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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

August 14, 1992

MONETARY POLICY ALTERNATIVES

Recent Developments

(1) On July 2, the day after the FOMC meeting, the discount rate and the intended federal funds rate were reduced 50 basis points to 3 and 3-1/4 percent, respectively. These actions were taken in response to data suggesting that the economic expansion was more subdued than anticipated, and against a background of marked weakness in the broad monetary aggregates, sluggish credit growth, and continuing disinflation. Over the balance of the period, the intended federal funds rate remained at 3-1/4 percent. The allowance for adjustment and seasonal borrowing was maintained at \$225 million until July 30, when it was raised by \$25 million to account for increasing demands for seasonal credit. Borrowing averaged close to its allowance in the two complete maintenance periods since the meeting, and the federal funds rate has averaged 3.25 percent.

(2) The weak economic data and policy easing prompted a considerable decline in market rates across the maturity spectrum on July 2. Note and bond markets have rallied further in recent weeks, as incoming information suggested limited momentum in the economic recovery and more favorable price and wage trends. On balance over the period, rates on both three-month Treasury bills and on thirty-year Treasury bonds dropped a little more than 40 basis points.<sup>1</sup> Intermediate-term rates fell by even more--from 60 to 70 basis points. This pattern suggests that the drop in long-term rates was accounted for by downward revisions of expected credit demands and inflation over the next few

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1. Financial markets quotations in the bluebook reflect data available through noon, August 14.

years, rather than a reconsideration of longer-term inflation expectations. Rates on fixed-rate home mortgages fell about 45 basis points over the intermeeting period, somewhat less than yields on intermediate-term Treasuries, partly reflecting a reassessment of prepayment risk as a result of the unexpectedly sharp pickup in refinancing activity. In other markets, spreads of yields on private securities over Treasury issues remained quite narrow. Most broad stock price indexes were little changed on balance over the period.

(3) The dollar's foreign exchange value on a weighted average basis has declined about 2-1/2 percent since the last FOMC meeting, as a depreciation of about 3-1/2 percent against the mark and other ERM currencies more than offset a slight appreciation against the yen. Since its recent peak in mid-April the dollar has fallen 10 percent, more than retracing the runup from year-end. The net depreciation of the dollar over the intermeeting period mainly reflected a weakening of near-term U.S. economic prospects and the associated declines in U.S. interest rates. Although the Bundesbank raised its discount rate 75 basis points on July 16, market interest rates in Germany moved only slightly higher. However, against the backdrop of questions about the future of monetary union, interest rates in other European countries rose somewhat more as central banks had to tighten to support their currencies. The Desk intervened on July 20, August 7, and August 11, purchasing a total of \$770 million against marks to moderate the dollar's decline.

. The Bank of Japan lowered its discount rate by 1/2 percentage point; short-term market rates in

Japan declined about 60 basis points, while long-term rates dropped by 40 basis points. Japanese stock prices declined by 6 percent, reaching six-year lows, while European stock markets fell 7 to 11 percent.

(4) M2 and M3 continued to contract in July, decreasing at 1-1/4 and 1-3/4 percent annual rates, respectively, leaving them below the parallel bands associated with their annual ranges. Both aggregates were substantially weaker than projected, reflecting in part a shortfall in the expansion of nominal income. In addition, velocities may have shifted up a little more than anticipated, perhaps owing to a further rechanneling of credit demands outside of the depository sector, encouraged by the drop in long-term market interest rates. Bank loans continued to slide in July and overall bank credit was flat. With little need for additional funds, institutions cut rates on retail deposits promptly following the July 2 easing. Rates on liquid deposits decreased substantially, but by less than the reduction in money market yields, and growth of those deposits (including demand deposits, other checkable deposits, savings deposits, and MMDAs) picked up.<sup>2</sup> Yields on retail time deposits were reduced more in line with declines in market rates of comparable maturity, and small time deposits extended their steep runoff. Outflows from retail money market mutual funds accelerated, in contrast to the usual pattern following declines in short-term yields. Faced with wide spreads between yields on M2 balances and rates on both capital market instruments and household credit, many households evidently have continued to redirect balances toward bond and stock funds and the repayment of credit. Weakness in bank credit was also reflected in sizable runoffs of large CDs, but the non-M2 component of

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2. Reflecting strong growth of transaction deposits and an acceleration of currency, M1 growth rebounded to an 11-1/2 percent rate in July. Growth in total reserves resumed, and the monetary base expanded at a 9-1/2 percent rate.

M3 was supported by flows into institution-only money market funds, whose yields fell less quickly than market rates.

(5) Recent declines in long-term interest rates fueled activity in bond and mortgage markets, but private debt growth overall apparently remained sluggish. In the household sector, mortgage applications shot up as mortgage rates touched new lows; most such applications were to refinance existing mortgages, but those for home purchases climbed as well. Consumer installment credit contracted at a 1 percent rate in June, and bank data for July suggest little pickup. Nonfinancial firms continued to issue bonds at a brisk pace in July, mainly to refund high-cost debt and pay down short-term loans. Both business loans at banks and commercial paper ran off in July, and overall funding needs appear to have remained modest. Senior lending officers at commercial banks reported that underwriting standards on business loans were about unchanged over the past three months, continuing the trend of recent surveys; in contrast to previous surveys, banks did not report further tightening in other terms of lending. Bond offerings remained brisk in the tax-exempt sector, but a sizable proportion of the issues were for refunding purposes, and a large volume of bonds were retired with the proceeds of issues sold some time ago. With federal debt continuing to expand at a rapid pace, overall nonfinancial sector debt has increased at an estimated 4-3/4 percent rate through July, leaving this aggregate just within its monitoring range.

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

	May	June	July	QIV'91 to July
<u>Money and credit aggregates</u>				
M1	14.6	-3.1	11.6	11.9
M2	.5	-3.8	-1.3	1.1
M3	-.7	-4.4	-1.8	-.5
Domestic nonfinancial debt	5.2	5.5	4.9 <sup>P</sup>	4.7 <sup>P</sup>
Bank credit	-.9	1.7	-.1	2.4
<u>Reserve measures</u>				
Nonborrowed reserves <sup>1</sup>	10.5	-8.1	4.8	15.3
Total reserves	12.1	-6.3	6.2	15.5
Monetary base	7.7	3.9	9.6	8.1
Memo: (Millions of dollars)				
Adjustment plus seasonal borrowing	155	229	284	--
Excess reserves	1000	913	968	--

p - Partly projected.

1. 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 consideration by the Committee. Under alternative B, federal funds would continue to trade around 3-1/4 percent in combination with an initial allowance for adjustment plus seasonal borrowing of \$250 million.<sup>3</sup> Under alternative A, the federal funds rate would drop to 2-3/4 percent. This could be achieved by a reduction in the borrowing allowance to \$225 million with the funds rate dropping below the discount rate, or by a cut in the discount rate of 1/2 percentage point with an unchanged borrowing allowance. Alternative C involves a return of the federal funds rate to 3-3/4 percent and a borrowing allowance of \$275 million.

(7) Market sentiment of late seems to have tilted toward some prospect of another policy ease in coming months. Although money market interest rates might firm a bit over the intermeeting period under the unchanged policy of alternative B, any increase would be limited if, consistent with the Greenbook forecast, information continued to suggest modest economic expansion. Bond rates also should remain around their current reduced levels, and could even edge down if inaction by the Federal Reserve, along with indicators of wages and prices, were seen as reinforcing disinflationary trends. If political dynamics seem to portend even higher budget deficits ahead, these downward pressures on bond yields may tend to be offset. The dollar, under alternative B, would be expected to trade around its recent lower levels.

(8) Under alternative A, short-term interest rates would fall by nearly the full 50 basis point drop in the federal funds rate, especially were the easing to take the form of a discount rate cut, which

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3. The borrowing allowance likely will need to be reduced in late September to reflect the usual fall-off in demands for seasonal credit.

would be seen as implying that the reduction more likely would be sustained. Banks would be expected to trim another 1/2 percentage point off the prime rate, still preserving large spreads over funding costs. Some market participants might read the easing as increased emphasis on spurring economic activity, at the cost of limiting progress against inflation. Nonetheless, given the outlook for tepid economic expansion and slower inflation that recently has come to be more firmly embedded in market expectations, nominal as well as real bond yields would be likely to decline noticeably. Easing in the United States might lessen constraints on more expansive monetary policies in a few other countries, but with many countries, especially in Europe, highly unlikely to follow suit, the dollar would tend to depreciate significantly further.

(9) A reversal of the July easing would take market participants completely by surprise and short-term interest rates would rise by at least 1/2 percentage point under alternative C. Bond rates, too, would retrace some of their recent declines under this alternative, at least initially, and quality spreads on private debt could widen if such a tightening were seen as placing the recovery at risk. The dollar would rebound appreciably.

(10) Growth rates of the monetary aggregates under the three alternatives are presented below. The table gives projected money growth rates through year-end, on the assumption that the contemplated reserve conditions under each alternative are maintained over that period. Growth rates for M2 and M3 are projected to be quite subdued. For the June-to-September period, expansion in the broad aggregates is likely to fall well short of the rates envisioned at the time of the last Committee meeting, even if alternative A is adopted. Moreover, growth of M2 and M3 over the rest of the year would remain damped,

leaving these aggregates below their annual target ranges under all the alternatives.<sup>4</sup> M1, on the other hand, is likely to expand at a double-digit pace over coming months, boosted by mortgage prepayments, low time deposit rates, and special factors.<sup>5</sup>

	<u>Alt. A</u>	<u>Alt. B</u>	<u>Alt. C</u>
Growth from June to September			
M2	1-1/4	1	3/4
M3	1/4	0	-1/4
M1	13	12-1/2	12
Growth from September to December			
M2	3-1/4	2-1/4	1-1/4
M3	1	1/4	-1/2
M1	11	9-1/4	7-3/4
Growth from 1991:Q4 to 1992:Q4			
M2	1-3/4	1-1/2	1-1/4
M3	0	0	-1/4
M1	12-1/2	12	11-1/2

(11) Data for late July and early August indicate that expansion of the monetary aggregates is strengthening a bit, perhaps as a consequence of the substantial decline across the maturity spectrum in market interest rates since the last FOMC meeting. However, the shortfall in July is not expected to be recovered, and underlying

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4. To reach the lower end of its annual range, M2 would need to grow at a 5-1/4 percent annual rate from July through the end of the year and M3 at a 4 percent rate.

5. M1 and M2 will be boosted in mid- to late-September by shifts to OCDs of funds now commingled in large time deposits under sweep account arrangements recently prohibited by the Board. About \$4 to \$5 billion of such accounts has been identified at \_\_\_\_\_, but other banks may be affected as well. The staff foresees little effect on the monetary aggregates from the closing of other Regulation D loopholes to take effect in September; the provision classifying teller's checks as transactions deposits will not take effect until December.

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									
1992 June	3458.7	3458.7	3458.7	4158.0	4158.0	4158.0	951.8	951.8	951.8
July	3454.9	3454.9	3454.9	4151.8	4151.8	4151.8	961.0	961.0	961.0
August	3460.1	3459.8	3459.6	4155.7	4155.3	4155.0	971.8	971.5	971.2
September	3469.0	3467.3	3465.6	4159.8	4158.0	4156.4	982.8	981.5	980.2
October	3478.8	3474.5	3470.2	4163.2	4159.1	4155.2	994.3	991.8	989.3
November	3487.8	3480.6	3473.4	4166.9	4160.1	4153.7	1002.4	998.4	994.4
December	3496.5	3486.7	3476.9	4170.4	4161.1	4152.2	1009.5	1004.2	999.0
Monthly Growth Rates									
1992 June	-3.8	-3.8	-3.8	-4.4	-4.4	-4.4	-3.1	-3.1	-3.1
July	-1.3	-1.3	-1.3	-1.8	-1.8	-1.8	11.6	11.6	11.6
August	1.8	1.7	1.6	1.1	1.0	0.9	13.5	13.1	12.7
September	3.1	2.6	2.1	1.2	0.8	0.4	13.6	12.4	11.2
October	3.4	2.5	1.6	1.0	0.3	-0.4	14.0	12.5	11.0
November	3.1	2.1	1.1	1.1	0.3	-0.5	9.8	8.0	6.2
December	3.0	2.1	1.2	1.0	0.3	-0.4	8.5	7.0	5.5
Quarterly Ave. Growth Rates									
1991 Q4	2.3	2.3	2.3	0.9	0.9	0.9	11.1	11.1	11.1
1992 Q1	4.3	4.3	4.3	2.2	2.2	2.2	16.4	16.4	16.4
Q2	0.0	0.0	0.0	-1.9	-1.9	-1.9	9.8	9.8	9.8
Q3	-0.4	-0.6	-0.7	-1.2	-1.3	-1.4	9.4	9.1	8.8
Q4	3.1	2.3	1.5	1.0	0.5	0.0	10.9	11.0	8.1
Mar 92 to Jun 92	-1.8	-1.8	-1.8	-3.1	-3.1	-3.1	5.5	5.5	5.5
Jun 92 to Sep 92	1.2	1.0	0.8	0.2	0.0	-0.2	13.0	12.5	12.0
Sep 92 to Dec 92	3.2	2.2	1.3	1.0	0.3	-0.4	10.9	9.3	7.7
Jun 92 to Dec 92	2.2	1.6	1.1	0.6	0.1	-0.3	12.1	11.0	9.9
Q4 91 to Q4 92	1.7	1.5	1.3	0.0	-0.1	-0.3	12.6	12.1	11.6
Q4 91 to Sep 92	1.4	1.3	1.2	-0.2	-0.2	-0.3	12.5	12.3	12.1
Q4 91 to Dec 92	1.8	1.6	1.3	0.1	-0.1	-0.3	12.4	11.8	11.3
1992 Target Ranges:	2.5 to 6.5			1.0 to 5.0					

Chart 1  
**ACTUAL AND TARGETED M2**

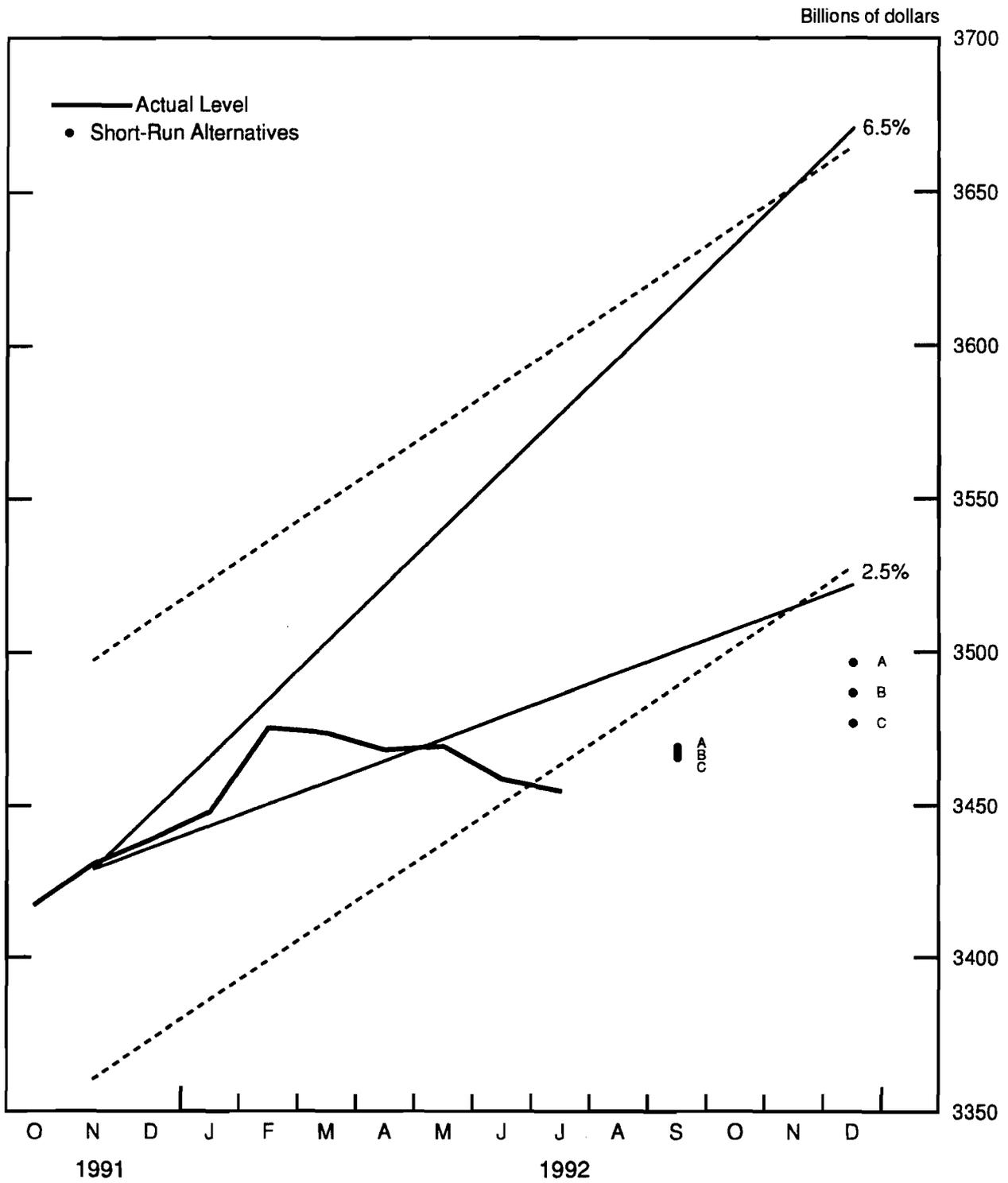


Chart 2  
**ACTUAL AND TARGETED M3**

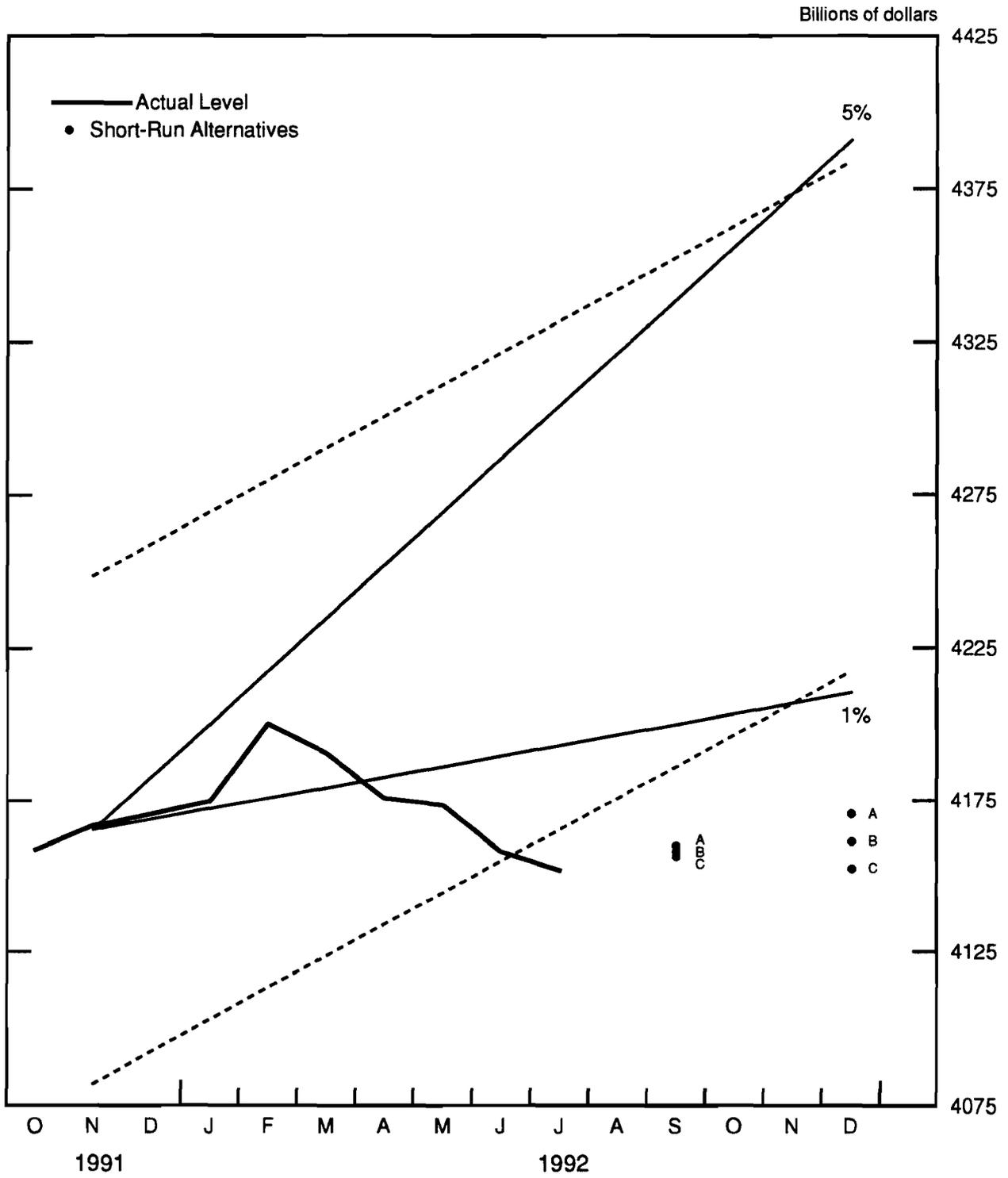


Chart 3  
M1

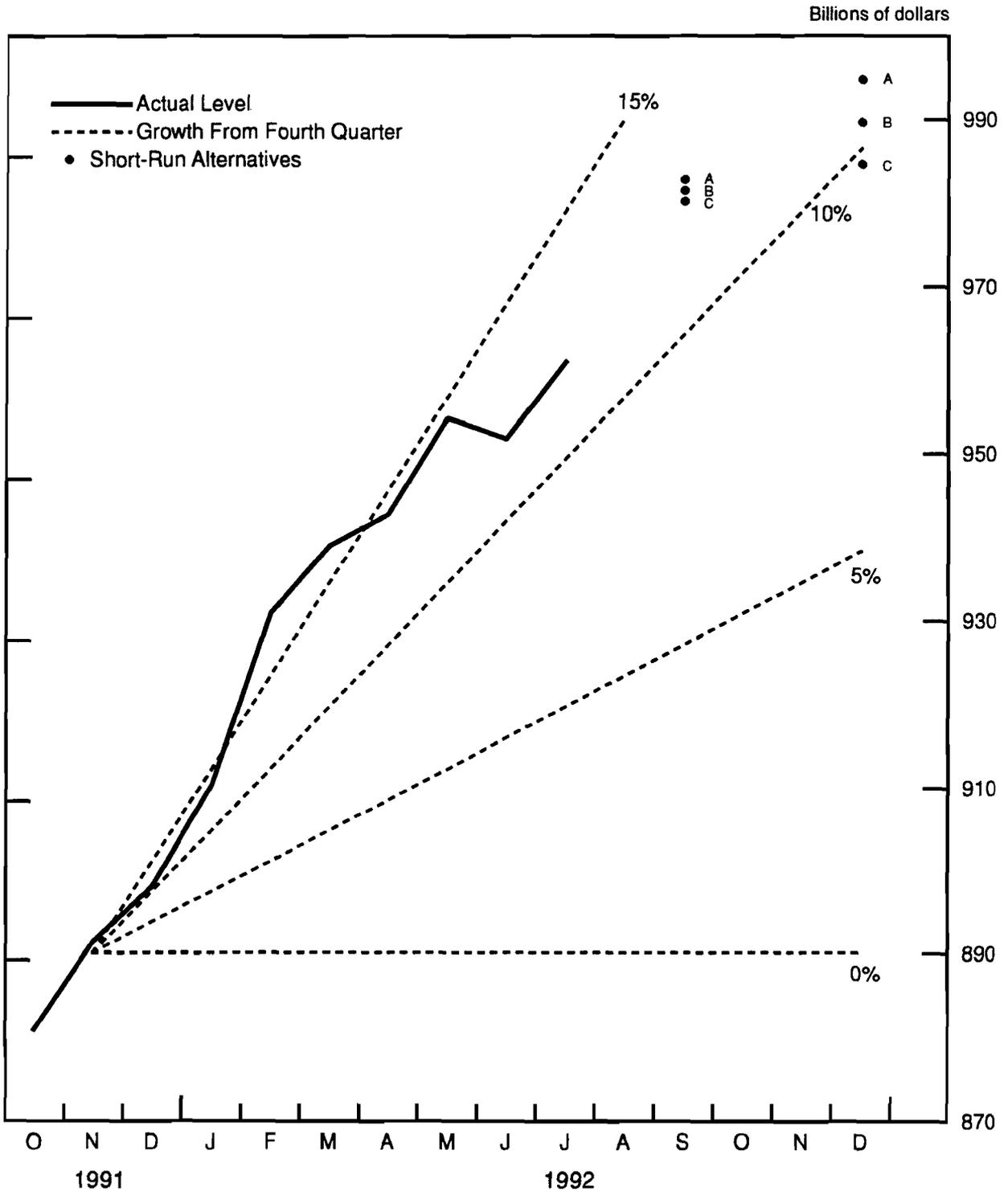
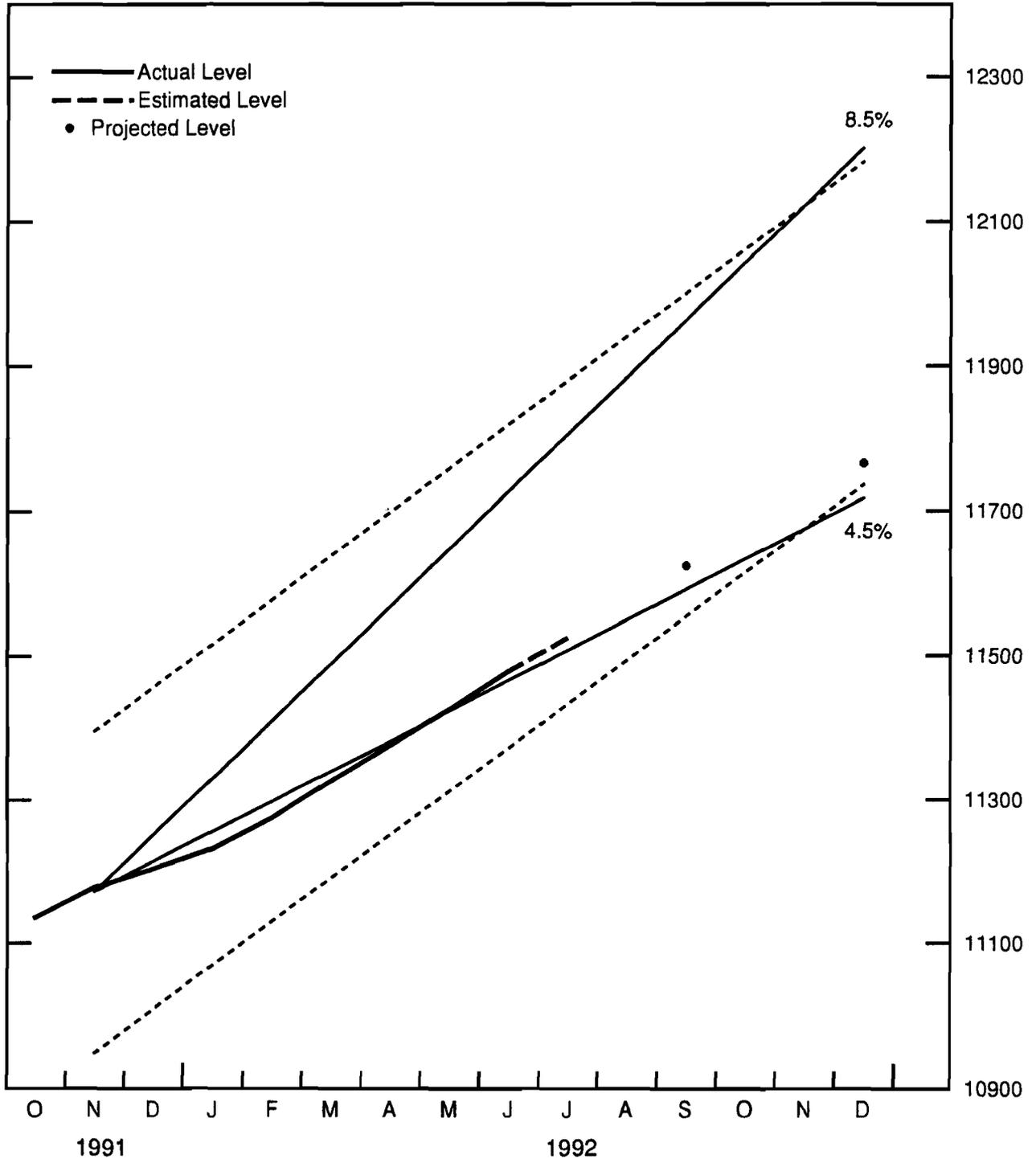


Chart 4  
DEBT

Billions of dollars



growth rates are expected to be slower than might have been anticipated at these lower interest rate levels.<sup>6</sup> As noted above, weaker expansion of income than previously anticipated likely plays an important role in explaining the lower path of money. In addition, however, the forces restraining money relative to income appear to be more intense than we thought. Spending is being financed out of internal funds and by drawing down money balances, and what net borrowing there is seems likely to be even more concentrated in capital markets and away from banks. Bank credit is now projected to increase at only a 2 percent annual rate in the second half of the year. The redirection of household funds to capital market instruments and debt repayment will continue to be encouraged by the further declines in deposit rates. Moreover, runoffs of brokered deposits may be accelerating after the June 16 effective date of FDICIA restrictions.

(12) Under alternative B, M2 is expected to resume expanding this month and to grow at a 2-1/4 percent pace on balance over the remainder of the year. M2 growth will be supported by large inflows to demand deposits in the months ahead, owing to the resumption of strong mortgage refinancing activity and a buildup in compensating balances occasioned by recent declines in market rates.<sup>7</sup> With flows into OCDs also strong, M1 is projected to expand at a 10 percent pace over the balance of the year.<sup>8</sup> Beyond M1, outflows from M2 money funds are projected to abate, although the very steep yield curve is expected to continue to draw balances from such accounts and

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6. Actual growth in the fourth quarter will be boosted relative to expectations at the last meeting effects.

7. Nearly half of the growth in M2 over the balance of the year is projected to come from increases in demand deposits and MMDAs associated with mortgage prepayments.

8. Total reserves and the monetary base would be expected to increase at around a 10 percent pace over June to December.

from retail time deposits to capital market investments. On a quarterly average basis, M2 would contract slightly this quarter, and increase at a 2-1/4 percent rate in the fourth quarter. This projection assumes the unchanged federal funds rate of alternative B extended through year-end and the Greenbook economic forecast. It implies velocity growth at a 4 percent annual rate in the third quarter and 3-1/4 percent in the fourth. With the assumed income and interest rates, standard money demand models predict velocity decreases through this period; experimental models that embody yield-curve effects and other alternative measures of opportunity costs are predicting velocity increases in the second half of the year, though not as large as embodied in the staff forecast.

(13) The firming in M2 under alternative B shows through in part to M3, which bottoms out in coming months and then edges higher. Acting to limit any pickup in this aggregate is the likelihood of anemic advances in bank credit and funding needs and some further declines in thrift credit. The failure of M3 to grow this year, as implied in all the alternatives, would be unprecedented in the official series, which begins in 1959. The extraordinary behavior of M3 is a function not only of weak depository credit but of restrained credit growth overall. With spending financed out of higher profits and by drawing down liquid assets, the debt of nonfederal sectors is projected to expand at only a 2-3/4 percent pace over the balance of the year, implying a further drop in debt-to-income ratios for both households and businesses. Continued strong federal borrowing will boost total debt growth to 4-3/4 percent for the year--near the lower end of its annual monitoring range.

(14) The lower interest rates of alternative A would be expected to buoy money growth over the balance of the year. Although

there is some question about the strength of the near-term response of M2 to lower short-term rates, the anticipated decline in long-term rates under this alternative should damp additional adverse yield curve effects. Over time, the lower real and nominal interest rates would raise income growth and, through that channel, further augment demands for money, though the effects through year-end would be small. The slightly faster growth in M2 deposits would feed through partly to M3, as would relatively more attractive rates on M3 money funds, leading to a resumption of 1 percent expansion in this aggregate over the balance of the year.

(15) Under alternative C, M2 and M3 would drop further below their annual ranges, as opportunity costs widen, banks become even more cautious lenders, and income growth is more restrained. The effects on M1 would be especially marked in the fourth quarter, given the drop in mortgage prepayments that would accompany the backup in long-term rates. Still, M1 would be expected to increase at a 10 percent rate from June to December.

Directive Language

(16) Draft language for the operational paragraph is presented below. Four alternatives for the last sentence, labeled a, b, c, and d, are shown. The first, (a), would follow the usual practice, retaining the current mid-quarter approach of updating the Committee's expectations for the quarter. The second, (b), would retain the current format but extend the money projections through year end. A third alternative, (c), would give an indication of Committee expectations for growth in M2 and M3, but would also suggest that continued expansion at a subdued pace leaving the aggregates below their long-run ranges would be acceptable in the context of unusual strength in velocity. A fourth alternative, (d), would convey the same thought without giving precise expectations for money growth.

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 might (WOULD) or slightly (SOMEWHAT) lesser reserve restraint (MIGHT) would be acceptable in the intermeeting period.

(a) The contemplated reserve conditions are expected to be consistent with growth of M2 and M3 over the period from June through September at annual rates

of about \_\_\_\_ AND \_\_\_\_ 2 and 1/2 percent, respectively.

- (b) The contemplated reserve conditions are expected to be consistent with growth of M2 and M3 over the period from June through ~~September~~ DECEMBER at annual rates of about \_\_\_\_ AND \_\_\_\_ 2 and 1/2 percent, respectively.
- (c) The contemplated reserve conditions are expected to be associated with some pickup in the growth of M2 and M3 to annual rates of about \_\_\_\_ and \_\_\_\_ percent over the period from June through December. Such growth would leave the expansion of both aggregates below the Committee's ranges for the year but is anticipated to be consistent with the Committee's policy objectives given the unusual strength in velocity.
- (d) The contemplated reserve conditions are expected to be consistent with some pickup in the monetary aggregates, but if unusual strength in velocity persists, M2 and M3 below their annual ranges could be consistent with the Committee's policy objectives.

**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	6.49	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	3.12	3.14	3.21	3.31	3.29	3.36	3.08	6.00	4.71	6.54	7.38	8.15	6.12	8.12	7.96	5.30
Monthly																
Aug 91	5.66	5.33	5.39	5.45	5.65	5.72	5.38	8.50	6.80	7.90	8.14	9.25	7.05	9.44	9.24	7.08
Sep 91	5.45	5.21	5.25	5.26	5.47	5.57	5.24	8.20	6.50	7.65	7.95	9.05	6.97	9.18	9.01	6.87
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	8.93	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	3.24	3.21	3.28	3.45	3.37	3.44	3.25	6.02	4.92	6.86	7.61	8.38	6.32	8.25	8.13	5.51
Weekly																
Apr 29 92	3.65	3.69	3.84	4.11	3.93	3.92	3.59	6.50	6.02	7.58	8.07	8.86	6.83	9.02	8.84	6.10
May 6 92	3.77	3.65	3.78	4.09	3.89	3.92	3.55	6.50	5.96	7.55	8.02	8.73	6.77	8.88	8.75	6.02
May 13 92	3.84	3.62	3.73	3.99	3.79	3.84	3.51	6.50	5.83	7.40	7.90	8.64	6.70	8.80	8.64	5.97
May 20 92	3.89	3.57	3.67	3.88	3.76	3.82	3.51	6.50	5.67	7.27	7.81	8.68	6.69	8.81	8.53	5.93
May 27 92	3.80	3.70	3.83	4.05	3.85	3.89	3.47	6.50	5.87	7.41	7.88	8.65	6.74	8.75	8.60	5.96
Jun 3 92	3.85	3.72	3.85	4.08	3.91	3.94	3.49	6.50	5.78	7.35	7.87	8.65	6.73	8.72	8.59	5.94
Jun 10 92	3.69	3.68	3.82	4.02	3.88	3.92	3.45	6.50	5.71	7.33	7.87	8.65	6.69	8.67	8.54	5.90
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	3.12	3.17	3.24	3.39	3.32	3.37	3.14	6.00	4.75	6.68	7.51	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	--	6.20	--	7.96	5.30
Daily																
Aug 7 92	3.20	3.14	3.19	3.30	3.29	3.37	--	6.00	4.71	6.57	7.40	--	--	--	--	--
Aug 12 92	3.22	3.12	3.20	3.30	3.28	3.35	--	6.00	4.71	6.48	7.33	--	--	--	--	--
Aug 13 92	3.30	3.09	3.18	3.29	3.28	3.34	--	6.00	4.72	6.55	7.36	--	--	--	--	--

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.

## Money and Credit Aggregate Measures

Seasonally adjusted

AUG. 17, 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>2</sup>	other <sup>2</sup>	total <sup>2</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	7.3	8.4	8.1
1990	4.2	4.0	3.9	-7.2	1.7	1.8	5.5	10.3	6.1	7.0
1991	8.0	2.8	1.1	-5.6	1.2	0.5	3.6	11.3	2.3	4.4
<b>QUARTERLY AVERAGE</b>										
1991-3rd QTR.	7.5	0.6	-1.6	-9.8	-1.3	0.7	1.9	13.9	1.6	4.5
1991-4th QTR.	11.0	2.3	-0.7	-5.4	0.9	0.2	6.1	12.3	1.6	4.2
1992-1st QTR.	16.5	4.3	0.0	-7.3	2.2	1.5	3.7	8.2	2.3	3.8
1992-2nd QTR.	9.8	-0.0	-3.7	-10.5	-1.9	0.2	2.4	13.1	2.7	5.3
<b>MONTHLY</b>										
1991-JULY	3.8	-1.5	-3.3	-9.5	-3.0	1.2	0.3	12.3	1.0	3.7
AUG.	9.1	0.7	-2.1	-4.5	-0.2	-1.5	1.3	15.3	0.8	4.3
SEP.	7.6	0.7	-1.7	-9.5	-1.2	-2.6	5.3	12.3	1.5	4.1
OCT.	12.2	2.0	-1.5	0.3	1.8	0.8	7.1	13.3	1.6	4.4
NOV.	14.3	4.8	1.5	-9.5	2.3	3.1	7.4	11.3	2.3	4.5
DEC.	9.0	2.8	0.6	-6.5	1.1	-0.3	6.2	7.5	1.3	2.8
1992-JAN.	16.4	3.2	-1.5	-8.2	1.2	-1.5	3.3	6.0	2.1	3.0
FEB.	27.2	9.6	3.3	-3.0	7.4	7.0	0.2	7.0	3.8	4.6
MAR.	10.3	-0.6	-4.5	-13.4	-2.8	1.8	2.7	15.0	2.3	5.5
APR.	4.9	-2.0	-4.5	-15.1	-4.2	-2.2	5.3	13.1	2.7	5.3
MAY	14.6	0.5	-4.8	-6.4	-0.7	-2.3	-0.8	12.7	2.7	5.2
JUNE	-3.1	-3.8	-4.0	-7.5	-4.4	2.3	1.8	15.1	2.2	5.5
JULY p	11.6	-1.3	-6.2	-4.3	-1.8		-0.3			
<b>LEVELS (\$BILLIONS) :</b>										
<b>MONTHLY</b>										
1992-MAR.	939.0	3473.9	2534.9	716.6	4190.5	5019.4	2854.8	2832.2	8494.3	11326.5
APR.	942.8	3468.1	2525.3	707.6	4175.7	5010.3	2867.5	2863.2	8513.3	11376.6
MAY	954.3	3469.5	2515.2	703.8	4173.3	5000.7	2865.5	2893.4	8532.2	11425.5
JUNE	951.8	3458.6	2506.8	699.4	4158.0	5010.3	2869.7	2929.9	8547.7	11477.7
JULY p	961.0	3454.9	2493.9	696.9	4151.8		2868.9			
<b>WEEKLY</b>										
1992-JULY 6	959.6	3455.8	2496.2	679.9	4135.7					
13	956.3	3454.4	2498.1	701.7	4156.2					
20	961.0	3452.2	2491.1	702.2	4154.4					
27 p	962.3	3454.7	2492.4	700.1	4154.9					
AUG. 3 p	966.8	3457.1	2490.3	699.1	4156.2					

- Adjusted for breaks caused by reclassifications.
- 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

AUG. 17, 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>1</sup>	Term Eurodollars NSA <sup>1</sup>	Savings bonds	Short-term Treasury securities	Commercial paper <sup>5</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	72.6	1028.8	1079.1	359.8	173.6	443.1	73.3	60.5	137.0	321.4	337.9	24.4
<b>MONTHLY</b>															
1991-JULY	259.3	279.3	313.7	64.8	986.1	1129.5	367.9	155.4	471.2	78.8	62.7	133.5	332.8	339.8	28.1
AUG.	261.3	280.1	317.3	67.3	994.1	1120.8	362.4	158.6	465.5	78.4	63.6	134.4	330.6	336.3	27.2
SEP.	262.9	280.6	320.6	66.4	1002.4	1111.0	359.9	162.6	458.5	76.7	61.5	135.2	322.9	337.7	25.8
OCT.	264.8	283.8	324.5	69.4	1015.0	1095.2	359.3	168.2	450.0	75.5	62.8	136.1	321.5	336.2	25.3
NOV.	266.0	287.6	329.7	73.0	1028.7	1079.2	359.5	173.6	442.3	73.6	61.5	137.1	324.7	337.9	24.5
DEC.	267.3	289.5	333.2	75.3	1042.6	1063.0	360.5	179.1	437.1	70.9	57.2	137.9	317.9	339.7	23.3
1992-JAN.	269.4	293.9	339.0	76.6	1061.2	1042.9	360.1	182.4	427.9	70.8	55.3	138.9	311.5	334.8	23.2
FEB.	271.6	305.1	346.3	76.4	1083.9	1019.8	363.9	188.2	420.7	72.0	55.9	140.1	321.2	327.5	22.9
MAR.	271.8	309.6	349.5	73.1	1098.0	1002.9	358.0	185.3	413.0	73.7	57.9	141.2	328.6	337.0	22.2
APR.	273.6	311.2	350.0	70.8	1111.2	985.6	354.1	189.2	405.7	72.3	55.0	142.4	328.8	341.7	21.6
MAY	274.7	315.1	356.5	66.9	1122.4	969.1	355.0	194.8	400.9	71.6	52.7	143.5	332.5	329.4	22.0
JUNE	276.2	311.0	356.7	68.4	1127.0	956.3	353.3	199.7	396.2	70.0	51.3	144.6	338.6	347.1	22.0
JULY p	278.9	315.6	358.7	67.9	1134.3	941.7	349.8	207.7	389.8	67.2	50.2				

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

August 14, 1992

Period	Treasury bills			Treasury coupons						Federal agencies redemptions (-)	Net change outright holdings total <sup>4</sup>	Net RPs <sup>5</sup>
	Net purchases <sup>2</sup>	Redemptions (-)	Net change	Net purchases <sup>3</sup>				Redemptions (-)	Net Change			
				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
1991 August	5,776	---	5,776	340	---	---	---	---	340	---	6,116	-2,134
September	529	---	529	200	650	---	---	---	850	---	1,374	2,216
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
Weekly												
April 29	---	---	---	---	---	---	---	---	---	---	---	1,490
May 6	---	---	---	---	---	---	---	---	---	---	---	-598
13	---	---	---	---	---	---	---	---	---	---	---	3,639
20	---	---	---	---	---	---	---	---	---	---	---	-4,120
27	668	---	668	---	200	---	---	---	200	160	707	10,994
June 3	3,442	---	3,442	---	---	---	---	---	---	31	3,411	-6,274
10	306	---	306	---	2,278	597	655	---	3,530	---	3,836	-2,998
17	---	---	---	---	---	---	---	---	---	---	---	-1,690
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
Memo: LEVEL (bil. \$) <sup>6</sup>												
August 12			140.6	31.5	67.1	16.1	25.5		140.2		286.5	-5.4

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	0.8	0.2	5.7