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September 18, 1987

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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

September 18, 1987

MONETARY POLICY ALTERNATIVES

Recent Developments

(1) Following the August 18 FOMC meeting, nonborrowed reserve paths continued to be constructed assuming \$500 million of adjustment plus seasonal borrowing at the discount window; actual borrowing in the maintenance period ending in late August exceeded this level owing to unanticipated demands for excess reserves. With this degree of reserve pressure, federal funds generally traded in a 6-1/2 to 6-3/4 percent range, though the rate moved a bit higher around the end of August when markets began to expect a near-term System tightening. In light of the potential for greater inflation, associated in part with weakness in the dollar, the objective for borrowing was raised in early September to \$600 million and, on September 4, the discount rate was increased from 5-1/2 to 6 percent. Borrowing averaged below the higher path level in the most recent complete maintenance period, as required reserves fell well short of estimates. (Through the first eight days of the current period, borrowing has averaged \$360 million.) Subsequent to the discount rate increase, federal funds have traded mainly in the 7 to 7-1/4 percent area. Total and nonborrowed reserves resumed expansion in August, primarily in association with higher levels of excess reserves.

(2) In often volatile markets, other interest rates rose substantially over the intermeeting period. Bond yields moved up sharply in the first part of the intermeeting period, as further declines in the dollar against a backdrop of strength in the economy spurred concerns about inflation and anticipation of some tightening of monetary policy. Short-term market rates also were rising, though by less, as at least a slight firming of policy was

perceived to be in train. After the announcement of the discount rate increase, short-term rates increased considerably further, and commercial banks raised the prime rate by 1/2 percentage point. On balance, private short-term rates are up around 3/4 of a percentage point since the August meeting, while Treasury bill rates have increased somewhat less, perhaps benefitting partly from the approach of another debt ceiling deadline that could disrupt supply. Bond rates have risen somewhat further after the discount rate action, but the bulk of the net increase of more than 1/2 of a percentage point over the intermeeting period was registered before that time. Rates on fixed-rate mortgages have climbed about 5/8 of a percentage point since the meeting, but ARM rates have risen relatively little, as lenders have sweetened terms to attract borrowers to their variable-rate instruments. Most stock price indexes reached new highs in late August, but have retreated since then to levels about 1 to 5 percent below those at the last FOMC meeting.

(3) The dollar's exchange value against the G-10 currencies came under substantial downward pressure in the second half of August and by early September had declined by 2-1/2 percent from the last FOMC meeting to a level 5 percent below its August 11 peak. The main factor in the dollar's depreciation appeared to be greater pessimism about the pace of adjustment of external imbalances, sparked by the release of U.S. trade figures for June. In addition, prospects for growth abroad relative to the U.S. implied little contribution from this source to external adjustment. More recently the dollar has traded somewhat above levels prevailing around the time of the discount rate increase, leaving the net decline for the intermeeting period at 2 percent.

, while the Desk purchased about \$400 million, primarily against yen in the period before the change in the discount rate.

(4) Growth of M2 picked up further in August to about a 6 percent annual rate and expansion of M3 increased to a 7-1/2 percent pace. Nevertheless, M2 remained well below the parallel band associated with its annual range, while M3 was just at the lower edge of its parallel band. Data for early September suggest that expansion in both of the broader aggregates this month may approach the August pace, which would imply growth for the three-month June-to-September period consistent with the FOMC's specification of around 5 percent. M1 advanced at a 5-1/4 percent pace in August, but seems to have slackened somewhat in September. Reflecting in part the effect of earlier interest rate increases, the velocity of M2 appears to be growing at about a 3-1/2 percent annual rate in the current quarter, based on the staff GNP forecast, and M3 velocity is projected to increase at a 2 percent rate. M1 velocity appears to be rising at a 6-1/4 percent annual rate this quarter, the first substantial increase in 3 years.

(5) The acceleration of M2 in August reflected stronger growth of its retail deposit components, a cessation of runoffs in demand deposits, and a pickup of growth in overnight RPs. The relatively steep yield curve for retail deposits continued to encourage growth in small time deposits, which accounted for much of the increase in the household component of M2, although growth of total liquid retail instruments--OCDs, savings, MMDAs, and money market mutual funds--more than reversed the previous month's net runoff. The leveling off of demand deposits likely represented some tapering off of the effects of previous interest rate increases on compensating balances and mortgage refinancing activity. Overnight and term RPs increased strongly at commercial banks last month, helping to finance heavy purchases of government securities.

KEY MONETARY AGGREGATES  
(Seasonally adjusted annual rates of growth)

	June	July	August	QIV' 86 to August
<u>Money and credit aggregates</u>				
M1	-10.4	1.6	5.3	6.7
M2	0.6	2.5	5.9	3.9
M3	4.8	1.7	7.6	5.0
Domestic nonfinancial debt	10.1	8.1	8.4 pe	9.8 pe
Bank credit	3.6	1.3	10.9	8.0
<u>Reserve measures</u>				
Nonborrowed reserves <sup>1</sup>	-8.4	-1.7	5.0	7.7
Total reserves	-13.3	-2.2	5.7	7.9
Monetary base	0.5	4.7	6.6	7.8
Memo: (Millions of dollars)				
Adjustment and seasonal borrowing	503	478	515	--
Excess reserves	1190	761	1032	--

pe - Preliminary estimate.

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 implementation of the Monetary Control Act and other regulatory changes to reserve requirements.

(6) M3 growth was bolstered in August by strong expansion in bank credit, as both securities acquisitions and lending picked up considerably. In addition to increasing term RPs, domestic banking offices borrowed heavily from foreign branches, which evidently obtained funds by issuing Eurodollar deposits--some of which are included in M3. Thrift institutions increased CD issuance while running off RPs for the first time in more than a year. The change in thrift funding patterns likely reflects reduced reliance on FHLB advances as well as increased acquisitions of adjustable-rate mortgages, which are less readily securitized and financed through RPs than are fixed-rate mortgages.

(7) The debt of domestic nonfinancial sectors appears to have expanded in August at around the reduced 8 percent pace of July, placing this aggregate near the middle of its 8 to 11 percent annual range. The pattern of credit demands has reflected the effects of rising long-term rates. Bond issuance, by both businesses and state and local governments, was reduced in August and September. Borrowing by businesses through bank loans and in the commercial paper market also has remained weak, and the moderation in overall credit usage may partly reflect some easing of the pace of financial restructuring in the third quarter. Though the rise in mortgage rates has curtailed fixed-rate mortgage financing, household borrowing appears to have been supported by a shift to adjustable-rate financing and by some strength in consumer credit, which has been bolstered recently by auto sales incentives. Federal borrowing picked up sharply in August, after the temporary extension of the debt ceiling. The Treasury has continued a normal pattern of borrowing in September, despite the prospect of a surplus in the federal budget this month. The Treasury's cash balance surged after mid-month, reflecting unusually

large quarterly tax receipts from corporations, as well as payments by individuals.

Policy alternatives

(8) The table below presents three alternative specifications for growth of the monetary aggregates from August to December based on the usual differences in pressures on reserve positions. (August, rather than September, is used as the base, as monetary data for September are still incomplete. More detailed data, including implied growth from September to December, are shown on the table and charts on the following pages.)

	<u>Alt. A</u>	<u>Alt. B</u>	<u>Alt. C</u>	<u>Memo: Long-run ranges</u>
Growth from August to December				
M2	5-1/2	4-1/2	3-1/2	
M3	6-1/4	6	5-3/4	
M1	4-1/2	3	1-1/2	
Implied growth from Q4'86 to Q4'87				
M2	4-1/4	4	4	5-1/2 to 8-1/2
M3	5-1/2	5-1/4	5-1/4	5-1/2 to 8-1/2
M1	6-1/4	6	5-1/2	
Associated federal funds rate range	4 to 8	5 to 9	6 to 10	

(9) Under alternative B, reserve paths would continue to be drawn with adjustment plus seasonal borrowing at the \$600 million level that has been specified since early September. Money markets do not yet appear to reflect this higher level of borrowing, and the federal funds rate would be expected to firm a little, into a 7-1/4 to 7-3/8 percent range, as borrowing came to average around \$600 million and the market perceived the Federal Reserve's intentions. The three-month Treasury bill rate would climb by

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
<b>Levels in billions</b>									
1987 July	2846.2	2846.2	2846.2	3571.4	3571.4	3571.4	747.6	747.6	747.6
August	2860.2	2860.2	2860.2	3594.0	3594.0	3594.0	750.9	750.9	750.9
September	2874.5	2874.0	2873.5	3611.7	3611.4	3611.1	753.1	752.9	752.7
October	2886.2	2884.1	2882.0	3631.8	3630.9	3630.0	756.1	755.1	754.1
November	2898.9	2893.9	2888.9	3650.6	3648.8	3647.0	758.9	756.6	754.3
December	2912.5	2903.6	2894.7	3670.0	3666.4	3662.8	762.0	758.2	754.4
<b>Monthly Growth Rates</b>									
1987 July	2.5	2.5	2.5	1.7	1.7	1.7	1.6	1.6	1.6
August	5.9	5.9	5.9	7.6	7.6	7.6	5.3	5.3	5.3
September	6.0	5.8	5.6	5.9	5.8	5.7	3.5	3.2	2.9
October	4.9	4.2	3.5	6.7	6.5	6.3	4.8	3.5	2.2
November	5.3	4.1	2.9	6.2	5.9	5.6	4.4	2.4	0.3
December	5.6	4.0	2.4	6.4	5.8	5.2	4.9	2.5	0.2
<b>Quarterly Ave. Growth Rates</b>									
1986 Q4	9.2	9.2	9.2	8.0	8.0	8.0	17.0	17.0	17.0
1987 Q1	6.3	6.3	6.3	6.4	6.4	6.4	13.1	13.1	13.1
Q2	2.3	2.3	2.3	3.8	3.8	3.8	6.4	6.4	6.4
Q3	3.0	3.0	3.0	4.5	4.5	4.5	0.3	0.3	0.2
Q4	5.4	4.7	4.0	6.5	6.3	6.1	4.5	3.3	2.1
June 87 to Sep. 87	4.8	4.8	4.7	5.1	5.1	5.0	3.5	3.4	3.3
Aug. 87 to Dec. 87	5.5	4.6	3.6	6.3	6.0	5.7	4.4	2.9	1.4
Sep. 87 to Dec. 87	5.3	4.1	2.9	6.5	6.1	5.7	4.7	2.8	0.9
Q4 86 to Q2 87	4.3	4.3	4.3	5.1	5.1	5.1	9.9	9.9	9.9
Q4 86 to Q3 87	3.9	3.9	3.9	4.9	4.9	4.9	6.7	6.7	6.6
Q4 86 to Q4 87	4.3	4.1	4.0	5.4	5.3	5.3	6.2	5.9	5.5
Q4 86 to Aug. 87	3.9	3.9	3.9	5.0	5.0	5.0	6.7	6.7	6.7
Q4 86 to Sep. 87	4.1	4.1	4.1	5.1	5.1	5.1	6.4	6.4	6.4

Chart 1  
ACTUAL AND TARGETED M2

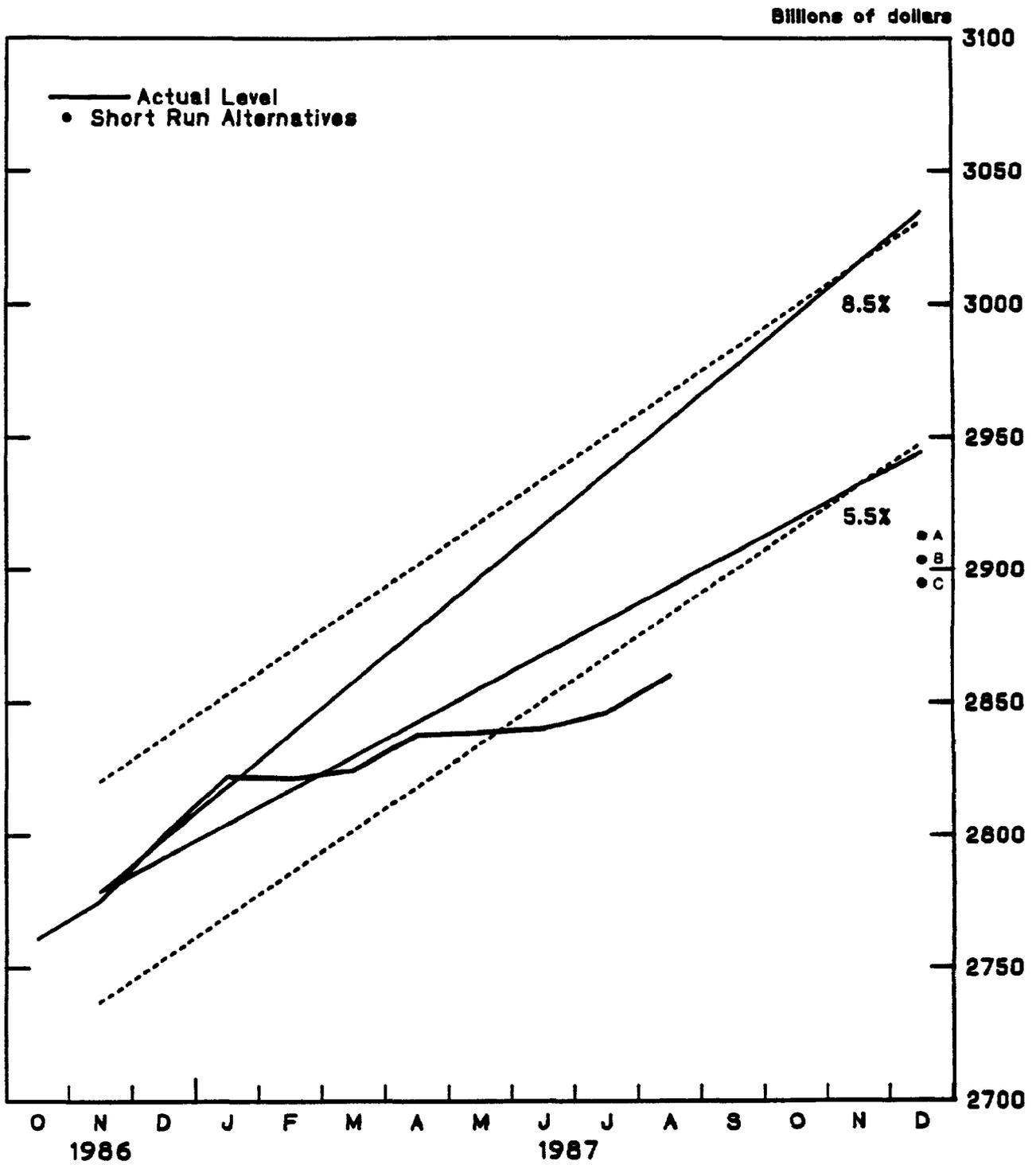


Chart 2  
ACTUAL AND TARGETED M3

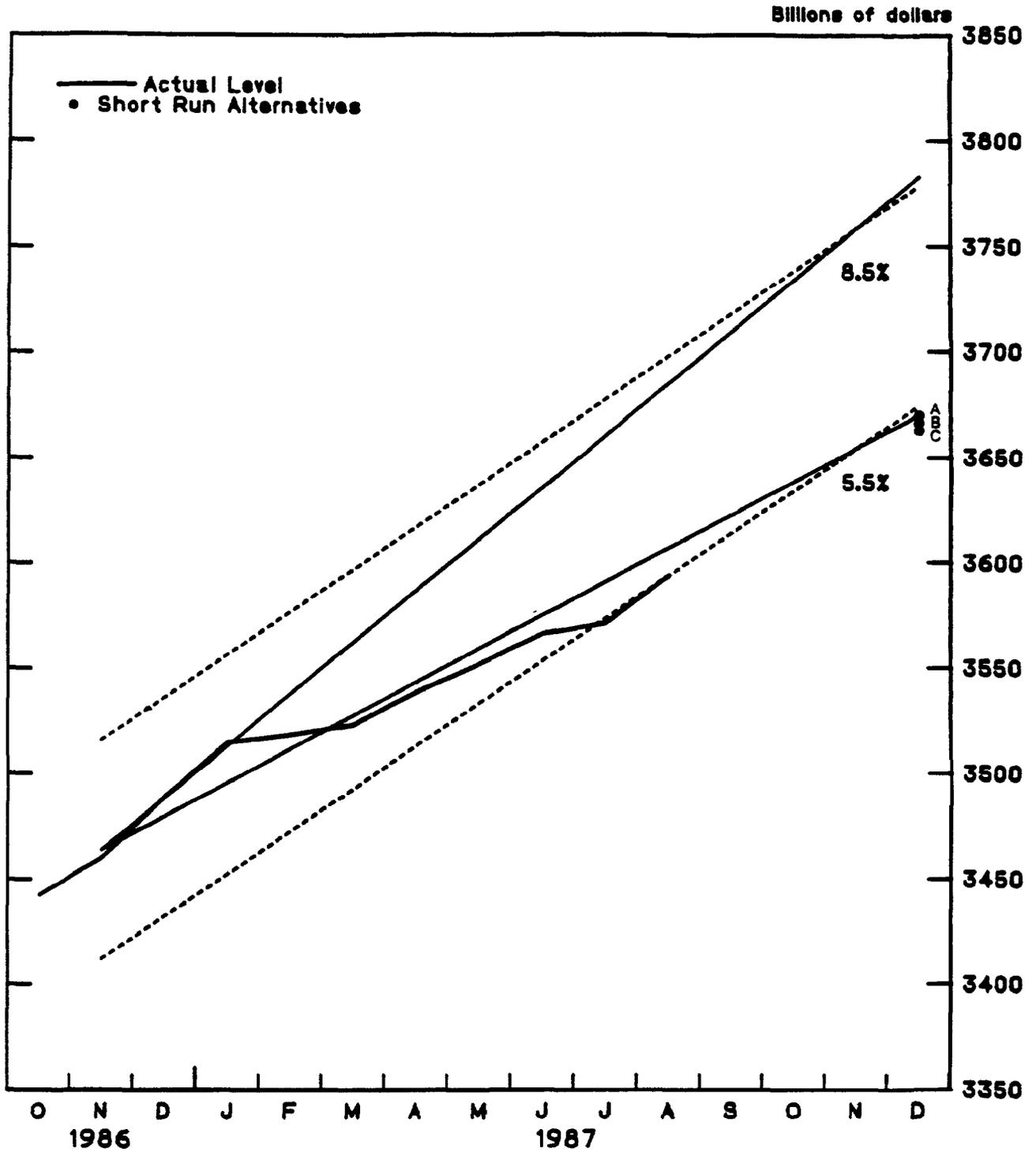


Chart 3  
M1

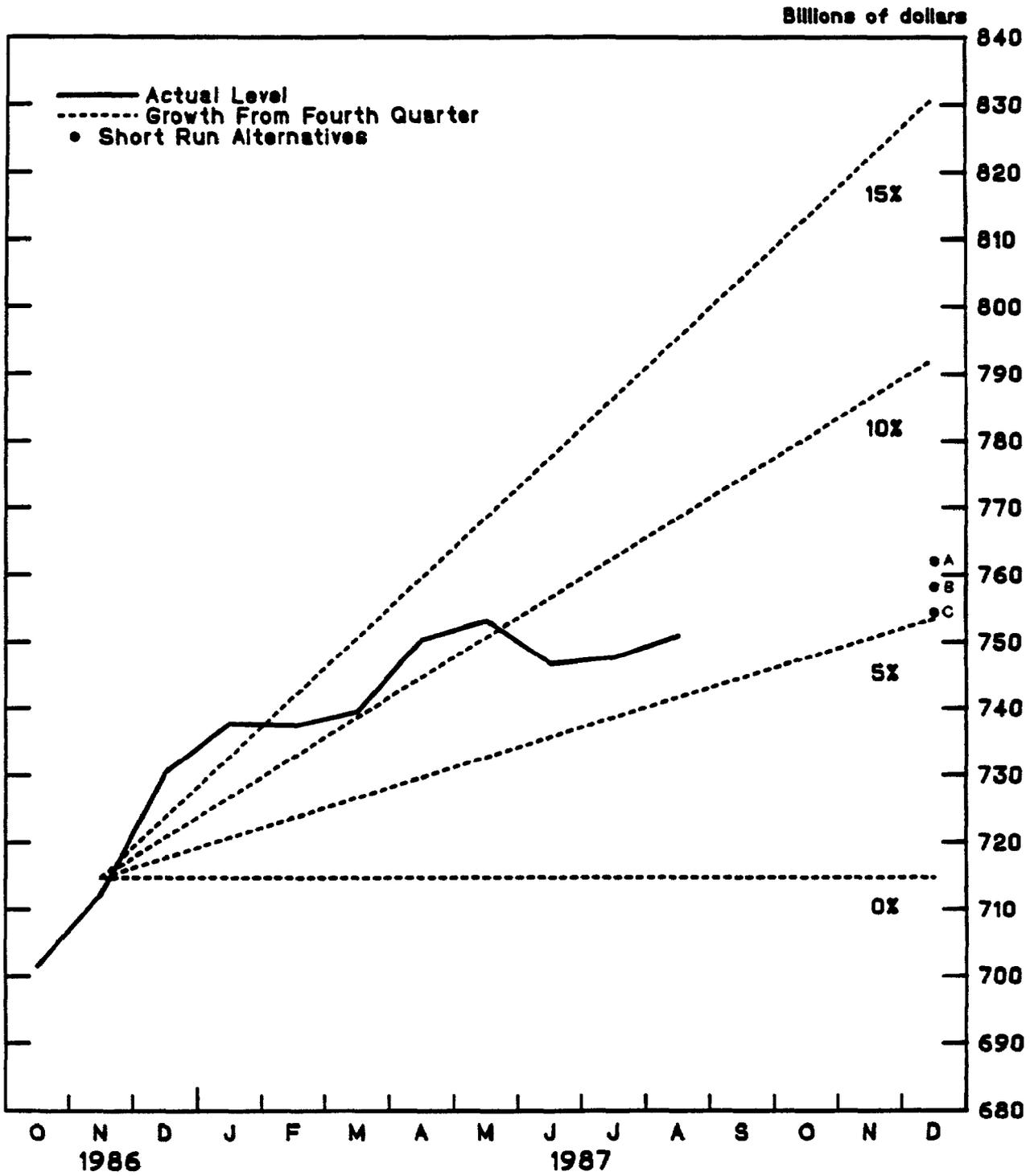
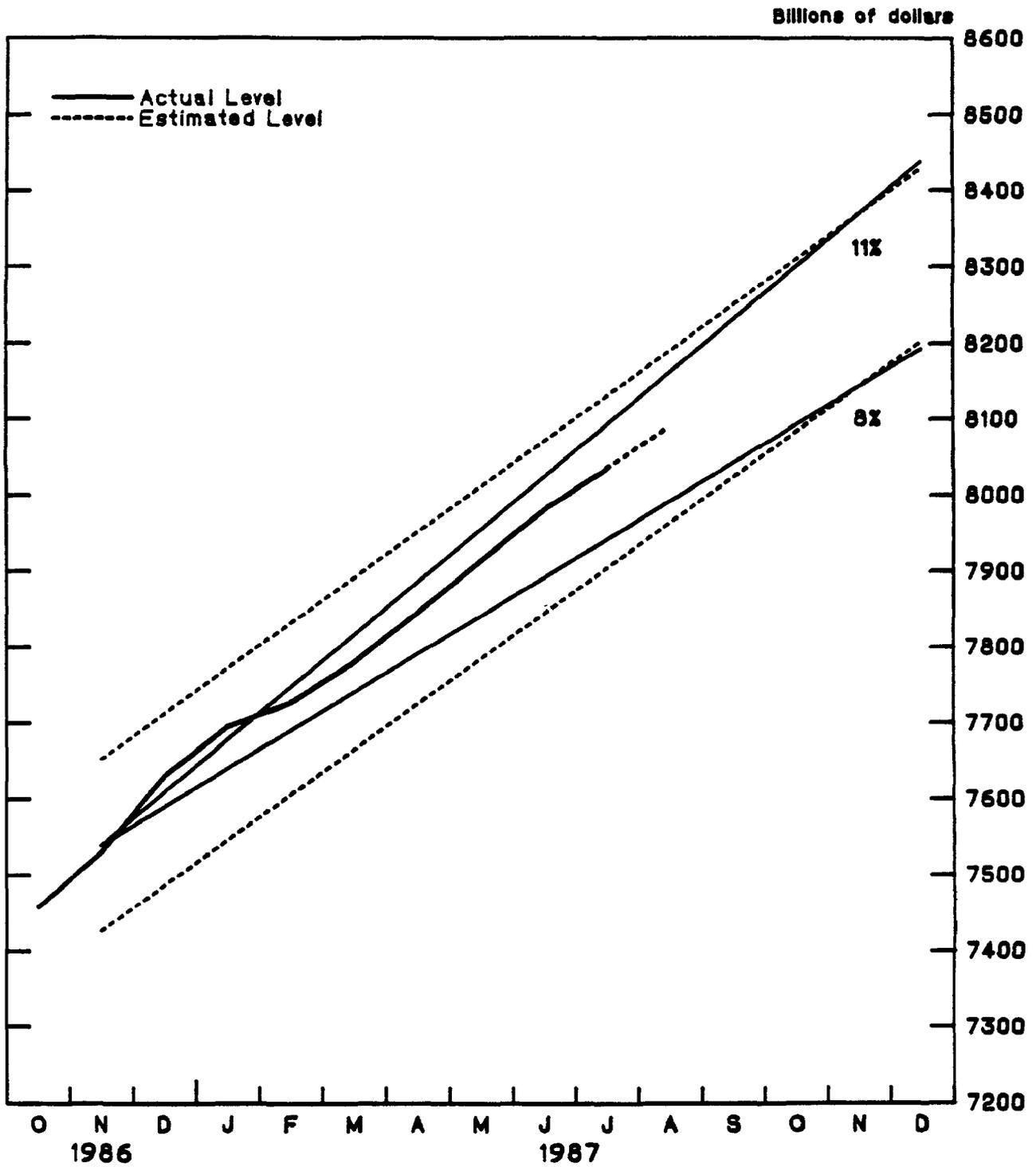


Chart 4  
DEBT



about 1/4 percentage point toward 6-3/4 percent, consistent with the slight firming of the federal funds rate and an unwinding of distortions associated with potential debt-ceiling disruptions. Private short-term rates also would rise, but by even smaller amounts. In light of the higher federal funds rate compared with its level expected at the last FOMC meeting, the federal funds range associated with alternative B, given in the last line of the table, is suggested at 5 to 9 percent; this would be 1 percentage point above the range now in the directive, and more nearly centered on the federal funds rates thought likely to prevail under this alternative.

(10) The slight further firming of short-term rates likely under alternative B would tend to support trading of the dollar on foreign exchange markets at around current levels for a while. Under these circumstances, the Treasury bond rate would be expected to continue to fluctuate a little above 9-1/2 percent, although corporate bond yields and rates on fixed-rate mortgages could drift higher into more normal alignment with Treasuries. Legislative developments could have a significant effect on the dollar and domestic financial markets over coming weeks, however. Agreement on a mechanism for substantial and continuing budget deficit reductions would tend to bolster bond prices and possibly the dollar. However, should little substantive progress be made on the budget, or should relatively restrictive trade measures seem to be in train, bond yields could come under upward pressure. In addition, if incoming information pointed to continued massive current account deficits, significant downward pressure on the dollar could well reemerge. In this event, long-term rates would be expected to rise in reflection of associated concerns about inflation and demand for dollar assets,

while short-term rates also would tend to move higher in anticipation of further monetary restraint. Indeed, the staff GNP forecast envisions further declines in the dollar over coming quarters and upward movements of short-term interest rates; in that forecast a portion of these movements has been assumed to occur in the fourth quarter.<sup>1</sup>

(11) The monetary aggregate specifications of alternative B assume that the reserve pressures of this alternative are maintained through year-end. Under these conditions, M2 is expected to grow at a 4-1/2 percent rate, near its pace of recent months. This would bring growth in M2 for the year to 4 percent, well below the lower end of the Committee's 5-1/2 to 8-1/2 percent long-run range. Adjustments of portfolios to the recent increase in open market rates would act to restrain M2 growth over the months ahead, especially its more liquid components, resulting in a further rise in M2 velocity. Opportunity costs of holding OCDs, savings deposits and MMDAs have risen appreciably over recent weeks and are likely to remain high owing to sluggish adjustment of offering rates. Moreover, similar to the experience thus far this year, demand deposits could well remain about flat, as the effects of the expected growth in economic activity over the remainder of the year are about offset by the impact of the recent upward movement in interest rates. Growth in small time deposits, in contrast, should be well maintained as banks and thrifts have been adjusting yields on these accounts more promptly to those in the open market. Given its relatively large interest sensitivity, M1 would be expected to grow at only a 3 percent rate over August to December,

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1. This forecast might be considered consistent with the reserve conditions of alternative B over the intermeeting period followed by a firming later in the quarter, or with a path intermediate between alternatives B and C.

implying quarterly average growth of 3-1/4 percent in the fourth quarter and a 2-1/4 percent rate of velocity expansion.

(12) Growth in M3 from August to December is anticipated at a 6 percent rate under alternative B. This would be a little stronger than its pace earlier in the year, and would move this aggregate close to, though not quite within, its longer-run range. Bank credit growth, and associated issuance of managed liabilities in M3, should be buoyed by additional reliance by businesses on short-term sources of funds, given increasing financing needs and the rise in bond rates. Despite some moderation in total mortgage flows owing to higher interest rates and reduced housing market activity, the renewed borrower interest in ARMs should support growth in thrift assets and managed liabilities in M3. Consumer credit growth may slacken substantially after the current round of automobile incentive programs ends and spending on cars and other durables weakens. Total borrowing by domestic nonfinancial sectors is expected to strengthen a bit in the fourth quarter, reflecting entirely a pickup in federal borrowing to finance a larger deficit. For the year, debt of domestic nonfinancial sectors is expected to rise by 9-1/2 percent on a quarterly average basis, in the middle of the annual range for this aggregate.

(13) Under alternative C, the borrowing assumption would be raised to \$800 million. The federal funds rate would move up to 7-3/4 percent or a little above, after the markets had adjusted to this further tightening of pressures on reserve positions. Other short-term market rates might also rise by around 1/2 percentage point, with the 3-month bill rising to about 7 percent. The prime rate would be boosted, perhaps by even more, given the relatively narrow spread of this rate over CDs now prevailing. The dollar

could firm a little, at least in the near term, and the perceived willingness to tighten policy could postpone emergence of any subsequent downward pressure on the dollar. Bond yields probably would move higher, although if the markets were to view this measure as forestalling future inflationary pressures, any rise in long-term rates could be rather small.

(14) Under alternative C, M2 growth over the August-to-December period would slow to about a 3-1/2 percent pace, as opportunity costs of holding M2 balances widened substantially further. At the most liquid end of the spectrum, M1 might expand only a little over this period, with demand deposits declining. Banks and thrifts, faced with even smaller inflows to core deposits, would step up their issuance of managed liabilities to fund only marginally weaker credit demands, and M3 would expand at a 5-3/4 percent rate over the August-to-December period, leaving growth for the year at 5-1/4 percent.

(15) Alternative A assumes that reserve paths would be constructed with borrowing of \$400 million. Since markets have not yet adjusted to the current \$600 million objective, this alternative implies only a modest drop in money market rates from current levels. The federal funds rate would drift lower to below 7 percent, somewhat above its trading range before the recent run-up in rates. Other private short-term rates also would decline, perhaps by a quarter of a percentage point. Bill rates might drop very little on balance once potential supply constraints eased. Even so, absent a clear indication of weakness in the economy or lessened inflation concerns, market participants probably would be surprised by any easing action coming on the heels of the discount rate hike. The dollar might well come under considerable downward pressure, and this would tend to limit possible declines in bond yields.

(16) Under alternative A, all of the monetary aggregates likely would accelerate from their pace of recent months, bringing M3 to the lower bound of its long-run range. Both M2 and M3 would be expected to end the year growing at rates that fall within, but in the lower portions of, their tentative ranges for next year. As short-term rates retraced much of their recent advances, opportunity costs would act as only a minor drag on M2 in the coming months, especially on its M1 and other liquid components. Consequently, M1 and M2 would expand at rates more in line with income over the fourth quarter. M3 would be expected to strengthen to a 6-1/4 percent rate over the August-to-December period as larger core deposit inflows to banks and thrifts would not be offset completely by smaller issuance of managed liabilities.

Directive language

(17) Draft language for the operational paragraph, with the usual options for alternative specifications of reserve pressures, is presented below for Committee consideration. The proposed addition of the phrase "sought in recent weeks" at the end of the first sentence would take account of the difference between actual reserve pressures recently and those specified in the reserve paths since the intermeeting adjustment in early September. The sentence on possible intermeeting adjustments provides for the usual options with regard to the symmetry or asymmetry of such adjustments with appropriate use of "would" or "might" and "somewhat" or "slightly." New language is suggested to update the M1 sentence.

OPERATIONAL PARAGRAPH

In the implementation of policy for the immediate future, the Committee seeks to DECREASE SOMEWHAT (Alt. A)/maintain (Alt. B)/ INCREASE SOMEWHAT (Alt. C) the ~~existing~~ degree of pressure on reserve positions SOUGHT IN RECENT WEEKS. Somewhat (SLIGHTLY) greater reserve restraint would (MIGHT), or (SOMEWHAT) slightly lesser reserve restraint (WOULD) might, be acceptable depending on indications of inflationary pressures, the strength of the business expansion, developments in foreign exchange markets, as well as the behavior of the aggregates. This approach is expected to be consistent with growth in M2 and M3 over the period from ~~June through September~~ AUGUST THROUGH DECEMBER at annual rates of around 5 \_\_\_ and 7-1/2 \_\_\_ percent, RESPECTIVELY. ~~Growth-in-M1, -while-picking-up-from-recent levels, -is-expected-to-remain-well-below-its-pace-during-1986.~~ M1

IS EXPECTED TO CONTINUE TO GROW RELATIVELY SLOWLY. The Chairman may call for Committee consultation if it appears to the Manager for Domestic Operations that reserve conditions during the period before the next meeting are likely to be associated with a federal funds rate persistently outside a range of ~~4 to 8~~ \_\_\_ TO \_\_\_ percent.

## Selected Interest Rates

Percent

September 21, 1987

Period	Short-term								Long-term							
	federal funds	Treasury bills secondary market			CDs secondary market 3-month	comm. paper 1-month	money market mutual fund	bank prime loan	U.S. government constant maturity yields			corporate A utility recently offered	municipal Bond Buyer	conventional home mortgages		
		3-month	6-month	1-year					3-year	10-year	30-year			secondary market	primary market	
		1	2	3	4				5	6	7	8	9	10	11	12
1986--High	9.55	7.21	7.30	7.35	7.94	7.91	7.21	9.50	8.60	9.38	9.52	10.83	8.72	10.97	10.99	9.09
1986--Low	5.75	5.09	5.16	5.32	5.47	5.60	5.17	7.50	6.24	7.02	7.16	9.03	7.15	9.31	9.30	7.62
1987--High	7.62	6.36	6.55	7.12	7.39	7.35	6.21	8.75	8.64	9.41	9.59	10.43	8.68	11.03	10.99	8.01
1987--Low	5.95	5.33	5.36	5.40	5.83	5.88	5.28	7.50	6.37	7.03	7.34	8.79	6.92	8.97	9.03	7.47
Monthly																
1986--Sep.	5.89	5.21	5.35	5.45	5.71	5.74	5.34	7.50	6.62	7.45	7.62	9.57	7.53	9.98	10.01	8.20
1986--Oct.	5.85	5.18	5.26	5.41	5.69	5.74	5.22	7.50	6.56	7.43	7.70	9.48	7.47	9.82	9.97	8.06
1986--Nov.	6.04	5.35	5.41	5.48	5.76	5.84	5.21	7.50	6.46	7.25	7.52	9.31	7.23	9.56	9.70	7.90
1986--Dec.	6.91	5.53	5.55	5.55	6.04	6.63	5.45	7.50	6.43	7.11	7.37	9.08	7.23	9.34	9.31	7.68
1987--Jan.	6.43	5.43	5.44	5.46	5.87	5.95	5.50	7.50	6.41	7.08	7.39	8.92	6.99	9.15	9.23	7.62
1987--Feb.	6.10	5.59	5.59	5.63	6.10	6.12	5.32	7.50	6.56	7.25	7.54	8.82	7.03	9.04	9.12	7.56
1987--Mar.	6.13	5.59	5.60	5.68	6.17	6.22	5.32	7.50	6.58	7.25	7.55	8.84	7.03	9.01	9.08	7.54
1987--Apr.	6.37	5.64	5.90	6.09	6.52	6.39	5.49	7.75	7.32	8.02	8.25	9.51	7.87	10.05	9.83	7.58
1987--May	6.85	5.66	6.05	6.52	6.99	6.83	5.79	8.14	8.02	8.61	8.78	10.05	8.35	10.58	10.60	7.88
1987--June	6.73	5.67	5.99	6.35	6.94	6.86	6.01	8.25	7.82	8.40	8.57	10.05	8.13	10.38	10.54	7.93
1987--July	6.58	5.69	5.76	6.24	6.70	6.57	6.02	8.25	7.74	8.45	8.64	10.17	8.09	10.20	10.28	7.81
1987--Aug.	6.73	6.04	6.15	6.54	6.75	6.62	--	8.25	8.03	8.76	8.97	10.37	8.11	10.39	10.33	7.76
Weekly																
1987--June 3	6.65	5.69	6.15	6.44	7.01	6.87	5.93	8.25	8.01	8.57	8.74	10.14	8.29	10.56	10.70	7.97
1987--June 10	6.70	5.60	5.95	6.41	6.99	6.87	5.97	8.25	7.95	8.55	8.71	10.04	8.16	10.38	10.66	7.97
1987--June 17	6.75	5.60	5.92	6.30	6.90	6.85	6.01	8.25	7.73	8.33	8.51	10.00	7.96	10.28	10.44	7.91
1987--June 24	6.79	5.70	5.97	6.30	6.89	6.87	6.04	8.25	7.69	8.27	8.44	10.03	8.10	10.28	10.35	7.88
1987--July 1	6.61	5.73	5.99	6.29	6.92	6.86	6.04	8.25	7.76	8.34	8.48	10.01	8.16	10.20	10.36	7.86
1987--July 8	6.64	5.63	5.65	6.22	6.76	6.69	6.06	8.25	7.65	8.30	8.43	10.07	8.05	10.18	10.30	7.86
1987--July 15	6.52	5.59	5.52	6.13	6.68	6.58	6.05	8.25	7.65	8.37	8.53	10.12	8.03	10.13	10.23	7.81
1987--July 22	6.57	5.61	5.69	6.18	6.63	6.49	6.01	8.25	7.70	8.44	8.65	10.34	8.08	10.23	10.23	7.77
1987--July 29	6.63	5.79	6.01	6.37	6.70	6.53	5.95	8.25	7.86	8.59	8.84	10.44	8.14	10.28	10.27	7.75
1987--Aug. 5	6.75	5.98	6.13	6.46	6.76	6.62	5.99	8.25	8.01	8.72	8.95	10.45	8.20	10.36	10.35	7.73
1987--Aug. 12	6.58	5.88	6.07	6.48	6.72	6.60	6.00	8.25	7.98	8.72	8.95	10.24	8.04	10.27	10.34	7.78
1987--Aug. 19	6.74	5.99	6.09	6.48	6.71	6.61	6.00	8.25	7.92	8.65	8.86	10.34	8.12	10.36	10.30	7.77
1987--Aug. 26	6.76	6.16	6.23	6.58	6.74	6.59	5.99	8.25	8.05	8.76	8.97	10.42	8.09	10.56	10.33	7.77
1987--Sept. 2	6.85	6.21	6.31	6.76	6.92	6.78	6.03	8.25	8.30	9.05	9.23	10.60	8.47	10.92	10.63	7.84
1987--Sept. 9	6.95	6.36	6.52	7.12	7.20	7.09	6.04	8.68	8.63	9.39	9.56	10.86	8.67	10.96	10.91	7.96
1987--Sept. 16	7.21	6.34	6.55	7.11	7.39	7.35	6.21	8.75	8.64	9.41	9.59	10.93	8.65	11.03	10.99	7.99
Daily																
1987--Sept. 11	7.13	6.35	6.47	7.11	7.44	7.36	--	8.75	8.62	9.33	9.50	--	--	--	--	--
1987--Sept. 17	7.09	6.38	6.68	7.10	7.44	7.34	--	8.85	8.69	9.48	9.65	--	--	--	--	--
1987--Sept. 18	7.03p	6.42	6.68	7.07	7.45	7.30	--	8.75	8.62p	9.38p	9.57p	--	--	--	--	--

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 and 13 are 1-day quotes for Friday and Thursday, 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 on the Friday following the end of the statement week. Column 15 is the average contract rate on new commitments for fixed-rate mort-

gages (FRMs) with 80 percent loan-to-value ratios at a sample of savings and loans. Column 16 is the average initial contract rate on new commitments for one-year, adjustable-rate mortgages (ARMs) at S&Ls offering both FRMs and ARMs with the same number of discount points.

Money and Credit Aggregate Measures

Seasonally adjusted

SEPT. 21, 1987

Period	Money stock measures and liquid assets						Bank credit total loans and investments <sup>1</sup>	Domestic nonfinancial debt <sup>2</sup>		
	M1	M2	nontransactions components		M3	L		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>PERCENT ANNUAL GROWTH: ANNUALLY (QIV TO QIV)</b>										
1984	5.4	7.9	8.6	23.2	10.7	12.2	11.2	16.0	13.4	13.9
1985	12.1	8.8	7.8	3.4	7.7	8.5	10.2	15.3	12.9	13.4
1986	15.3	8.9	6.9	8.4	8.8	8.1	9.8	14.7	12.7	13.2
<b>QUARTERLY AVERAGE</b>										
3RD QTR. 1986	16.5	10.6	8.6	6.2	9.7	8.1	10.6	14.7	11.9	12.5
4TH QTR. 1986	17.0	9.2	6.6	3.2	8.0	8.2	8.8	11.5	12.3	12.1
1ST QTR. 1987	13.1	6.3	4.0	6.4	6.4	6.4	10.1	9.7	10.6	10.4
2ND QTR. 1987	6.4	2.3	0.8	10.0	3.8	2.9	7.0	9.5	9.2	9.3
<b>MONTHLY</b>										
1986--AUG.	18.4	11.0	8.4	6.9	10.2	8.7	14.8	10.0	15.2	14.0
SEPT.	10.7	7.9	7.0	12.9	8.9	8.7	12.7	10.8	14.3	13.5
OCT.	14.4	10.7	9.5	-7.4	7.1	7.6	3.6	7.2	9.7	9.1
NOV.	18.8	6.4	2.2	5.5	6.2	7.6	6.4	14.4	11.0	11.8
DEC.	30.5	10.7	3.8	7.7	10.1	9.5	15.0	20.0	14.7	16.0
1987--JAN.	11.8	9.4	8.6	6.3	8.8	9.6	16.1	6.8	11.2	10.2
FEB.	-0.5	-0.3	-0.3	7.4	1.2	2.4	0.9	3.0	5.7	5.1
MAR.	3.4	1.4	0.7	2.6	1.6	-2.9	3.8	5.9	9.0	8.3
APR.	17.5	5.6	1.4	4.0	5.3	3.0	11.9	8.5	10.4	10.0
MAY	4.5	0.3	-1.1	21.9	4.6	8.7	7.4	15.1	9.2	10.5
JUNE	-10.4	0.6	4.7	21.2	4.8	2.5	3.6	14.9	8.5	10.1
JULY	1.6	2.5	2.8	-1.5	1.7	-3.0	1.3	4.5	9.2	8.1
AUG. P	5.3	5.9	6.1	14.1	7.6		10.6	6.5	7.8	7.5
<b>MONTHLY LEVELS (\$BILLIONS)</b>										
1987--APR.	750.3	2837.9	2087.6	700.7	3538.6	4183.1	2147.3	1841.1	6004.2	7845.3
MAY	753.1	2838.7	2085.6	713.5	3552.2	4213.3	2160.6	1864.2	6050.0	7914.2
JUNE	746.6	2840.2	2093.7	726.1	3566.3	4222.1	2167.1	1887.4	6093.1	7980.5
JULY	747.6	2846.2	2098.6	725.2	3571.4	4211.5	2169.5	1894.4	6139.9	8034.3
AUG. P	750.9	2860.2	2109.3	733.7	3594.0		2188.7	1904.7	6179.6	8084.3
<b>WEEKLY LEVELS (\$BILLIONS)</b>										
1987--AUG. 3	751.6									
10	749.6									
17	750.7									
24	753.1									
31 P	751.0									
SEPT. 7 P	746.0									

1/ ANNUAL RATES FOR BANK CREDIT ARE ADJUSTED FOR A TRANSFER OF LOANS FROM CONTINENTAL ILLINOIS NATIONAL BANK TO THE FDIC BEGINNING SEPTEMBER 26, 1984.

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

## Components of Money Stock and Related Measures

Billions of dollars, seasonally adjusted unless otherwise noted

SEPT. 21, 1987

Period	Currency	Demand deposits	Other checkable deposits	Overnight RPs and Eurodollars NSA	MMDAs NSA	Savings deposits	Small denomination time deposits <sup>1</sup>	Money market mutual funds, NSA		Large denomination time deposits <sup>3</sup>	Term RPs NSA	Term Eurodollars NSA	Savings bonds	Short-term Treasury securities	Commercial paper	Bankers acceptances
								general purpose, and broker/dealer <sup>2</sup>	institutions only							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
<b>ANNUALLY (4TH QTR):</b>																
1984	157.8	246.6	143.9	56.1	405.4	290.5	880.0	161.7	57.7	413.6	65.3	81.7	73.9	267.3	161.2	45.7
1985	169.7	268.6	175.9	67.2	509.2	301.9	880.3	176.6	64.7	433.3	63.0	77.6	78.9	295.7	201.7	43.2
1986	182.4	299.8	226.1	77.1	568.2	358.4	858.4	207.2	84.3	446.1	80.8	80.1	89.7	290.4	229.0	37.7
<b>MONTHLY</b>																
1986-AUG.	179.0	291.2	210.4	74.7	553.6	334.6	876.7	200.5	80.8	449.4	75.2	78.0	85.3	288.7	219.7	37.3
SEPT.	179.7	292.2	214.7	72.7	558.8	341.4	872.2	202.2	84.4	448.4	77.9	81.4	86.4	287.9	223.9	36.9
OCT.	181.2	293.4	220.3	77.4	564.4	350.5	866.7	206.9	84.5	445.5	78.0	78.0	87.7	286.7	228.4	37.7
NOV.	182.4	297.8	225.8	76.7	568.7	358.5	857.1	207.1	84.4	445.8	82.4	79.3	89.8	292.2	228.4	38.0
DEC.	183.5	308.3	232.3	77.3	571.4	366.3	853.5	207.6	84.1	447.1	82.0	83.0	91.7	292.4	230.2	37.5
1987-JAN.	186.0	305.1	240.1	83.5	574.3	376.7	851.6	209.0	84.0	449.7	81.2	84.8	92.7	289.3	239.7	37.8
FEB.	187.2	300.8	242.9	78.7	570.8	387.2	848.3	210.7	84.7	448.2	84.9	87.6	93.5	291.7	239.8	39.3
MAR.	187.7	299.3	245.7	75.3	570.6	396.3	845.9	211.6	84.9	450.1	84.9	88.2	94.3	276.1	239.1	39.8
APR.	188.9	303.9	250.7	75.1	565.5	406.1	843.6	211.0	83.1	454.6	91.0	83.9	95.1	263.4	244.9	41.2
MAY	190.2	303.9	252.2	74.2	557.1	411.7	843.0	209.1	81.8	459.7	96.4	87.0	95.9	268.5	254.3	42.4
JUNE	191.1	297.4	251.2	72.7	553.5	415.2	850.0	210.2	81.3	465.0	98.4	89.4	96.5	263.7	252.1	43.5
JULY	192.1	296.2	252.5	72.8	548.0	416.7	858.5	210.4	83.4	464.8	96.3	85.8	97.3	250.6	248.2	44.0
AUG. P	193.2	296.4	254.5	75.5	543.4	420.0	865.7	213.4	83.4	466.6	96.6	93.1				

1/ INCLUDES RETAIL REPURCHASE AGREEMENTS. ALL IRA AND KEOGH ACCOUNTS AT COMMERCIAL BANKS AND THRIFT INSTITUTIONS ARE SUBTRACTED FROM SMALL TIME DEPOSITS.

2/ EXCLUDES IRA AND KEOGH ACCOUNTS.

3/ 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>

STRICTLY CONFIDENTIAL (FR)  
CLASS II-FOMC

Millions of dollars, not seasonally adjusted

September 21, 1987

Period	Treasury bills net change <sup>2</sup>	Treasury coupons net purchases <sup>3</sup>					Federal agencies net purchases <sup>4</sup>					Net change outright holdings total <sup>5</sup>	Net RPs <sup>6</sup>
		within 1-year	1-5	5-10	over 10	total	within 1-year	1-5	5-10	over 10	total		
1981	5,337	294	1,702	393	379	2,768	133	360	--	--	494	8,491	684
1982	5,698	312	1,794	388	307	2,803	--	--	--	--	--	8,312	1,461
1983	13,068	484	1,896	890	383	3,653	--	--	--	--	--	16,342	-5,445
1984	3,779	826	1,938	236	441	3,440	--	--	--	--	--	6,964	1,450
1985	14,596	1,349	2,185	358	293	4,185	--	--	--	--	--	18,619	3,001
1986	19,099	190	893	236	158	1,476	--	--	--	--	--	20,178	10,033
1986--QTR. I	-2,821	--	--	--	--	--	--	--	--	--	--	-2,861	-3,580
II	7,585	--	--	--	--	--	--	--	--	--	--	7,535	-356
III	4,668	--	--	--	--	--	--	--	--	--	--	4,577	4,044
IV	9,668	190	893	236	158	1,476	--	--	--	--	--	10,927	9,925
1987--QTR. I	-2,714	--	-252	--	--	-252	--	--	--	--	--	-3,676	-14,254
QTR. II	5,823	1,767	5,036	1,226	920	8,948	--	--	--	--	--	14,735	2,121
1987--Jan.	414	--	--	--	--	--	--	--	--	--	--	304	-10,701
Feb.	-4,189	--	-252	--	--	-252	--	--	--	--	--	-4,441	-4,723
Mar.	1,062	--	--	--	--	--	--	--	--	--	--	1,062	1,170
Apr.	3,573	1,232	3,642	914	669	6,457	--	--	--	--	--	9,993	15,801
May	1,697	--	--	--	--	--	--	--	--	--	--	1,697	-16,634
June	553	535	1,394	312	251	2,491	--	--	--	--	--	3,044	2,954
July	-4,909	--	-200	--	--	-200	--	--	--	--	--	-5,168	906
Aug.	499	--	5	--	--	5	--	--	--	--	--	504	-2,365
June 3	29	--	--	--	--	--	--	--	--	--	--	29	- 11,981
10	334	--	--	--	--	--	--	--	--	--	--	334	2,247
17	185	--	--	--	--	--	--	--	--	--	--	185	3,632
24	27	535	1,394	312	251	2,491	--	--	--	--	--	2,518	4,236
July 1	-268	--	--	--	--	--	--	--	--	--	--	-268	-7,511
8	-306	--	-75	--	--	-75	--	--	--	--	--	-381	857
15	-246	--	-125	--	--	-125	--	--	--	--	--	-371	-2,249
22	-714	--	--	--	--	--	--	--	--	--	--	-773	2,484
29	-3,512	--	--	--	--	--	--	--	--	--	--	-3,512	578
Aug. 5	176	--	5	--	--	5	--	--	--	--	--	181	604
12	--	--	--	--	--	--	--	--	--	--	--	--	-1,392
19	157	--	--	--	--	--	--	--	--	--	--	157	442
26	46	--	--	--	--	--	--	--	--	--	--	46	3,983
Sept. 2	804	--	--	--	--	--	--	--	--	--	--	804	-4,478
9	2,994	--	--	--	--	--	--	--	--	--	--	2,994	2,023
16	309	443	2,551	619	493	4,105	--	--	--	--	--	4,414	-854
LEVEL--Sept. 16 (\$ billions)	108.8	23.8	43.0	14.8	24.8	106.5	2.4	3.6	1.3	.3	7.6	225.2	-2.4

1. Change from end-of-period to end-of-period.

2. Outright transactions in market and with foreign accounts, and redemptions (-) in bill auctions.

3. Outright transactions in market and with foreign accounts, and short-term notes acquired in exchange for maturing bills. Excludes redemptions, maturity shifts, rollovers of maturing coupon issues, and direct Treasury borrowing from the System.

4. Outright transactions in market and with foreign accounts only. Excludes redemptions and maturity shifts.

5. In addition to the net purchase of securities, also reflects changes in System holdings of bankers' acceptances, direct Treasury borrowing from the System and redemptions (-) of agency and Treasury coupon issues.

6. Includes changes in RPs (+), matched sale-purchase transactions (-), and matched purchase sale transactions (+).