraint suggests that real long-

1. The Desk's allowance for adjustment plus seasonal borrowing was kept unchanged at \$250 million, while actual borrowing, which was boosted by technical difficulties at two large banks, averaged \$425 million in the two full maintenance periods since the August FOMC meeting.

2. Rate movements are calculated using quotes through noon, September 17. At that time a few banks had reduced their prime rates from 6 to 5-3/4 percent, but none were money-center banks and the action had not become general.

3. The thirty-year constant maturity Treasury yield has dropped a bit more than rates on corporate bonds and mortgages. However, this differential primarily reflects movements in the exceptional premium for the most recently auctioned Treasury bond--the security used in the construction of the constant maturity yield. Owing to the Treasury's decision to reduce the volume of such securities offered and the frequency of auctions in the future, the yield on the thirty-year bond auctioned in early August has been unusually far below nearby securities on the yield curve, and the gap has widened on balance over the intermeeting period. Indeed, private securities underwriters are said to be using a more seasoned issue as a benchmark for pricing decisions.

term interest rates may also have fallen since late July; this interpretation of rate movements is consistent with the reduced foreign exchange value for the U.S. dollar and continued strength in stock markets. Market perceptions, in light of incoming data, that the Federal Reserve would raise nominal short-term rates later and by less than was previously foreseen probably contributed to declines in real yields on bonds and equity. Apparently, investors turned increasingly to longer-term assets to preserve returns, which has helped to lift most major stock market indexes 1 to 2 percent since the August meeting.

(2) On balance, the weighted average foreign exchange value of the dollar fell about 3 percent since the last meeting, depreciating even more against the mark and other European currencies, while appreciating about 3 percent against the yen. The dollar was buoyed against the yen early in the period by U.S. intervention sales of yen (\$165 million equivalent) and the accompanying public statement by the Treasury Department, which the market apparently read as signalling a new attitude--that further strengthening of the yen was not desirable.

. The mark's strength was partly related to the unexpectedly slow pace of interest rate reductions by the Bundesbank; while the discount and Lombard rates were cut 50 basis points on September 10, the key RP rate was lowered only 10 basis points. German three-month market rates were essentially unchanged and long-term rates declined 25 basis points over the intermeeting period. Other ERM monetary authorities continued to be cautious in reducing interest rates, despite the additional leeway offered by the wider, 15 percent, exchange rate margins. Japanese three-month interest rates fell 30 basis points and long-term rates 10 basis points.

(3) Appetites for longer-term securities continue to weaken M2 demand. Bond and stock mutual funds posted a record gain in July, and weekly data indicate an even stronger advance in August. M2 grew at the subdued rate of 1-3/4 percent in August, close to the forecast in the last bluebook, leaving the aggregate slightly above the lower end of its annual growth cone. A temporary dip in mortgage refinancing likely restrained M2 growth last month. Components generally followed recent trends: M1 again grew rapidly--at a 10-1/2 percent rate for the month;⁴ savings and MMDAs posted a moderate gain, while there were runoffs in small time deposits and money market mutual funds, the closest substitutes for capital market investments.⁵

(4) M3 growth was slow in August, although it rose for the first time in three months and was somewhat above the staff projection at the last meeting.⁶ This aggregate is now at the lower end of its growth cone. Sluggish depository credit continued to depress M3 growth. With credit demands continuing to be concentrated in capital markets, bank credit decelerated to a 3-1/4 percent rate of growth in August. Most of the increase was in bank securities portfolios; business loans

4. Total reserves and the monetary base grew at 9-3/4 and 11-1/2 percent rates, respectively, in August.

5. M2 plus bond and stock mutual funds (excluding institutional holdings and IRA/Keogh accounts) is estimated to have grown at about a 5 percent rate in August, the same as its average pace for the year to date.

6. The unexpected pickup in M3 in August owed primarily to a decline in money fund holdings of large CDs, which resulted in a rare, albeit small, increase in net CDs in this aggregate. (The aggregates are constructed on a consolidated basis by subtracting deposits held by money-stock issuers--depository institutions and money funds--from reported deposit liabilities.) Expansion of M3 continued to be held down by the decline in institutional money funds that began in September of 1992; the stable short-term interest rate environment since then has eliminated the yield advantage of their slowly-adjusting average returns over direct investment in money market instruments.

were little changed, while real estate and consumer loan growth slowed, and security loans ran off.

(5) The growth of nonfederal debt, though still subdued, appears to have picked up a little in recent months, with both business and household borrowing strengthening somewhat. In the business sector, commercial paper issuance has been strong of late, but the bulk of net borrowing remained focused on bond markets. Receptive financial markets readily absorbed heavy bond issuance and a pickup in initial public offerings of equity, the proceeds of which financed considerable retirement of higher-cost bonds and probably the paydown of bank loans. The improvement in household financial positions has supported higher debt growth. Consumer credit picked up to a 7 percent pace in July (on a month-average basis), and bank data for August suggest further appreciable growth. Mortgage debt is estimated to be expanding moderately, as households do not appear to be taking out significant additional cash in refinancing their mortgages. From the fourth quarter of 1992 through July, nonfederal debt grew at only a 3 percent rate. Federal debt growth eased over the summer from its rapid second-quarter rate on a seasonally adjusted basis. Total domestic nonfinancial debt is estimated to have grown at a 5-1/2 percent rate in July, and at a 4-1/2 percent rate from the fourth quarter through July, leaving this aggregate somewhat above the lower bound of its monitoring range for 1993.

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

	June	July	Aug	QIV to Aug ¹
<u>Money and credit aggregates</u>				
M1	7.2	13.8	10.5	10.2
M2	2.6	2.2	1.8	1.2
M3	-0.8	-0.3	1.6	.0
Domestic nonfinancial debt	6.4	5.6	--	4.6
Federal	12.2	7.4	--	9.3
Nonfederal	4.3	5.0	--	3.0
Bank credit	9.1	8.8	3.4	5.0
<u>Reserve measures</u>				
Nonborrowed reserves ²	3.8	8.1	7.4	10.3
Total reserves	5.1	9.4	9.7	10.8
Monetary base	10.9	9.5	11.5	10.2
Memo: (Millions of dollars)				
Adjustment plus seasonal borrowing	181	244	352	--
Excess reserves	911	1089	949	--

1. QIV to July for debt aggregates.

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 incorporate adjustments for discontinuities associated with changes in reserve requirements.

Policy Alternatives

(6) Three policy alternatives are presented for consideration by the Committee. Under alternative B, federal funds would continue to trade around 3 percent in combination with an initial allowance for adjustment plus seasonal borrowing of \$250 million.⁷ Under alternative A, the federal funds rate would decline to 2-1/2 percent, either through a reduction in the initial borrowing allowance or a cut in the discount rate by 50 basis points and an unchanged initial borrowing allowance. Under alternative C, the federal funds rate would rise to 3-1/2 percent in association with a boost in the initial borrowing allowance.

(7) Alternative B is consistent with the staff's economic forecast. In that forecast, short-term rates are assumed to remain at current levels through the end of 1994. Growth in output settles into a pace broadly in line with that of potential output, preserving the current modest slack in resource markets. Accordingly, core inflation edges lower. Market participants apparently believe that the federal funds rate will remain at 3 percent, at least for the next several months, and under alternative B, money market interest rates would remain around current levels. However, participants seem to expect stronger economic growth over coming months than implicit in the staff forecast and little further progress in reducing inflation. In the absence of stronger growth, intermediate- and longer-term rates might well drift lower as incoming data tilt market sentiment and investors continue to reach for yield. Bond yields could remain unusually volatile for a time as market participants continue to assess the

7. Demands for seasonal credit are likely to diminish over the intermeeting period, as they typically do in the fall, calling for downward technical adjustment to the borrowing allowance.

sustainability of the much reduced levels of long-term rates that have recently been reached. This skittishness may focus particularly on indicators bearing on the outlook for prices, partly in light of their possible implications for monetary policy going forward. Consistent with the staff forecast of policy easings in Germany and Japan, the dollar should trade on the high side of recent levels under alternative B.

(8) While lower long-term rates and tight quality spreads should continue to spur considerable activity in capital markets, net growth in debt is expected to remain moderate. Debt of nonfederal sectors is projected to grow more rapidly over the balance of the year than in the first half but more slowly than nominal output. In the business sector, net equity issuance should stay around the elevated levels of late, restraining borrowing. Households likely will respond vigorously to recent declines in mortgage rates, but mainly to refinance existing mortgages. Mortgage and consumer debt is expected to continue to increase at a moderate rate. Including the federal government, the debt of nonfinancial sectors is projected to expand at a bit more than a 4 percent pace over the final five months of the year, leaving its growth for the year at 4-1/2 percent, a little above the lower bound of its annual range.

(9) As shown in the table below, M2 under alternative B is projected to grow at a 2 percent average rate over the final four months of this year. Special factors, especially mortgage refinancings,

	<u>Alt. A</u>	<u>Alt. B</u>	<u>Alt. C</u>
Growth from August to December			
M2	2-1/2	2	1-1/2
M3	1	3/4	1/2
M1	13-1/4	12-1/4	11-1/4
Growth from Q4:1992 to December 1993			
M2	1-1/2	1-1/2	1-1/4
M3	1/4	1/4	0
M1	11-1/2	11	10-3/4

should boost M2 growth a little over this period.⁸ Underlying growth in this aggregate, however, will remain quite sluggish. Although the flatter yield curve should eventually damp the shift from M2 to capital market assets, we do not expect any slowing in the near term; indeed, with recent capital gains enhancing the advertised returns on mutual funds, inflows could remain quite brisk. On a quarterly average basis, growth in M2 would slow to a 1-1/2 percent rate in the fourth quarter, implying growth for the year on a Q4-to-Q4 basis of 1-1/4 percent.⁹ Growth in M2 velocity would pick up to a 4 percent rate in the fourth quarter, bringing the increase for the year to 3 percent. Under alternative B, M3 would grow at a 3/4 percent rate over the remainder of this year, leaving this aggregate just above both its fourth-quarter 1992 level and the bottom of its

8. We expect that NationsBank will transfer its government security dealer operations, with associated RPs, to a nonbank affiliate in October, reversing the transaction it made in July and depressing M2. In part reflecting the surge in refinancing, M1 is projected to accelerate to a 12-1/4 percent pace over the August-to-December period. Accompanying this strength in M1, total reserves are expected to increase at a 16-3/4 percent pace over the period and the monetary base at a 10-3/4 percent rate.

9. The growth of M2 continues to fall short of staff money demand models by substantial margins. More conventional models are predicting about 5 percent growth this year; even the expanded models that include the effects of the steep yield curve call for about 3-1/2 percent growth in 1993.

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										
Jul-93	3521.4	3521.4	3521.4	4169.9	4169.9	4169.9	1085.5	1085.5	1085.5	
Aug-93	3526.7	3526.7	3526.7	4175.3	4175.3	4175.3	1095.0	1095.0	1095.0	
Sep-93	3533.6	3532.7	3531.8	4178.4	4177.7	4177.0	1103.9	1103.3	1102.8	
Oct-93	3536.2	3533.3	3530.3	4176.7	4174.9	4173.2	1115.5	1113.9	1112.3	
Nov-93	3545.9	3541.2	3536.5	4183.3	4180.2	4177.0	1129.1	1126.4	1123.7	
Dec-93	3555.1	3549.2	3543.3	4189.9	4185.4	4180.9	1143.2	1139.6	1135.9	
Monthly Growth Rates										
Jul-93	2.2	2.2	2.2	-0.3	-0.3	-0.3	13.8	13.8	13.8	
Aug-93	1.8	1.8	1.8	1.6	1.6	1.6	10.5	10.5	10.5	
Sep-93	2.3	2.0	1.7	0.9	0.7	0.5	9.7	9.1	8.5	
Oct-93	0.9	0.2	-0.5	-0.5	-0.8	-1.1	12.6	11.5	10.4	
Nov-93	3.3	2.7	2.1	1.9	1.5	1.1	14.7	13.5	12.3	
Dec-93	3.1	2.7	2.3	1.9	1.5	1.1	15.0	14.0	13.0	
Quarterly Averages										
93 Q1	-1.8	-1.8	-1.8	-3.7	-3.7	-3.7	6.6	6.6	6.6	
93 Q2	2.2	2.2	2.2	2.5	2.5	2.5	10.5	10.5	10.5	
93 Q3	3.2	3.1	3.1	1.1	1.1	1.1	12.7	12.7	12.6	
93 Q4	2.1	1.6	1.1	0.8	0.6	0.3	12.6	11.7	10.8	
Growth Rate										
From	To									
Dec-92	Jun-93	1.0	1.0	1.0	0.2	0.2	0.2	9.1	9.1	9.1
Jun-93	Sep-93	2.1	2.0	1.9	0.7	0.6	0.6	11.4	11.2	11.0
Jun-93	Dec-93	2.3	2.0	1.6	0.9	0.7	0.5	13.0	12.4	11.7
Aug-93	Dec-93	2.4	1.9	1.4	1.0	0.7	0.4	13.2	12.2	11.2
Sep-93	Dec-93	2.4	1.9	1.3	1.1	0.7	0.4	14.2	13.2	12.0
92 Q4	Jun-93	0.9	0.9	0.9	-0.2	-0.2	-0.2	9.4	9.4	9.4
92 Q4	Aug-93	1.2	1.2	1.2	0.0	0.0	0.0	10.2	10.2	10.2
92 Q4	Dec-93	1.6	1.4	1.2	0.3	0.2	0.1	11.4	11.1	10.8
90 Q4	91 Q4	2.8	2.8	2.8	1.1	1.1	1.1	8.0	8.0	8.0
91 Q4	92 Q4	1.8	1.8	1.8	0.3	0.3	0.3	14.3	14.3	14.3
92 Q4	93 Q4	1.4	1.3	1.2	0.2	0.1	0.0	11.0	10.8	10.5

1993 Target Ranges: 1.0 to 5.0

0.0 to 4.0

Chart 1

ACTUAL AND TARGETED M2

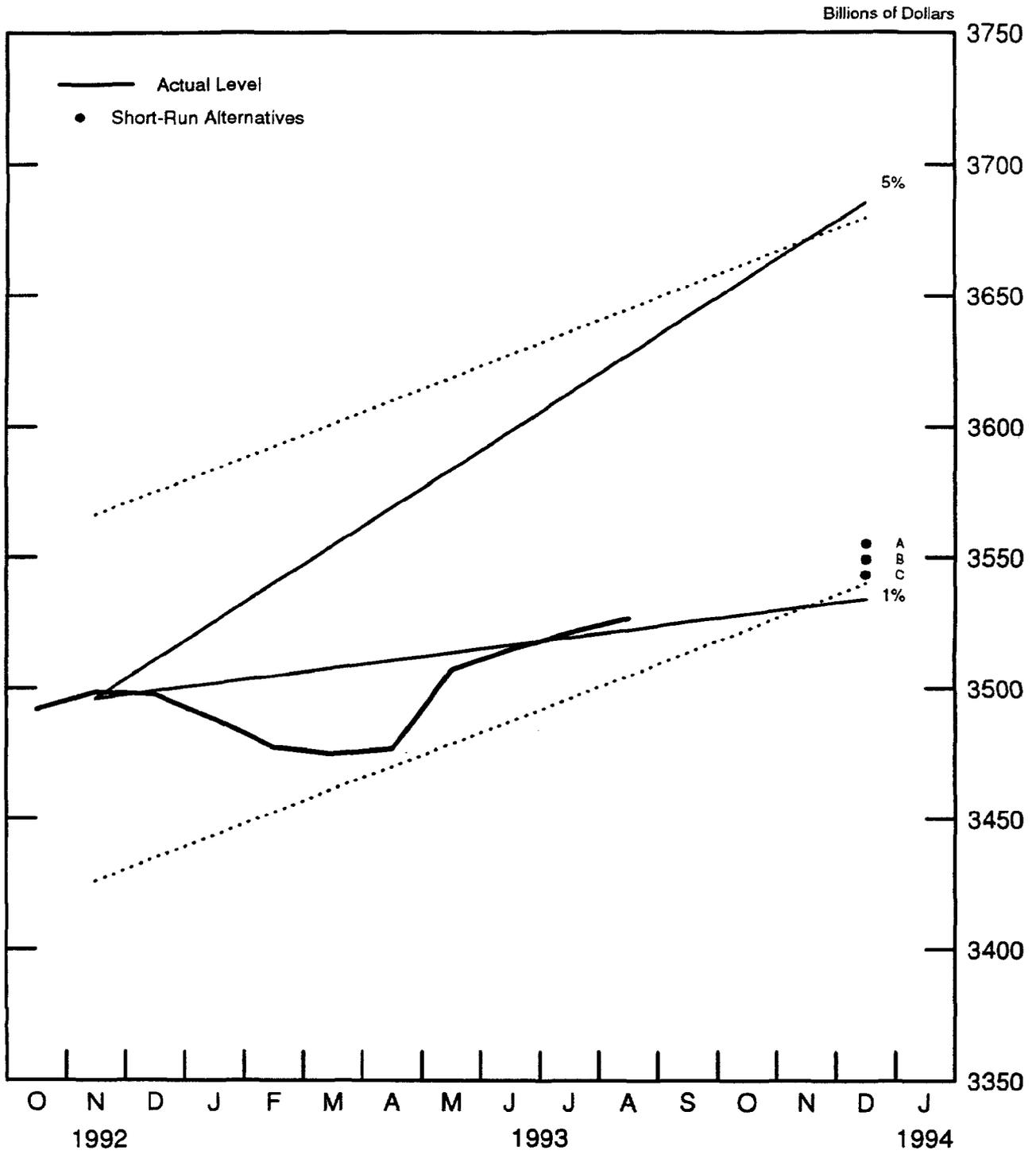


Chart 2

ACTUAL AND TARGETED M3

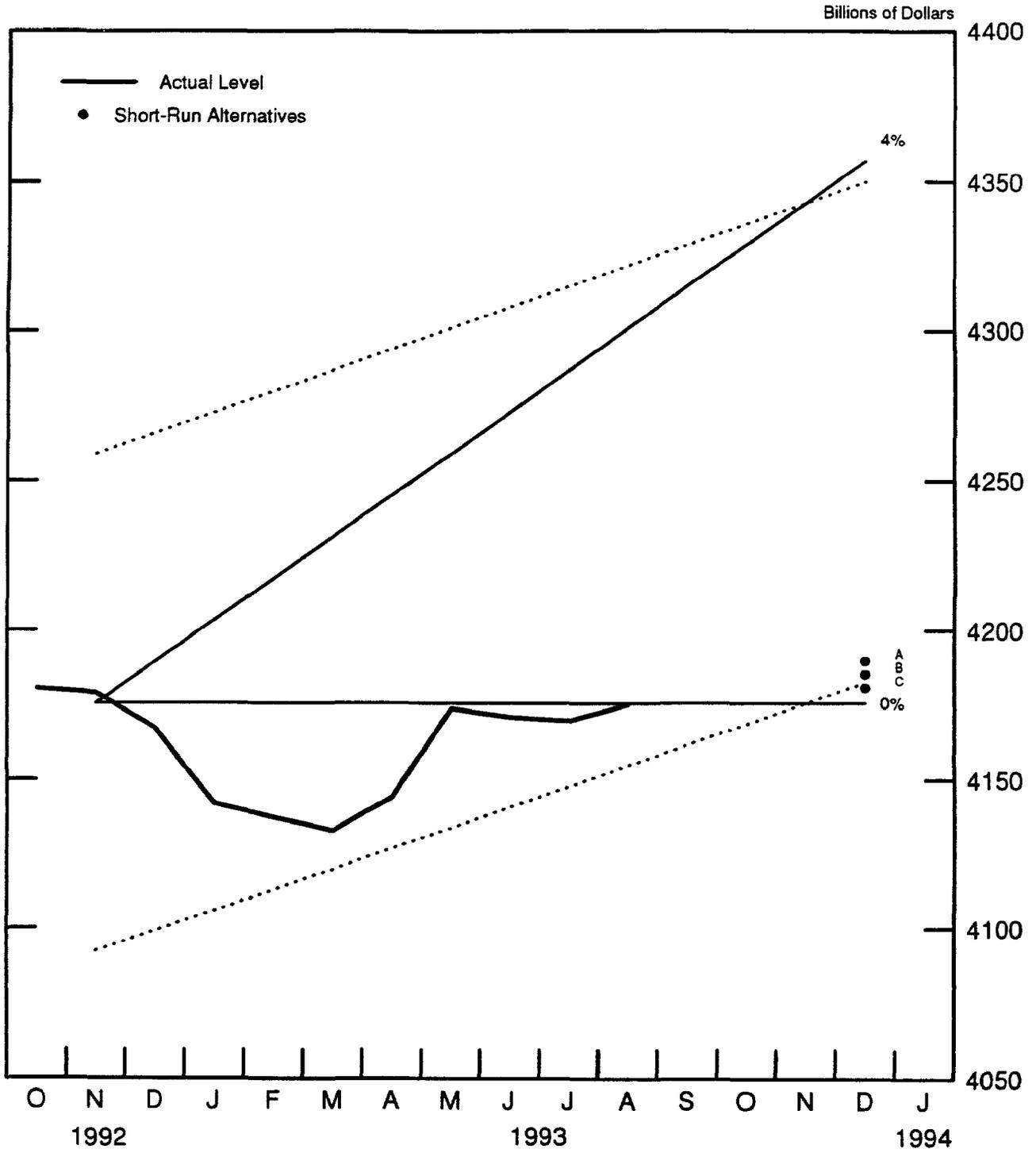


Chart 3

M1

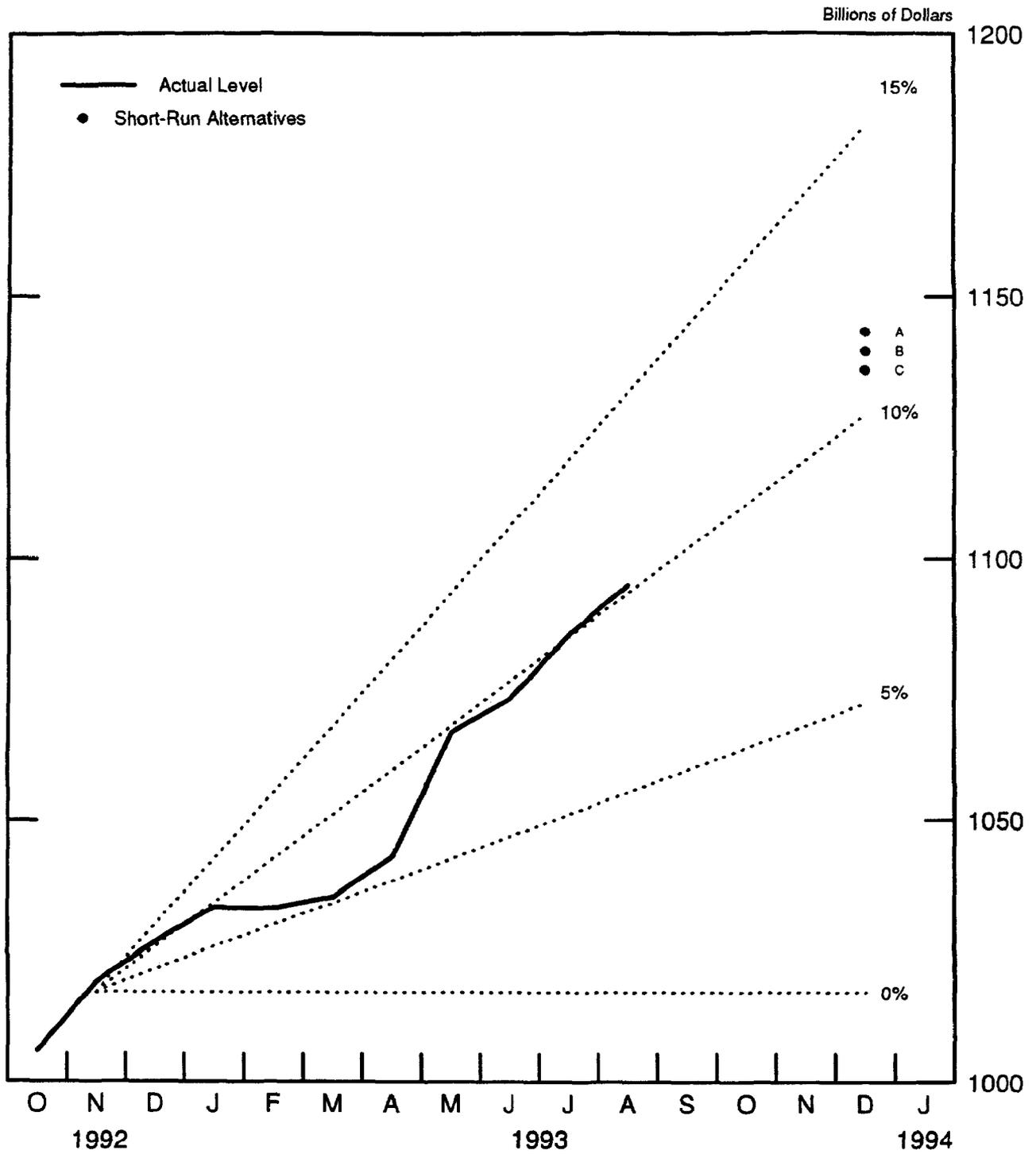
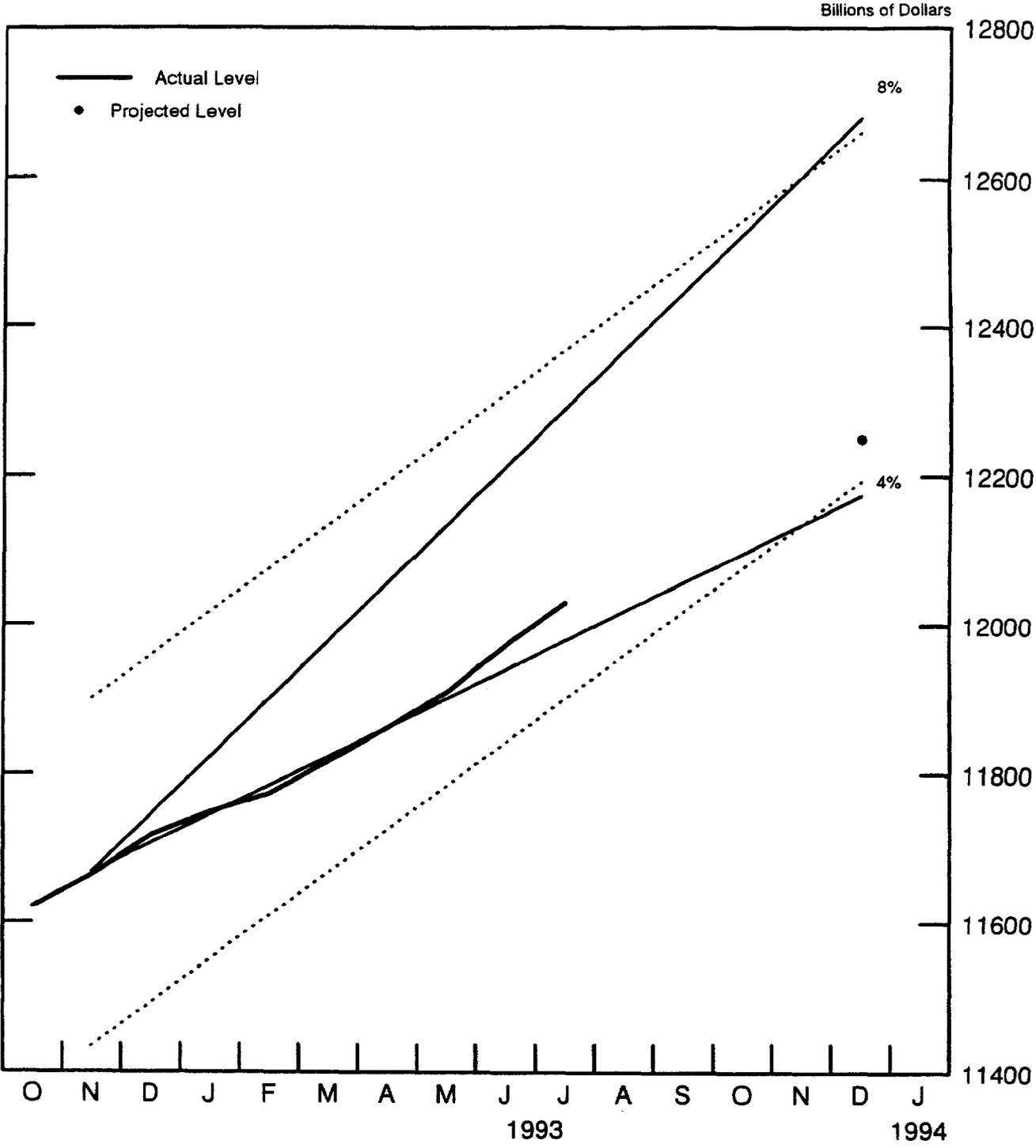


Chart 4

DEBT



annual range. Sluggish demand for bank loans is expected to hold down banks' needs for funds. Moreover, the RTC, with new funding authority, is expected to begin working down its backlog of resolutions in coming months, leading to more rapid shrinkage of thrift institutions and the substitution of Treasury financing for deposit financing to carry acquired assets.

(10) Under alternative A, money market interest rates would drop by the full 50 basis point decline in the federal funds rate. The prime rate would also decrease by this amount. Intermediate-term rates would fall appreciably, as expectations of the path of short-term rates in the months ahead were revised down, and the dollar would weaken on foreign exchange markets. Real long-term rates would move lower as well, and the drop in interest and exchange rates would provide additional stimulus to spending over time. The extent of the decline in nominal bond rates, however, would depend importantly on how the market interpreted the Committee's rationale for this action.

(11) This alternative might seem attractive if the Committee saw the lack of progress toward full employment in the staff outlook as unsatisfactory and was willing to settle for essentially no further disinflation in this expansion; market perceptions that the Committee had down-weighted its price stability objective could limit declines in nominal long-term rates. Alternative A might also be chosen if the Committee saw economic activity and inflation as possibly coming in below the staff forecast; market perceptions that the Committee was signalling an expectation that the outlook for real activity had deteriorated and for disinflation had improved could result in substantial declines in bond yields. Although the longer-term effects of lower interest rates on money demand may be uncertain, over the next several months deposit rates would lag declines in market rates,

boosting money growth under this alternative and providing a little more assurance that the broad monetary aggregates would finish the year within their ranges. Given the staff spending forecast, M2 would expand at a 2-1/2 percent rate over the remainder of the year, ending the year 1-1/2 percent above its fourth-quarter 1992 base. The boost to growth in income beginning late in the year would tend to lift this aggregate further into its tentative 1994 range early next year. Some of the more rapid growth in M2 would show through to M3 under alternative A, but expansion of this aggregate would remain quite weak as borrowers continued to direct their credit demands toward long-term markets.

(12) Under alternative C, interest rates would rise and the dollar would strengthen on foreign exchange markets. Money market rates would increase by the full 50 basis point rise in the federal funds rate. Although markets seem still to expect a tightening in policy at some point, action under this alternative would come much sooner than now built into the yield curve. Intermediate-term rates would increase significantly, especially if the tightening were seen as signalling a more aggressive posture of the Federal Reserve against inflation and a higher trajectory of short-term rates for a considerable period. However, lower prospective inflation might decrease far-ahead forward rates, limiting advances in nominal bond yields.

(13) Alternative C might be favored if the modest degree of price deceleration in the staff forecast were viewed to be unsatisfactory. Tighter money market conditions might also be sought if the Committee were concerned that low nominal and real short-term rates were fostering runups in capital market prices that were unsustainable, risking either excessive stimulus to spending and inflation down the road or a sharp correction in financial markets with potential

systemic implications. M2 under this alternative is projected to grow at a 1-1/2 percent rate over the final four months of the year, restrained primarily by higher opportunity costs and less robust mortgage refinancings. M2 growth could be faster than this if declines in bond and stock prices prompted a reassessment of the relative risks of deposits and capital market instruments. M3 would expand at only a 1/2 percent rate over this period, held down in part by sizable outflows from institution-only money market funds. These growth rates would place both aggregates near the bottom of their annual ranges for this year, and on a lower trajectory going into 1994 than under alternative B, partly reflecting damped income growth.

Directive Language

(14) Presented below is draft wording for the operational paragraph that includes the usual options for Committee consideration.

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. In the context of the Committee's long-run objectives for price stability and sustainable economic growth, and giving careful consideration to economic, financial, and monetary developments, 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 modest growth in M2 and little net change in M3 over the balance of the YEAR third quarter.

SELECTED INTEREST RATES

(percent)

	Short-Term								Long-Term							
	federal funds	Treasury bills secondary market			CDs secondary market	comm. paper	money market mutual fund	bank prime loan	U.S. government constant maturity yields			corporate A-utility recently offered	municipal Bond Buyer	conventional home mortgages		
		3-month	6-month	1-year	3-month	1-month			3-year	10-year	30-year			secondary market	primary market	
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
92 -- High	4.20	4.05	4.22	4.51	4.32	5.02	4.51	6.50	6.32	7.65	8.07	8.99	6.87	9.09	9.03	6.22
-- Low	2.86	2.69	2.82	2.91	3.07	3.17	2.74	6.00	4.24	6.30	7.29	8.06	6.12	7.73	7.84	4.97
93 -- High	3.24	3.10	3.26	3.48	3.28	3.39	2.92	6.00	5.06	6.73	7.46	8.28	6.44	8.17	8.14	5.36
-- Low	2.87	2.82	2.94	3.07	3.06	3.07	2.59	6.00	4.07	5.30	5.93	6.83	5.44	6.82	6.82	4.33
Monthly																
Sep 92	3.22	2.91	2.96	3.06	3.13	3.25	2.91	6.00	4.42	6.42	7.34	8.11	6.40	7.85	7.92	5.11
Oct 92	3.10	2.86	3.04	3.17	3.26	3.22	2.79	6.00	4.64	6.59	7.53	8.40	6.59	8.12	8.09	5.06
Nov 92	3.09	3.13	3.34	3.52	3.58	3.25	2.83	6.00	5.14	6.87	7.61	8.51	6.56	8.35	8.31	5.26
Dec 92	2.92	3.22	3.36	3.55	3.48	3.71	2.82	6.00	5.21	6.77	7.44	8.27	6.43	8.22	8.22	5.45
Jan 93	3.02	3.00	3.14	3.35	3.19	3.21	2.83	6.00	4.93	6.60	7.34	8.13	6.40	8.03	8.02	5.23
Feb 93	3.03	2.93	3.07	3.25	3.12	3.14	2.72	6.00	4.58	6.26	7.09	7.80	6.12	7.65	7.68	4.98
Mar 93	3.07	2.95	3.05	3.20	3.11	3.15	2.66	6.00	4.40	5.98	6.82	7.61	5.85	7.57	7.50	4.79
Apr 93	2.96	2.87	2.97	3.11	3.09	3.13	2.65	6.00	4.30	5.97	6.85	7.66	5.99	7.46	7.47	4.71
May 93	3.00	2.96	3.07	3.23	3.10	3.11	2.62	6.00	4.40	6.04	6.92	7.75	5.92	7.48	7.47	4.65
Jun 93	3.04	3.07	3.20	3.39	3.21	3.19	2.62	6.00	4.53	5.96	6.81	7.59	5.87	7.41	7.42	4.64
Jul 93	3.06	3.04	3.16	3.33	3.16	3.15	2.64	6.00	4.43	5.81	6.63	7.43	5.80	7.19	7.21	4.56
Aug 93	3.03	3.02	3.14	3.30	3.14	3.14	2.64	6.00	4.36	5.68	6.32	7.16	5.67	7.05	7.11	4.48
Weekly																
Jun 2 93	3.09	3.06	3.21	3.43	3.19	3.16	2.62	6.00	4.59	6.10	6.92	7.69	5.91	7.55	7.47	4.66
Jun 9 93	2.96	3.10	3.26	3.48	3.24	3.19	2.62	6.00	4.64	6.07	6.89	7.59	5.92	7.43	7.48	4.67
Jun 16 93	3.01	3.06	3.19	3.37	3.20	3.19	2.62	6.00	4.54	5.99	6.83	7.58	5.86	7.37	7.38	4.64
Jun 23 93	3.00	3.07	3.18	3.36	3.19	3.19	2.62	6.00	4.51	5.93	6.79	7.48	5.79	7.29	7.34	4.59
Jun 30 93	3.13	3.06	3.16	3.35	3.20	3.21	2.63	6.00	4.42	5.82	6.69	7.46	5.75	7.17	7.23	4.58
Jul 7 93	3.10	3.00	3.09	3.27	3.15	3.17	2.63	6.00	4.36	5.79	6.68	7.44	5.76	7.20	7.19	4.56
Jul 14 93	3.01	3.02	3.12	3.27	3.15	3.15	2.64	6.00	4.35	5.76	6.62	7.36	5.74	7.08	7.16	4.53
Jul 21 93	3.09	3.04	3.15	3.29	3.14	3.13	2.63	6.00	4.39	5.74	6.56	7.48	5.87	7.33	7.20	4.56
Jul 28 93	3.03	3.09	3.24	3.46	3.18	3.15	2.65	6.00	4.59	5.92	6.68	7.37	5.87	7.19	7.25	4.55
Aug 4 93	3.10	3.06	3.20	3.40	3.16	3.16	2.65	6.00	4.52	5.84	6.55	7.31	5.83	7.23	7.21	4.55
Aug 11 93	2.98	3.03	3.17	3.36	3.16	3.15	2.64	6.00	4.48	5.82	6.48	7.17	5.68	7.12	7.17	4.51
Aug 18 93	3.06	3.01	3.12	3.28	3.13	3.15	2.64	6.00	4.38	5.71	6.32	7.09	5.61	6.97	7.10	4.45
Aug 25 93	2.98	2.99	3.10	3.25	3.14	3.12	2.64	6.00	4.26	5.58	6.21	6.97	5.56	6.87	6.97	4.41
Sep 1 93	3.08	3.01	3.11	3.23	3.13	3.13	2.64	6.00	4.19	5.45	6.10	6.83	5.52	6.82	6.93	4.40
Sep 8 93	2.99	2.96	3.05	3.16	3.11	3.13	2.64	6.00	4.07	5.30	5.93	6.85	5.44	6.91	6.82	4.33
Sep 15 93	3.03	2.97	3.07	3.22	3.12	3.13	2.64	6.00	4.17	5.33	5.94	--	5.49	6.88	6.96	4.36
Daily																
Sep 10 93	2.94	2.96	3.06	3.18	3.11	3.12	--	6.00	4.11	5.29	5.89	--	--	--	--	--
Sep 16 93	3.10	2.95	3.07	3.25	3.12	3.14	--	6.00	4.19	5.37	6.01	--	--	--	--	--
Sep 17 93	-- p	--	--	--	3.12	--	--	--	--	--	--	--	--	--	--	--

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

SEPTEMBER 20, 1993

Period	Money stock measures and liquid assets					Bank credit	Domestic nonfinancial debt ¹			
	M1	M2	nontransactions components		M3	L	total loans and investments ¹	U. S. government ²	other ²	total ²
			In M2	In M3 only						
	1	2	3	4	5	6	7	8	9	10
Annual growth rates(%):										
Annually (Q4 to Q4)										
1990	4.3	4.0	3.9	-6.5	1.8	2.0	5.7	10.2	5.5	6.6
1991	8.0	2.8	1.1	-6.2	1.1	0.3	3.4	11.3	2.6	4.6
1992	14.3	1.8	-2.6	-6.6	0.3	1.3	3.8	10.7	3.1	5.0
Quarterly Average										
1992-3rd QTR.	11.6	0.9	-3.2	-3.5	0.1	1.1	3.5	12.5	3.4	5.7
1992-4th QTR.	16.8	2.7	-2.7	-14.4	-0.1	1.6	4.1	6.7	3.5	4.3
1993-1st QTR.	6.6	-1.8	-5.3	-13.1	-3.7	-2.4	1.8	7.6	2.5	3.8
1993-2nd QTR.	10.5	2.2	-1.3	3.8	2.5	3.4	5.9	10.4	2.5	4.6
Monthly										
1992-AUG.	15.2	3.1	-1.5	1.7	2.9	3.3	6.6	12.2	4.1	6.2
SEP.	18.0	2.8	-3.1	-6.1	1.3	2.8	6.3	8.2	3.4	4.7
OCT.	19.1	3.9	-2.2	-24.4	-0.8	0.8	3.4	1.0	3.7	3.0
NOV.	15.7	2.3	-3.2	-13.9	-0.4	2.5	2.7	7.2	3.3	4.3
DEC.	8.8	-0.3	-4.1	-19.4	-3.4	-1.7	2.1	13.8	2.7	5.6
1993-JAN.	7.8	-3.3	-7.8	-28.0	-7.2	-5.9	-1.2	4.0	2.8	3.1
FEB.	-0.2	-3.7	-5.2	11.0	-1.4	-1.0	3.3	4.7	1.8	2.5
MAR.	2.6	-0.9	-2.4	-3.5	-1.3	-0.5	6.1	11.8	1.9	4.5
APR.	8.9	0.7	-2.9	17.3	3.3	4.1	3.7	10.7	2.4	4.6
MAY	27.4	10.5	3.3	-1.4	8.6	10.0	8.6	10.2	2.9	4.8
JUNE	7.2	2.6	0.6	-18.9	-0.8	0.6	9.1	12.2	4.3	6.4
JULY	13.8	2.2	-2.8	-14.1	-0.3	0.0	8.8	7.4	5.0	5.6
AUG. p	10.5	1.8	-2.1	0.2	1.6		3.4			
Levels (\$Billions):										
Monthly										
1993-APR.	1043.0	3476.8	2433.7	667.5	4144.2	5030.3	2972.7	3148.9	8713.9	11862.8
MAY	1066.8	3507.2	2440.3	666.7	4173.9	5072.4	2994.0	3175.6	8734.8	11910.4
JUNE	1073.2	3514.9	2441.6	656.2	4171.0	5074.8	3016.8	3207.9	8765.9	11973.8
JULY	1085.5	3521.4	2436.0	648.5	4169.9	5074.9	3038.9	3227.8	8802.2	12030.0
AUG. p	1095.0	3526.7	2431.7	648.6	4175.3		3047.5			
Weekly										
1993-AUG. 2	1091.3	3527.0	2435.7	647.2	4174.2					
9	1091.5	3523.0	2431.5	647.3	4170.3					
16	1095.2	3530.7	2435.6	649.6	4180.3					
23	1096.1	3529.7	2433.5	647.1	4176.7					
30 p	1097.6	3522.4	2424.9	651.9	4174.3					
SEP. 6 p	1103.1	3535.1	2432.0	641.5	4176.6					

1. Adjusted for breaks caused by reclassifications.

2. 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

SEPTEMBER 20, 1993

Period	Currency	Demand deposits	Other checkable deposits	Overnight RPs and Euro-dollars NSA ¹	Savings deposits ²	Small denomination time deposits ³	Money market mutual funds		Large denomination time deposits ⁴	Term RP's NSA ¹	Term Euro-dollars NSA ¹	Savings bonds	Short-term Treasury securities	Commercial paper ¹	Bankers acceptances
							general purpose and broker/dealer ⁴	Institutions only							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Levels (\$Billions):															
Annually (4th Qtr.)															
1990	245.4	277.7	293.1	78.8	919.8	1171.6	348.2	131.5	496.8	93.6	68.0	125.2	329.9	356.2	36.3
1991	265.8	287.0	329.6	73.4	1028.8	1081.0	362.9	175.6	432.3	74.7	60.7	137.0	319.4	336.3	24.4
1992	290.0	338.8	380.2	75.4	1179.0	882.8	344.1	207.5	361.9	80.5	47.0	154.5	325.6	369.6	20.4
Monthly															
1992-AUG.															
SEP.	282.4	322.5	362.8	76.5	1145.7	926.9	348.9	220.9	378.1	75.8	51.4	147.4	322.9	355.7	21.1
OCT.	286.3	329.0	366.7	74.4	1158.9	912.7	343.9	220.7	373.7	77.6	49.4	149.3	321.0	363.4	20.7
NOV.	288.0	336.0	373.7	75.7	1170.5	896.5	346.3	210.9	367.0	79.6	48.1	151.9	320.2	368.0	20.5
DEC.	289.8	339.5	381.6	75.8	1180.4	881.7	343.7	209.2	361.3	81.4	47.2	154.7	325.1	372.4	20.3
1993-JAN.															
FEB.	292.3	340.9	385.2	74.8	1186.0	870.1	342.3	202.3	357.5	80.6	45.6	156.8	331.6	368.4	20.4
MAR.	294.8	341.9	388.6	73.3	1184.4	861.3	339.5	197.7	350.7	79.7	43.6	158.9	337.1	360.7	20.6
APR.	296.9	341.9	386.4	74.1	1182.4	856.1	333.6	201.9	346.3	82.1	47.0	161.1	340.9	355.9	20.2
MAY	299.0	342.0	386.3	74.5	1178.8	851.1	333.1	200.9	340.5	85.7	50.4	162.7	338.0	360.3	19.3
JUNE	301.4	347.3	386.2	72.7	1181.6	844.2	331.8	200.4	346.0	88.8	49.8	163.9	337.4	365.5	19.3
JULY	304.0	359.1	395.5	70.0	1193.7	837.4	336.8	202.8	345.9	89.7	50.5	164.8	345.9	368.3	19.4
AUG. p	306.8	360.6	397.9	73.9	1198.7	829.8	336.5	198.1	342.7	92.8	47.6	165.7	350.3	369.1	18.7
SEP.	309.6	365.8	402.3	76.3	1200.1	821.3	336.3	195.0	338.2	96.4	44.0	167.2	349.7	373.0	15.1
OCT.	312.5	370.8	403.9	78.6	1205.1	814.2	334.5	193.3	338.4	96.1	45.4				

1. Net of money market mutual fund holdings of these items.
2. Includes money market deposit accounts.
3. Includes retail repurchase agreements. All IRA and Keogh accounts at commercial banks and thrift institutions are subtracted from small time deposits.
4. Excludes IRA and Keogh accounts.
5. Net of large denomination time deposits held by money market mutual funds, depository institutions, U.S. government, and foreign banks and official institutions.

p preliminary

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

September 17, 1993

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					
1990	17,448	4,400	13,048	425	50	-100	---	---	375	183	13,240	11,128
1991	20,038	1,000	19,038	3,043	6,583	1,280	375	---	11,282	292	27,726	-1,614
1992	13,086	1,600	11,486	1,096	13,118	2,818	2,333	---	19,365	632	30,219	-13,215
1992 ---Q1	-1,000	1,600	-2,600	---	2,452	---	---	---	2,452	85	-233	-14,636
---Q2	4,415	---	4,415	285	2,193	597	655	---	3,730	250	7,896	1,137
---Q3	867	---	867	350	3,900	945	731	---	5,927	176	6,617	14,195
---Q4	8,805	---	8,805	461	4,572	1,276	947	---	7,256	121	15,939	-13,912
1993 ---Q1	---	---	---	279	1,441	716	705	---	3,141	289	2,851	-461
---Q2	7,749	---	7,749	244	2,490	1,147	1,110	---	4,990	91	12,648	10,624
1992 September	595	---	595	350	3,500	750	731	---	5,332	37	5,890	9,739
October	4,072	---	4,072	---	200	---	---	---	200	---	4,272	-19,267
November	1,064	---	1,064	461	4,172	1,176	947	---	6,756	---	7,820	2,425
December	3,669	---	3,669	---	200	100	---	---	300	121	3,848	2,929
1993 January	---	---	---	---	---	---	---	---	---	103	-103	-6,128
February	---	---	---	---	---	---	---	---	---	85	-85	4,788
March	---	---	---	279	1,441	716	705	---	3,141	101	3,039	879
April	121	---	121	244	2,490	1,147	1,110	---	4,990	28	5,083	-5,514
May	349	---	349	---	---	---	---	---	---	41	308	4,112
June	7,280	---	7,280	---	---	---	---	---	---	22	7,258	12,027
July	---	---	---	---	200	---	---	---	200	366	-166	-14,317
August	902	---	902	100	1,100	500	100	---	1,800	125	2,577	4,528
Weekly												
June 2	228	---	228	---	---	---	---	---	---	---	228	-7,245
9	5,664	---	5,664	---	---	---	---	---	---	---	5,664	-5,464
16	819	---	819	---	---	---	---	---	---	---	819	1,458
23	420	---	420	---	---	---	---	---	---	---	420	9,629
30	280	---	280	---	---	---	---	---	---	22	258	4,161
July 7	---	---	---	---	---	---	---	---	---	---	---	-6,769
14	---	---	---	---	---	---	---	---	---	19	-19	-2,771
21	---	---	---	---	---	---	---	---	---	298	-298	3,712
28	---	---	---	---	---	---	---	---	---	49	-49	-9,914
August 4	---	---	---	---	200	---	100	---	300	---	300	6,299
11	379	---	379	---	---	---	---	---	---	---	379	-1,159
18	276	---	276	---	650	500	---	---	1,150	---	1,426	2,726
25	143	---	143	100	250	---	---	---	350	125	368	-4,815
September 1	104	---	104	---	200	---	---	---	200	---	304	3,833
8	10	---	10	211	2,300	797	717	---	4,026	---	4,036	-3,206
15	63	---	63	---	---	---	---	---	---	---	63	1,867
Memo: LEVEL (bil. \$) ⁶												
September 15			158.9	191.5	75.0	22.5	31.1		320.1		330.9	-5.8

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 issues.

4. Reflects net change in 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
1.9	2.2	0.6	0.1	4.8