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# MONETARY POLICY ALTERNATIVES

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Prepared for the Federal Open Market Committee

By the staff Board of Governors of the Federal Reserve System

October 2, 1992

MONETARY POLICY ALTERNATIVES

Recent Developments

(1) The degree of reserve pressure was left unchanged after the August 18 FOMC meeting, with federal funds expected to continue to trade around 3-1/4 percent. However, on September 4, in response to a weak employment report and in the context of money growth that had picked up to only a modest rate, the Desk signalled an easing of the intended federal funds rate to 3 percent. The actual federal funds rate averaged around 15 basis points above intended levels during the intermeeting period. Higher rates owed chiefly to unexpectedly large drains of nonborrowed reserves by market factors, especially the Treasury balance as individual nonwithheld tax payments came in above projections during the second half of September.<sup>1</sup> And earlier this week, quarter-end pressures added to tightness in the funds market. Additionally, at times early in the period when the dollar was under substantial downward pressure in volatile foreign exchange markets, the Desk at times exercised particular caution in providing reserves to avoid generating expectations of further ease.

(2) Short-term market interest rates declined 15 to 45 basis points over the intermeeting period, reflecting the System easing in early September and the recent emergence of expectations of further

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1. Unanticipated shortfalls in reserves on the final days of the last two complete maintenance periods contributed to higher seasonal and adjustment borrowing than built into the reserve path, though borrowing tended to run persistently above path throughout those periods as well. Borrowing spikes and reserve pressures at the end of those maintenance periods may have been muted somewhat by the increase in the carryover allowance from 2 percent to 4 percent of required reserves plus required clearing balances, which took effect in the period ending September 16. The Board doubled the carryover allowance to mitigate the adverse impact on the flexibility of bank reserve management of the two reductions in reserve requirements.

policy action in light of the continued sluggish economic expansion. Intermediate-term yields also fell, but at the longest end of the maturity spectrum rates were unchanged on balance over the intermeeting period. The policy easing and generally weak economic data tended to reduce bond yields, but greater concerns about the fiscal outlook and increased uncertainty--perhaps arising in part from foreign exchange market turmoil and policy changes abroad--acted as a counterweight. Broad stock price indexes generally declined 2 to 4 percent on balance over the period.

(3) Exchange markets were turbulent over the intermeeting period and bilateral dollar exchange rates moved by widely varying amounts. Nonetheless, on a weighted-average basis the dollar was unchanged on balance over the period.<sup>2</sup> The dollar weakened early in the period, partly in response to expectations of Federal Reserve easing. On Friday, August 21, and on the following Monday the Desk intervened to purchase a total of \$500 million against marks

. In mid-September the dollar moved sharply higher as turmoil in European currency markets both prompted some safe-haven buying of dollars and resulted in interest rate reductions in Germany. In recent days, reduced strains within the European Monetary System and heightened expectations of further ease by the Federal Reserve have prompted renewed declines in the dollar.

(4) Tension within the EMS gave rise to . major adjustments in monetary policies, and the withdrawal of sterling and the lira from the exchange rate mechanism. The Bundesbank lowered its Lombard and discount rates

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2. Appreciations of 4-3/4 percent against the Canadian dollar, 11-1/2 percent against sterling, and 12 percent against the lira about offset a 3-1/2 percent decline against the mark and a 5-1/2 percent drop against the yen.

25 and 50 basis points, respectively, and short-term market rates in Germany have declined about 85 basis points. Reacting to these declines, short-term interest rates also fell on balance in Switzerland, the Netherlands, and Belgium. Following a sharp but short-lived increase in interest rates to bolster the pound, the Bank of England lowered interest rates in association with its suspension of the pound's membership in the ERM; on net, over the intermeeting period, official rates in the U.K. fell 1 percentage point. In contrast, rates were raised in Italy and in France to defend currency values. Interest rates in Japan are little changed since the FOMC meeting. The Canadians raised interest rates

. Averaging across these disparate interest rate movements, short-term rates abroad have risen somewhat over the intermeeting period, but long-term rates have declined.

(5) The monetary aggregates strengthened over the past two months, although both of the broad aggregates remain somewhat below their target cones. M2 rose at around a 3 percent rate in both August and September, marking a considerable turnaround from the declines posted on balance from March through July. M3 growth also turned positive, averaging 2 percent in August and September. For the June-to-September period, M2 and M3 expanded at 1-3/4 and 1 percent rates, respectively, roughly consistent with the Committee's expectations for growth over the June-to-December period of 2 and 1/2 percent, for M2 and M3. On a quarterly average basis, M2 was unchanged in the third quarter and, based on the Greenbook projection for GDP, M2 velocity rose at a 4 percent rate--again well in excess of what might have been expected from previous changes in market interest rates.

(6) While M2 growth remains unusually subdued, its pickup over the past two months does appear to reflect the cumulative effects of declines in market interest rates and the related drop in opportunity costs since the end of June. Demand deposit growth, already strong, accelerated further in the last two months, likely owing to the effects of lower money market yields on earnings credit rates for compensating balances and on incentives to economize on cash balances. In September, a rise in mortgage refinancing activity associated with the previous decline in mortgage rates also boosted demand deposits. Liquid household deposits, including other checkable deposits, accelerated over August and September; although depository institutions have reduced rates on liquid deposits quickly this year, opportunity costs on such deposits still have declined. With currency growth strengthening as well, apparently owing in part to foreign demand, M1 growth averaged 17 percent over August and September.<sup>3</sup> Small time deposits and M2-type money market mutual fund shares extended their declines, probably owing in part to flows into bond and stock mutual funds; those flows remained strong in August and reportedly in September. Although large time deposits continued to contract in the last two months, the runoff at commercial banks slowed, perhaps owing to faster growth of bank credit.

(7) Bank credit expanded at 5-1/2 percent rates in both August and September, up from less than 1 percent over the previous two months. The turnaround in bank credit was attributable to a strengthening of loans, which ran off more slowly in August and increased in September. Last month, business loans expanded for the first time since last

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3. Required reserves picked up in association with the acceleration in M1 deposits, boosting the increase in total reserves to a 22 percent rate over August and September, and the monetary base to a 16 percent pace.

October. With the prime rate, at 6 percent, remaining unusually high relative to bank funding costs, the increase in business loans appeared to reflect stronger demand rather than any significant easing of supply restraint. Business financing needs seem to have remained modest in recent months and stronger loan demand may have owed in part to a moderation in issuance of bonds and stocks by nonfinancial firms. In the household sector, overall credit demands, while perhaps picking up a bit, also seem to have continued weak. Adjusted for securitizations, consumer loans at banks expanded at a slower pace in August and September than in the previous two months, as did home equity loans. Mortgage refinancing activity, however, has remained strong, and net mortgage growth may have picked up a little. In municipal bond markets, issuance has been rapid, but most of the proceeds have been used for refinancing. Altogether, growth of the debt of nonfederal sectors has strengthened a little in recent months, but it remains below the pace of spending. While federal borrowing tailed off in September, it had remained heavy through August, helping to lift growth of nonfinancial sector debt from the fourth quarter of 1991 to 4-3/4 percent, a little above the bottom of its 4-1/2 to 8-1/2 percent monitoring range.

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

	Aug.	Sept.	June to Sept.	QIV'91 to Sept.
<u>Money and credit aggregates</u>				
M1	16.0	18.6	15.5	13.3
M2	3.1	3.2	1.8	1.7
M3	2.7	1.0	0.9	0.3
Domestic nonfinancial debt	4.5	--	4.6 <sup>1</sup>	4.8 <sup>1</sup>
Bank credit	5.4	5.5	3.6	3.0
<u>Reserve measures</u>				
Nonborrowed reserves <sup>2</sup>	21.1	23.4	16.7	17.2
Total reserves	20.2	24.1	17.1	17.4
Monetary base	16.7	16.0	14.2	9.9
Memo: (Millions of dollars)				
Adjustment plus seasonal borrowing	251	287	--	--
Excess reserves	935	1015	--	--

1. Through August.

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

(8) Two alternatives are presented below for the Committee's consideration. Under alternative B, federal funds would continue to trade around 3 percent, in association with an initial assumption for adjustment plus seasonal borrowing of \$200 million.<sup>4</sup> Under the easier policy stance of alternative A, the expected federal funds rate would be cut to 2-1/2 percent. Although moving the funds rate below the discount rate is technically feasible, implementing this alternative through a reduction of at least 1/2 point in the discount rate would accord with the usual practice of keeping the expected funds rate at or above the discount rate. With a 1/2 percentage point drop in the discount rate, for example, an initial borrowing assumption of \$200 million would be retained under alternative A.

(9) Projected growth rates of the monetary aggregates under the two policy alternatives appear on the table below. (The table and charts on the following pages give more detailed data.) The differences between the money growth paths in alternatives A and B over the next three months are relatively small, as the near-term responsiveness of demands for M2 to declines in short-term interest rates is likely to continue to be damped. This lack of responsiveness arises from the relatively strong effects of a steeper yield curve and lower short-term rates on the attractiveness of capital market instruments and from the prompter adjustment of deposit rates relative to both market rates and loan rates. Growth in M2 and M3 over June to December would be about in line with the Committee's expectations for this period expressed in the last directive. Both aggregates would fall short of the lower bounds of

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4. Over the intermeeting period, seasonal borrowing will trend down, as is typical at this time of year, so technical reductions in the borrowing assumption probably will be needed.

their annual ranges by about 1/2 percentage point under either alternative.<sup>5</sup> The similar outcomes for the year projected in the two alternatives reflect both the reduced near-term interest elasticity and the lateness in the year.

	<u>Alt. A</u>	<u>Alt. B</u>
Growth from September to December		
M2	2-3/4	2
M3	1-1/4	1
M1	14-1/2	12-1/2
Growth from June to December		
M2	2-1/4	2
M3	1	1
M1	15-1/4	14-1/4
Growth from 1991:Q4 to 1992:Q4		
M2	2	1-3/4
M3	1/2	1/2
M1	14	13-1/2

(10) The spate of weak incoming economic information since late last week has reestablished market expectations that another easing of reserve conditions may well be imminent, involving an anticipated further decline in the federal funds rate by 1/4 percentage point. Under these circumstances, selection of the unchanged reserve conditions of alternative B would initially induce some backup in interest rates across the maturity spectrum and some rise in the exchange value of the dollar. This upward pressure would be muted to the extent that market participants viewed any policy action as merely

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5. To attain the lower bounds of their annual ranges, M2 and M3 would need to grow by 5 and 3-1/4 percent, respectively, from September to December.

Alternative Levels and Growth Rates for Key Monetary Aggregates

	M2		M3		M1	
	Alt. A	Alt. B	Alt. A	Alt. B	Alt. A	Alt. B
<b>Levels in billions</b>						
1992 July	3460.8	3460.8	4163.0	4163.0	960.8	960.8
August	3469.6	3469.6	4172.3	4172.3	973.6	973.6
September	3478.9	3478.9	4175.8	4175.8	988.7	988.7
October	3487.2	3486.1	4180.5	4180.0	1001.9	1001.1
November	3498.1	3494.9	4186.6	4185.2	1016.1	1013.6
December	3503.3	3497.2	4188.9	4186.2	1024.5	1019.5
<b>Monthly Growth Rates</b>						
1992 July	-0.9	-0.9	-1.1	-1.1	11.3	11.3
August	3.1	3.1	2.7	2.7	16.0	16.0
September	3.2	3.2	1.0	1.0	18.6	18.6
October	2.9	2.5	1.4	1.2	16.0	15.0
November	3.8	3.0	1.8	1.5	17.0	15.0
December	1.8	0.8	0.7	0.3	10.0	7.0
<b>Quarterly Ave. Growth Rates</b>						
1991 Q4	2.4	2.4	1.0	1.0	11.1	11.1
1992 Q1	4.2	4.2	2.1	2.1	16.4	16.4
Q2	0.4	0.4	-1.3	-1.3	9.8	9.8
Q3	0.1	0.1	-0.4	-0.4	10.4	10.4
Q4	3.0	2.7	1.4	1.3	16.3	15.1
Jun 92 to Dec 92	2.3	2.0	1.1	0.9	15.3	14.2
Sep 92 to Dec 92	2.8	2.1	1.3	1.0	14.5	12.5
Q4 91 to Q2 92	2.3	2.3	0.4	0.4	13.3	13.3
Q4 91 to Q3 92	1.6	1.6	0.2	0.2	12.6	12.6
Q4 91 to Q4 92	1.9	1.8	0.5	0.4	13.9	13.6
Q4 91 to Sep 92	1.7	1.7	0.3	0.3	13.3	13.3
Q4 91 to Dec 92	2.0	1.8	0.5	0.5	13.9	13.4
<b>1992 Target Ranges:</b>	2.5 to 6.5		1.0 to 5.0			

Chart 1  
**ACTUAL AND TARGETED M2**

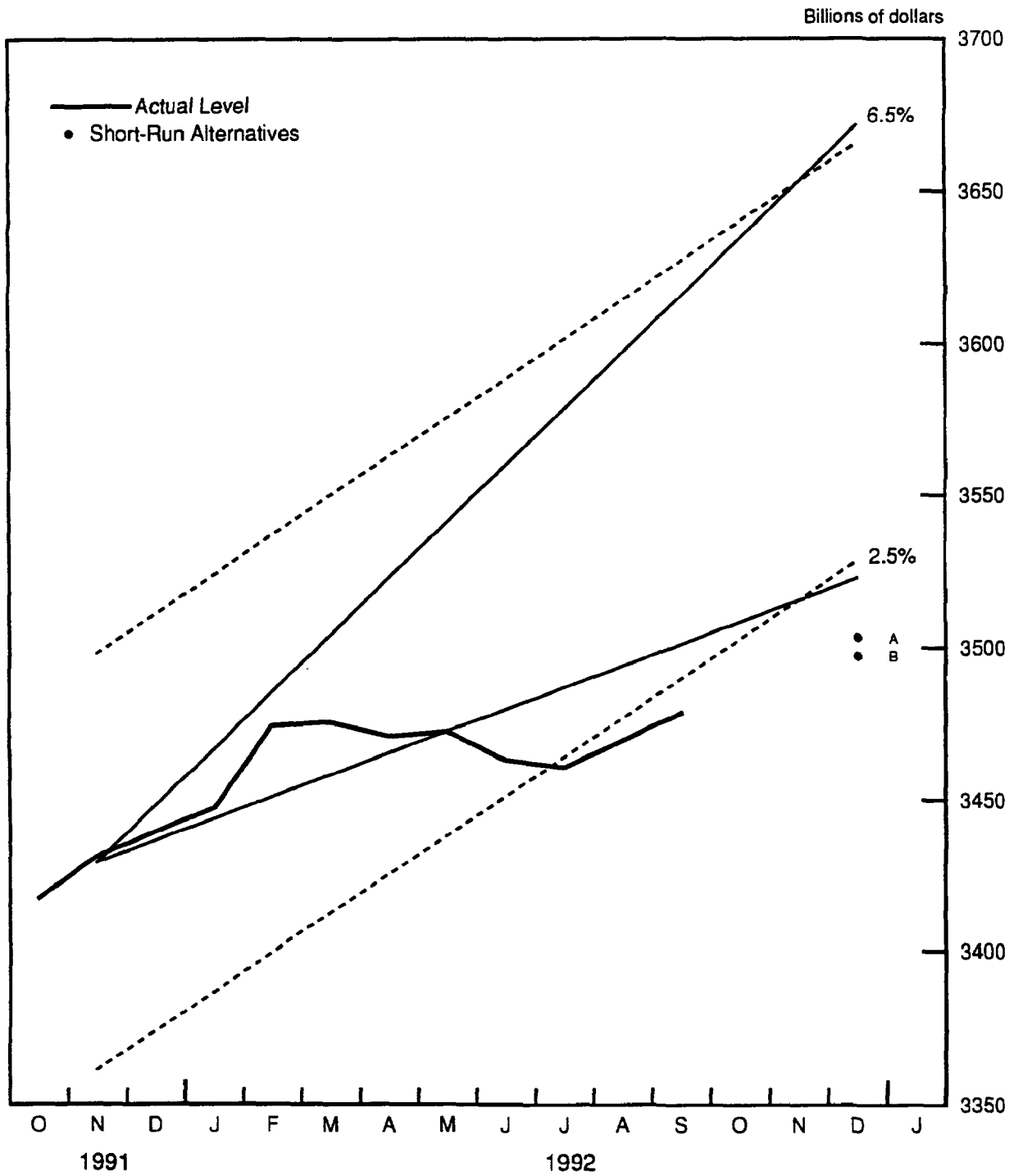


Chart 2  
**ACTUAL AND TARGETED M3**

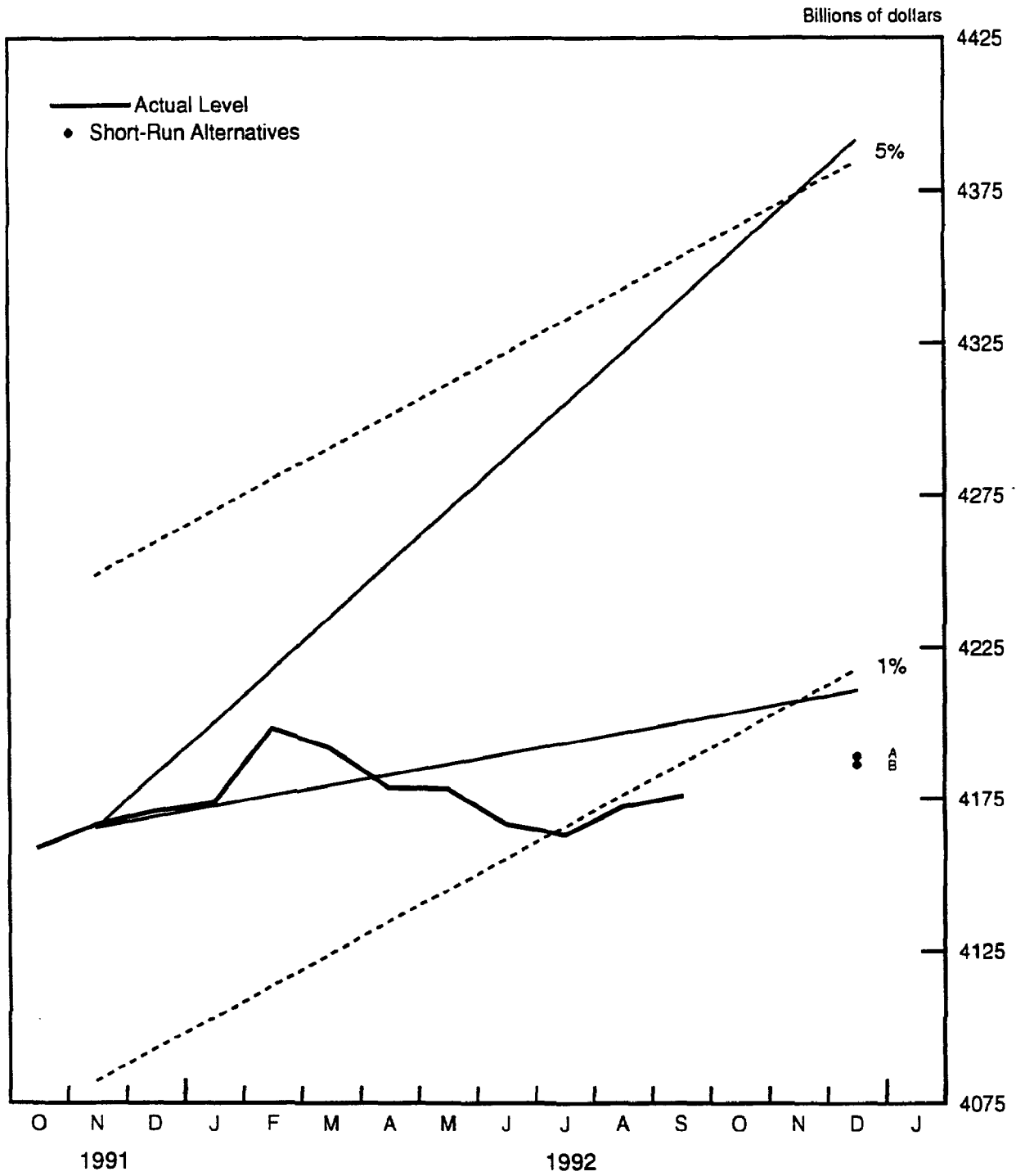


Chart 3  
M1

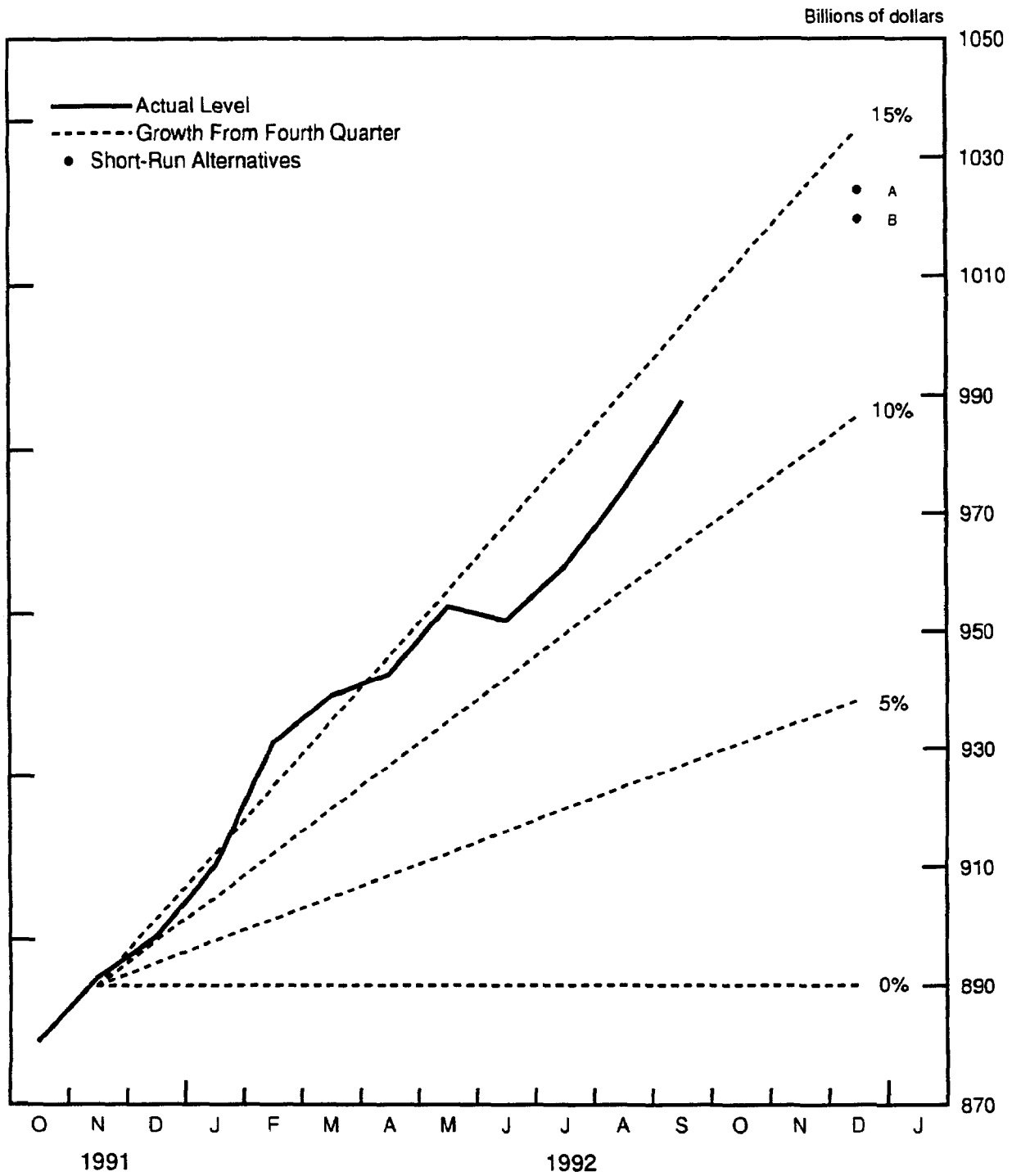
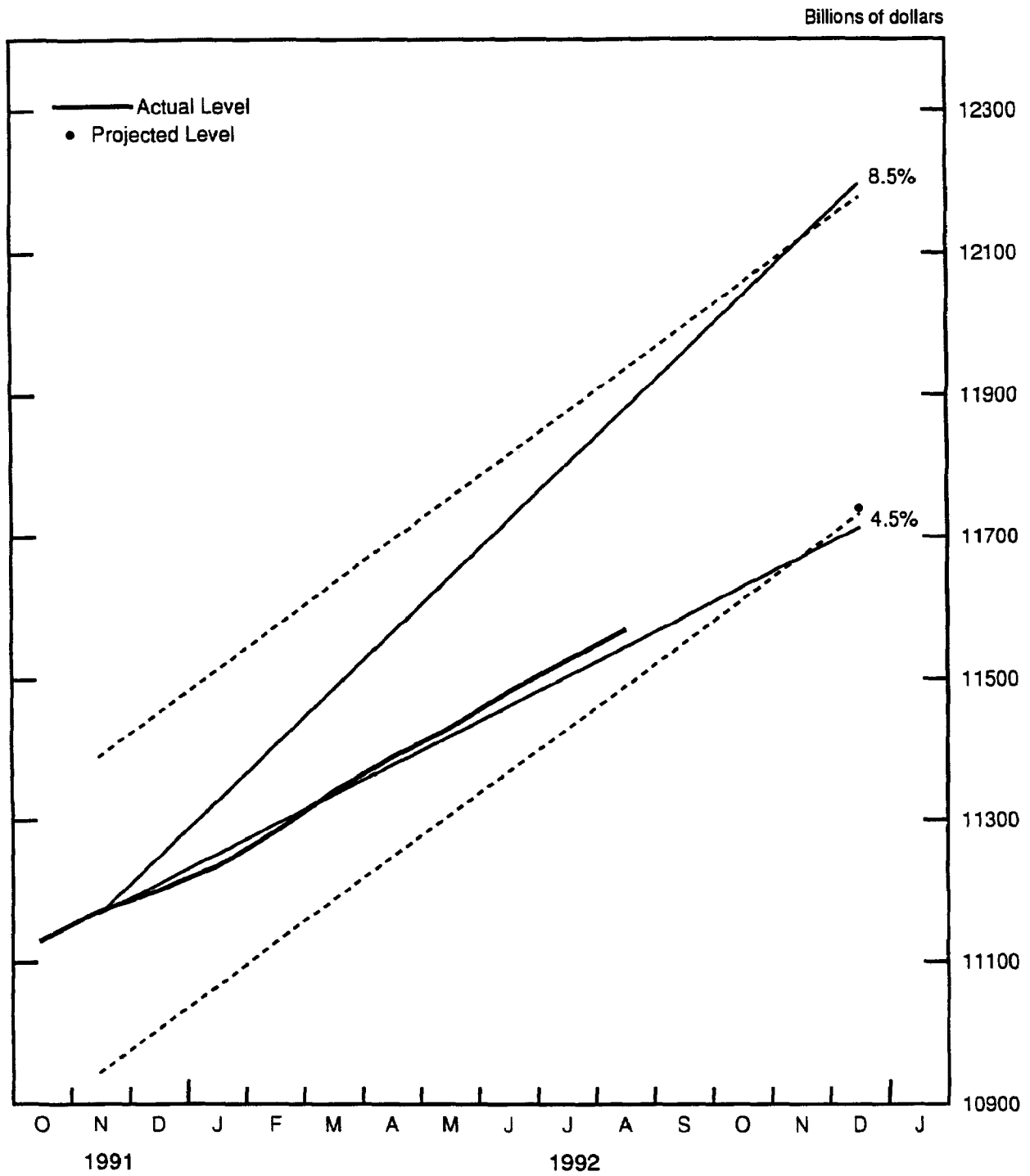


Chart 4  
DEBT



postponed. The market's expectations of an eventual ease would be strengthened should incoming data confirm the tepid expansion and disinflationary trends in the Greenbook forecast. That forecast encompasses the possibility of some decline in short-term rates over coming months, but keeping the funds rate at 3 percent over the six weeks of the intermeeting period would not necessarily be inconsistent with that possibility. In any event, a decline in long-term rates could eventually develop even at an unchanged funds rate as evidence of disinflation takes firm enough hold to offset skittishness about fiscal policy; indeed, failing to meet market expectations about policy easing could well strengthen perceptions that the disinflation trend will be sustained.

(11) Under alternative B, M2 is projected to grow at a 2 percent rate from September to December, somewhat slower than in the last two months. Monetary growth will be boosted for a time by additions to demand deposits associated with prepayments on mortgage-backed securities arising from robust refinancings and to OCDs from the reclassification of sweep accounts<sup>6</sup> . However, nominal income growth is projected to moderate in the fourth quarter. Moreover, despite the special factors and lingering effects of previous policy stimulus, projected M2 growth stays below that of nominal GDP because of the probable persistence of the forces that have been boosting M2 velocity for some time. In particular, the further declines in liquid deposit rates in prospect, in combination with a still steep Treasury yield curve, will continue to encourage shifts into bond and stock mutual funds from M2 balances. In addition, the

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6. About \$4-1/2 billion of such accounts, which have been classified as large time deposits since their introduction in July 1990, will be reclassified as transaction deposits at the end of October. M1 as a whole is expected to record a 12-1/2 percent rate of growth from September to December. With currency and total reserves growth projected at 9-1/2 and 17-1/2 percent, respectively, over these three months, the monetary base would expand at an 11 percent rate.



gap between consumer loan rates and deposit rates will stay wide by historical standards, tending to foster a further rechanneling of funds away from M2 and toward household debt repayment or avoidance. The growth in M2 velocity in the fourth quarter of nearly 1 percent would bring its expansion over this year to 2-1/2 percent. Were the federal funds rate to be maintained at 3 percent beyond the Committee meeting in November, M2 growth in the first quarter probably would be on a trajectory below the Committee's tentative 2-1/2 to 6-1/2 percent range, with continued sizeable velocity increases.

(12) Under alternative B, the staff foresees M3 growth of 1 percent from September to December, also somewhat slower than over August and September. Institution-only money funds have lost the rate advantage they temporarily enjoyed relative to market instruments immediately after recent policy easings. Furthermore, the runoffs of large time deposits at banks as well as thrifts are expected to pick up again. Bank credit growth is seen as moderating from its pace of recent months as the unusually rapid pace of security acquisitions drops off, meaning bank needs for net new financing should abate. Bank lending terms and standards will probably remain quite restrictive, possibly easing only a little, and demands for business and consumer credit at banks seem likely to remain very subdued.

(13) Overall credit demands will remain modest in the face of continuing concerns about economic prospects, and they will be concentrated in longer-term markets as balance sheets continue to be strengthened. The slightly stronger pace of borrowing by nonfederal sectors that has developed over the summer is expected to persist. Borrowers may be a bit less intent on paying down debt given improving financial situations and cash flows, and credit supply conditions should remain stable or improve slightly as capital positions of intermediaries become more comfortable. From August to December,

business debt is expected to grow slowly, with increases in internal funds nearly matching the rise in capital spending. Household debt also is foreseen to grow slowly, with its expansion wholly attributable to mortgage borrowing; incentives to prepay or avoid consumer debt should keep this component about flat after its previous sustained runoff. The rate of expansion of federal debt on a seasonally adjusted basis is running temporarily to the low side following the unexpected buildup in cash balances in September. As a result, total debt of domestic nonfinancial sectors is projected to slip off to only a 4-1/2 percent rate, leaving growth over the four quarters of this year around the 4-1/2 percent lower bound of its annual monitoring range.

(14) The immediate 1/2 percentage point drop in the federal funds rate under alternative A would exceed the market's expected change. Short-term market interest rates would decline by as much as 1/4 point further, and banks would reduce the prime rate by 1/2 point, maintaining an unusually wide spread over funding costs. The dollar probably would depreciate somewhat further; since the policy easing would occur in a situation of persistent macroeconomic slack and ongoing disinflation, the decline in the dollar is most likely to be contained. In such circumstances, long-term market rates probably would move still lower, pulled down by the weight of a reduced expected path for short-term rates over at least the intermediate term.

(15) Under alternative A, M2 and M3 likely would grow at rates of 2-3/4 and 1-1/4 percent over the September-to-December interval. The two aggregates should be on a somewhat steeper trajectory into next year, raising the odds that they would be within their tentative ranges in the early months of 1993. In addition to the limited stimulus to M2 demands arising from the reduction in opportunity costs, spending by then should have begun to respond to the

monetary policy easing embodied in alternative A. Real interest rates would be lower than under alternative B, though actual declines in real rates may be limited by a continued ebbing of inflation expectations. Although some kinds of spending may now be less responsive to interest rates, lower rates still would speed balance sheet strengthening, buoy wealth, and support net exports.

Directive Language

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

OPERATIONAL PARAGRAPH

In the implementation of policy for the immediate future, the Committee seeks to DECREASE SOMEWHAT/main-tain/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 might (WOULD) or slightly (SOMEWHAT) lesser reserve restraint (MIGHT) would 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 SEPTEMBER June through December at annual rates of about \_\_\_ 2 and 1/2 \_\_\_ percent, respectively.

**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
91 -- High	7.46	6.46	6.50	6.43	7.75	8.49	7.37	9.93	7.47	8.35	8.52	9.96	7.40	9.97	9.75	7.78
-- Low	4.22	3.84	3.93	4.01	4.25	4.88	4.53	7.07	5.24	6.96	7.58	8.49	6.76	8.38	8.35	6.02
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	9.22	9.03	6.22
-- Low	3.07	2.78	2.86	2.96	3.07	3.17	2.87	6.00	4.34	6.36	7.29	8.06	6.12	7.86	7.84	5.01
<b>Monthly</b>																
Oct 91	5.21	4.99	5.04	5.04	5.33	5.29	5.03	8.00	6.23	7.53	7.93	9.02	6.89	9.04	8.86	6.71
Nov 91	4.81	4.56	4.61	4.64	4.94	4.95	4.82	7.58	5.90	7.42	7.92	8.95	6.89	8.86	8.71	6.42
Dec 91	4.43	4.07	4.10	4.17	4.47	4.98	4.61	7.21	5.39	7.09	7.70	8.68	6.87	8.56	8.50	6.19
Jan 92	4.03	3.80	3.87	3.95	4.05	4.11	4.18	6.50	5.40	7.03	7.58	8.57	6.67	8.65	8.43	5.89
Feb 92	4.06	3.84	3.93	4.08	4.07	4.11	3.84	6.50	5.72	7.34	7.85	8.79	6.83	8.92	8.76	5.88
Mar 92	3.98	4.04	4.18	4.40	4.25	4.28	3.73	6.50	6.18	7.54	7.97	8.91	6.86	9.17	8.94	6.11
Apr 92	3.73	3.75	3.87	4.09	4.00	4.02	3.66	6.50	5.93	7.48	7.96	8.82	6.80	8.98	8.85	6.15
May 92	3.82	3.63	3.75	3.99	3.82	3.87	3.52	6.50	5.81	7.39	7.89	8.70	6.72	8.85	8.67	6.00
Jun 92	3.76	3.66	3.77	3.98	3.86	3.91	3.45	6.50	5.60	7.26	7.84	8.62	6.66	8.66	8.51	5.87
Jul 92	3.25	3.21	3.28	3.45	3.37	3.43	3.25	6.02	4.91	6.84	7.60	8.38	6.32	8.25	8.13	5.51
Aug 92	3.30	3.13	3.21	3.33	3.31	3.38	3.07	6.00	4.72	6.59	7.39	8.16	6.31	8.04	7.98	5.27
Sep 92	3.22	2.91	2.96	3.06	3.13	3.25	--	6.00	4.42	6.42	7.34	8.11	6.40	7.98	7.92	5.11
<b>Weekly</b>																
Jun 17 92	3.73	3.65	3.75	3.94	3.84	3.91	3.44	6.50	5.60	7.27	7.85	8.61	6.62	8.66	8.48	5.84
Jun 24 92	3.72	3.64	3.75	3.95	3.84	3.89	3.42	6.50	5.53	7.22	7.83	8.56	6.58	8.58	8.43	5.78
Jul 1 92	3.87	3.59	3.67	3.89	3.82	3.88	3.44	6.50	5.40	7.13	7.78	8.44	6.55	8.36	8.29	5.69
Jul 8 92	3.24	3.22	3.31	3.51	3.43	3.48	3.35	6.00	5.04	6.90	7.62	8.41	6.36	8.25	8.13	5.56
Jul 15 92	3.28	3.21	3.26	3.43	3.35	3.42	3.24	6.00	4.92	6.94	7.65	8.44	6.33	8.26	8.09	5.50
Jul 22 92	3.22	3.17	3.24	3.36	3.32	3.41	3.19	6.00	4.83	6.88	7.65	8.32	6.22	8.16	8.08	5.45
Jul 29 92	3.18	3.18	3.25	3.41	3.32	3.37	3.14	6.00	4.75	6.67	7.50	8.22	6.12	8.24	8.05	5.37
Aug 5 92	3.33	3.17	3.26	3.44	3.33	3.38	3.11	6.00	4.91	6.69	7.45	8.15	6.24	8.12	8.06	5.30
Aug 12 92	3.24	3.14	3.21	3.31	3.29	3.36	3.08	6.00	4.71	6.54	7.38	8.10	6.20	8.11	7.96	5.30
Aug 19 92	3.33	3.07	3.16	3.25	3.28	3.36	3.05	6.00	4.63	6.52	7.34	8.16	6.36	7.86	7.87	5.20
Aug 26 92	3.27	3.13	3.22	3.36	3.32	3.38	3.02	6.00	4.73	6.62	7.40	8.20	6.45	8.07	8.01	5.26
Sep 2 92	3.33	3.15	3.23	3.32	3.33	3.40	3.01	6.00	4.68	6.60	7.40	8.08	6.38	7.90	7.94	5.24
Sep 9 92	3.09	2.97	3.01	3.10	3.14	3.24	2.96	6.00	4.41	6.39	7.29	8.06	6.31	7.95	7.84	5.15
Sep 16 92	3.28	2.91	2.93	3.04	3.07	3.17	2.90	6.00	4.38	6.36	7.30	8.10	6.43	8.02	7.89	5.03
Sep 23 92	3.07	2.90	2.94	3.05	3.12	3.23	2.88	6.00	4.45	6.45	7.39	8.17	6.49	8.06	8.02	5.02
Sep 30 92	3.41	2.78	2.86	2.96	3.13	3.30	2.87	6.00	4.34	6.40	7.37	8.16	6.45	7.99	7.93	5.01
<b>Daily</b>																
Sep 25 92	3.19	2.80	2.84	2.93	3.13	3.29	--	6.00	4.31	6.41	7.35	--	--	--	--	--
Oct 1 92	3.58	2.61	2.75	2.85	3.09	3.24	--	6.00	4.18	6.23	7.30	--	--	--	--	--
Oct 2 92	3.06 <sup>p</sup>	2.63	2.79	2.87	3.07	3.15	--	6.00	4.20	6.26	7.33	--	--	--	--	--

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

OCT. 5, 1992

Period	Money stock measures and liquid assets					Bank credit	Domestic nonfinancial debt <sup>1</sup>			
	M1	M2	nontransactions components		M3	L	total loans and investments <sup>1</sup>	U.S. government <sup>1</sup>	other <sup>1</sup>	total <sup>1</sup>
			in M2	in M3 only						
	1	2	3	4	5	6	7	8	9	10
<b>ANN. GROWTH RATES (%) :</b>										
<b>ANNUALLY (Q4 TO Q4)</b>										
1989	0.6	4.8	6.2	-0.9	3.6	4.8	7.5	7.2	8.4	8.1
1990	4.2	4.0	3.9	-7.2	1.7	1.8	5.5	10.3	5.9	6.9
1991	8.0	2.8	1.1	-5.7	1.2	0.5	3.5	11.0	2.3	4.3
<b>QUARTERLY AVERAGE</b>										
1991-4th QTR.	11.0	2.4	-0.6	-5.4	1.0	0.2	6.1	11.5	1.5	3.9
1992-1st QTR.	16.5	4.2	-0.1	-7.5	2.2	1.5	3.7	10.0	2.4	4.2
1992-2nd QTR.	9.8	0.3	-3.1	-9.1	-1.3	0.6	2.5	14.2	2.3	5.2
1992-3rd QTR. <i>pe</i>	10½	0	-3½	-2½	-½		2			
<b>MONTHLY</b>										
1991-SEP.	7.6	0.7	-1.6	-9.6	-1.1	-2.6	5.3	9.1	1.9	3.7
OCT.	12.2	2.1	-1.4	0.2	1.8	0.9	7.1	12.5	1.4	4.0
NOV.	14.3	4.8	1.6	-9.6	2.3	3.1	7.4	12.6	1.7	4.3
DEC.	9.0	2.8	0.7	-6.7	1.2	-0.3	6.2	9.8	0.9	3.1
1992-JAN.	16.4	2.7	-2.1	-8.4	0.8	-1.9	3.4	7.7	2.3	3.7
FEB.	27.2	9.4	2.9	-3.1	7.2	6.8	0.2	8.3	4.1	5.2
MAR.	10.3	0.4	-3.1	-13.6	-2.0	2.5	2.7	17.1	2.4	6.1
APR.	4.9	-1.7	-4.1	-14.1	-3.8	-1.8	5.5	14.8	1.9	5.2
MAY	14.6	0.6	-4.7	-3.1	-0.1	-1.8	-0.9	12.3	1.8	4.4
JUNE	-3.1	-3.2	-3.2	-4.1	-3.3	3.2	1.8	14.8	2.1	5.3
JULY	11.3	-0.9	-5.6	-1.9	-1.1	-0.6	-0.0	10.7	2.6	4.6
AUG.	16.0	3.1	-1.9	0.9	2.7		5.4			
SEP. <i>pe</i>	19	3	-3	-10	1		6			
<b>LEVELS (\$BILLIONS) :</b>										
<b>MONTHLY</b>										
1992-APR.	942.8	3471.1	2528.3	707.5	4178.6	5013.1	2867.6	2876.7	8512.1	11388.8
MAY	954.3	3472.7	2518.4	705.7	4178.3	5005.4	2865.4	2906.2	8524.7	11430.8
JUNE	951.8	3463.4	2511.6	703.3	4166.7	5018.6	2869.6	2942.0	8539.6	11481.6
JULY	960.8	3460.8	2499.9	702.2	4163.0	5016.0	2869.5	2968.2	8557.8	11525.9
AUG.	973.6	3469.6	2496.0	702.7	4172.3		2882.3			
<b>WEEKLY</b>										
1992-AUG.										
3	966.3	3462.1	2495.8	703.3	4165.4					
10	972.2	3471.4	2499.2	699.9	4171.3					
17	975.4	3470.1	2494.7	702.5	4172.6					
24	972.5	3467.0	2494.5	701.6	4168.6					
31	978.7	3473.6	2494.9	706.7	4180.3					
SEP.										
7	983.5	3478.6	2495.1	695.7	4174.3					
14 <i>p</i>	986.2	3480.9	2494.7	704.5	4185.4					
21 <i>p</i>	991.5	3479.6	2488.1	698.6	4178.2					

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

OCT. 5, 1992

Period	Currency	Demand deposits	Other checkable deposits	Overnight RPs and Eurodollars NSA <sup>1</sup>	Savings deposits <sup>2</sup>	Small denomination time deposits <sup>3</sup>	Money market mutual funds		Large denomination time deposits <sup>4</sup>	Term RPs NSA <sup>5</sup>	Term Eurodollars NSA <sup>5</sup>	Savings bonds	Short-term Treasury securities	Commercial paper <sup>1</sup>	Bankers acceptances
							general purpose and broker/dealer <sup>5</sup>	Institutions only							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
<b>LEVELS (\$BILLIONS) :</b>															
<b>ANNUALLY (4TH QTR.)</b>															
1989	221.2	279.2	282.8	76.2	884.7	1145.3	311.2	106.8	561.3	106.8	78.8	116.8	320.3	349.1	40.3
1990	245.5	277.5	292.7	78.8	919.9	1167.7	346.2	130.1	501.9	93.6	68.0	125.2	331.1	357.4	33.6
1991	266.0	287.0	329.1	73.4	1028.8	1079.1	359.8	173.6	443.1	73.0	60.5	137.0	321.4	337.9	24.4
<b>MONTHLY</b>															
1991-AUG.	261.3	280.1	317.3	67.6	994.1	1120.8	362.4	158.6	465.5	78.2	63.6	134.4	330.6	336.3	27.2
SEP.	262.9	280.6	320.6	66.9	1002.4	1111.0	359.9	162.6	458.5	76.5	61.5	135.2	322.9	337.7	25.8
OCT.	264.8	283.8	324.5	70.0	1015.0	1095.2	359.3	168.2	450.0	75.2	62.8	136.1	321.5	336.2	25.3
NOV.	266.0	287.6	329.7	73.8	1028.7	1079.2	359.5	173.6	442.3	73.3	61.5	137.1	324.7	337.9	24.5
DEC.	267.3	289.5	333.2	76.3	1042.6	1063.0	360.5	179.1	437.1	70.4	57.2	137.9	317.9	339.7	23.3
1992-JAN.	269.4	293.9	339.0	77.8	1061.2	1042.9	358.6	182.4	427.9	70.3	55.3	138.9	311.5	334.8	23.2
FEB.	271.6	305.1	346.3	77.8	1083.9	1019.8	361.7	188.2	420.7	71.5	55.9	140.1	321.2	327.5	22.9
MAR.	271.8	309.6	349.5	74.7	1098.0	1002.8	358.3	185.3	413.0	73.0	57.9	141.2	328.5	337.0	22.2
APR.	273.6	311.2	350.0	72.8	1111.2	985.3	355.3	189.2	405.7	72.2	55.0	142.4	328.8	341.7	21.6
MAY	274.7	315.1	356.4	69.5	1122.4	968.7	356.1	194.8	400.9	73.0	53.2	143.5	332.2	329.4	22.0
JUNE	276.2	311.0	356.7	72.4	1127.0	956.2	354.2	199.7	395.3	73.0	53.1	144.6	338.2	347.1	22.0
JULY	279.0	315.6	358.5	72.9	1134.3	941.7	350.8	207.7	388.5	71.6	52.6	145.9	337.9	347.5	21.7
AUG.	282.3	320.7	362.7	76.4	1145.5	925.9	349.1	217.2	383.3	71.9	51.6				

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 and thrift institutions.
- p-preliminary

NET CHANGES IN SYSTEM HOLDINGS OF SECURITIES<sup>1</sup>  
Millions of dollars, not seasonally adjusted

October 2, 1992

Period	Treasury bills			Treasury coupons				Federal agencies redemptions (-)	Net change outright holdings total <sup>4</sup>	Net RPs <sup>5</sup>		
	Net <sup>2</sup> purchases	Redemptions (-)	Net change	Net purchases <sup>3</sup>								
				within 1 year	1-5	5-10	over 10					
1989	1,468	12,730	-11,263	327	946	258	284	500	1,315	442	-10,390	-1,683
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
1991 ---Q1	2,160	1,000	1,160	800	2,950	400	---	---	4,150	---	5,310	-16,864
---Q2	4,356	---	4,356	900	550	---	---	---	1,450	128	5,698	992
---Q3	7,664	---	7,664	1,165	650	---	---	---	1,815	55	9,419	152
---Q4	5,858	---	5,858	178	2,433	880	375	---	3,867	109	7,299	14,106
1992 ---Q1	-1,000	1,600	-2,600	---	2,452	---	---	---	2,452	85	-233	-14,636
---Q2	4,415	---	4,415	---	2,278	597	655	---	3,730	250	7,896	1,137
---Q3	867	---	867	---	400	---	195	---	5,927	176	6,617	11,999
1991 October	2,198	---	2,198	---	---	---	---	---	---	14	2,185	6,942
November	2,823	---	2,823	178	2,133	880	375	---	3,567	51	4,022	-8,871
December	837	---	837	---	300	---	---	---	300	45	1,092	16,035
1992 January	-1,628	1,600	-3,228	---	---	---	---	---	---	85	-3,313	-12,874
February	123	---	123	---	1,027	---	---	---	1,027	---	1,150	-2,010
March	505	---	505	---	1,425	---	---	---	1,425	---	1,930	248
April	---	---	---	---	---	---	---	---	---	49	-49	345
May	4,110	---	4,110	---	---	---	---	---	200	160	4,149	-1,203
June	306	---	306	---	2,278	597	655	---	3,530	40	3,796	1,996
July	---	---	---	---	---	---	---	---	---	85	-85	-914
August	271	---	271	---	400	---	195	---	595	54	812	5,371
September	595	---	595	---	---	---	---	---	5,332	37	5,890	7,543
Weekly												
June 24	---	---	---	---	---	---	---	---	---	---	---	5,070
July 1	---	---	---	---	---	---	---	---	---	9	-9	-2,729
8	---	---	---	---	---	---	---	---	---	---	---	2,917
15	---	---	---	---	---	---	---	---	---	20	-20	-3,023
22	---	---	---	---	---	---	---	---	---	15	-15	3,007
29	---	---	---	---	---	---	---	---	---	50	-50	-4,875
August 5	---	---	---	---	---	---	---	---	---	13	-13	10,828
12	90	---	90	---	---	---	195	---	195	---	285	-10,190
19	30	---	30	---	200	---	---	---	200	---	230	2,376
26	---	---	---	---	200	---	---	---	200	41	159	-1,459
September 2	165	---	165	---	---	---	---	---	---	---	165	7,817
9	300	---	300	550	1,825	725	731	---	3,832	37	4,095	-2,613
16	155	---	155	---	500	---	---	---	500	---	655	-868
23	126	---	126	---	650	---	---	---	650	---	776	3,982
30	---	---	---	---	350	---	---	---	350	---	350	4,457
Memo: LEVEL (bil. \$) <sup>6</sup>												
September 30			141.4	32.5	69.6	17.2	26.6		145.9		292.9	-7.7

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
2.2	2.5	0.7	0.2	5.6

September 30