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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

December 17, 1993

MONETARY POLICY ALTERNATIVES

Recent Developments

(1) During the period since the November 16 FOMC meeting, the federal funds rate has averaged very close to the intended level of 3 percent.¹ Most short-term interest rates were little changed over the intermeeting period.^{2,3} Recent economic data have been interpreted by market participants as increasing the odds of a tightening of monetary policy, but not necessarily over the very near term. In longer-term markets, yields are up 10 to 15 basis points on balance. Rates were pushed up by signs of stronger economic growth and firming in some commodity prices, though that pressure was offset to some degree by declines in oil prices. Longer-term rates now stand 40 to 60 basis points above their mid-October lows. Over the intermeeting period, most major stock price indexes fell 1 to 2 percent, but the Dow Jones Industrial Average rose about 1 percent on strong performances by a few firms to post new highs near the end of the period.

(2) The dollar's weighted-average foreign exchange value showed little net change over the intermeeting period. It rose about 3 percent against the yen in light of deteriorating prospects for the

1. The allowance for adjustment and seasonal borrowing was reduced in two steps of \$25 million each to \$50 million during the intermeeting period, reflecting autumnal declines in the demand for seasonal credit. In the two maintenance periods ending since the November meeting, actual borrowing averaged somewhat below its allowance. Adjustment borrowing was quite low during the intermeeting period, setting a postwar weekly average low of \$1.6 million in the week of December 8.

2. Market quotations are as of noon on Friday, December 17.

3. Premiums for year-end funding that are implicit in money market interest rates are down from 6 to 7 percentage points at the time of the last FOMC meeting to 1 to 3 percentage points most recently.

Japanese economy and heightened expectations of further easing by the Bank of Japan. Stock prices in that country fell about 4 percent, and short- and long-term interest rates dropped 25 to 40 basis points. The dollar was about unchanged against the German mark, but declined somewhat against other European currencies. In Europe, interest rates generally decreased 10 to 50 basis points, about in line with market expectations, while stock prices continued to advance, with indexes in several countries reaching new highs.

(3) Growth of M2 and M3 strengthened appreciably in November and, at rates of around 4-1/4 percent for both aggregates, was somewhat more rapid than projected by the staff in the last bluebook. Developments in the capital markets may have contributed to this pick-up: Flows into longer-term mutual funds, probably responding to the capital losses associated with the decline in bond prices in late October and November, slowed appreciably during the weeks of November.⁴ Some of the unexpected strength in M2 and M3 was in money market mutual funds--a likely repository of funds for investors moving out of longer-term mutual funds. M1 growth in November was at a 10-1/2 percent rate, as projected in the last bluebook. Currency growth stayed near October's moderate rate; a considerable deceleration in this component over the past two months appears to be due in part to slower growth of foreign demands for U.S. currency. Mortgage refinancing activity likely helped fuel continued rapid expansion of

4. The strengthening of M2 showed through to M2+ (which adds bond and stock mutual funds to M2). M2+ is estimated to have expanded at a 7-1/2 percent rate last month, up from October's 6-1/4 percent pace.

demand deposits last month.⁵ The strengthening of M3 owed to a surge in term Eurodollars as well as to the stepped-up growth in M2.

(4) M2 and M3 in the fourth quarter are projected to be about 1-1/2 and 1/2 percent, respectively, above their average levels for the fourth quarter of 1992, leaving them both about 1/2 percentage point above the lower bounds of their downward-adjusted annual ranges.⁶ Although the growth rate of M2 was roughly the same as in 1992, its velocity rose less rapidly--at an estimated 3-1/2 percent in 1993, down from 5 percent in 1992.⁷ Moreover, some of the increase in velocity in 1993 can be explained by a rise in short-term opportunity costs, as deposit rates continued to adjust downward in response to previous declines in market interest rates. Thus, despite record growth of bond and stock mutual funds, there are some indications that the unusual shifts out of M2 may be beginning to abate, perhaps as portfolios become adjusted to the steep yield curve and the greater availability of mutual funds, as consumer loan rates come down, and as households become more comfortable with their financial positions.⁸ Nonetheless, the rise in M2 velocity this year still was greater than forecast by traditional models, and the level of M2 velocity in the fourth quarter of 1993 is 17 percent above the level

5. The monetary base expanded at an 8-3/4 percent rate last month, up a little from October's pace but down considerably from the third-quarter rate.

6. At the July meeting, the range for M2 for 1993 was revised down 1 percentage point to 1 to 5 percent, while that for M3 was lowered 1/2 percentage point to 0 to 4 percent. A detailed analysis of the behavior of the aggregates in 1993 is contained in an appendix to the Greenbook.

7. Special factors, including increases in demand deposits related to prepayments of mortgages and heavy foreign demands for U.S. currency in the first three quarters, boosted growth of M2 in 1993 and depressed its velocity by an estimated 1 percentage point--the same as in 1992.

8. M2+ is projected to have expanded 5-1/2 percent during 1993. The velocity of this aggregate is expected to have fallen about 1/2 percent this year.

these models expect, given the actual behavior of short-term opportunity costs.⁹ The velocity of M3 also is projected to have risen less sharply in 1993 than last year. Contributing to the slower increase in V3 has been somewhat stronger credit growth at depositories, although this effect has been offset somewhat by an even greater reliance than last year on nondeposit sources of funds.

(5) Nonfederal debt growth appears to be running somewhat stronger in the third and fourth quarters than previously thought, and, at a projected average rate of 4-3/4 percent over these two quarters, is noticeably above the pace of the first half of the year. The faster growth has been evident mainly in the household sector, where sounder balance sheets and perhaps less concern about economic prospects evidently have prompted a greater willingness to borrow. Consumer installment credit has been particularly robust, expanding at a 12-3/4 percent pace in October; bank data suggest that consumer borrowing fell off a bit last month but nevertheless remained well in excess of income growth. Mortgage borrowing is estimated to have picked up appreciably in the third quarter and to be continuing apace in the fourth quarter, reflecting strong housing activity as well as some equity extraction. In the business sector, however, net borrowing has remained quite modest. Internal funds have been nearly ample enough to cover the high level of capital outlays, and elevated share prices have induced many firms to tap equity markets. Gross issuance of corporate bonds has flagged in recent months, partly owing to the backup in long rates, while borrowing from shorter-term sources has remained subdued. The rise in long rates likewise has taken a toll on

9. M2 velocity in 1993 increased by 2 percentage points more than would have been predicted by the new broader model of M2 demand that includes rates on intermediate-term securities and consumer loans.

bond issuance in the state and local sector. Federal debt, though, rebounded in November from a decline in October, bringing estimated total debt growth last month to a 6-1/2 percent rate. Through November, total domestic nonfinancial sector debt is estimated to have risen at a 5 percent rate from its 1992:Q4 base, leaving this aggregate somewhat above the 4 percent lower bound of its monitoring range.

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

	Sep.	Oct.	Nov.	QIV to Nov. ¹
<u>Money and credit aggregates</u>				
M1	13.6	10.4	10.5	10.7
M2	4.1	0.7	4.3	1.5
M3	3.6	1.9	4.2	0.7
Domestic nonfinancial debt	5.3	3.7	6.4	4.9
Federal	7.1	-1.5	9.3	8.3
Nonfederal	4.6	5.6	5.3	3.7
Bank credit	4.0	0.0	6.3	4.7
<u>Reserve measures</u>				
Nonborrowed reserves ²	15.2	23.1	16.8	12.7
Total reserves	16.6	20.0	12.7	12.6
Monetary base	15.1	7.9	8.8	10.6
Memo: (Millions of dollars)				
Adjustment plus seasonal borrowing	428	285	89	--
Excess reserves	1090	1089	1093	--

1. Data for November debt measures are partly projected.

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 alternatives are presented below for Committee consideration. Under alternative B, federal funds would continue to trade around 3 percent in association with adjustment plus seasonal borrowing at the discount window of \$50 million. Under alternative C, the federal funds rate would move up to 3-1/2 percent and the borrowing allowance to \$75 million. In the case of alternative A, the federal funds rate would decline to 2-1/2 percent and borrowing would fall, perhaps to \$25 million.

(7) Alternative B is consistent with the policy assumptions underlying the staff economic forecast. In that forecast, short-term rates are maintained at around current levels through most of 1994. The spurt in output in the current quarter, related importantly to production adjustments in the automobile industry, is not sustained. Output decelerates in the first quarter, and then settles into a growth pace broadly in line with that of potential over the balance of the year, held down to an extent by scheduled fiscal retrenchment. With economic slack persisting, albeit at around the current diminished level, prices decelerate modestly further. Relative to the staff forecast, market participants appear to be anticipating a bit more strength in aggregate demand through next year, and have built into interest rates substantial odds that policy will begin to tighten in the first part of the year to keep inflation from increasing. Nonetheless, market interest rates are unlikely to move down much on balance under the steady funds rate of alternative B in coming months, since the market would continue to expect a tightening before long. The foreign exchange value of the dollar under alternative B should stay around current levels.

	<u>Alt. A</u>	<u>Alt. B</u>	<u>Alt. C</u>
Growth from November to March			
M2	2-1/4	2	1-3/4
M3	1-1/4	1	3/4
M1	6-1/2	6	5-1/4
Implied growth from 1992:			
Q4 to March			
M2	2-1/2	2	1-3/4
M3	1-1/2	1-1/4	1
M1	7	6-1/2	5-3/4

(8) Growth of the broad monetary aggregates, shown in the table above, is expected to slow a little through March under alternative B from the faster pace of recent months, but to stay above the pace of 1993 as a whole. This moderation is entirely accounted for by identifiable special factors. In particular, the recent falloff in mortgage refinancing applications portends a marked reduction in demand deposits associated with this activity. This effect subtracts around 3 percentage points from the expansion of M1 and 1 percentage point from M2 over the November-to-March period. (Increases in refinancing over the summer and early fall added an estimated 1-3/4 and 1/2 percentage points of growth to M1 and M2 from August to November.) Abstracting from this factor, growth of M2 is projected to pick up a little in coming months. Shifts from M2 should continue to moderate a little as balance sheets become better aligned with the current structure of interest rates. We expect flows into long-term mutual funds to average below the record pace of most of 1993, reacting also to heightened investor perceptions of risk after the backup in yields and associated capital losses of October and November.

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											
Sep-93	3533.1	3533.1	3533.1	4178.2	4178.2	4178.2	1106.5	1106.5	1106.5		
Oct-93	3535.2	3535.2	3535.2	4184.9	4184.9	4184.9	1116.1	1116.1	1116.1		
Nov-93	3547.8	3547.8	3547.8	4199.5	4199.5	4199.5	1125.9	1125.9	1125.9		
Dec-93	3556.2	3556.2	3556.2	4204.8	4204.8	4204.8	1129.7	1129.7	1129.7		
Jan-94	3563.6	3561.8	3560.0	4207.7	4206.6	4205.5	1137.4	1136.3	1135.2		
Feb-94	3569.9	3566.9	3563.9	4211.5	4209.7	4207.9	1144.2	1142.3	1140.4		
Mar-94	3575.5	3571.6	3567.7	4215.6	4212.9	4210.2	1150.6	1148.1	1145.6		
Monthly Growth Rates											
Sep-93	4.1	4.1	4.1	3.6	3.6	3.6	13.6	13.6	13.6		
Oct-93	0.7	0.7	0.7	1.9	1.9	1.9	10.4	10.4	10.4		
Nov-93	4.3	4.3	4.3	4.2	4.2	4.2	10.5	10.5	10.5		
Dec-93	2.8	2.8	2.8	1.5	1.5	1.5	4.1	4.1	4.1		
Jan-94	2.5	1.9	1.3	0.8	0.5	0.2	8.2	7.0	5.8		
Feb-94	2.1	1.7	1.3	1.1	0.9	0.7	7.2	6.4	5.6		
Mar-94	1.9	1.6	1.3	1.2	0.9	0.7	6.7	6.1	5.5		
Quarterly Averages											
93 Q1	-1.9	-1.9	-1.9	-3.9	-3.9	-3.9	6.5	6.5	6.5		
93 Q2	2.2	2.2	2.2	2.3	2.3	2.3	10.5	10.5	10.5		
93 Q3	3.2	3.2	3.2	1.2	1.2	1.2	12.9	12.9	12.9		
93 Q4	2.6	2.6	2.6	2.7	2.7	2.7	10.5	10.5	10.5		
94 Q1	2.6	2.3	2.0	1.4	1.3	1.1	7.2	6.5	5.9		
Growth Rate											
From	To										
Sep-93	Dec-93		2.6	2.6	2.6	2.5	2.5	2.5	8.4	8.4	8.4
Dec-93	Mar-94		2.2	1.7	1.3	1.0	0.8	0.5	7.4	6.5	5.6
Nov-93	Mar-94		2.3	2.0	1.7	1.2	1.0	0.8	6.6	5.9	5.2
92 Q4	Nov-93		1.5	1.5	1.5	0.7	0.7	0.7	10.7	10.7	10.7
92 Q4	Dec-93		1.7	1.7	1.7	0.7	0.7	0.7	10.2	10.2	10.2
93 Q4	Jan-94		2.9	2.6	2.3	1.6	1.5	1.3	7.2	6.6	6.0
93 Q4	Feb-94		2.7	2.3	2.0	1.4	1.3	1.1	7.2	6.5	5.9
93 Q4	Mar-94		2.5	2.1	1.8	1.4	1.2	1.0	7.1	6.5	5.8
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		1.7	1.7	1.7	0.2	0.2	0.2	14.3	14.3	14.3
92 Q4	93 Q4		1.5	1.5	1.5	0.6	0.6	0.6	10.5	10.5	10.5

Chart 1

ACTUAL AND TARGETED M2

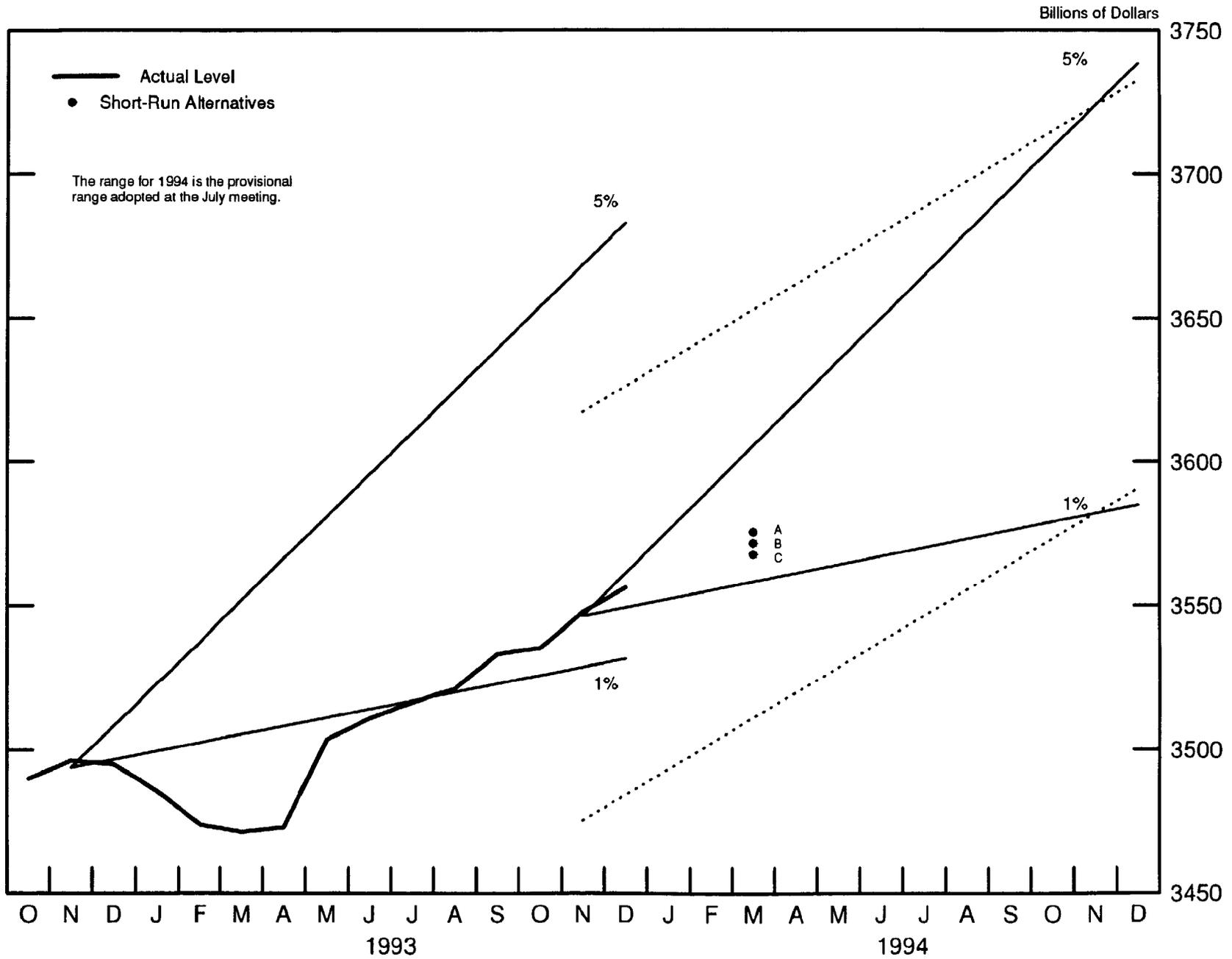


Chart 2

ACTUAL AND TARGETED M3

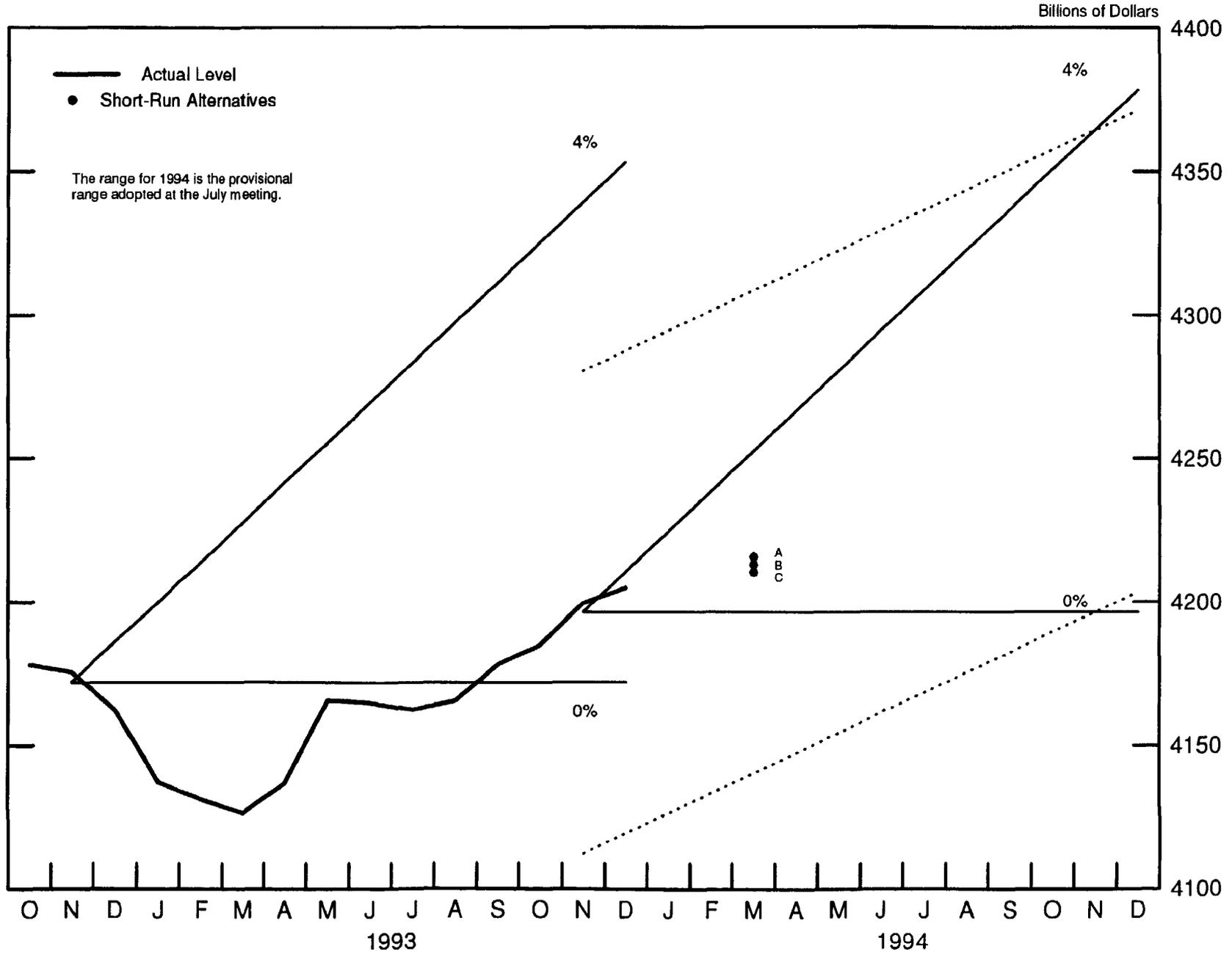


Chart 3

M1

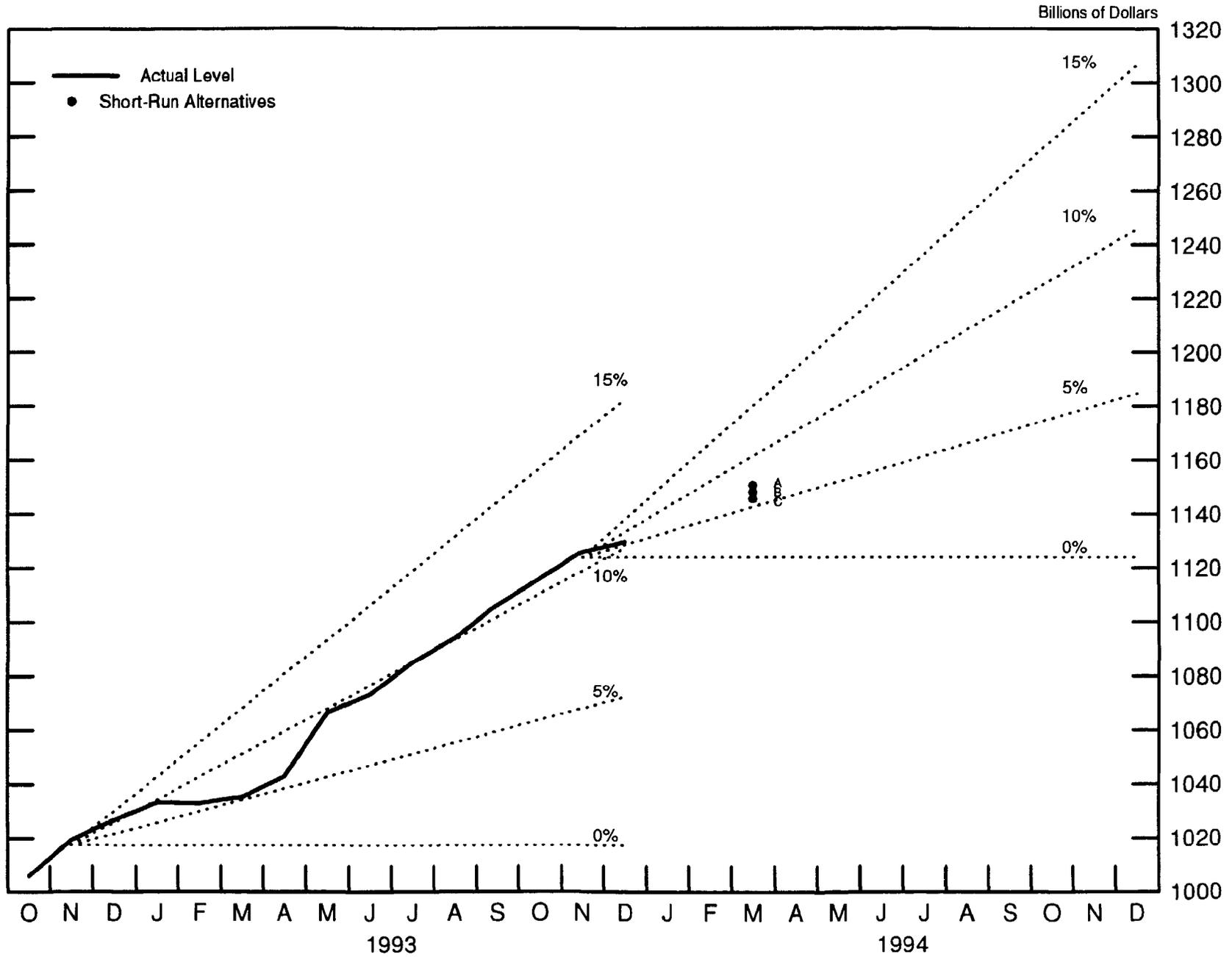
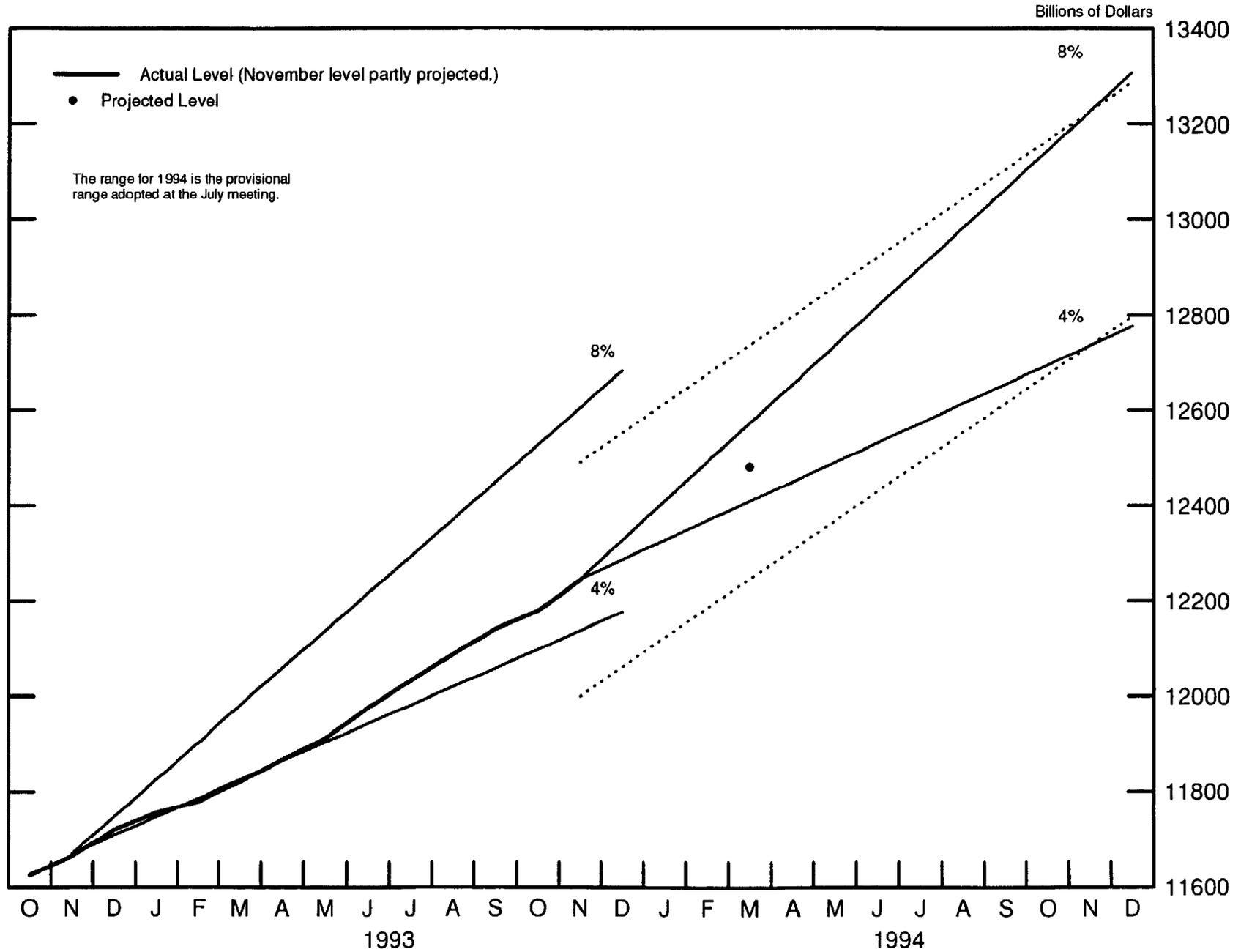


Chart 4

Debt



(9) Nonetheless, substantial portfolio shifts are expected to persist, as the yield curve remains relatively steep, and these shifts will continue to damp the growth of M2 relative to nominal income. The velocity of M2 in the first quarter would rise at a 4 percent rate, down only a bit from the 4-1/2 percent rate projected for the current quarter. M2 by March would have expanded at a 2 percent annual rate from its fourth-quarter 1993 base under alternative B, placing this aggregate well above the lower end of its provisional 1 to 5 percent growth range for next year. However, monthly money growth in the first quarter could be especially volatile and difficult to interpret. Seasonal factors were distorted by policy-induced surges in money in early 1991 and 1992. In addition, amounts and patterns of tax payments, and associated adjustments in money holdings, could be atypical, given the uncertain effects of the new tax law.

(10) Under alternative B, M3 would advance at a 1 percent annual rate over the November-to-March period; by March this aggregate would be 1-1/4 percent above its fourth-quarter 1993 base, well within its 0 to 4 percent provisional range for 1994. Bank credit should continue to expand around the 5 percent pace of 1993, and banks are expected to persist in funding much of the growth with lower cost, non-M3 sources, in part to avoid deposit insurance premiums. The debt of the nonfederal sectors will grow at a 4-3/4 percent rate through March, in line with the stepped-up pace of the second half of 1993. Household borrowing is expected to continue to be strong, reflecting more comfortable financial positions and the high level of spending on housing and durable goods. Overall financing needs of businesses are expected to grow as advances in capital spending outstrip growth in internal funds, and as net equity issuance is held down by a major

merger. Total debt of nonfinancial sectors is projected to increase at a 5-3/4 percent pace from the fourth quarter of 1993 to March, well above the lower end of its provisional 4 to 8 percent range for next year.

(11) The rise in the federal funds rate under alternative C, to 3-1/2 percent, would come sooner than now anticipated by market participants and built into markets interest rates. Rates at the near end of the maturity spectrum would rise by almost the full 50 basis point increase in the funds rate; intermediate- and long-term rates would go up, but as usual by less. The extraordinary spread of the prime rate over funding costs and the more aggressive lending posture of commercial banks suggest that the prime rate might notch up only 1/4 percentage point. The eventual increase in long-term rates could be limited because such a tightening at this time might be seen as better ensuring continuing moderate expansion and disinflation in the years ahead. Quality spreads would be expected to remain fairly narrow as a firming in the policy stance in the context of market expectations of a more solid economic expansion would not be likely to raise many concerns about credit quality. Higher yields on dollar assets would put upward pressure on the exchange value of the dollar. M2 would grow at a 1-3/4 percent annual rate over the November-to-March period, restrained by higher opportunity costs. M3 would expand under alternative C at only a 3/4 percent pace over the November-to-March period.

(12) Alternative C might be preferred if there were concerns about the inflation outlook. Such concerns could arise from a view that current-quarter strength in economic activity suggested that the economy was on an appreciably higher growth track, perhaps because financial factors damping expansion have faded, allowing the current

accommodative stance of monetary policy to show through more fully into aggregate demand. In that event, the output gap would be closing more quickly than in the staff forecast, raising the risks of an overshooting of activity relative to its potential and hence greater inflationary pressures over time. A timely firming in policy now could obviate a more aggressive tightening later to keep inflation from picking up, involving perhaps even higher real interest rates if delays permitted inflation expectations to deteriorate.

(13) The easing of policy under alternative A would come as a surprise to market participants, and short-term interest rates would fall by about the 50 basis point drop in the federal funds rate. Intermediate- and long-term rates would decline by less; indeed, the extent of any decline would be quite limited if the easing were seen by market participants to be unsustainable. The dollar would weaken on foreign exchange markets. Under alternative A, M2 would expand at a 2-1/4 percent pace, close to that evident since midyear, buoyed partly by less of a slowdown in M1 than under alternatives B and C. M3 would grow at a 1-1/4 percent pace from November to March.

(14) Alternative A might be favored if the current strength in the economy were seen as likely to give way to a significant weakening in the pace of expansion next year, considering the greater fiscal restraint in train and the backup in long-term interest rates and the dollar since mid-October. Moreover, even if the staff forecast is judged to be the most likely outcome, the lack of much progress in reducing the unemployment rate may be deemed to be unacceptable. Moreover, recent softness in the oil market could suggest lessened risk to the inflation outlook from an easing, at least in the near term.

Directive Language

(15) 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 MODERATE growth in M2 and M3 over COMING MONTHS the balance of the year.

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	fixed-rate	fixed-rate
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	3.12	3.27	3.48	3.36	3.44	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	5.24	5.83	6.79	5.41	6.72	6.74	4.14
Monthly																
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
Sep 93	3.09	2.95	3.06	3.22	3.12	3.14	2.65	6.00	4.17	5.36	6.00	6.94	5.50	6.89	6.92	4.36
Oct 93	2.99	3.02	3.12	3.25	3.24	3.14	2.65	6.00	4.18	5.33	5.94	6.91	5.48	6.85	6.83	4.25
Nov 93	3.02	3.10	3.26	3.42	3.35	3.15	2.66	6.00	4.50	5.72	6.21	7.25	5.71	7.32	7.16	4.24
Weekly																
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	6.99	5.49	6.88	6.96	4.36
Sep 22 93	3.12	2.94	3.07	3.26	3.12	3.14	2.65	6.00	4.21	5.42	6.07	7.07	5.51	6.94	6.95	4.34
Sep 29 93	3.05	2.92	3.05	3.23	3.10	3.16	2.65	6.00	4.17	5.35	6.01	6.95	5.53	6.95	6.89	4.29
Oct 6 93	3.24	2.95	3.06	3.23	3.24	3.16	2.68	6.00	4.18	5.36	6.01	6.93	5.52	6.78	6.87	4.28
Oct 13 93	2.91	3.00	3.09	3.21	3.22	3.15	2.64	6.00	4.12	5.28	5.94	6.79	5.41	6.72	6.81	4.33
Oct 20 93	2.97	3.03	3.11	3.24	3.22	3.13	2.65	6.00	4.11	5.24	5.83	6.97	5.44	6.87	6.74	4.14
Oct 27 93	2.97	3.06	3.17	3.30	3.26	3.14	2.64	6.00	4.24	5.42	5.98	6.97	5.56	6.94	6.86	4.19
Nov 3 93	3.04	3.07	3.22	3.37	3.34	3.15	2.66	6.00	4.39	5.54	6.03	7.25	5.72	7.26	7.11	4.17
Nov 10 93	2.96	3.09	3.25	3.40	3.36	3.15	2.65	6.00	4.49	5.70	6.20	7.23	5.69	7.24	7.12	4.28
Nov 17 93	3.03	3.10	3.24	3.39	3.34	3.15	2.67	6.00	4.45	5.67	6.17	7.37	5.70	7.38	7.08	4.20
Nov 24 93	2.98	3.12	3.27	3.47	3.35	3.14	2.67	6.00	4.55	5.82	6.31	7.27	5.74	7.38	7.31	4.30
Dec 1 93	3.09	3.12	3.27	3.46	3.35	3.15	2.69	6.00	4.53	5.80	6.27	7.24	5.71	7.37	7.25	4.31
Dec 8 93	2.92	3.10	3.26	3.44	3.35	3.44	2.69	6.00	4.53	5.75	6.21	7.24	5.53	7.17	7.14	4.25
Dec 15 93	2.94	3.05	3.24	3.47	3.26	3.36	2.69	6.00	4.55	5.77	6.23	--	5.62	--	7.17	4.20
Daily																
Dec 10 93	2.90	3.05	3.24	3.48	3.27	3.36	--	6.00	4.53	5.73	6.19	--	--	--	--	--
Dec 16 93	3.03	3.03	3.23	3.46	3.22	3.33	--	6.00	4.58	5.84	6.31	--	--	--	--	--
Dec 17 93	-- 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

DECEMBER 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	5.6	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	1.7	-2.7	-6.7	0.2	1.3	3.8	10.7	3.1	5.0
Quarterly Average										
1992-4th QTR.	16.8	2.6	-3.0	-15.0	-0.4	1.4	4.1	6.7	3.4	4.2
1993-1st QTR.	6.5	-1.9	-5.4	-14.0	-3.9	-2.4	1.8	7.6	2.7	4.0
1993-2nd QTR.	10.5	2.2	-1.4	3.3	2.3	3.3	6.1	10.4	2.4	4.5
1993-3rd QTR.	12.9	3.2	-1.1	-9.0	1.2	1.3	7.2	9.1	4.4	5.7
Monthly										
1992-NOV.	15.6	2.1	-3.3	-15.2	-0.7	2.2	2.7	7.2	3.0	4.1
DEC.	8.8	-0.5	-4.3	-20.7	-3.8	-2.0	2.2	13.8	2.8	5.7
1993-JAN.	7.7	-3.2	-7.7	-28.9	-7.3	-5.8	-1.2	4.0	3.7	3.8
FEB.	-0.2	-4.0	-5.6	10.3	-1.7	-0.9	3.3	4.7	1.6	2.4
MAR.	2.6	-0.9	-2.4	-4.0	-1.4	-0.2	6.3	11.8	1.3	4.0
APR.	9.0	0.6	-2.9	15.8	3.0	3.8	4.2	10.7	2.5	4.7
MAY	27.3	10.5	3.2	-2.5	8.4	9.4	8.2	10.2	2.5	4.6
JUNE	7.2	2.5	0.4	-14.5	-0.2	0.5	9.3	12.2	4.3	6.4
JULY	13.3	1.9	-3.2	-14.9	-0.7	-0.8	9.1	7.3	5.2	5.7
AUG.	10.1	1.6	-2.2	-3.0	0.9	3.0	3.3	8.7	4.3	5.5
SEP.	13.6	4.1	-0.1	1.1	3.6	-2.6	4.0	7.1	4.6	5.3
OCT.	10.4	0.7	-3.7	8.4	1.9	3.5	0.0	-1.5	5.6	3.7
NOV. p	10.5	4.3	1.4	3.9	4.2		6.3			
Levels (\$Billions):										
Monthly										
1993-JULY	1085.0	3516.3	2431.3	646.1	4162.4	5064.3	3037.9	3227.6	8805.9	12033.4
AUG.	1094.1	3521.1	2426.9	644.5	4165.6	5076.9	3046.3	3251.1	8837.3	12088.3
SEP.	1106.5	3533.1	2426.6	645.1	4178.2	5065.9	3056.4	3270.4	8871.2	12141.6
OCT.	1116.1	3535.2	2419.1	649.6	4184.9	5080.6	3056.4	3266.3	8912.7	12178.9
NOV. p	1125.9	3547.8	2422.0	651.7	4199.5		3072.5			
Weekly										
1993-NOV. 1	1118.4	3528.9	2410.5	646.9	4175.8					
8	1118.8	3539.8	2421.1	648.2	4188.0					
15	1123.0	3546.9	2423.9	650.7	4197.6					
22	1124.3	3547.6	2423.3	654.4	4202.0					
29 p	1127.2	3547.5	2420.2	654.4	4201.8					
DEC. 6 p	1129.6	3558.8	2429.2	649.7	4208.6					

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

DECEMBER 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 ⁵	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							
							7	8							
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	496.9	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	880.3	344.1	207.5	360.8	80.6	47.0	154.5	325.6	369.6	20.4
Monthly															
1992-NOV.	289.8	339.5	381.6	75.8	1180.4	879.3	343.7	209.2	360.2	81.4	47.2	154.7	325.1	372.4	20.3
DEC.	292.3	340.8	385.2	74.7	1186.0	867.3	342.3	202.3	355.7	80.6	45.6	156.8	331.4	368.4	20.4
1993-JAN.	294.8	341.9	388.6	73.2	1184.4	858.3	340.0	197.7	348.5	79.8	43.5	158.9	337.5	360.7	20.6
FEB.	296.9	341.8	386.4	74.0	1182.4	853.1	333.2	201.9	344.0	82.1	46.7	161.1	342.9	355.9	20.2
MAR.	299.0	341.9	386.3	74.4	1178.8	848.1	332.7	200.9	338.1	85.7	49.8	162.7	341.6	360.3	19.3
APR.	301.4	347.2	386.2	72.6	1181.6	841.1	331.5	200.4	343.2	88.8	48.7	163.9	340.7	365.5	19.3
MAY	304.0	359.1	395.5	70.0	1193.7	834.2	336.4	202.8	343.1	89.8	48.7	164.8	347.1	368.4	19.4
JUNE	306.8	360.5	397.8	73.5	1198.8	826.6	336.2	198.1	339.8	92.8	45.5	165.7	349.1	369.1	18.7
JULY	309.6	365.6	401.9	75.6	1200.1	817.6	335.9	195.0	335.2	96.4	41.9	166.8	348.5	369.1	17.5
AUG.	312.6	370.7	403.1	78.3	1205.1	810.1	334.2	193.3	335.4	96.3	44.1	167.8	345.7	381.4	16.4
SEP.	316.4	376.4	406.0	81.6	1208.7	803.4	332.4	194.1	333.8	96.2	45.3	168.8	323.5	379.5	15.9
OCT.	318.2	379.9	410.2	84.0	1209.6	795.8	332.9	196.6	334.4	95.0	46.0	169.8	318.9	391.5	15.5
NOV. p	319.9	385.3	412.7	85.3	1214.6	788.2	336.4	196.7	332.6	94.5	51.1				

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

December 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
---Q3	1,268	---	1,268	511	3,700	1,297	817	---	6,326	526	7,067	-8,644
1992 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	-14,435
August	902	---	902	100	1,100	500	100	---	1,800	125	2,577	4,528
September	366	---	366	411	2,400	797	717	---	4,326	35	4,656	1,262
October	1,396	468	927	---	---	---	---	---	---	70	857	-6,723
November	5,931	---	5,931	---	100	---	---	---	100	15	6,016	7,232
Weekly												
September 8	10	---	10	211	2,300	797	717	---	4,026	---	4,036	-3,206
15	63	---	63	---	---	---	---	---	---	---	63	1,867
22	---	---	---	---	---	---	---	---	---	---	---	18,292
29	65	---	65	200	---	---	---	---	200	35	230	-15,535
October 6	304	---	304	---	100	---	---	---	100	---	404	-6,182
13	82	---	82	---	---	---	---	---	---	5	77	472
20	281	468	-188	---	---	---	---	---	---	30	-218	1,314
27	361	---	361	---	---	---	---	---	---	35	326	-1,910
November 3	1,235	---	1,235	---	100	---	---	---	100	---	1,335	-2,301
10	3,859	---	3,859	---	---	---	---	---	---	---	3,859	3,738
17	273	---	273	---	---	---	---	---	---	---	273	89
24	496	---	496	---	---	---	---	---	---	---	496	3,880
December 1	665	---	665	---	---	---	---	---	---	15	650	-4,174
8	174	---	174	189	2,619	1,008	826	---	4,642	---	4,816	-8,794
15	413	---	413	---	---	---	---	---	---	---	413	7,336
Memo: LEVEL (bil. \$) ⁶												
December 15			167.1	198.8	79.3	24.7	31.7		334.5		343.5	-4.3

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	2.1	0.6	0.1	4.7