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STRICTLY CONFIDENTIAL (FR) CLASS I FOMC

SEPTEMBER 25, 1998

MONETARY POLICY ALTERNATIVES

PREPARED FOR THE FEDERAL OPEN MARKET COMMITTEE
BY THE STAFF OF THE BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM

Strictly Confidential (F.R.)
Class I -- FOMC

September 25, 1998

MONETARY POLICY ALTERNATIVES

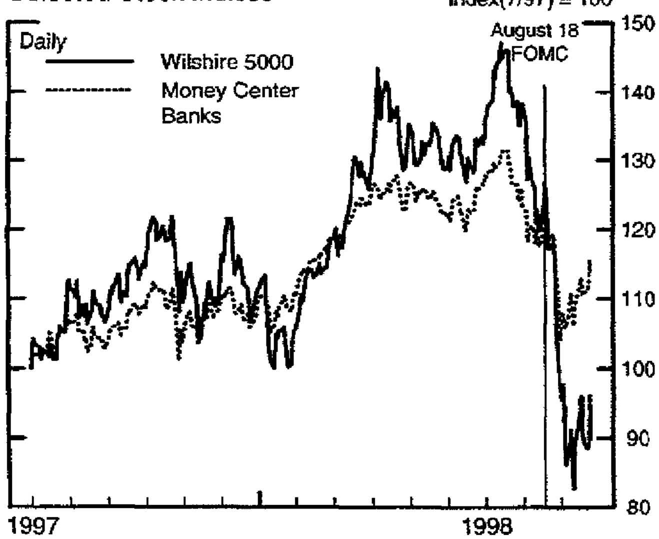
Recent Developments

(1) Financial markets were extremely volatile around the world over the intermeeting period, and signs of distress mounted. In general, investors grew more pessimistic about asset values globally and also demonstrated a reduced tolerance for assuming risk. The sell-off of risky assets and increase in volatility was sharpest in the early part of the period, but price movements were quite choppy throughout the interval. In many cases, prices leveled out for a time or even rebounded some, partly in response to the growing sense that the Federal Reserve would be easing policy. In recent days, declines have resumed in some markets following revelations of the magnitude of positions and extent of losses of a major hedge fund, Long-Term Capital Management. The steady drumbeat of disappointing news out of Japan and Russia, concerns that financial strains in Latin America might intensify, and worries about the portfolios of some large financial institutions apparently reinforced the already evident tendency for investors to mark down their outlook for profits in the United States and to tilt their portfolios toward safe and liquid assets. Major U.S. equity price indexes dropped 3-1/2 to 6-1/2 percent over the intermeeting period and are off 12 to 14 percent from their July peaks (chart).[1] Share prices for money center banks and investment houses were especially hard hit amid news about

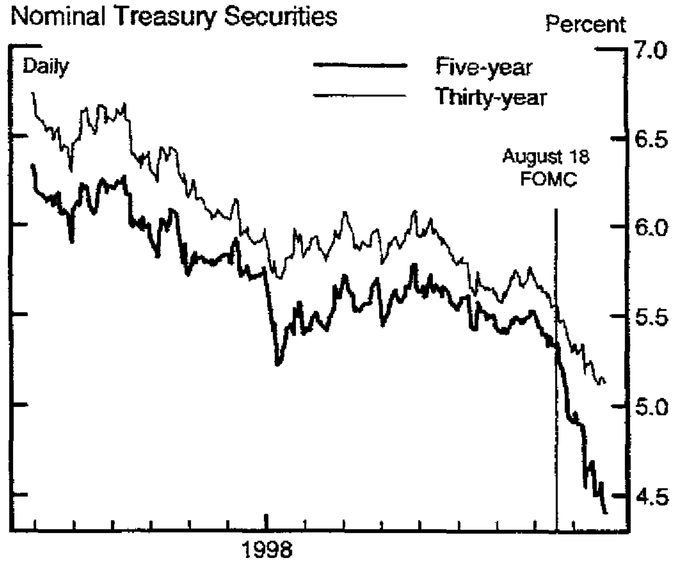
[1] Trading volumes on major U.S. stock exchanges were extremely heavy but apparently posed few significant problems for clearing and settlement systems. Although intraday equity price movements were sizable--in index-point terms larger than those that tripped major circuit breakers in October 1997--they were not large enough in recent weeks to trigger any circuit breakers that would halt trading. Since earlier this year, such circuit breakers have been based on percent changes in market values rather than index points.

Chart 1

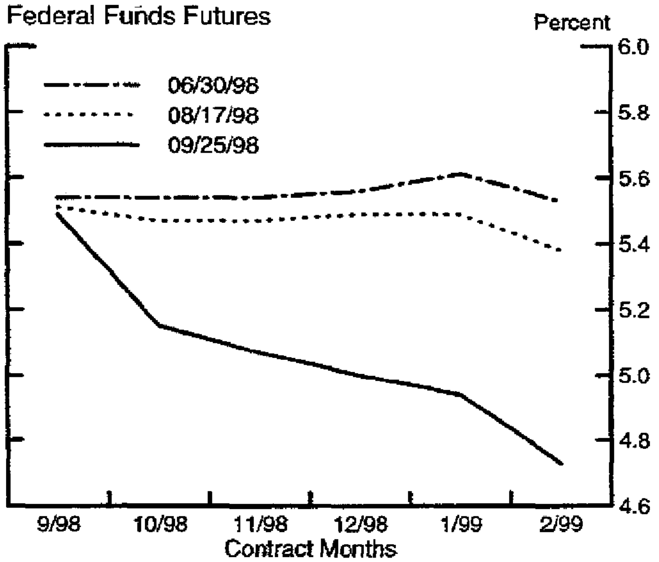
Selected Stock Indices



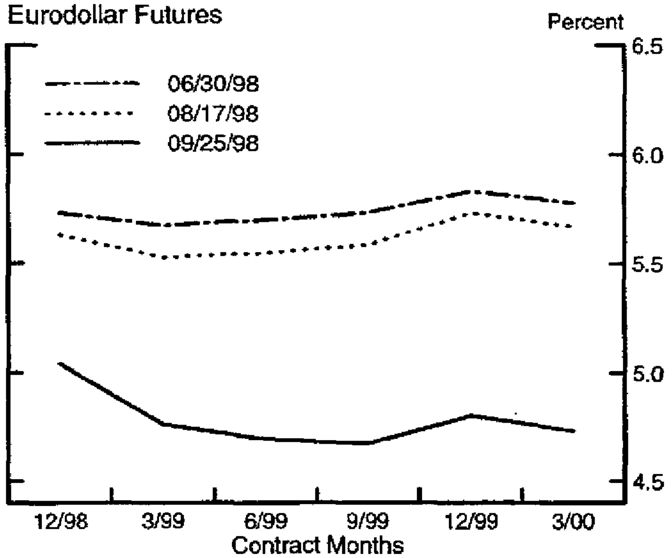
Nominal Treasury Securities



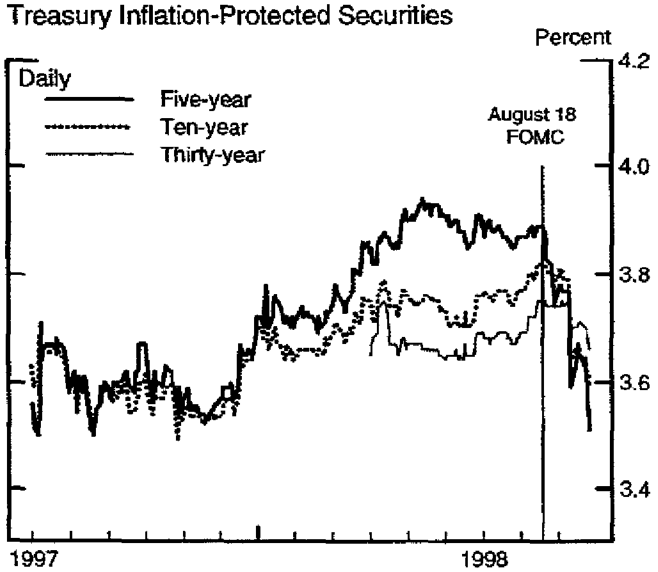
Federal Funds Futures



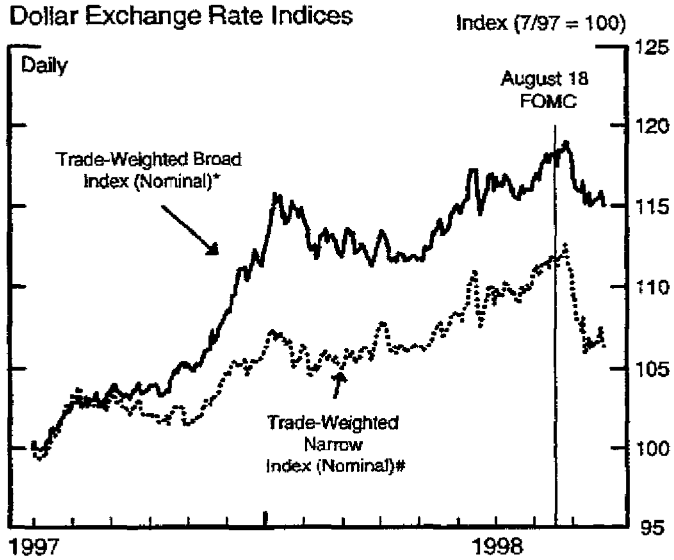
Eurodollar Futures



Treasury Inflation-Protected Securities



Dollar Exchange Rate Indices

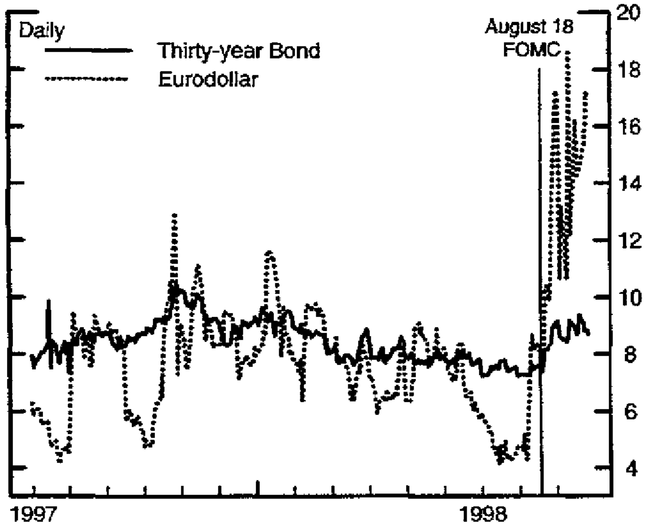


*Against 29 U.S. trading partners #Against 16 major currencies

Chart 2

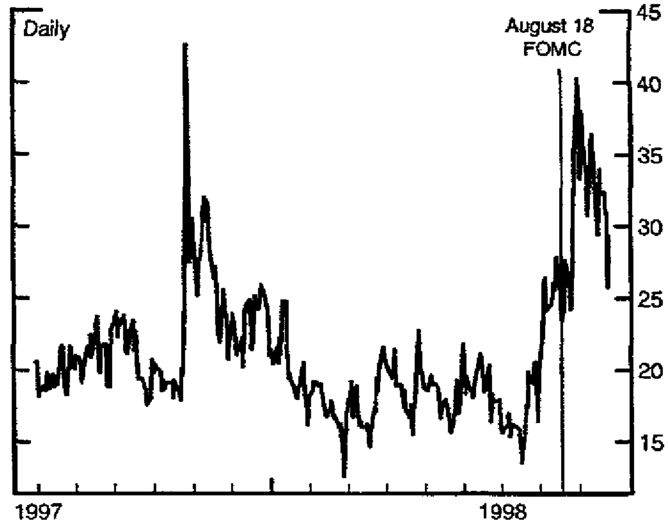
Implied Interest Rate Volatilities

Percent



S&P 500 Implied Volatility

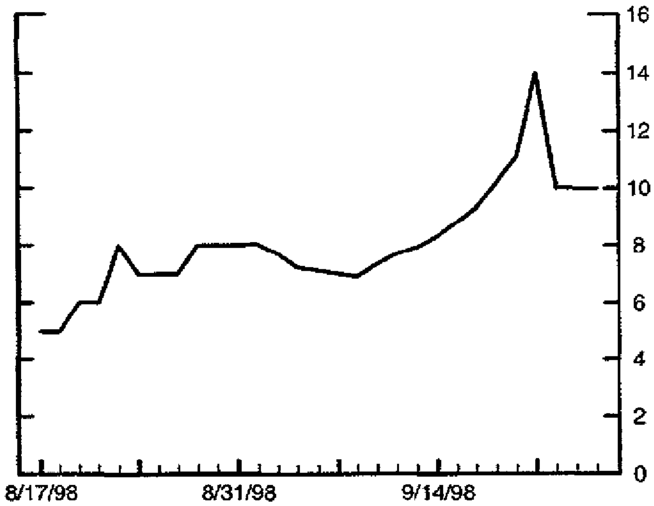
Percent



On-the-Run Premiums for Treasury Securities*

Thirty-year Bond

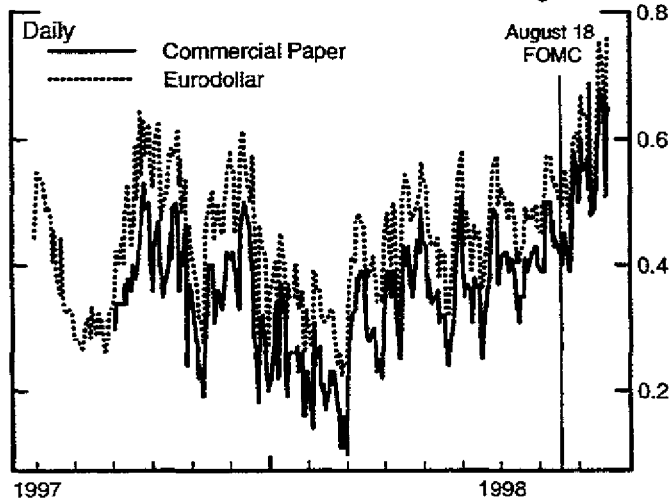
Basis Points



*Spreads of next-to-most recently issued security over most recently issued security.

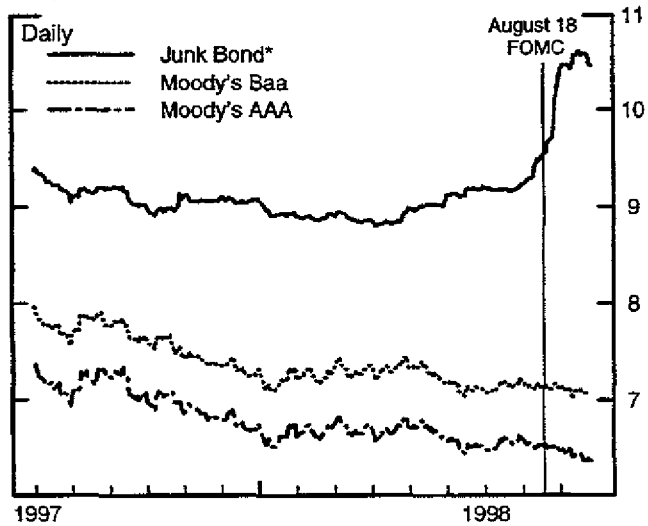
Interest Rate Spreads
(Over Three-month Treasuries)

Percentage Points



Corporate Bond Yields

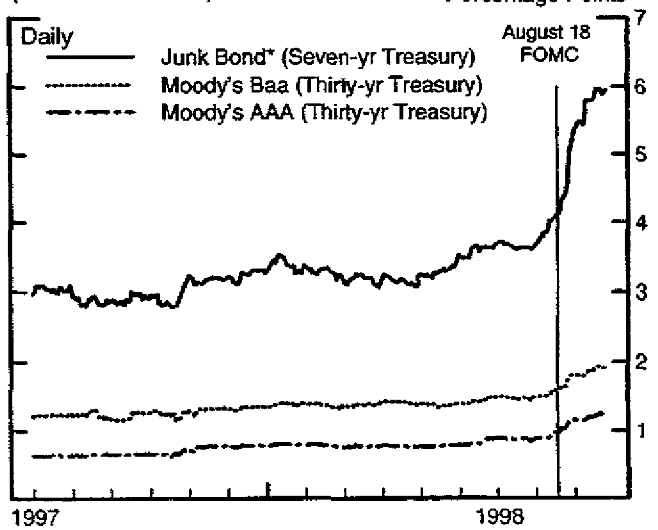
Percent



*Merrill Lynch Master II Index

Quality Spreads
(Over Treasuries)

Percentage Points



*Merrill Lynch Master II Index

the extent of their trading losses and speculation about the magnitude of their exposure to emerging markets and distressed counterparties. Prices of Treasury securities were buoyed by the strong safe-haven demands as well as by market sentiment that financial difficulties abroad would tend to slow U.S. economic growth and prompt easing moves by the Federal Reserve. On balance, longer-term Treasury yields fell 40 to 95 basis points over the intermeeting period, bringing their net declines from their recent peaks in late July to 65 to 110 basis points.[2] The demand for on-the-run Treasuries, the most liquid of all investments, was especially intense and their spreads to comparable off-the-run issues widened. The entire Treasury yield curve now lies below the intended federal funds rate for the first time since 1989. Judging from this configuration, as well as from yields on federal funds and Eurodollar futures contracts, market participants now seem certain of at least a 25 basis point rate cut by the Federal Reserve at this meeting and place high odds on a full percentage point of cumulative easing by the middle of next year.

(2) Signs of investors' increased uncertainty about the prospects for the U.S. economy and greater reluctance to bear risk were abundant. Implied volatility derived from options--including those on the S&P 500, Eurodollar futures, and Treasury bond futures--has remained elevated since the end of August. Spreads on swaps and mortgage securities fluctuated over a wide range and increased considerably on balance. Corporate bond markets also appeared

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[2] In view of the volatility in financial markets, daily Desk operations were sensitive to ensuring an adequate degree of liquidity in the market. The average federal funds rate over the intermeeting period was close to its intended level. Anecdotal information suggests that intraday demand for reserves in the turbulent market atmosphere was somewhat elevated, although much of the actual increase in excess reserves reflected wire transfer problems in a single period.

unsettled at times. Declines in yields on investment-grade bonds over the intermeeting period, while appreciable, did not match the fall in yields on comparable-maturity Treasuries, and investment-grade issuers pulled back offerings as they waited for more favorable market conditions. In contrast, yields on junk bonds moved up sharply over the intermeeting period. Junk bond mutual funds have experienced heavy outflows on balance, and new issuance of below-investment-grade securities has essentially dried up. In this setting, firms have been relying heavily on shorter-term sources of financing, including bank loans and commercial paper. However, banks appear to have become more wary of late, too. Market contacts report that interest rates have risen in the syndicated loan market, particularly for lower-rated and leveraged deals, and volume has dropped off. Also, a special Survey of Senior Loan Officers indicates that a significant number of banks have tightened terms and standards for loans to larger businesses in the last month.

(3) The announcement by the Russian government on August 17 of a unilateral suspension of payments on ruble-denominated debt, as well as an effective devaluation of the ruble, initiated a protracted period of heightened turmoil in foreign financial markets. Early in the period, stripped Brady spreads for Latin American countries rose 700 to 1300 basis points, and yields on Asian sovereign dollar-denominated bonds rose 180 to 660 basis points. For all countries except Malaysia, more than half of these increases were reversed later in the period. Brazilian financial markets came under especially heavy pressure as participants focused on that country's large current account deficit and lack of progress in addressing underlying fiscal problems. Speculative pressures abated somewhat, though, after Brazilian authorities boosted domestic interest rates sharply and indicated that they were prepared to implement significant

policy changes and approach the IMF for a program after the presidential election. The Mexican peso, pressured by declines in oil prices early in the period as well as by the more general concerns about emerging markets, depreciated 10 percent against the dollar over the period in spite of a 13 percentage point increase in one-month domestic interest rates. In East Asia, domestic interest rates generally fell, while dollar exchange rates were about unchanged to slightly higher. In some cases, concerns about speculative activity induced unorthodox policies. In late August, the Hong Kong Monetary Authority purchased a substantial amount of equities on the Hong Kong stock market, apparently because they were concerned that short-sales of equities were contributing to pressure against the Hong Kong dollar. In early September, Malaysia imposed comprehensive exchange controls and pegged the ringgit to the dollar. Investor concerns about the potential for outright defaults, as in Russia, or the imposition of strict capital controls, as in Malaysia, probably contributed to a sell-off of Latin American assets.

(4) In most foreign industrial countries, interest rates on government debt declined substantially over the intermeeting period, but not as much as in the United States. This divergence in part reflected the particularly strong demands for the liquidity of U.S. Treasury securities. In addition, the anticipated path for short-term interest rates in the United States was lowered by more than in other industrial countries, in part because the United States was seen as relatively more vulnerable to growing problems in Latin America and thus as more likely to ease monetary policy. These revisions to monetary policy expectations, combined with some renewed concerns about the burgeoning U.S. current account deficit, contributed to a significant depreciation of the dollar against the currencies of industrial nations over the intermeeting period. The trade-weighted foreign exchange value of the dollar dropped 4-3/4 percent against

major currencies. The decline of the dollar against the yen seemed especially puzzling at times, but it may have reflected both some tendency for investors to seek the greater perceived safety of assets in home markets and the influence of the zero bound on nominal interest rates in constraining further declines in nominal and real rates in Japan. With incoming data suggesting further deterioration in the Japanese economy, the Bank of Japan announced that it would guide the overnight call rate down to around 1/4 percent from the previous target "somewhat below" the official discount rate of 1/2 percent. This move, which surprised investors, contributed to a 36 basis point decline in Japanese bond yields over the intermeeting period to a level of 85 basis points. The lack of progress on legislation to reform the banking system contributed to the negative outlook for Japan.

. The Desk did not intervene during the period for the accounts of the System or the Treasury.

(5) The broad money aggregates expanded rapidly over the intermeeting period, propelled largely by unexpectedly strong growth in retail and institution-only money market mutual funds. As in some past episodes of market turbulence, money funds appear to have been favored by investors looking to wait out the current bout of market volatility by parking balances in relatively safe, liquid assets. In addition, many investors no doubt have found the yields on money funds attractive given the current very flat yield curve and the decline in Treasury bill rates. M2 and M3 are now estimated to have grown at 14-1/2 and 15-3/4 percent rates respectively in September, placing both aggregates still further above the upper bounds of their annual ranges. While market turbulence has certainly disrupted the composition of credit flows

of late, reasonably complete data through August show no signs of any slowing in the growth of total domestic nonfinancial debt. Bank credit growth was quite rapid in August, with strength evident in both securities and loans; lending continued to expand robustly in September, especially to businesses. Based on preliminary and partial data, the staff estimates that overall business borrowing actually picked up in September despite the tumult in financial markets and a somewhat more restrictive lending stance by banks.

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

	July	Aug.	Sept.	1997:Q4 to Sept.[2]
Money and Credit Aggregates				
M1	-3.2	-3.6	1.5	0.1
Adjusted for sweeps	4.6	2.0	6.9	5.1
M2	4.7	8.3	14.6	8.1
M3	1.0	12.1	15.7	10.1
Domestic nonfinancial debt	6.2	6.0	n.a.	6.2
Federal	-0.9	-0.8	n.a.	-0.9
Nonfederal	8.4	8.2	n.a.	8.5
Bank Credit	4.9	16.1	10.1	8.9
Adjusted[1]	4.8	15.8	5.1	8.1
Reserve Measures				
Nonborrowed Reserves	-15.5	4.6	-13.5	-4.8
Total Reserves	-15.3	4.9	-15.2	-4.9
Adjusted for sweeps	3.9	11.9	1.3	6.1
Monetary Base	5.0	8.9	5.7	5.9
Adjusted for sweeps	6.6	9.6	6.9	7.0
Memo: (millions of dollars)				
Adjustment plus seasonal borrowing	258	271	203	--
Excess reserves	1365	1516	1542	--

1. Adjusted to remove effects of mark-to-market accounting rules (FIN 39 and FASB 115).
2. For nonfinancial debt and its components, 1997:Q4 to August.

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) As a consequence of the financial market developments over the intermeeting period, the staff now expects weaker foreign economies, a lower path for the U.S. stock market, and more restrictive credit market conditions over the next few years than forecast at the time of the August FOMC meeting. Absent offsetting policy actions, these depressing influences on aggregate demand would result in very slow growth in U.S. output over the next few years and further disinflation from the already-modest pace of price increases. Thus, in the Greenbook the staff has assumed that the FOMC will initiate a series of easing moves that cumulate to 3/4 percentage point over the next six months. Still, output growth slows in the forecast to about 1-1/4 percent in 1999, and the unemployment rate rises to 5-1/4 percent by the end of that year. Both total and core CPI inflation are projected to be about 2 percent in 1999 and 2000, held down to an important extent by restrained inflation expectations as well as by technical changes in the indexes that take effect in 1999. Thus, even with the easing, the staff outlook for economic growth is noticeably weaker than the central tendency of the FOMC members' forecasts for 1999 reported in July, while that for CPI inflation next year is toward the lower end of the central tendency range.[3]

(7) To begin addressing the weaker outlook for the U.S. economy, the Committee may wish to reduce the funds rate 25 basis points at this meeting, as in **alternative A**. Now that the stock market has fallen and credit terms have tightened, the real federal funds rate probably can be reduced from its unusually high level without adding to inflation pressures. Indeed, with

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[3] As of the July Humphrey Hawkins report, the central tendencies of the governors' and presidents' projections for 1999 were 2 to 2-1/2 percent for real GDP growth, 2 to 2-1/2 percent for CPI inflation, and 4-1/2 to 4-3/4 percent for the unemployment rate in the fourth quarter of 1999.

inflation expectations possibly falling further in recent months--as suggested by a much larger decline in the spread of nominal over indexed Treasury yields than can be accounted for by the relative liquidity of these instruments--the real federal funds rate may even have edged higher. Even if the Committee's outlook for spending is stronger than that of the staff, if it has been revised down substantially, a policy ease might still be called for. Moreover, financial markets are fragile and, in the absence of signs of economic recovery and progress on key policy reforms in Japan and other countries, the possibilities for disappointing outcomes abroad precipitating further contagion and restraint on spending in the United States may be seen as unacceptably high. A 25 basis point cut in the funds rate at this point could be viewed as providing a modicum of insurance against the risk of such very adverse outcomes. In addition to boosting domestic demand, a lower federal funds rate could be of some limited help in relieving pressures on emerging market countries, especially those tied to the dollar or finding themselves in need of defending the exchange value of their currencies through tight monetary policies. Indeed, in recent days as an easing by the Federal Reserve has come to be seen as more likely, emerging market countries have witnessed some narrowing in spreads on their dollar-denominated debt and some improvement in their stock markets. If foreign outcomes proved not so disappointing or the domestic economy surprisingly resilient, the policy move could be reversed before long without raising questions about the Federal Reserve's anti-inflation resolve. Even if the Committee suspected that more easing might eventually be needed, it might want to move by only 25 basis points at this time because of the residual inflation risks inherent in the unusually low unemployment rate along with the strength to date in the economic expansion.

(8) Treasury bill rates might edge higher with a 25 basis point cut in the funds rate because markets seem to have built in some odds that the move at this meeting might be even

larger. Despite some disappointment in the size of the move, intermediate- and longer-term rates might not increase much, if at all, since the presumption would be that the Federal Reserve likely would follow this rate cut with another before long. Indeed, private securities markets could rally a bit and risk spreads narrow with confirmation of the FOMC's willingness to act. Nonetheless, should third-quarter earnings announcements, mostly to be released in October, line up with the staff forecast, equity prices would likely resume their downward adjustment. The 25 basis point move should have little effect on the foreign exchange value of the dollar.

(9) If the Committee believed that, as in the staff forecast, a larger policy move were needed to have an adequate effect in forestalling oncoming weakness in economic activity or if it wanted to take more forceful action to address the risks facing financial markets here and abroad, it might choose to reduce the funds rate 50 basis points at this meeting (**alternative A'**). Depending on the wording of the announcement associated with such a move, the market might see the FOMC as being on hold for a longer duration, eliminating for a little while market uncertainty about whether additional easings were in the offing. Moves of 50 basis points have been somewhat unusual in recent years, and, in volatile financial markets with largely unanchored expectations, reactions are difficult to gauge. Most likely, equity markets would rally and risk premiums on private debt would fall, as the FOMC was seen as taking a more active stance in cushioning the effects of tighter financing conditions and weaker foreign demand on economic activity. But there is some chance that market participants could interpret the larger move as indicating that the Federal Reserve viewed the current economic situation as especially serious, perhaps owing to fragility in the financial sector. If so, the rebound in equities could be tempered while Treasury bond prices could be strengthened further. In any event, the value of

the dollar against major currencies would likely drop somewhat under this alternative.[4] The prime rate would likely be reduced by 1/2 percentage point.

(10) Although the staff projection embodies a substantial weakening in aggregate demand, data to date suggest that the economy is growing near its potential rate. With labor markets still quite tight and forecasts in recent years often underpredicting economic activity, the Committee may wish to have more evidence in hand that growth of aggregate demand is slowing considerably before easing policy. If so, the Committee would find the unchanged stance of policy under **alternative B** appropriate. The recent tightening of credit supply conditions and drop in equity prices toward a more realistic alignment with earnings prospects may be viewed as necessary and overdue corrections that will help to prevent speculative and inflationary imbalances from developing. An easing at this time might risk inhibiting those adjustments and be viewed as an attempt to support overly optimistic investor and lender behavior. Indeed, if corporate bond and equity prices rallied substantially, such a move could potentially court another sharp correction at a later date.

(11) With markets betting heavily on an easing at this FOMC meeting, holding rates unchanged as in alternative B would leave investors confused about Federal Reserve intentions and likely engender added volatility. Short-term Treasury and private rates would back up sharply, and longer-term rates also would rise, though perhaps not by much if, as seems likely, market participants believed that the easing had merely been postponed. Increases in Treasury yields might be less than in private rates, if adverse reactions in financial markets strengthened

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[4] The reactions in financial and foreign exchange markets might be even larger if the discount rate were also reduced by 50 basis points, as such joint action might be seen as suggesting that the Federal Reserve is convinced that interest rates will remain low for a considerable period of time.

flight-to-safety motives. A part of the recent improvement in foreign financial markets, which has been built on growing expectations of an easing in U.S. monetary policy, could be reversed, particularly in some especially vulnerable countries. The foreign exchange value of the dollar would likely rise, although this effect could be mitigated somewhat if the adverse effects on Latin American markets were particularly severe.

(12) With some slowing in growth of nominal spending, expansion in the debt of nonfinancial sectors is expected to moderate over the months ahead. Business borrowing is likely to be restrained somewhat by less accommodative markets for securities and some further tightening in standards and terms on bank loans beyond that indicated in the most recent loan officer survey. While credit availability to households is expected to be affected less, household borrowing should slow along with the projected deceleration of spending on housing and durables. The staff forecast projects continued paydowns of federal debt. Overall nonfinancial debt is expected to grow 5-3/4 percent this year, in the upper half of its 3-to-7 percent range, and at about a 4-1/2 percent rate over the September-to-March period, down from the 6 percent pace of the last few months but continuing to outpace nominal GDP.

(13) In the staff forecast, M2 growth would be supported by declines in opportunity costs associated with the policy easings.[5] Within the aggregate, growth should be strong in liquid deposits, whose rates adjust relatively sluggishly to declines in market rates, while small time deposits should run off, as offering rates on these deposits tend to adjust faster. Currency demand should remain strong, supported by ongoing turbulence abroad. Money market mutual funds should be buoyed by the declines in market rates and continue to benefit somewhat from

[5] The Greenbook projection could be considered to be consistent with a 25 basis point easing at this meeting and a similar move toward the end of 1998. Those assumptions are used for the projections of money growth under alternative A.

the reduced attractiveness of stock mutual funds, but to a lesser degree than over the past couple months; the projected declines in stock prices are not as steep as those that already have occurred, and some of the money fund inflows at the onset of the bear market were likely only parked temporarily while in transit to alternative longer-term investments. On balance, M2 is projected to grow at a 6-1/2 percent rate over the next six months, implying further substantial declines in velocity. With economic growth softening and bank lending moderating, M3 is projected to decelerate to a 7-1/2 percent pace over September to March. The broad monetary aggregates will almost surely far exceed their growth ranges in 1998; M2 is projected to grow 8 percent this year and M3 to grow 10 percent.[6] However, a good part of the recent and projected strength in the aggregates apparently reflects shifts in money demand rather than strong spending growth; M2 has been boosted by heightened demands for liquidity and shifts away from stock market investments, while the elevated growth of M3 has in part reflected a substitution of bank funding sources for market financing by lower-rated business firms.

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[6] The ranges for 1998 and the preliminary ranges for 1999 are 1 to 5 percent for M2 and 2 to 6 percent for M3.

Directive Language

(14) Presented below are three different wording choices for the operational paragraph. All include the usual policy alternatives for Committee consideration. The first incorporates the traditional wording of the directive, and the other two, Options 1 and 2, are taken from the September 24, 1998, memo to the Committee. The Committee may, of course, decide to use some other variant after its discussion of proposed wording changes at the meeting on Tuesday.

OPERATIONAL PARAGRAPH

Traditional Wording

In the implementation of policy for the immediate future, the Committee seeks conditions in reserve markets consistent with maintaining/INCREASING/DECREASING the federal funds rate at/to an average of around ___ ~~5-1/2~~ percent. 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, a slightly/SOMEWHAT higher federal funds rate WOULD/MIGHT or a slightly/SOMEWHAT lower federal funds rate would/MIGHT be acceptable in the intermeeting period. The contemplated reserve conditions are expected to be consistent with some moderation in the growth in M2 and M3 over coming months.

Option 1

In the immediate future, to promote the Committee's long-run objectives of price stability and sustainable economic growth, the Committee seeks conditions in reserve markets consistent with maintaining/raising/lowering the federal funds rate at/to an average of around ____ percent.

1. [No tilt] Changes in economic, financial, and moetary conditions could call for a slight increase or decrease in the federal funds rate durig the intermeeting period. [or]

2. [Tilt] In view of the currently available evidence, the Committee believes that developments are more likely to warrant a decrease/increase than an increase/decrease in the federal funds rate in coming months. Any potential changes in the federal funds rate objective during the intermeeting period should be considered in that context.

The contemplated reserve conditions are expected to be consistent with some moderation in the growth in M2 and M3 over coming months.

Option 2

In the implementation of policy for the immediate future, the Committee seeks conditions in reserve markets consistent with maintaining/increasing/decreasing the federal funds rate at/to an average of around ____ percent. 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,

1. [Tilt] the Committee is more likely to find acceptable a slightly lower/higher federal funds rate than a slightly higher/lower funds rate in the intermeeting period. [or]

2. [No tilt] the Committee is equally likely to find acceptable a slightly lower or a slightly higher federal funds rate in the intermeeting period.

The contemplated reserve conditions are expected to be consistent with some moderation in the growth in M2 and M3 over coming months.

Alternative Growth Rates for Key Money and Credit Aggregates

	M2			M3			Debt
	Alt. A′	Alt. A	Alt. B	Alt. A′	Alt. A	Alt. B	All Alternatives
Monthly Growth Rates							
Aug-98	8.3	8.3	8.3	12.1	12.1	12.1	6.0
Sep-98	14.6	14.6	14.6	15.7	15.7	15.7	4.1
Oct-98	7.8	7.4	7.0	8.7	8.5	8.3	2.9
Nov-98	8.0	7.2	6.4	8.7	8.3	7.9	5.5
Dec-98	7.1	6.3	5.5	7.9	7.5	7.1	5.5
Jan-99	6.4	6.1	5.0	6.8	6.7	6.2	4.3
Feb-99	5.5	5.8	4.5	6.4	6.6	6.0	4.2
Mar-99	4.8	5.2	4.0	6.1	6.3	5.7	3.9
Quarterly Averages							
1998 Q1	8.0	8.0	8.0	11.0	11.0	11.0	6.2
1998 Q2	7.5	7.5	7.5	10.0	10.0	10.0	6.1
1998 Q3	6.6	6.6	6.6	7.0	7.0	7.0	5.8
1998 Q4	9.4	9.0	8.6	10.6	10.4	10.2	4.4
1999 Q1	6.4	6.1	5.1	7.1	7.0	6.5	4.6
Growth Rate							
From To							
Sep-98 Dec-98	7.7	7.0	6.3	8.5	8.2	7.8	4.7
Sep-98 Mar-99	6.7	6.4	5.5	7.6	7.4	7.0	4.4
1997 Q4 Sep-98	8.1	8.1	8.1	10.1	10.1	10.1	6.0
1997 Q4 Dec-98	8.1	7.9	7.8	9.9	9.8	9.8	5.7
1998 Q4 Mar-98	7.4	7.3	7.1	8.4	8.4	8.3	5.2
1995 Q4 1996 Q4	4.6	4.6	4.6	6.8	6.8	6.8	5.3
1996 Q4 1997 Q4	5.7	5.7	5.7	8.8	8.8	8.8	5.0
1997 Q4 1998 Q4	8.1	8.0	7.9	10.0	10.0	9.9	5.7
1998 Annual Ranges:	1.0 to 5.0			2.0 to 6.0			

Note: Alternative A is consistent with the Greenbook interest rate path.

Chart 3

Actual and Projected M2

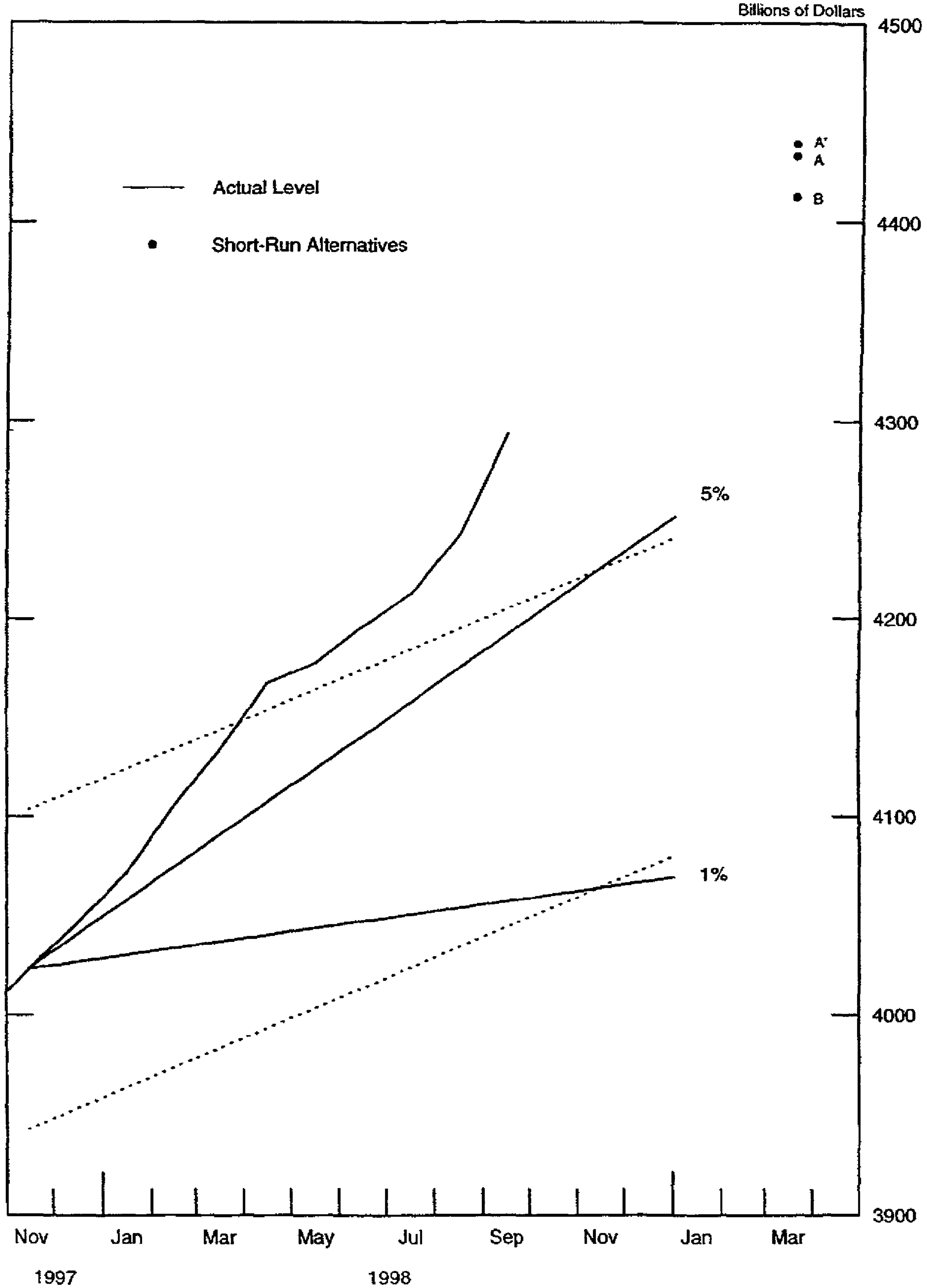


Chart 4

Actual and Projected M3

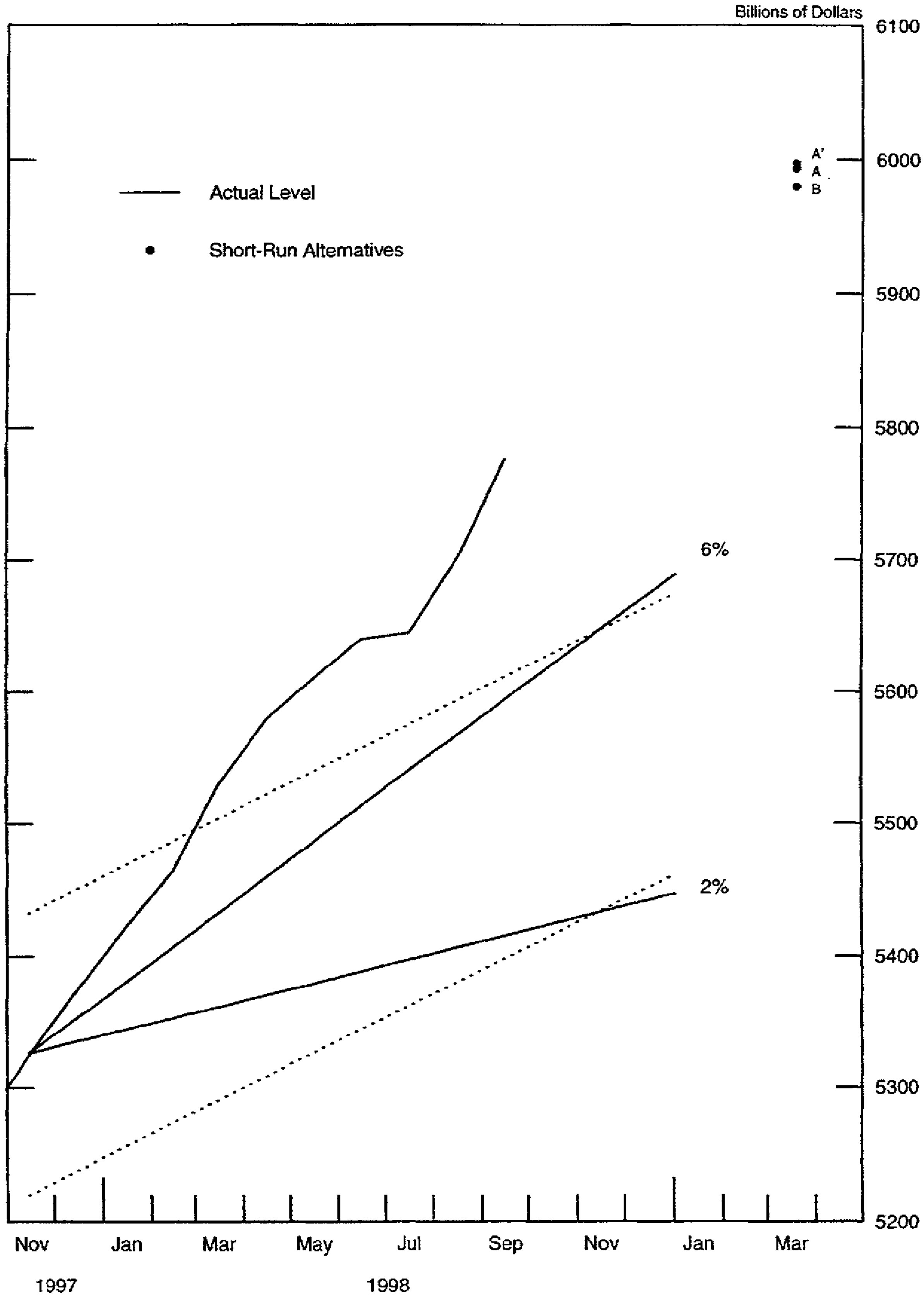
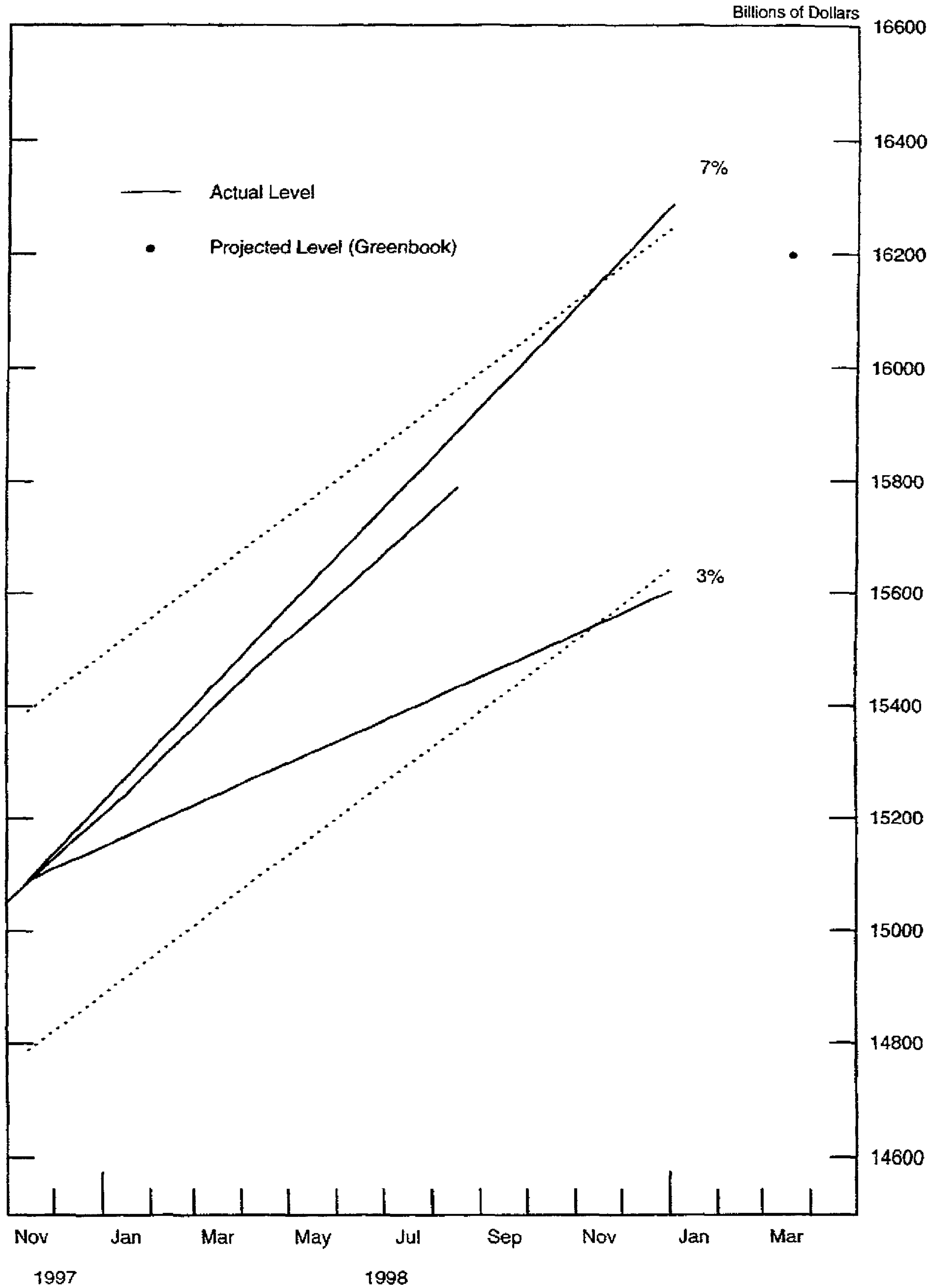


Chart 5

Actual and Projected Debt



SELECTED INTEREST RATES
(percent)

September 28, 1998

	Short-Term: federal funds	Short-Term: Treasury bills secondary market 3-month	Short-Term: Treasury bills secondary market 6-month	Short-Term: Treasury bills secondary market 1-year	Short-Term: CDs secondary market 3-month	Short-Term: comm. paper 1-month	Long-Term: U.S. government constant maturity yields 3-year	Long-Term: U.S. government constant maturity yields 5-year	Long-Term: U.S. government constant maturity yields 10-year	Long-Term: U.S. government constant maturity yields 30-year	Long-Term: indexed yields 5-year	Long-Term: indexed yields 10-year	Long-Term: corporate A-utility recently offered	Long-Term: municipal Bond Buyer	Long-Term: conventional home mortgages primary market fixed-rate	Long-Term: conventional home mortgages primary market ARM
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
97 -- High	5.80	5.27	5.40	5.66	5.82	5.90	6.64	6.79	6.92	7.12	3.67	3.67	8.27	6.14	8.18	5.91
-- Low	5.05	4.85	4.99	5.07	5.34	5.37	5.69	5.72	5.74	5.90	3.52	3.27	7.05	5.40	6.99	5.45
98 -- High	5.87	5.24	5.24	5.23	5.74	5.71	5.70	5.72	5.75	6.05	3.93	3.82	7.19	5.52	7.22	5.71
-- Low	5.32	4.53	4.52	4.40	5.37	5.44	4.51	4.48	4.67	5.14	3.58	3.62	6.86	5.17	6.64	5.42
Monthly																
Sep 97	5.54	4.95	5.09	5.23	5.60	5.49	5.98	6.11	6.21	6.50	3.61	3.58	7.58	5.64	7.43	5.55
Oct 97	5.50	4.97	5.09	5.17	5.65	5.49	5.84	5.93	6.03	6.33	3.60	3.57	7.44	5.63	7.29	5.51
Nov 97	5.52	5.14	5.17	5.17	5.74	5.53	5.76	5.80	5.88	6.11	3.55	3.54	7.24	5.59	7.21	5.49
Dec 97	5.50	5.16	5.24	5.24	5.80	5.78	5.74	5.77	5.81	5.99	3.63	3.60	7.10	5.44	7.10	5.52
Jan 98	5.56	5.04	5.03	4.98	5.54	5.46	5.38	5.42	5.54	5.81	3.73	3.68	6.97	5.32	6.99	5.54
Feb 98	5.51	5.09	5.07	5.04	5.54	5.47	5.43	5.49	5.57	5.89	3.72	3.66	7.02	5.33	7.04	5.60
Mar 98	5.49	5.03	5.04	5.11	5.58	5.51	5.57	5.61	5.65	5.95	3.79	3.71	7.11	5.41	7.13	5.69
Apr 98	5.45	4.95	5.06	5.10	5.58	5.49	5.58	5.61	5.64	5.92	3.86	3.75	7.10	5.44	7.14	5.67
May 98	5.49	5.00	5.14	5.16	5.59	5.49	5.61	5.63	5.65	5.93	3.92	3.75	7.16	5.45	7.14	5.69
Jun 98	5.56	4.98	5.12	5.13	5.60	5.51	5.52	5.52	5.50	5.70	3.88	3.72	6.98	5.36	7.00	5.69
Jul 98	5.54	4.96	5.03	5.08	5.59	5.51	5.47	5.46	5.46	5.68	3.87	3.76	6.93	5.35	6.95	5.63
Aug 98	5.55	4.90	4.95	4.94	5.58	5.50	5.24	5.27	5.34	5.54	3.85	3.80	7.02	5.32	6.92	5.59
Weekly																
Jul 24 98	5.51	4.96	5.04	5.08	5.59	5.51	5.47	5.47	5.46	5.68	3.86	3.75	6.92	5.35	6.96	5.65
Jul 31 98	5.57	4.95	5.01	5.09	5.60	5.52	5.48	5.51	5.50	5.73	3.86	3.76	7.04	5.36	6.97	5.62
Aug 7 98	5.57	4.93	5.00	5.04	5.59	5.51	5.39	5.43	5.43	5.66	3.87	3.78	6.98	5.37	6.94	5.61
Aug 14 98	5.52	4.89	4.94	4.97	5.58	5.50	5.31	5.36	5.40	5.60	3.88	3.80	7.05	5.34	6.91	5.60
Aug 21 98	5.56	4.92	4.97	4.97	5.58	5.50	5.29	5.32	5.39	5.53	3.87	3.82	6.97	5.32	6.92	5.58
Aug 28 98	5.50	4.89	4.91	4.85	5.57	5.50	5.05	5.07	5.20	5.42	3.78	3.80	7.08	5.26	6.92	5.58
Sep 4 98	5.59	4.76	4.79	4.68	5.52	5.50	4.84	4.92	5.05	5.32	3.77	3.80	7.00	5.30	6.82	5.51
Sep 11 98	5.48	4.73	4.71	4.55	5.46	5.49	4.67	4.72	4.90	5.26	3.67	3.71	6.93	5.22	6.77	5.50
Sep 18 98	5.52	4.62	4.69	4.54	5.42	5.49	4.65	4.62	4.83	5.21	3.65	3.66	6.90	5.20	6.66	5.43
Sep 25 98	5.44	4.53	4.52	4.40	5.37	5.49	4.51	4.48	4.67	5.14	3.58	3.62	6.89	5.17	6.64	5.42
Daily																
Sep 9 98	5.45	4.76	4.74	4.59	5.48	5.48	4.70	4.79	4.95	5.28	3.73	3.75	--	--	--	--
Sep 10 98	5.55	4.66	4.59	4.40	5.45	5.48	4.51	4.55	4.76	5.18	3.59	3.64	--	--	--	--
Sep 11 98	5.46	4.75	4.70	4.52	5.41	5.48	4.65	4.65	4.85	5.23	3.60	3.64	--	--	--	--
Sep 14 98	5.65	4.72	4.76	4.56	5.43	5.49	4.65	4.65	4.87	5.23	3.63	3.66	--	--	--	--
Sep 15 98	5.71	4.67	4.72	4.58	5.42	5.48	4.69	4.68	4.90	5.25	3.64	3.66	--	--	--	--
Sep 16 98	5.49	4.62	4.71	4.55	5.43	5.49	4.71	4.69	4.88	5.23	3.67	3.67	--	--	--	--
Sep 17 98	5.47	4.58	4.65	4.53	5.42	5.49	4.63	4.60	4.80	5.18	3.65	3.66	--	--	--	--
Sep 18 98	5.38	4.51	4.62	4.48	5.42	5.50	4.56	4.50	4.70	5.15	3.65	3.65	--	--	--	--
Sep 21 98	5.47	4.56	4.68	4.49	5.42	5.49	4.58	4.51	4.69	5.12	3.63	3.64	--	--	--	--
Sep 22 98	5.38	4.69	4.69	4.50	5.43	5.51	4.62	4.57	4.73	5.16	3.64	3.65	--	--	--	--
Sep 23 98	5.48	4.55	4.51	4.39	5.42	5.50	4.52	4.48	4.69	5.16	3.57	3.62	--	--	--	--
Sep 24 98	5.42	4.44	4.39	4.32	5.34	5.44	4.43	4.43	4.64	5.15	3.55	3.62	--	--	--	--
Sep 25 98	5.56 p	4.41	4.34	4.29	5.24	--	4.41	4.40	4.60	5.13	3.51	3.59	--	--	--	--

NOTE: Weekly data for columns 1 through 12 are week-ending averages. As of September 1997, data in column 6 are interpolated from data on certain commercial paper trades settled by the Depository Trust Company; prior to that, they reflect an average of offering rates placed by several leading dealers. Columns 13 and 14 are 1-day quotes for Friday or Thursday, respectively. Column 14 is the Bond Buyer revenue index. 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

Strictly Confidential (FR)-
Class II FOMC

September 28, 1998

Money and Debt Aggregates

Seasonally adjusted

Period	Money stock measures and liquid assets					Domestic nonfinancial debt		
	M1	M2	nontransactions components		M3	U. S. government[1]	other[1]	total[1]
			In M2	In M3 only				
	1	2	3	4	5	6	7	8
Annual growth rates(%):								
Annually (Q4 to Q4)								
1995	-1.6	3.9	6.6	15.4	6.1	4.4	5.8	5.4
1996	-4.5	4.6	8.7	15.3	6.8	3.8	5.9	5.3
1997	-1.2	5.7	8.5	19.6	8.8	0.7	6.6	5.0
Quarterly(average)								
1997-Q3	0.3	5.7	7.7	16.9	8.3	0.0	6.2	4.6
Q4	0.9	7.0	9.3	19.5	10.0	0.4	7.9	6.0
1998-Q1	3.0	8.0	9.8	20.3	11.0	0.0	8.3	6.2
Q2	0.2	7.5	10.1	17.7	10.0	-1.4	8.5	6.1
Monthly								
1997-Aug.	6.2	9.8	11.2	13.9	10.8	1.3	7.0	5.6
Sep.	-8.5	6.6	12.2	16.6	9.0	0.8	7.1	5.5
Oct.	-1.8	6.0	8.9	16.2	8.5	0.0	8.2	6.1
Nov.	8.2	7.3	6.9	25.5	11.7	-0.4	8.5	6.3
Dec.	7.6	6.8	6.5	25.6	11.4	1.5	7.8	6.2
1998-Jan.	-2.6	7.5	11.2	19.1	10.4	-0.5	8.0	5.8
Feb.	3.1	9.8	12.1	6.7	9.0	-1.3	8.9	6.3
Mar.	5.1	8.4	9.7	32.7	14.5	1.4	8.1	6.4
Apr.	-0.4	9.7	13.2	13.3	10.6	-1.8	8.6	6.1
May	-3.3	3.0	5.2	18.4	6.8	-4.0	8.8	5.6
June	-3.6	5.3	8.4	8.6	6.2	-0.9	7.8	5.7
July	-3.2	4.7	7.5	-9.8	1.0	-0.9	8.4	6.2
Aug.	-3.6	8.3	12.4	23.3	12.1			
Levels ($billions):								
Monthly								
1998-Apr.	1080.7	4167.2	3086.5	1411.7	5579.0	3791.3	11690.5	15481.8
May	1077.7	4177.6	3099.9	1433.3	5610.8	3778.6	11775.9	15554.6
June	1074.5	4196.1	3121.6	1443.6	5639.7	3775.7	11852.6	15628.3
July	1071.6	4212.7	3141.2	1431.8	5644.5	3772.9	11935.8	15708.7
Aug.	1068.4	4242.0	3173.7	1459.6	5701.6			
Weekly								
1998-Aug. 3	1083.1	4225.8	3142.8	1452.4	5678.2			
10	1063.3	4234.1	3170.8	1461.3	5695.4			
17	1061.4	4236.1	3174.7	1459.0	5695.1			
24	1065.4	4240.5	3175.0	1451.7	5692.2			
31	1075.4	4253.5	3178.1	1469.2	5722.7			
Sep. 7p	1064.7	4277.6	3212.9	1483.1	5760.7			
14p	1065.3	4288.4	3223.1	1479.8	5768.2			

1. 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

STRICTLY CONFIDENTIAL (FR)
CLASS II-FOMC

September 25, 1998

NET CHANGES IN SYSTEM HOLDINGS OF SECURITES[1]
Millions of dollars, not seasonally adjusted

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					
1995	10,932	900	10,032	390	5,366	1,432	2,529	1,776	7,941	1,003	16,970	-1,023
1996	9,901	---	9,901	524	3,898	1,116	1,655	2,015	5,179	409	14,670	5,351
1997	9,147	---	9,147	5,549	19,680	3,849	5,897	1,996	32,979	1,540	40,586	-64
1997 ---Q1	---	---	---	619	3,366	698	1,237	607	5,314	230	5,084	-11,149
---Q2	4,602	---	4,602	877	5,822	1,233	1,894	376	9,451	498	13,554	6,771
---Q3	---	---	---	644	2,697	---	---	598	2,744	571	2,173	-4,493
---Q4	4,545	---	4,545	3,409	7,794	1,918	2,766	416	15,471	241	19,775	8,807
1998 ---Q1	---	2,000	-2,000	1,501	2,262	283	743	478	4,311	60	2,251	-15,409
---Q2	3,550	---	3,550	1,369	2,993	495	---	286	4,571	99	8,022	10,707
1997 September	---	---	---	644	2,697	---	---	---	3,341	105	3,236	-181
October	---	---	---	---	---	770	648	416	1,002	215	787	-4,412
November	---	---	---	1,462	3,323	535	904	---	6,224	26	6,198	5,519
December	4,545	---	4,545	1,947	4,471	613	1,214	---	8,245	---	12,790	7,700
1998 January	---	2,000	-2,000	---	---	---	---	478	-478	---	-2,478	-21,985
February	---	---	---	---	---	---	---	---	---	10	-10	4,262
March	---	---	---	1,501	2,262	283	743	---	4,789	50	4,739	2,314
April	3,550	---	3,550	1,369	2,993	495	---	286	4,571	74	8,047	9,405
May	---	---	---	---	---	---	---	---	---	---	---	-14,806
June	---	---	---	---	---	---	---	---	---	25	-25	16,108
July	---	---	---	---	---	---	---	1,311	-1,311	---	-1,311	-9,397
August	---	---	---	986	535	303	1,769	---	3,593	50	3,518	1,409
Weekly												
June 10	---	---	---	---	---	---	---	---	---	---	---	-7,867
17	---	---	---	---	---	---	---	---	---	---	---	10,838
24	---	---	---	---	---	---	---	---	---	---	---	4,090
July 1	---	---	---	---	---	---	---	---	---	25	-25	-1,629
8	---	---	---	---	---	---	---	---	---	---	---	-5,872
15	---	---	---	---	---	---	---	1,311	-1,311	---	-1,311	8,421
22	---	---	---	---	---	---	---	---	---	---	---	-10,085
29	---	---	---	---	---	---	---	---	---	---	---	8,153
August 5	---	---	---	---	---	---	1,049	---	1,049	---	1,049	-7,532
12	---	---	---	---	---	---	---	---	---	50	-75	9,774
19	---	---	---	---	---	---	---	---	---	---	---	-6,976
26	---	---	---	---	---	303	720	---	1,023	---	1,023	7,374
September 2	---	---	---	986	535	---	---	---	1,521	---	1,521	-6,951
9	---	---	---	---	---	---	---	---	---	---	---	8,405
16	---	---	---	---	---	---	---	---	---	48	-48	-5,832
23	---	---	---	2,549	1,600	---	---	---	4,148	---	4,148	-235
Memo: LEVEL (bil. $)[6]												
September 23			215.7	49.1	104.6	41.3	53.9		248.9		465.1	-18.7

1. Change from end-of-period to end-of-period.
2. Outright transactions in market and with foreign accounts.
3. Outright transactions in market and with foreign accounts, and short-term notes acquired in exchange for maturing bills. Excludes maturity shifts and rollovers of maturing issues.
4. Reflects net change in redemptions (-) of Treasury and agency securities.
5. Includes change in RPs (+), matched sale-purchase transactions (-), and matched purchase sale transactions (+).
6. The levels of agency issues were as follows:

	within 1 year	1-5	5-10	over 10	total
September 23	0.1	0.1	0.2	0.0	0.4