

Prefatory Note

The attached document represents the most complete and accurate version available based on original copies culled from the files of the FOMC Secretariat at the Board of Governors of the Federal Reserve System. This electronic document was created through a comprehensive digitization process which included identifying the best-preserved paper copies, scanning those copies,¹ and then making the scanned versions text-searchable.² Though a stringent quality assurance process was employed, some imperfections may remain.

Please note that this document may contain occasional gaps in the text. These gaps are the result of a redaction process that removed information obtained on a confidential basis. All redacted passages are exempt from disclosure under applicable provisions of the Freedom of Information Act.

¹ In some cases, original copies needed to be photocopied before being scanned into electronic format. All scanned images were deskewed (to remove the effects of printer- and scanner-introduced tilting) and lightly cleaned (to remove dark spots caused by staple holes, hole punches, and other blemishes caused after initial printing).

² A two-step process was used. An advanced optimal character recognition computer program (OCR) first created electronic text from the document image. Where the OCR results were inconclusive, staff checked and corrected the text as necessary. Please note that the numbers and text in charts and tables were not reliably recognized by the OCR process and were not checked or corrected by staff.

MONETARY POLICY ALTERNATIVES

Prepared for the Federal Open Market Committee

By the staff Board of Governors of the Federal Reserve System

September 20, 1996

MONETARY POLICY ALTERNATIVES

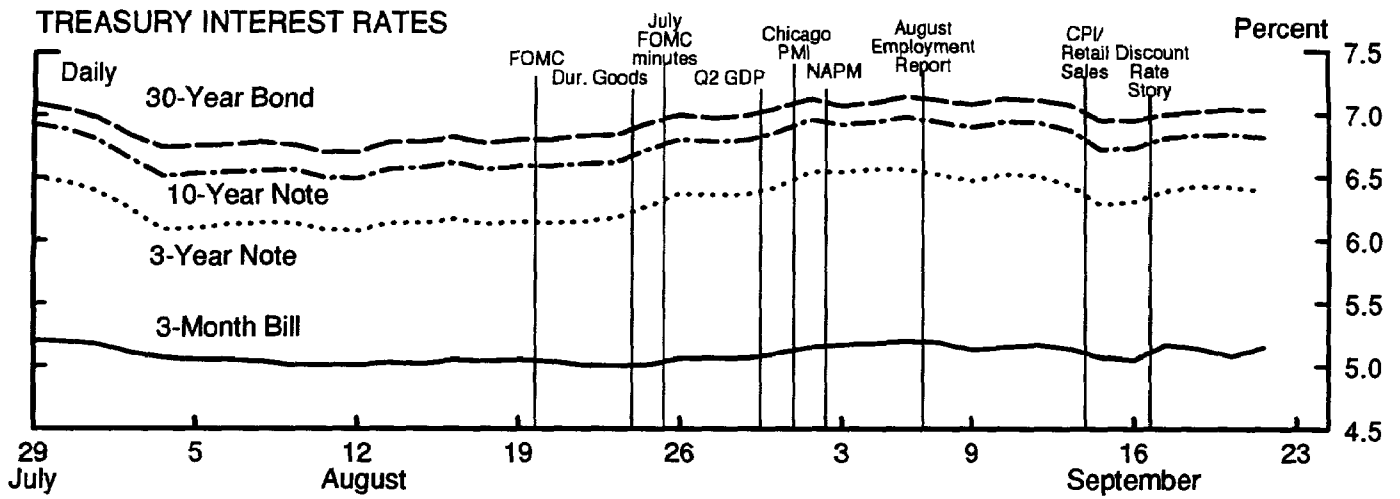
Recent Developments

(1) The Committee's decision to leave the funds rate unchanged at the August meeting was anticipated by market participants and thus had little effect on market interest rates. With incoming information on balance confirming earlier indications that the economic expansion was moderating and inflation remaining subdued, the asymmetric tilt in the directive was not utilized and the intended funds rate was maintained at 5-1/4 percent during the intermeeting period. Federal funds have generally traded near the intended rate.¹ Indeed, despite further reductions in required operating balances owing to new sweeps of retail deposits, volatility of the daily effective funds rate around its intended rate remains relatively low; some unpredictable late-in-the-day tightness in the funds rate has occurred, however.

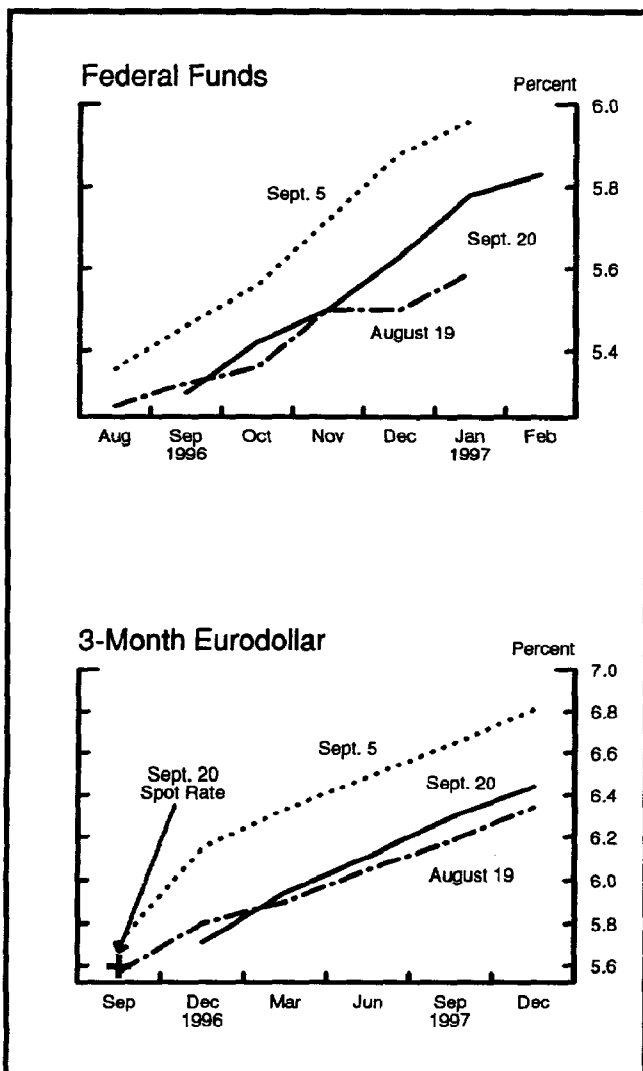
(2) In the weeks following the FOMC meeting, market interest rates rose somewhat (chart), reversing their declines of early August, as output growth was seen to have more momentum than had been anticipated and press reports suggested increased concern among Committee members about the outlook for inflation. Credit markets rallied in mid-September on favorable inflation reports and sluggish retail sales data, but gave back part of their gains, particularly at the short end, after a wire service reported that a number of Reserve Banks had requested discount rate increases. On balance over the intermeeting period, short-term interest rates have risen about 10 to 15 basis

1. In the two maintenance periods completed since the last FOMC meeting, borrowing has averaged about \$50 million above its allowance of \$325 million.

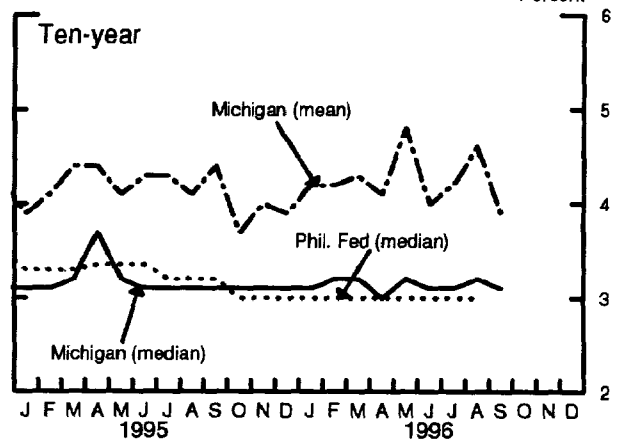
Chart 1



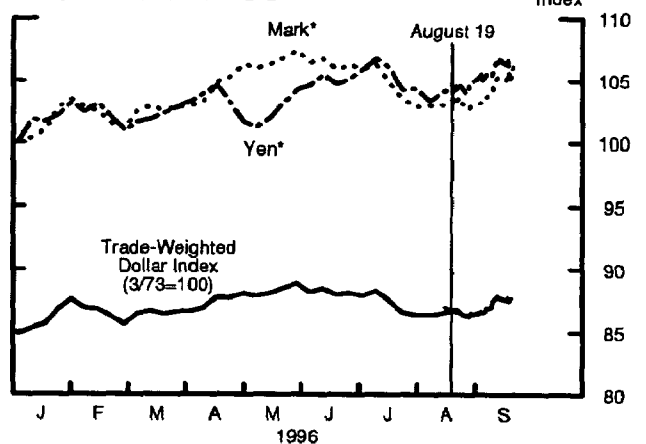
FUTURES CONTRACTS



INFLATION EXPECTATIONS



EXCHANGE RATES



* Index, Jan 1996=100
Weekly. Daily beginning August 19.

points, while intermediate- and long-term rates are up 20 to 25 basis points. Recent surveys of short- and long-term inflation expectations (available through August for professional forecasters and September for households) show essentially no evidence of a rise (chart). Federal funds futures contracts now suggest a two-thirds chance of a 1/4 point increase in the funds rate at the September FOMC meeting, while Eurodollar futures rates seem to imply only a modest amount of tightening through next year, once likely term premiums are taken into account (chart). Equity markets rebounded over the period, with major indexes up around 2 to 3 percent to record highs; small-cap stocks rose smartly but remained below records set earlier this year.

(3) Reflecting in part the increase in U.S. interest rates, the dollar's weighted-average exchange value rose almost 1 percent over the intermeeting period (chart). Declines in market interest rates abroad also contributed to a firmer dollar, as foreign ten-year rates fell 15 basis points and three-month rates dropped 25 basis points, on average. Official lending rates were lowered by several central banks, including the Bundesbank and the Bank of Canada. Canadian, German, and U.K. stock indexes recovered to or exceeded previous highs, while those in Japan, France, and Italy remained well below recent peaks, as investors were apparently less optimistic about prospects for economic activity in the latter group of countries.

; the Desk again did not intervene.

(4) Broad money growth picked up in August, but by somewhat less than projected at the time of the last FOMC meeting. M2 grew at a 3-3/4 percent rate, leaving it in the upper portion of its 1 to 5

percent annual range. Liquid deposits continued to run off, but at a slower pace than in July.² Retail money funds grew rapidly, as their yields eased more gradually than market rates in early August. Small time deposits, whose rates had increased appreciably in spring and early summer in lagged response to upward movements in market rates, posted a solid gain. Little substitution between these M2 components and capital market mutual funds was evident, as stock fund flows resumed in strength and bond fund flows also picked up in August.³

(5) Despite a decline in bank credit, M3 accelerated to a 5 percent growth rate in August, leaving it somewhat below the upper end of its 2 to 6 percent annual range. With favorable yield spreads, institutional money funds posted robust growth. Large time deposits also grew rapidly, as banks continued to shift markedly away from reliance on overseas sources of funding. Data for early September suggest a further acceleration in both M2 and M3.

(6) Growth of the debt of nonfederal sectors has moderated a bit in recent months. The rate of increase in consumer credit has remained below that earlier this year; the less ebullient expansion of such credit primarily reflects more moderate increases in spending on consumer durables and repayments of earlier loans, but strains on household balance sheets and less generous loan supplies also may be

2. M1 declined at a 10 percent rate in August. After adjusting for the initial effects of new sweep programs, M1 was up at a 4-1/2 percent rate. Currency growth moderated to a 7-1/2 percent pace, while both demand deposits and NOW accounts fell sharply because of new sweeps. The monetary base rose at a 6-1/4 percent rate, or at a 9-3/4 percent rate after adjusting for sweeps.

3. The effects of capital losses in July on the August month-average value of assets in stock mutual funds restrained the growth rate of M2 plus stock and bond funds to only 1 percent in August.

restraining borrowing some. Comprehensive data on residential mortgage borrowing lag substantially; real estate lending by banks posted a solid gain in August, but, rather than additional overall strength in home mortgage borrowing, this may reflect shifts to adjustable-rate financing, which banks tend to hold on their books. Business borrowing has slackened somewhat, particularly in commercial paper and corporate bond markets, as hefty profits are perhaps funding a larger share of business investment spending. Commercial and industrial lending at banks has strengthened in early September, and bank business lending in the third quarter is running ahead of its pace earlier this year, perhaps reflecting the financing of higher levels of inventories. Loan supply conditions are still quite favorable for businesses, and quality spreads in securities markets remain at historically low levels. Outstanding state and local debt has resumed its decline since mid-year, owing to continued retirement of advance-refunded debt and a slackened pace of new issues. On the other hand, federal borrowing has picked up a little this summer. Growth of total nonfinancial debt for the year has edged down to around the midpoint of its annual range.

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

	June	July	Aug.	QIV to Aug.
<u>Money and credit aggregates</u>				
M1	-0.5	-8.8	-9.9	-3.4
Adjusted for retail sweeps	8.0	-0.3	4.5	5.9
M2	5.3	1.9	3.7	4.2
M3	4.5	2.6	5.1	5.5
Domestic nonfinancial debt	5.0	5.3	3.4	5.1
Federal	2.1	6.0	4.4	4.0
Nonfederal	6.0	5.0	3.1	5.5
Bank credit	1.5	1.0	-1.0	2.8
<u>Reserve measures</u>				
Nonborrowed reserves ¹	-8.3	-20.0	-20.5	-10.3
Total reserves	-2.5	-20.3	-21.1	-10.0
Adjusted for retail sweeps	14.0	-2.3	8.1	8.4
Monetary base	5.7	7.6	6.2	3.2
Adjusted for retail sweeps	7.9	9.5	9.7	5.7
Memo: (Millions of dollars)				
Adjustment plus seasonal borrowing	386	368	334	--
Excess reserves	1150	1065	965	--

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

(7) The staff has read the mixed economic data since the August FOMC meeting as still consistent with growth moderating to a pace about in line with the economy's potential, assuming that the Committee's policy stance remains unchanged through the forecast period. The outlook for output growth and the unemployment rate for the rest of 1996 and 1997 is essentially the same as in the last Greenbook and remains broadly consistent with the central tendencies of the Committee members' forecasts for these variables made in July. Recent core inflation data have been a shade lower than the staff anticipated, but resource utilization remains high enough in the staff forecast to put some upward pressure on increases in labor costs and prices. With crude energy prices likely to be more elevated for a time than had been assumed and a hike in the minimum wage further boosting costs and prices, the staff's projection for consumer price inflation remains around the upper ends of the Committee members' central tendencies for both years. However, the underlying profile of inflation going forward under the staff forecast may be slightly more adverse than Committee members were expecting in July, because they may not have fully incorporated upcoming technical adjustments in the consumer price index at the time they were surveyed.

(8) The Committee thus might view such an inflation outcome as unacceptable. Nonetheless, there are reasons why the Committee might choose the unchanged federal funds rate of alternative B for the upcoming intermeeting period. Although labor markets are tight and wages accelerating, the extent and timing of any feedthrough of this acceleration to overall compensation and ultimately prices remain uncertain. Real interest rates are in the neighborhood of levels that

over the past fifteen years have been associated on average with little change in inflation, and the growth of money and credit has been moderate, suggesting perhaps that if the stance of policy is stimulative, it may not be greatly so. Indeed, the staff forecast has only a gradual pickup in core inflation, which in any event will start from a level in the third quarter that is probably lower than the Committee had anticipated. In these circumstances, waiting to assess better the economic situation might not incur much risk of a significant deterioration in inflation expectations, provided the delay were not too long, because containing inflation will still be possible before it has risen appreciably above the general level of recent years. Moreover, the soft cast to the recent trend of retail sales and continued surprisingly favorable readings on broad price indexes may lead the Committee to consider the staff forecast as too pessimistic about likely inflation pressures. If so, inflation is more apt to be kept within acceptable bounds without policy adjustment.

(9) With market participants apparently placing greater than even odds on policy tightening at this meeting, interest rates would likely decline and the dollar weaken on foreign exchange markets if the unchanged policy of alternative B were adopted. Even before the discount rate story earlier this week, markets had built in close to 50/50 odds of a slight policy tightening, and alternative B probably would trigger rate declines that not only reversed the increases associated with the story, but some of those registered earlier in the intermeeting period as well. Many would likely view the Committee as merely delaying policy action until the November meeting rather than changing its fundamental assessment of the potential inflation threat, and this reaction would tend to limit the decline in long-term rates.

There is a risk that policy inaction would induce some in the market to question the Committee's commitment to holding down inflation, or its willingness to take forward-looking action to do so, which would tend to boost inflation expectations. Given uncertainties about the outlook and the perceived lack of a policy consensus within the Federal Reserve, markets are likely to remain highly sensitive to new economic data and to indications of Committee members' inclinations.

(10) A tightening of policy at this Committee meeting, whether by 50 basis points, as assumed in **alternative C**, or by only 25 basis points, would improve the chances that price pressures would be contained and inflation outcomes would be consistent with the Committee members' expectations in July. In the alternative scenarios in the Greenbook, an increase of one percentage point in the federal funds rate over the next year is sufficient to tilt core inflation down. A 25 or 50 basis point tightening at this meeting could be seen either as a first installment in moving more deliberately toward lower inflation, or as a more limited action aimed at holding the line. With labor markets tight and wage gains already strengthening, the Committee may see it as only a matter of time before total compensation puts sufficient pressure on profit margins to prompt businesses to raise their prices faster. Especially if aggregate demand has more momentum than in the staff forecast, waiting for very long to tighten, given the lags in the effects of monetary policy, risks embedding some rise in inflation and inflation expectations into the economy and financial markets. That result would necessitate more aggressive and potentially disruptive policy action at a later date to return inflation to recent levels.

(11) Markets participants do not have a 25 basis point firming at this FOMC meeting fully built into the structure of interest rates, and would be considerably surprised by a 50 basis point hike. Thus, some of the former and the bulk of the latter would be matched by a rise in short-term rates. The impact on intermediate- and long-term rates is less certain, especially because the firming would constitute a reversal in the direction of policy. Such policy reversals in the past have often resulted in fairly large movements in intermediate- and long-term rates. However, in light of signs of moderating aggregate demand and damped inflation, as well as statements in the Committee's published minutes, much market commentary has accepted the notion that a reversal in the direction of policy could be limited in scope. Still, policy action of any size will probably lead market participants to revise their view of the path of policy and build in some expectations of additional tightenings. A 1/4 point firming is more likely to leave them skittish as they expect further action soon, while the larger tightening would have a greater immediate impact on rates. The statement accompanying the announcement of the policy change might be able to reduce the chance that the market would come to extrapolate sizable further increases in the funds rate.

(12) Borrowing by domestic nonfinancial sectors in the staff forecast is expected to remain moderate over the final months of the year. Households are anticipated to use consumer credit at around the reduced pace of recent months while growth in mortgage indebtedness probably will decelerate in keeping with a slowdown in home buying. Elevated debt burdens and further selective tightening of consumer credit availability should act as a mild restraint on household borrowing. Business debt growth is likely to strengthen a bit in the

near term in keeping with inventory restocking and some levelling off of cash flow. Credit is expected to remain readily available to businesses from banks and securities markets; firms with access to the bond market will probably concentrate their borrowing there, especially if bond rates do not rise much from recent levels. With growth in federal debt fairly subdued, debt of domestic nonfinancial sectors is expected to expand at a 4-1/4 percent pace over the final four months of 1996, implying growth of about 5 percent for the year as a whole.

(13) In view of slower-than-expected M2 and M3 growth in recent months, the staff has revised down projected growth for those aggregates in 1996. M2 is now expected to increase at a 4-1/2 percent rate this year and M3 at a 5-3/4 percent rate under alternative B, somewhat below the upper ends of their growth ranges for the year. Over the August-to-December period, the expansion of M2 is projected to pick up to about a 4-3/4 percent pace, broadly in line with GDP growth under alternative B. The pickup in M2 should show through to M3, and growth in the latter is forecast to strengthen to a 6 percent rate over the final four months of this year, abetted by a strengthening of the expansion of bank credit. Continued large sweeps of other checkable deposits and demand deposits will distort measured M1. Indeed, M1 is projected to run off at about a 5 percent annual rate over the August-to-December period, while expansion of sweep-adjusted M1 increases to a 6-1/2 percent rate.

Growth Rates of Money and Debt
(Percent, annual rates)

	<u>August to December</u>	<u>1995:Q4 to 1996:Q4</u>
M2	4-3/4	4-1/2
M3	6	5-3/4
M1	-5	-4
Adjusted for sweeps	6-1/2	6
Debt	4-1/4	5

Alternative Levels and Growth Rates for Key Monetary Aggregates

	M2		M3		M1		
	Alt. B	Alt. C	Alt. B	Alt. C	Alt. B	Alt. C	
Levels in Billions							
Jun-96	3740.0	3740.0	4714.5	4714.5	1116.7	1116.7	
Jul-96	3745.8	3745.8	4724.6	4724.6	1108.5	1108.5	
Aug-96	3757.2	3757.2	4744.8	4744.8	1099.4	1099.4	
Sep-96	3772.5	3772.5	4771.3	4771.3	1093.5	1093.5	
Oct-96	3787.3	3786.0	4794.0	4793.2	1088.0	1087.5	
Nov-96	3801.5	3797.7	4816.7	4814.3	1084.9	1083.5	
Dec-96	3815.7	3809.4	4839.6	4835.6	1081.6	1079.0	
Monthly Growth Rates							
Jun-96	5.3	5.3	4.5	4.5	-0.5	-0.5	
Jul-96	1.9	1.9	2.6	2.6	-8.8	-8.8	
Aug-96	3.7	3.7	5.1	5.1	-9.9	-9.9	
Sep-96	4.9	4.9	6.7	6.7	-6.4	-6.5	
Oct-96	4.7	4.3	5.7	5.5	-6.0	-6.5	
Nov-96	4.5	3.7	5.7	5.3	-3.4	-4.5	
Dec-96	4.5	3.7	5.7	5.3	-3.7	-4.9	
Quarterly Averages							
96 Q1	5.8	5.8	7.1	7.1	-2.7	-2.7	
96 Q2	3.9	3.9	5.3	5.3	-0.7	-0.7	
96 Q3	2.9	2.9	4.1	4.1	-6.7	-6.7	
96 Q4	4.6	4.2	5.9	5.7	-5.7	-6.2	
Growth Rate							
From	To						
Dec-95	Aug-96	4.1	4.1	5.7	5.7	-3.4	-3.4
Aug-96	Dec-96	4.7	4.2	6.0	5.7	-4.9	-5.6
94 Q4	95 Q4	3.9	3.9	5.8	5.8	-1.8	-1.8
95 Q4	96 Q2	4.9	4.9	6.2	6.2	-1.7	-1.7
95 Q4	96 Q3	4.3	4.3	5.6	5.6	-3.3	-3.3
95 Q4	96 Q4	4.4	4.3	5.7	5.6	-3.9	-4.0

1996 Target Ranges:

1 to 5

2 to 6

Directive Language

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

OPERATIONAL PARAGRAPH

In the implementation of policy for the immediate future, the Committee seeks to DECREASE (SOMEWHAT/SLIGHTLY)/maintain/INCREASE (SOMEWHAT/SLIGHTLY) 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, somewhat (SLIGHTLY) greater reserve restraint would (MIGHT) or slightly (SOMEWHAT) lesser reserve restraint might (WOULD) be acceptable in the intermeeting period. The contemplated reserve conditions are expected to be consistent with moderate growth in M2 and M3 over coming months.

SELECTED INTEREST RATES
(percent)

	Short-Term								Long-Term							
	federal funds	Treasury bills secondary market			CDs secondary market	comm. paper	money market mutual fund	bank prime loan	U.S. government constant maturity yields			corporate A-utility recently offered	municipal Bond Buyer	conventional home mortgages		
		3-month	6-month	1-year	3-month	1-month			3-year	10-year	30-year			secondary market	primary market	
		1	2	3	4	5	6	7	8	9	10	11	12	13	fixed-rate	fixed-rate
95 -- High	6.21	5.81	6.31	6.75	6.39	6.10	5.61	9.00	7.80	7.85	7.89	8.81	6.94	9.57	9.22	6.87
-- Low	5.40	4.89	5.05	4.98	5.55	5.73	5.16	8.50	5.36	5.68	6.06	6.98	5.65	7.40	7.11	5.53
96 -- High	5.61	5.18	5.37	5.61	5.57	5.73	5.15	8.50	6.59	7.02	7.16	8.23	6.34	8.72	8.42	6.01
-- Low	5.08	4.79	4.71	4.57	5.13	5.28	4.73	8.25	4.95	5.59	5.97	7.00	5.63	7.35	6.94	5.19
Monthly																
Sep 95	5.80	5.28	5.30	5.31	5.73	5.82	5.24	8.75	5.89	6.20	6.55	7.55	6.18	8.01	7.64	5.81
Oct 95	5.76	5.28	5.32	5.28	5.79	5.81	5.20	8.75	5.77	6.04	6.37	7.36	6.05	7.88	7.48	5.74
Nov 95	5.80	5.36	5.27	5.14	5.74	5.80	5.26	8.75	5.57	5.93	6.26	7.30	5.89	7.79	7.38	5.64
Dec 95	5.60	5.14	5.13	5.03	5.62	5.84	5.20	8.65	5.39	5.71	6.06	7.10	5.74	7.53	7.20	5.57
Jan 96	5.56	5.00	4.92	4.82	5.39	5.56	5.05	8.50	5.20	5.65	6.05	7.09	5.72	7.45	7.03	5.44
Feb 96	5.22	4.83	4.77	4.69	5.15	5.29	4.85	8.25	5.14	5.81	6.24	7.31	5.73	7.51	7.08	5.31
Mar 96	5.31	4.96	4.96	5.06	5.29	5.39	4.76	8.25	5.79	6.27	6.60	7.75	6.07	8.07	7.62	5.51
Apr 96	5.22	4.95	5.06	5.23	5.36	5.40	4.75	8.25	6.11	6.51	6.79	7.90	6.20	8.32	7.93	5.73
May 96	5.24	5.02	5.12	5.33	5.36	5.38	4.74	8.25	6.27	6.74	6.93	8.02	6.22	8.46	8.07	5.77
Jun 96	5.27	5.09	5.25	5.48	5.46	5.45	4.76	8.25	6.49	6.91	7.06	8.13	6.25	8.59	8.32	5.92
Jul 96	5.40	5.15	5.30	5.52	5.53	5.44	4.81	8.25	6.45	6.87	7.03	8.07	6.15	8.56	8.25	5.98
Aug 96	5.22	5.05	5.13	5.35	5.40	5.39	4.82	8.25	6.21	6.64	6.84	7.87	6.00	8.33	8.00	5.84
Weekly																
Jun 5 96	5.33	5.06	5.17	5.44	5.39	5.41	4.76	8.25	6.42	6.84	6.98	8.12	6.20	8.64	8.30	5.86
Jun 12 96	5.24	5.12	5.29	5.51	5.47	5.43	4.75	8.25	6.52	6.94	7.07	8.20	6.34	8.64	8.39	5.91
Jun 19 96	5.45	5.08	5.26	5.47	5.47	5.44	4.77	8.25	6.50	6.95	7.10	8.20	6.27	8.59	8.30	5.93
Jun 26 96	5.21	5.11	5.25	5.51	5.48	5.48	4.78	8.25	6.52	6.94	7.09	7.97	6.20	8.48	8.29	5.98
Jul 3 96	5.53	5.09	5.21	5.43	5.47	5.49	4.81	8.25	6.36	6.78	6.94	8.23	6.15	8.72	8.14	5.94
Jul 10 96	5.26	5.17	5.37	5.61	5.57	5.47	4.81	8.25	6.59	7.02	7.16	8.09	6.24	8.56	8.42	6.01
Jul 17 96	5.23	5.13	5.29	5.49	5.55	5.45	4.78	8.25	6.45	6.86	7.04	8.01	6.10	8.44	8.23	5.97
Jul 24 96	5.25	5.15	5.29	5.51	5.52	5.41	4.80	8.25	6.40	6.80	6.98	8.06	6.10	8.53	8.19	6.01
Jul 31 96	5.53	5.18	5.30	5.54	5.54	5.42	4.82	8.25	6.45	6.87	7.04	7.76	6.02	8.20	8.23	5.98
Aug 7 96	5.38	5.06	5.12	5.32	5.43	5.41	4.87	8.25	6.14	6.56	6.77	7.73	5.92	8.21	7.88	5.89
Aug 14 96	5.10	5.02	5.11	5.29	5.40	5.38	4.79	8.25	6.12	6.54	6.74	7.81	5.98	8.28	7.88	5.81
Aug 21 96	5.18	5.04	5.11	5.33	5.38	5.38	4.82	8.25	6.15	6.59	6.80	7.98	6.00	8.35	7.93	5.79
Aug 28 96	5.21	5.04	5.13	5.41	5.38	5.37	4.79	8.25	6.31	6.74	6.95	8.16	6.09	8.62	8.09	5.75
Sep 4 96	5.39	5.15	5.29	5.57	5.49	5.42	4.83	8.25	6.52	6.92	7.09	8.14	6.19	8.67	8.34	5.85
Sep 11 96	5.16	5.17	5.33	5.59	5.54	5.46	4.82	8.25	6.52	6.94	7.12	7.99	6.12	8.42	8.28	5.90
Sep 18 96	5.22	5.11	5.23	5.49	5.48	5.44	4.83	8.25	6.37	6.80	7.00	--	--	8.53	8.14	5.83
Daily																
Sep 13 96	5.29	5.07	5.17	5.44	5.45	5.43	--	8.25	6.29	6.74	6.95	--	--	--	--	--
Sep 19 96	5.29	5.11	5.26	5.53	5.32	5.45	--	8.25	6.46	6.87	7.05	--	--	--	--	--
Sep 20 96	-- p	--	--	--	5.52	--	--	--	--	--	--	--	--	--	--	--

NOTE: Weekly data for columns 1 through 11 are statement week averages. Data in column 7 are taken from Donoghue's Money Fund Report. Columns 12, 13 and 14 are 1-day quotes for Friday, Thursday or Friday, respectively, following the end of the statement week. Column 13 is the Bond Buyer revenue index. Column 14 is the FNMA purchase yield, plus loan servicing fee, on 30-day mandatory delivery commitments. Column 15 is the average contract rate on new commitments for fixed-rate mortgages (FRMs) with 80 percent loan-to-value ratios at major institutional lenders. Column 16 is the average initial contract rate on new commitments for 1-year, adjustable-rate mortgages (ARMs) at major institutional lenders offering both FRMs and ARMs with the same number of discount points.

p - preliminary data

Money and Credit Aggregate Measures

Seasonally adjusted

SEPTEMBER 23, 1996

Period	Money stock measures and liquid assets					Bank credit	Domestic nonfinancial debt ¹			
	M1	M2	nontransactions components		M3	L	total loans and investments ¹	U. S. government ²	other ²	total ²
			In M2	In M3 only						
	1	2	3	4	5	6	7	8	9	10
Annual growth rates(%):										
Annually (Q4 to Q4)										
1993	10.5	1.4	-2.4	-0.5	1.0	1.4	5.0	8.4	4.0	5.2
1994	2.4	0.6	-0.3	6.2	1.6	2.6	6.8	5.7	5.1	5.2
1995	-1.8	3.9	6.6	14.5	5.8	7.2	8.7	4.4	5.9	5.5
Quarterly(average)										
1995-Q3	-1.5	6.6	10.5	12.1	7.7	8.9	6.6	4.4	5.5	5.2
1995-Q4	-5.1	4.1	8.4	6.4	4.6	6.0	4.8	2.3	5.6	4.7
1996-Q1	-2.7	5.8	9.6	12.3	7.1	5.0	5.3	3.0	5.7	5.0
1996-Q2	-0.7	3.9	5.9	10.5	5.3	5.5	2.6	4.7	5.8	5.6
Monthly										
1995-AUG.	-1.7	6.8	10.8	10.5	7.5	7.9	5.2	1.8	4.2	3.6
SEP.	-3.9	4.5	8.3	9.7	5.5	10.0	7.7	0.9	5.8	4.5
OCT.	-8.7	2.5	7.7	10.6	4.1	5.8	3.6	3.3	5.9	5.2
NOV.	-3.0	3.9	7.0	-0.3	3.1	1.4	4.0	3.1	5.6	4.9
DEC.	-4.4	5.7	10.2	-3.8	3.8	5.3	3.7	1.0	5.2	4.1
1996-JAN.	-6.1	4.8	9.6	17.5	7.4	3.9	9.7	0.3	5.8	4.4
FEB.	-2.0	5.4	8.6	28.4	10.0	4.4	4.6	6.1	6.2	6.2
MAR.	10.1	11.6	12.4	8.9	11.1	12.5	-2.0	8.9	5.6	6.5
APR.	-3.3	1.8	4.0	1.5	1.8	5.4	6.1	4.2	6.0	5.5
MAY	-6.8	-2.0	0.0	21.1	2.7	-0.9	1.4	2.0	5.5	4.6
JUNE	-0.5	5.3	7.7	1.5	4.5	5.7	1.5	2.1	6.0	5.0
JULY	-8.8	1.9	6.4	5.3	2.6	3.0	1.0	6.0	5.0	5.3
AUG. p	-9.9	3.7	9.3	10.9	5.1		-1.0			
Levels (\$billions):										
Monthly										
1996-APR.	1123.6	3730.0	2606.4	956.5	4686.5	5804.7	3660.1	3698.0	10433.5	14131.5
MAY	1117.2	3723.7	2606.5	973.3	4697.0	5800.2	3664.3	3704.3	10481.5	14185.7
JUNE	1116.7	3740.0	2623.3	974.5	4714.5	5827.9	3669.0	3710.7	10533.8	14244.5
JULY	1108.5	3745.8	2637.3	978.8	4724.6	5842.7	3672.0	3729.4	10577.7	14307.1
AUG. p	1099.4	3757.2	2657.7	987.7	4744.8		3668.8			
Weekly										
1996-AUG. 5	1107.9	3757.1	2649.2	975.9	4733.0					
12	1099.4	3755.7	2656.3	987.1	4742.8					
19	1096.8	3757.2	2660.3	987.4	4744.5					
26	1099.6	3759.8	2660.2	991.9	4751.7					
SEP. 2 p	1097.4	3758.4	2660.9	994.9	4753.3					
9 p	1095.4	3775.3	2679.9	992.1	4767.4					

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

SEPTEMBER 23, 1996

Period	Currency	Demand deposits	Other checkable deposits	Savings deposits ¹	Small denomination time deposits ²	Money market mutual funds		Large denomination time deposits ⁴	RP's ^{5,6}	Eurodollars ^{5,6}	Savings bonds	Short-term Treasury securities ⁵	Commercial paper ⁵	Bankers acceptances ⁵
						Retail ³	Institution-only							
						1	2							
Levels (\$billions):														
Annual (Q4)														
1993	320.0	381.6	412.1	1215.1	792.3	356.5	196.3	334.8	155.3	66.1	170.7	339.5	382.4	15.7
1994	352.8	383.3	404.2	1162.7	812.0	383.1	182.9	358.6	175.9	81.7	179.8	381.0	401.5	13.8
1995	371.9	388.7	359.2	1123.8	934.2	455.5	225.2	414.1	184.3	91.6	184.5	468.3	438.2	12.7
Monthly														
1995-AUG.	368.5	389.3	377.2	1101.6	923.3	438.7	218.5	396.4	192.9	93.1	183.5	437.0	433.3	12.4
SEP.	369.5	389.4	372.4	1108.4	926.4	445.9	221.7	400.3	192.5	93.7	183.9	456.6	438.6	12.8
OCT.	370.8	388.1	364.1	1116.1	929.8	450.6	223.7	409.7	190.0	92.9	184.2	465.4	440.5	13.4
NOV.	371.6	388.2	360.4	1120.6	935.1	455.5	224.8	415.3	185.3	90.7	184.5	464.2	437.1	12.6
DEC.	373.2	389.8	353.0	1134.6	937.7	460.3	227.2	417.2	177.6	91.1	184.8	475.4	437.1	12.0
1996-JAN.	373.6	393.5	343.2	1151.8	937.5	463.6	230.6	416.1	184.4	95.4	185.0	465.8	437.2	11.8
FEB.	373.3	397.4	337.8	1164.5	937.1	469.5	243.9	421.5	186.3	96.6	185.0	444.8	442.3	10.3
MAR.	375.2	407.1	335.4	1183.0	932.5	482.1	248.3	428.4	184.1	94.4	185.2	459.2	445.1	9.8
APR.	376.0	406.3	332.4	1193.2	930.4	482.8	245.6	430.8	182.9	97.2	185.6	461.3	461.0	10.3
MAY	377.1	409.7	321.8	1197.5	928.2	480.8	243.5	436.2	195.1	98.5	186.0	433.1	473.4	10.8
JUNE	379.4	413.7	315.0	1206.9	927.5	488.8	249.4	442.2	183.6	99.3	186.4	444.8	470.9	11.4
JULY	382.6	410.6	306.8	1213.6	929.6	494.1	252.9	448.2	179.9	97.7	186.8	446.7	473.1	11.4
AUG. p	385.0	407.5	298.6	1223.7	933.8	500.2	257.2	454.1	177.5	98.8				

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

p preliminary

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

CLASS II-FOMC

September 20, 1996

Period	Treasury bills			Treasury coupons						Federal agencies redemptions (-)	Net change outright holdings total ⁴	Net RPs ⁵
	Net purchases ²	Redemptions (-)	Net change	Net purchases ³				Redemptions (-)	Net Change			
				within 1 year	1-5	5-10	over 10					
1993	17,717	---	17,717	1,223	10,350	4,168	3,457	767	18,431	774	35,374	5,974
1994	17,484	---	17,484	1,238	9,168	3,818	3,606	2,337	15,493	1,002	31,975	-7,412
1995	10,932	900	10,032	390	4,966	1,239	3,122	1,476	8,241	1,303	16,970	-1,023
1995 --Q1	---	---	---	---	---	---	---	621	-621	229	-850	-4,083
--Q2	4,470	---	4,470	---	2,549	839	1,138	370	4,156	312	8,314	10,395
--Q3	842	---	842	---	100	---	100	---	200	501	541	-15,979
--Q4	5,621	900	4,721	390	2,317	400	1,884	485	4,506	261	8,965	8,644
1996 --Q1	---	---	---	---	---	---	---	1,228	-1,228	108	-1,336	-8,879
--Q2	3,399	---	3,399	35	1,899	479	1,065	787	2,691	138	5,952	2,959
1995 September	409	---	409	---	100	---	100	---	200	46	563	608
October	1,350	900	450	---	---	---	---	485	-485	83	-118	-427
November	4,271	---	4,271	---	---	400	---	---	400	120	4,551	2,404
December	---	---	---	390	2,317	---	1,884	---	4,591	58	4,533	6,666
1996 January	---	---	---	---	---	---	---	1,228	-1,228	---	-1,228	-12,623
February	---	---	---	---	---	---	---	---	---	---	---	-1,689
March	---	---	---	---	---	---	---	---	---	108	-108	5,433
April	88	---	88	35	1,899	479	1,065	787	2,691	82	2,697	-505
May	---	---	---	---	---	---	---	---	---	16	-16	4,174
June	3,311	---	3,311	---	---	---	---	---	---	40	3,271	-711
July	---	---	---	---	---	---	---	---	---	52	-52	7,118
August	---	---	---	1,240	1,279	297	900	---	3,716	---	3,716	-9,267
Weekly												
June 5	---	---	---	---	---	---	---	---	---	---	---	2,584
12	3,311	---	3,311	---	---	---	---	---	---	40	3,271	-6,784
19	---	---	---	---	---	---	---	---	---	---	---	10,552
26	---	---	---	---	---	---	---	---	---	---	---	-8,919
July 3	---	---	---	---	---	---	---	---	---	---	---	5,399
10	---	---	---	---	---	---	---	---	---	37	-37	476
17	---	---	---	---	---	---	---	---	---	---	---	5,130
24	---	---	---	---	---	---	---	---	---	---	---	-12,007
31	---	---	---	---	---	---	---	---	---	15	-15	12,371
August 7	---	---	---	---	---	---	---	---	---	---	---	-9,379
14	---	---	---	---	1,279	297	900	---	2,476	---	2,476	160
21	---	---	---	1,240	---	---	---	---	1,240	---	1,240	-1,370
28	---	---	---	---	---	---	---	---	---	---	---	4,584
September 4	---	---	---	---	---	---	---	---	---	---	---	-3,632
11	---	---	---	---	---	---	---	---	---	25	-25	4,811
18	---	---	---	---	---	---	---	---	---	---	---	-5,122
Memo: LEVEL (bil. \$) ⁶												
September 18			198.9	217.7	95.0	33.7	40.4		386.8		401.4	-12.3

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

2. Outright transactions in market and with foreign accounts.

3. Outright transactions in market and with foreign accounts, and short-term notes acquired in exchange for maturing bills. Excludes maturity shifts and rollovers of maturing issues.

4. Reflects net change in redemptions (-) of Treasury and agency securities.

5. Includes change in RPs (+), matched sale-purchase transactions (-), and matched purchase sale transactions (+).

6. The levels of agency issues were as follows:

within 1 year	1-5	5-10	over 10	total
1.4	0.4	0.5	0.0	2.3

September 18