

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.

December 18, 1998

Monetary Policy Alternatives

Prepared for the Federal Open Market Committee
by the Staff of the Board of Governors of the Federal Reserve System

December 18, 1998

MONETARY POLICY ALTERNATIVES

Recent Developments

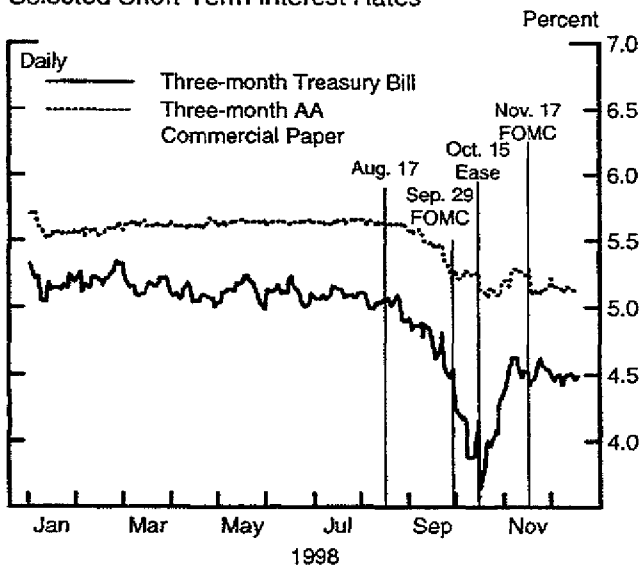
(1) Although financial markets had not fully anticipated the Committee's quarter-point easing of the intended federal funds rate at its November meeting, the accompanying statement was interpreted by the market as suggesting that no additional action was likely at the December meeting, so that market interest rates showed small, mixed changes. However, most interest rates declined, on balance, over the intermeeting period as a whole (chart 1).¹ The largest decreases in Treasury rates--amounting to 27 basis points--came at longer maturities, in response to a weaker outlook for foreign activity and to the effect of lower oil and other commodity prices on the prospects for inflation. Real interest rates, as measured by yields on indexed securities, were about flat over the period. On net, major equity indexes posted changes ranging from about 1 percent lower to 12 percent higher. Investors see little chance of a policy move at the December meeting, although, judging by federal funds futures rates, market participants appear to have built in about even odds of an easing at the February meeting and a very high probability of action by mid-year.

(2) The November policy move seemed to encourage further unwinding of strains in financial markets over the next week or two. Equity markets extended their rally, and quality spreads and the implied volatility of bond and stock prices fell somewhat further from their October highs (chart 2); issuance in the corporate bond market, which had picked up before the

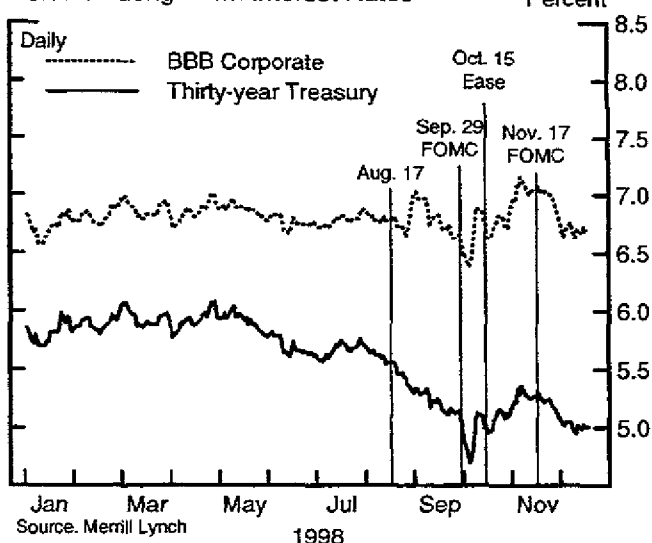
1. Some money-market rates increased over the period, however, because their terms crossed year-end, and so they began to include the effects of anticipated year-end pressures.

Chart 1

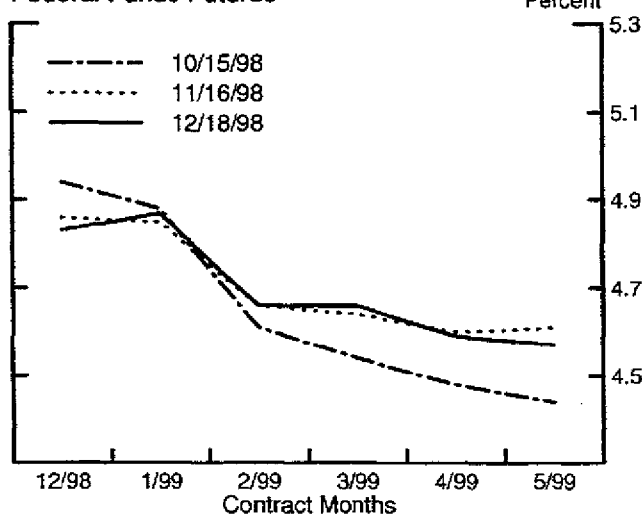
Selected Short-Term Interest Rates



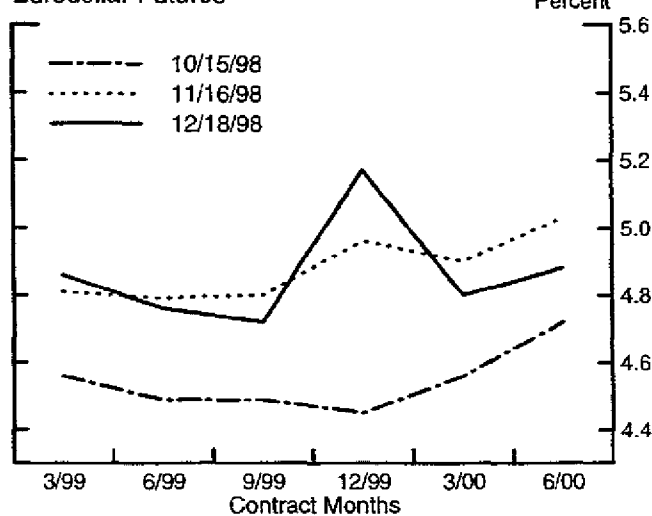
Selected Long-Term Interest Rates



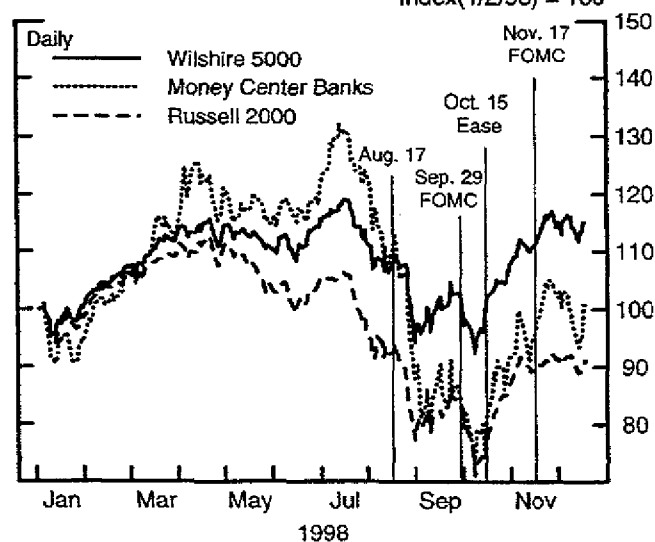
Federal Funds Futures



Eurodollar Futures



Selected Stock Indexes



Nominal Trade-Weighted Dollar Exchange Rates

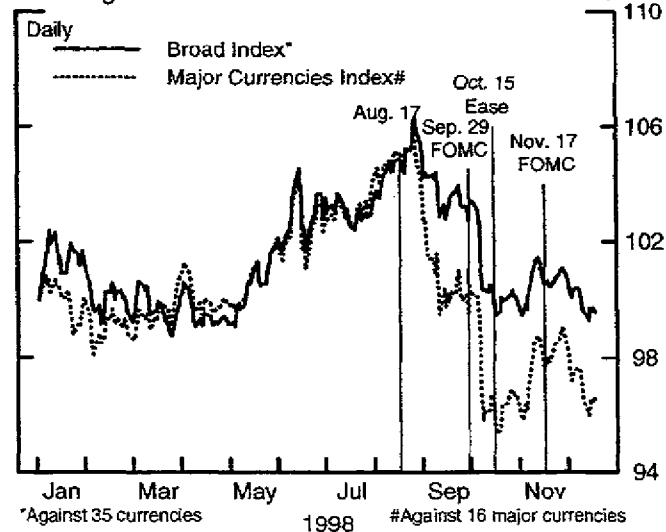
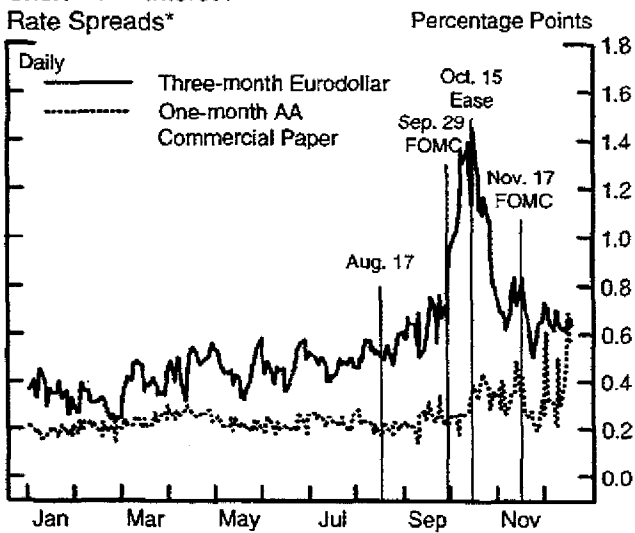


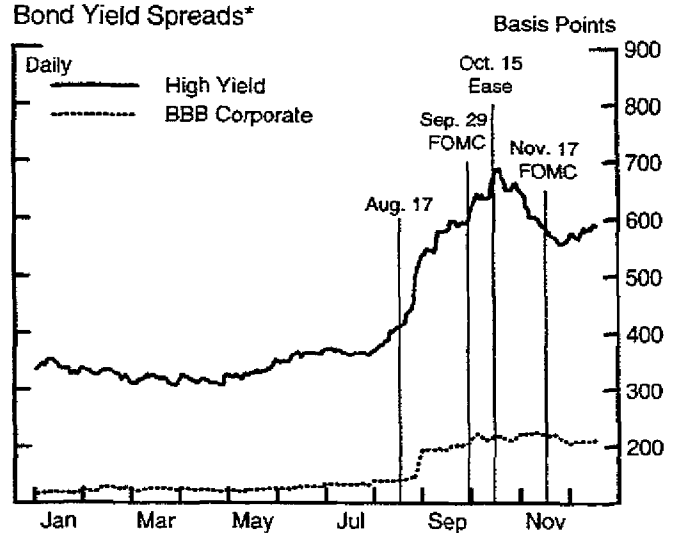
Chart 2

Short-Term Interest Rate Spreads*



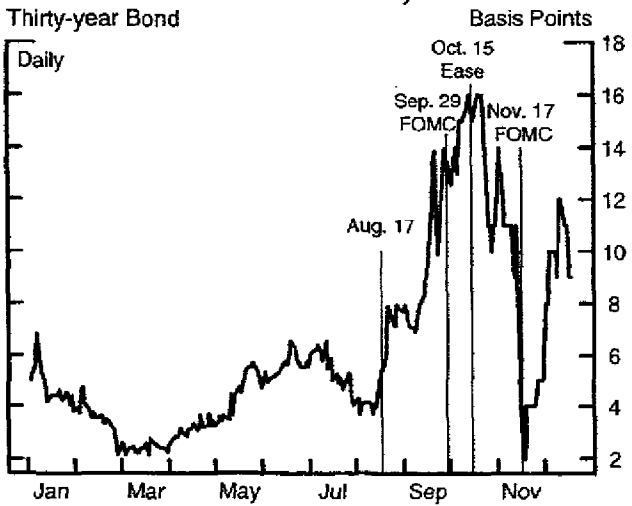
*Three-month eurodollar spread is relative to the three-month Treasury bill rate. One-month commercial paper spread is relative to the one-month repo rate.

Bond Yield Spreads*



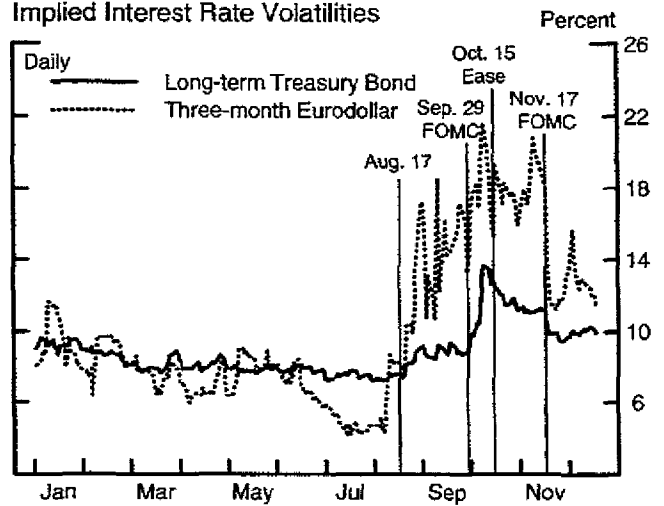
*High yield spread is relative to the seven-year Treasury yield. BBB corporate spread is relative to the ten-year Treasury yield.

On-the-Run Premiums for Treasury Securities*
Thirty-year Bond



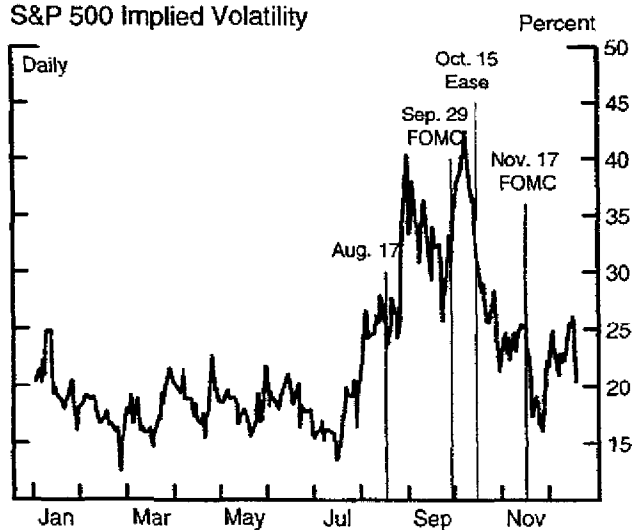
*Spreads of next-to-most-recently over most-recently issued security. Note. New five- and thirty-year Treasury securities issued on 11/16.

Implied Interest Rate Volatilities



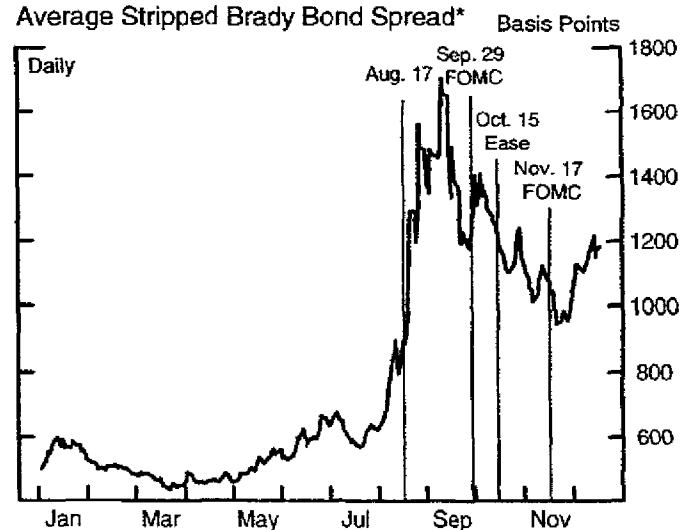
1998

S&P 500 Implied Volatility



1998

Average Stripped Brady Bond Spread*



1998

*J.P. Morgan Emerging Market Bond Index, an average of stripped Brady bond yield spreads over Treasuries for 10 emerging market countries.

meeting, remained heavy. Although markets have continued to be receptive to corporate debt offerings, in recent weeks indicators of market stress have reversed a portion--and in some cases more than all--of their improvement after the last meeting. In part, the recent deterioration in market conditions reflects widespread warnings of lower corporate profits, heightened policy uncertainties in Brazil, and a weaker outlook for Europe. The reduced willingness of market participants to take positions--especially before year-end--appears to have decreased liquidity, tending to exaggerate price movements.²

(3) The effective federal funds rate averaged very close to the intended level over the intermeeting period, and variation around the intended rate declined somewhat from the elevated levels of the preceding interval.³ Nonetheless, variability remained on the high side.

Intertemporal arbitrage of the federal funds rate has been impaired by continuing caution in reserve management and perhaps also by the further erosion of required operating balances, which flirted with record lows over the intermeeting period, as the introduction of new sweep programs continued to trim transactions deposits.

2. Recently, premiums for lower-tier commercial paper over the extended New Year's weekend have been on the order of 400 basis points at an annual rate, considerably more than a year ago. By contrast, year-end effects have been relatively modest by the standards of recent years in the federal funds market, where the premium is currently about 100 to 150 basis points, although some foreign institutions about which there are credit concerns are paying considerably more.

3. At its November meeting, the Committee amended the Authorization for Domestic Open Market Operations to extend the permitted maturity of System repurchase agreements (RPs) from fifteen to sixty days. Over the intermeeting period, the Desk availed itself of this new authority on three occasions, arranging System RPs with maturities between thirty and forty-five days to meet anticipated seasonal demands over year-end. In addition, the Desk undertook its first coupon pass of inflation-indexed Treasury securities, buying \$437 million of such securities for the System account on November 23.

(4) The weighted average value of the dollar against major currencies declined about 1 percent over the intermeeting period. Concerns about the vulnerability of U.S. markets to financial difficulties in Brazil and uncertainty generated by the impeachment proceedings weighed on the dollar at times. Hostilities in Iraq have had a negligible effect on the foreign exchange value of the dollar. In Europe, a slackening of inflation pressures and signs of slowing economic growth prompted monetary easing, including a coordinated interest rate reduction by euro-area central banks on December 3 and a reduction in the official repo rate of the Bank of England on December 10. On balance, European long-term interest rates fell somewhat more than those in the United States, but the dollar was about unchanged against the mark and sterling over the intermeeting period. In Japan, by contrast, the call money target rate has held steady, and the yield on the bellwether government bond rose about 45 basis points over the period, boosted by expectations of sizable increases in government bond issuance to finance fiscal stimulus. With the dollar-yen interest rate differential narrowing, the dollar depreciated 3-1/4 percent against the yen. The Bank of Canada matched the U.S. policy move in November, and the U.S. dollar eased less than 1 percent against the Canadian dollar. U.S. monetary authorities did not intervene in foreign exchange markets over the period.

(5) Latin American equity markets, which had moved higher early in the period in the wake of the announcement of a financial support package for Brazil, displayed renewed strains following the decision by that country's lower house of congress to reject a key fiscal reform measure. Subsequent decisions by the legislature to delay consideration of other reforms reinforced concerns about the policy outlook. Equity prices in Brazil declined 16 percent, Brazil's Brady bond spread rose 350 basis points, and capital outflows continued. In Mexico,

equity prices and Brady bond spreads were little changed on balance. Mexican authorities tightened monetary policy to support the peso, which ended the period up 2 percent against the dollar. In Asia, some currencies experienced upward pressures against the dollar, resulting in part from their increased competitiveness vis-a-vis Japan as the yen strengthened against those currencies, as well as from the declining interest rates in industrial countries. Monetary authorities in many of these emerging market economies took this opportunity to ease policy. Equity prices continued to move higher in a number of Asian countries. The rise was particularly large in Korea, where recent data suggest that the recession has bottomed out, and the Korean won rose 8-3/4 percent against the dollar. The currencies of other Asian emerging market economies were mixed, on balance, against the dollar over the period.

(6) The broad monetary aggregates continued to expand robustly in November. M2 advanced at a 10-1/4 percent pace, reflecting, in part, the reduction in its opportunity cost resulting from monetary policy easings this fall. In addition, heavy mortgage refinancing activity provided a fillip to liquid deposit growth, while demand for currency, both at home and abroad, apparently continued to expand briskly. However, growth of M2 last month was a bit below both the October rate and the projection in the November bluebook. The slight moderation reflected a sharp slowing in retail money fund growth, possibly reflecting a shift by some investors back into bond and stock mutual funds in association with the substantial rise in equity prices and the partial quelling of market turbulence after mid-October. In contrast, M3 accelerated somewhat to a 14-1/2 percent pace in November, appreciably above the rate projected in the last bluebook. Much of the rapid increase in the non-M2 portion of M3 was accounted for by continued heavy flows into institution-only money market funds. M3 was also bolstered by advances in RPs,

likely reflecting in part the funding of brisk securities acquisitions by banks. Incoming data indicate some deceleration in both of these aggregates this month.

(7) From the fourth quarter of 1997 to the fourth quarter of 1998, M2 grew an estimated 8-3/4 percent, placing this aggregate well above the upper bound of its 1 to 5 percent range.⁴ In part, the robust expansion over the year can be attributed to relatively rapid growth in nominal income and to the decline in market interest rates in late 1997 and in 1998. These factors, though, cannot explain all the strength in M2; among the other forces that likely boosted money growth in 1998 are increased demand for safe and liquid assets as investors responded to the heightened volatility in financial markets in the second half of the year and households' ongoing efforts to reverse some of the decline in the share of their portfolios allocated to monetary assets, following several years of outsized gains in stock market wealth. M3 grew even faster than M2, posting an estimated 10-3/4 percent rise from the final quarter of 1997 to the final quarter of 1998, substantially above the upper end of its 2 to 6 percent range. The rapid advance in M3--the fastest since 1984--importantly reflected the funding of vigorous growth in depository credit with managed liabilities, many of which are in M3. The strong expansion in depository credit owed in turn to rapid growth in spending, decisions by banks to lever up their capital by purchasing substantial volumes of securities, and a shift by some borrowers to bank loans when financial markets were troubled in the fall. However, M3 growth was boosted to an even greater

4. M1 expanded 1-1/2 percent in 1998 on a fourth-quarter to fourth-quarter basis, but it grew at a 5-3/4 percent rate after adjusting for the initial effects of new retail sweep accounts. Over this four-quarter period, the initial incremental effects of new retail sweeps in reducing transaction deposits totaled about \$60 billion, bringing the cumulative total since 1994 to over \$300 billion.

extent by flows into institution-only money funds, which are capturing a growing share of the corporate cash management market and whose relative attractiveness was temporarily enhanced late in the year by declines in short-term market interest rates.

(8) Domestic nonfinancial sector debt has expanded at a greater than 6 percent annual rate over the past few months, with robust growth in nonfederal debt more than offsetting paydowns by the federal government. Demand for credit continued to be buoyed by strong spending on durable goods, housing, and business investment as well as by merger and acquisition activity. Disruptions in securities markets since mid-August apparently did not significantly damp private borrowing, as a well-capitalized banking system was able to accommodate demand deflected from those markets and federally sponsored agencies continued their aggressive acquisitions of mortgages. On a fourth-quarter to fourth-quarter basis, domestic nonfinancial debt is projected to increase 6-1/4 percent this year--in the top half of its 3 to 7 percent range, considerably outstripping the growth of nominal income. The relatively strong growth of debt may reflect the outsized contribution to GDP this year of domestic demand--a higher proportion of which may be financed with U.S. debt than is likely to be the case for exports.

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

	Sep.	Oct.	Nov.	1997:Q4 to 1998:Q4 ^{pe}
<u>Money and Credit Aggregates</u>				
M1	3.5	7.2	9.9	1.4
Adjusted for sweeps	7.6	8.2	10.1	5.7
M2	14.8	12.7	10.3	8.7
M3	14.5	12.9	14.6	10.8
Domestic nonfinancial debt	6.0	6.5	6.6 ^{pe}	6.3
Federal	-3.3	-3.1	-0.5 ^{pe}	-1.2
Nonfederal	8.9	9.4	8.8 ^{pe}	8.8
Bank credit	15.5	25.2	9.5	11.3
Adjusted ¹	10.2	18.1	15.3	10.4
<u>Reserve Measures</u>				
Nonborrowed reserves	-10.5	-3.3	7.4	-3.5
Total reserves	-11.0	-5.4	4.9	-3.8
Adjusted for sweeps	2.3	1.7	7.1	6.1
Monetary base	11.5	9.3	9.1	6.9
Adjusted for sweeps	12.1	9.4	9.2	7.8
Memo: (millions of dollars)				
Adjustment plus seasonal borrowing	251	174	84	--
Excess reserves	1684	1572	1618	--

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.

pe - preliminary estimate

1. Adjusted to remove the effects of mark-to-market accounting rules (FIN 39 and FASB 115).

Policy Alternatives

(9) In light of the surprising strength in incoming real-side data as well as the buoyancy of equity markets, the staff has boosted its forecast of GDP growth. Compared with the projection in the November Greenbook, real GDP is anticipated to grow about 1/2 percentage point faster in 1999, starting from a level of output in the fourth quarter of this year that is somewhat higher than anticipated a month ago. The resulting growth of output is still a little below that of potential in 1999 and again in 2000. Production has been supported in recent years by sustained large increases in outlays for capital goods, inventories, consumer durables, and housing. Given the high levels of these stocks relative to output and income, firms and households should slow the rate of accumulation of these goods--a tendency reinforced in the outlook by the projected slight weakening in equity prices, which holds down household net worth and raises the cost of capital to businesses. *The outlook for inflation is little changed, as the impact of tighter labor markets than in the last forecast is nearly offset by the effects of recent declines in oil and other commodity prices on the prospects for inflation and inflationary expectations. Overall prices are anticipated to rise considerably faster in 1999 and 2000 than in 1998; the pickup largely reflects the effects of a turnaround in oil prices, with core CPI inflation over the next two years remaining at about the level of 1998.*

(10) If the Committee views the Greenbook forecast as acceptable and the most likely outcome, it presumably would maintain the intended federal funds rate at 4-3/4 percent, as under **alternative B**. The announcement just after the last Committee meeting indicated that the cumulative easing since September had appropriately positioned policy to promote sustained growth and low inflation. The incoming data might be read, on balance, as providing no

compelling reason to change that view. Although measures of activity have been on the strong side, inflation has remained damped. Slower wage growth, along with declining commodity prices, suggests that price pressures and inflation expectations should be contained for some time, even in the face of what appear to be very tight labor markets. Moreover, the points of vulnerability to the outlook seem about as they were at the time of the last policy ease. Foreign economies are expected to strengthen on balance next year, but a significantly worse outcome cannot be ruled out. Strains in U.S. financial markets, for the most part, do not differ materially from mid-November, with credit spreads remaining elevated and markets still comparatively unsettled. As a consequence of the mix of incoming information and the wording of the November announcement, market participants do not expect a policy move in either direction at this meeting, and, absent an especially compelling case for policy action, the Committee may wish to avoid surprising them—particularly before year-end when thin markets and a reluctance to put capital at risk could magnify the effects of any policy action.

(11) Against this backdrop, the choice of alternative B should have little effect on domestic interest rates or dollar exchange rates. After year-end, when trading volume picks up and investors again become more willing to put weaker credits on their balance sheets, conditions in securities markets may well become more liquid, and risk spreads could well narrow. Still, difficulties in foreign financial markets, domestic market disruptions, high volatility, and unusual patterns of asset price movements of recent months are likely to leave a lasting imprint on perceptions of risk, the appetite for it, and the resources dedicated to taking positions in financial markets. As a consequence, spreads in many markets should remain appreciably above their levels of last summer and liquidity somewhat reduced.

(12) The choice of the quarter-point increase in the federal funds rate of **alternative C** would seem to rest on the judgment that the inflation outcome in the staff forecast is unacceptable or that there are significant risks of a more substantial pickup in inflation. In the staff forecast, core CPI inflation persists above 2 percent, and many other measures of inflation notch higher. The Committee may believe that a worse inflationary scenario is plausible because the economy continues to operate beyond its long-run potential, incoming data show that aggregate demand has considerable momentum, and financial conditions in general may now be too accommodative. The resilience of equity prices in the face of continued earnings disappointments could suggest the possibility that the stock market will remain a positive influence on demand, in contrast to the drag anticipated in the staff forecast. Although spreads remain wide in the bond market, the absolute cost of credit, averaging across quality classes, is little changed from early summer, when the Committee was concerned about inflation pressures. Moreover, the cost of funds is down substantially for borrowers from banks as well as in the commercial paper market owing to the monetary policy easings. And after the turn of the year, markets might become even more attractive to private borrowers. In addition, the foreign exchange value of the dollar against the major currencies has fallen 6 percent since mid-July. Finally, the surprise easing of monetary policy in continental Europe may indicate an increased willingness there to respond to signs of demand weakness, which would facilitate easing in other countries and reduce the risk of a slackening in global economic activity.

(13) The case for easing further at some point, as in the 1/4 point reduction in the federal funds rate at this meeting of **alternative A**, might rest on the view that there are substantial risks of a shortfall in global demand and of more downward pressure on prices than

the Committee might find desirable. The prospects for Brazil remain fragile, and the lack of progress in resolving fiscal imbalances in that country may now suggest even higher odds for problems there that would spread to other emerging markets, feeding back to the United States. Furthermore, the continuing steep declines in oil and commodity prices may be signalling that worldwide demand is weaker than expected. Such price declines could themselves feed through to further reductions in aggregate price measures and inflation expectations, elevating the real federal funds rate, should the nominal funds rate remain unchanged, and putting upward pressure on real long-term rates. Higher long-term rates could come at an inopportune time given a possibly developing overhang in manufacturing capacity. Preemptive action to head off undue restraint on spending might be viewed as especially appropriate if inflation already were expected to be consistent with price stability. Indeed, market participants implicitly appear to be putting some weight on these demand and price risks in that they continue to factor into market quotes another policy ease by mid-year.

(14) Market participants would be surprised by either a tightening or an easing at this meeting. Hence, reactions would be sharp in either direction, with substantial changes in interest rates, equity prices, and the foreign exchange value of the dollar. Such reactions would be exacerbated by the current illiquidity of markets and by the attempts of market participants to divine the rationale for such an action. While the press release could help to shape the interpretation of the action by market participants, they might suspect other motives or undisclosed information. Reactions to a tightening would be greater than to an easing, because the former would reverse recent trends in policy and would be inconsistent with the direction of policy currently built into the yield curve.

(15) Under alternative B, conditions in credit markets could well improve after the turn of the year, but lenders should stay on the cautious side as the growth of economic activity slows and profits and incomes soften further. This caution is likely to keep the price of credit elevated for more marginal business borrowers, but other businesses should continue to find credit readily available. Most households, too, are unlikely to face unusual credit stringency, although lenders will probably remain selective. As the growth of spending slows, business and household borrowing should decelerate over coming quarters. Overall nonfinancial debt should slow to a 5-1/4 percent annual rate from November to March, around the center of its 3 to 7 percent provisional range for 1999.

(16) Under alternative B, M2 and M3 are likely to decelerate substantially. The growth of M2 in the first quarter will probably continue to exceed that of nominal income, in part reflecting the lingering effects of the decline in market interest rates in the latter part of 1998. As a result, velocity will decline, but by only about 3-1/2 percent at an annual rate, approximately one-half of the pace that appears to have occurred in the current quarter. The slowing in the decline in velocity owes in part to a tapering off of the enhanced demands for liquidity that accompanied the financial turmoil. M3 is projected to grow faster than M2 as bank credit should continue to expand rapidly, financed in part with wholesale instruments, and as inflows of institution-only money funds are expected to stay brisk. Under alternative B, M2 and M3 are projected to expand over the November-to-March period at annual rates of 7-1/2 and 9 percent, respectively. Under all of the alternatives, M2 and M3 by March would be well above their provisional ranges.

Directive Language

(17) Shown below are three options for the operational paragraph: Option 1 is the traditional wording; option 2 is alternative language shown in the November bluebook; and option 3 represents revised alternative language incorporating the Committee's comments at the November meeting. Also, the monetary aggregates sentence in all three options contains different choices to characterize expected money growth.

Traditional Wording of the Operating Paragraph

(Option 1)

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 ___ ~~4-3/4~~ 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 moderate/some moderation in/some pickup in the growth in M2 and M3 over coming months.

Alternative Language for the Operating Paragraph

(Option 2)

To promote the Committee's long-run objectives of price stability and sustainable economic growth, the Committee in the immediate future seeks conditions in reserve markets consistent with maintaining/increasing/decreasing the federal funds rate at/to an average of

around ____ percent. In view of the evidence currently available, the Committee believes that prospective developments are [equally likely to warrant an increase or a decrease (NO TILT)]; [more likely to warrant an increase/a decrease than a decrease/an increase (TILT)] in the federal funds rate in coming months. Any potential changes in the federal funds rate operating objective during the intermeeting period should be considered in that context. The contemplated reserve conditions are expected to be consistent with moderate/some moderation in/some pickup in the growth in M2 and M3 over coming months.

Revised Alternative Language for the Operating Paragraph

(Option 3)

To promote the Committee's long-run objectives of price stability and sustainable economic growth, the Committee in the immediate future seeks conditions in reserve markets consistent with maintaining/increasing/decreasing the federal funds rate at/to an average of around ____ percent. In view of the evidence currently available, the Committee believes that prospective developments are [equally likely to warrant an increase or a decrease (NO TILT)]; [more likely to warrant an increase/a decrease than a decrease/an increase (TILT)] in the federal funds rate operating objective in coming months as well as during the intermeeting period. The contemplated reserve conditions are expected to be consistent with moderate/some moderation in/some pickup 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. B	Alt. C	Alt. A	Alt. B	Alt. C	All Alternatives	
Monthly Growth Rates								
Sep-98	14.8	14.8	14.8	14.5	14.5	14.5	6.0	
Oct-98	12.7	12.7	12.7	12.9	12.9	12.9	6.5	
Nov-98	10.3	10.3	10.3	14.6	14.6	14.6	6.6	
Dec-98	8.6	8.6	8.6	10.3	10.3	10.3	5.5	
Jan-99	8.3	7.9	7.5	9.7	9.5	9.3	5.5	
Feb-99	7.6	6.8	6.0	8.8	8.4	8.0	5.3	
Mar-99	6.8	6.0	5.2	7.9	7.5	7.1	4.6	
Quarterly Averages								
1998 Q1	8.0	8.0	8.0	11.0	11.0	11.0	6.2	
1998 Q2	7.4	7.4	7.4	10.2	10.2	10.2	6.1	
1998 Q3	6.6	6.6	6.6	7.1	7.1	7.1	6.1	
1998 Q4	11.8	11.8	11.8	13.4	13.4	13.4	6.3	
1999 Q1	8.3	7.9	7.5	10.1	9.9	9.6	5.5	
Growth Rate								
From	To							
Nov-98	Dec-98	8.6	8.6	8.6	10.3	10.3	10.3	5.5
Nov-98	Mar-99	7.9	7.4	6.9	9.3	9.0	8.8	5.3
1997 Q4	Nov-98	8.8	8.8	8.8	11.0	11.0	11.0	6.3
1997 Q4	Dec-98	8.8	8.8	8.8	11.0	11.0	11.0	6.3
1998 Q4	Mar-99	8.0	7.5	7.0	9.6	9.4	9.1	5.3
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	8.7	8.7	8.7	10.8	10.8	10.8	6.3
1998 Annual Ranges:		1.0 to 5.0			2.0 to 6.0			3.0 to 7.0
1999 Provisional Ranges:		1.0 to 5.0			2.0 to 6.0			3.0 to 7.0

Chart 3
Actual and Projected M2

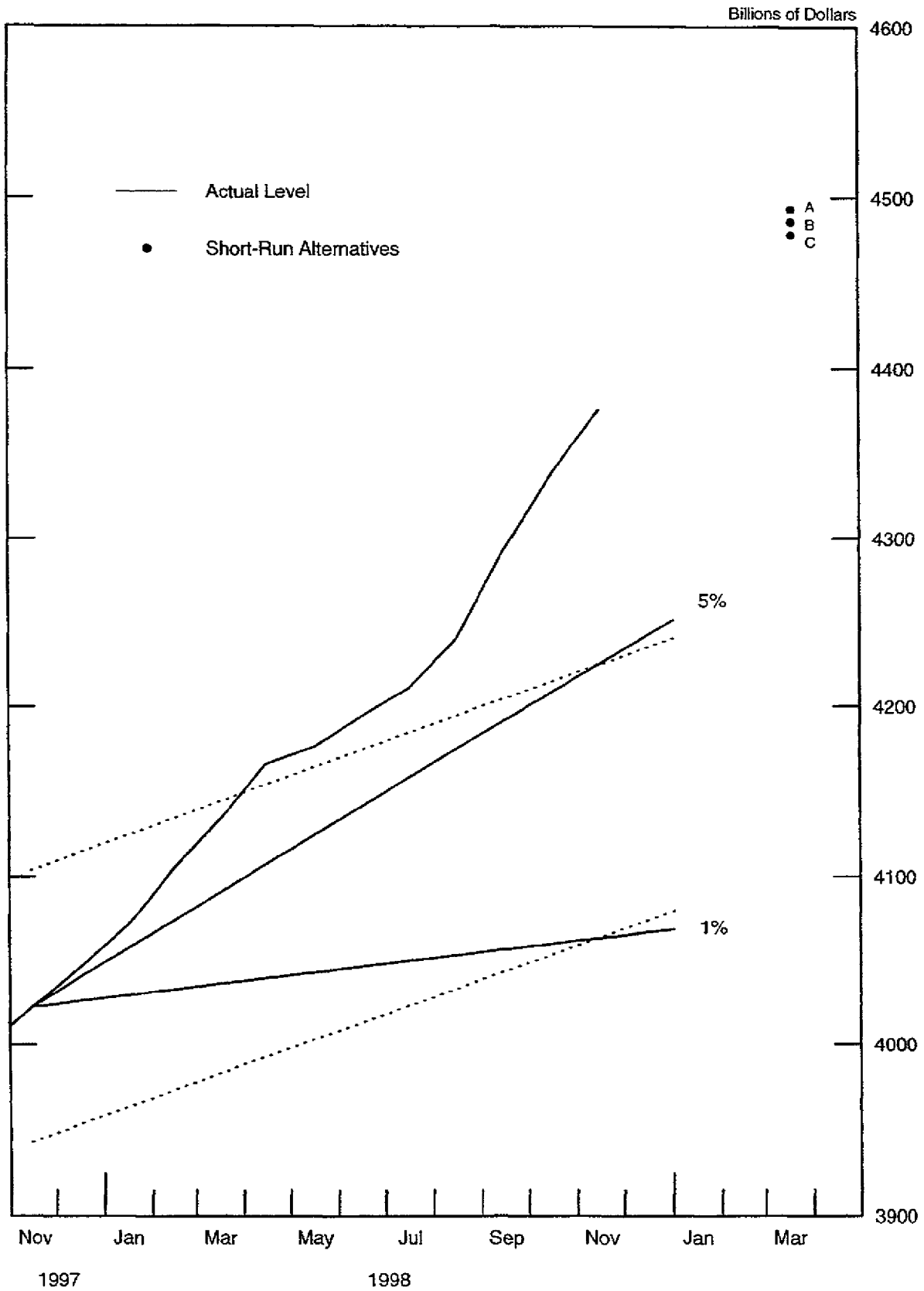


Chart 4

Actual and Projected M3

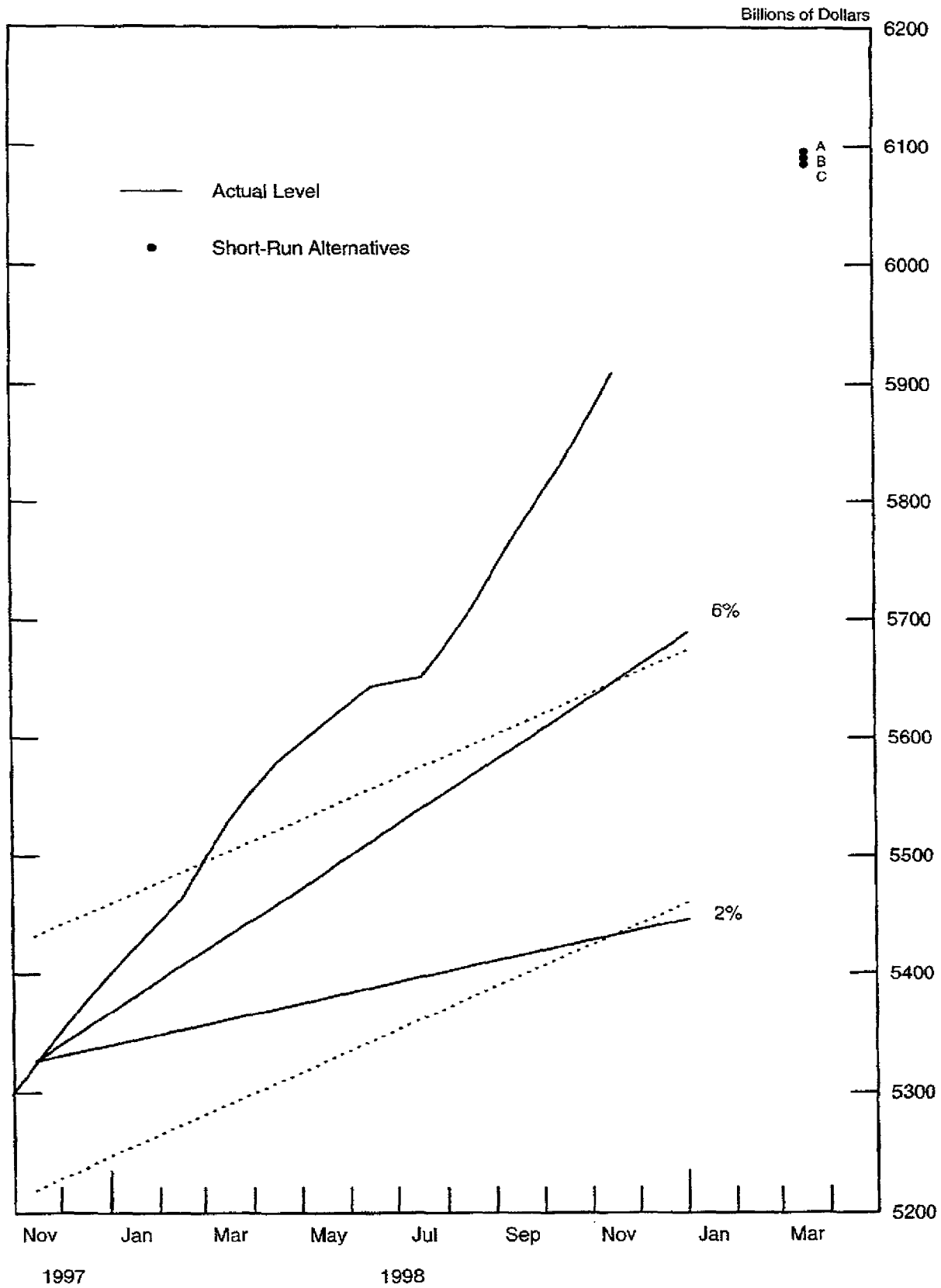
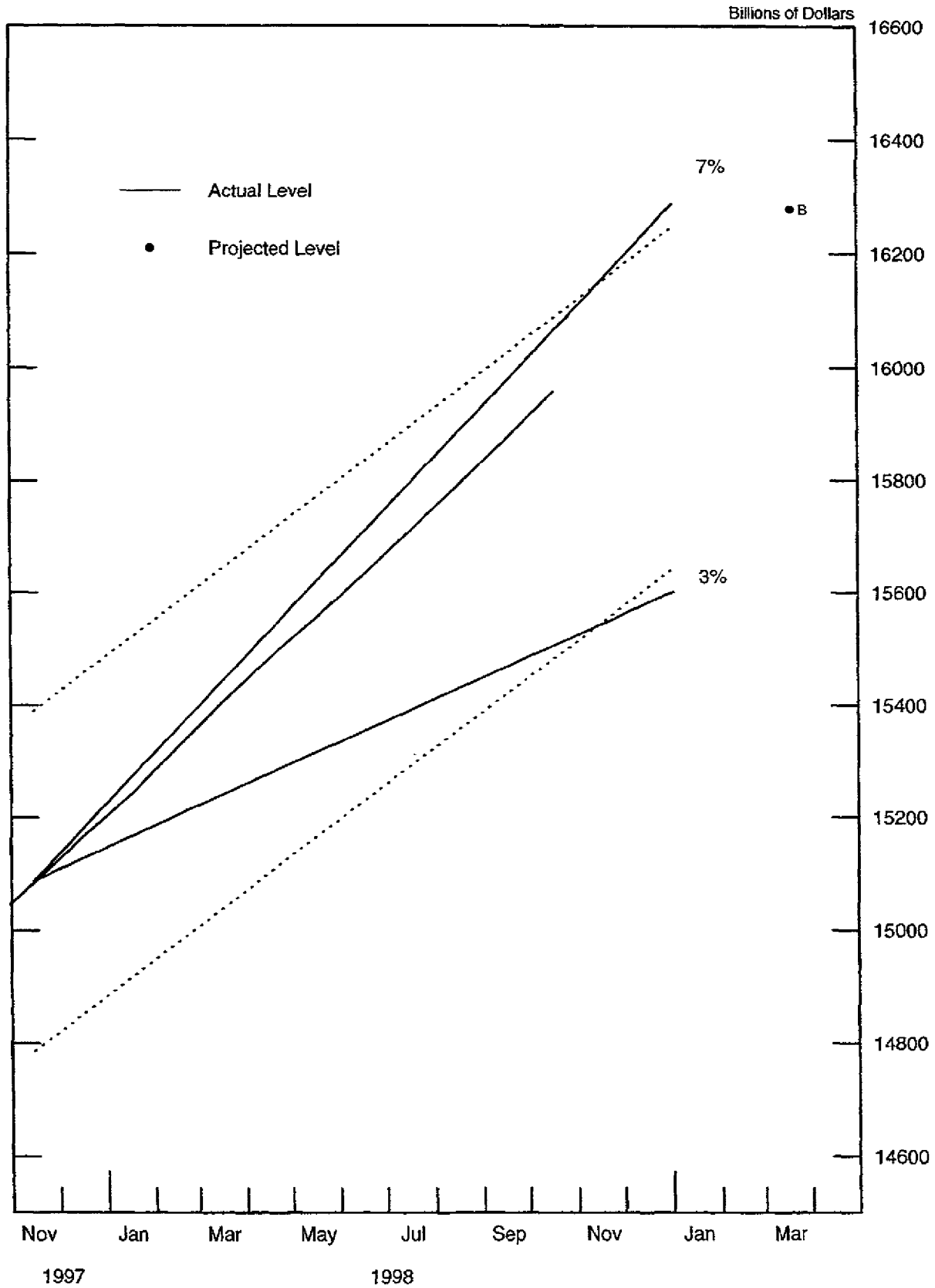


Chart 5

Actual and Projected Debt



SELECTED INTEREST RATES
(percent)

December 21, 1998

	Short-term						Long-term									
	Federal funds	Treasury bills secondary market			CDs secondary market	Comm. paper	U.S. government constant maturity yields				Indexed yields		Moody's Baa	Municipal Bond Buyer	Conventional home mortgages primary market	
		3-month	6-month	1-year	3-month	1-month	3-year	5-year	10-year	30-year	5-year	10-year			Fixed-rate	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	8.36	6.14	8.18	5.91
-- Low	5.05	4.86	4.99	5.07	5.34	5.37	5.69	5.72	5.74	5.90	3.52	3.27	7.26	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	7.42	5.52	7.22	5.71
-- Low	4.69	3.84	3.94	3.84	5.13	4.84	4.15	4.17	4.41	4.88	3.44	3.55	7.01	5.09	6.49	5.35
Monthly																
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	7.32	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	7.19	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	7.25	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	7.32	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	7.33	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	7.30	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	6.70	3.88	3.72	7.13	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	7.15	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	7.14	5.32	6.92	5.59
Sep 98	5.51	4.61	4.63	4.50	5.41	5.44	4.62	4.62	4.81	5.20	3.64	3.67	7.09	5.22	6.72	5.47
Oct 98	5.07	3.96	4.05	3.95	5.21	5.14	4.18	4.18	4.53	5.01	3.53	3.63	7.18	5.19	6.71	5.38
Nov 98	4.83	4.41	4.42	4.33	5.24	5.00	4.57	4.54	4.83	5.25	3.75	3.77	7.34	5.27	6.87	5.53
Weekly																
Oct 16 98	5.14	3.84	3.99	3.96	5.26	5.22	4.22	4.22	4.58	5.02	3.57	3.70	7.25	5.21	6.90	5.35
Oct 23 98	4.81	3.85	3.94	3.84	5.14	5.03	4.15	4.17	4.59	5.08	3.54	3.62	7.28	5.25	6.73	5.37
Oct 30 98	5.06	4.12	4.11	3.93	5.16	5.05	4.20	4.22	4.63	5.12	3.60	3.64	7.26	5.24	6.83	5.42
Nov 6 98	5.09	4.43	4.43	4.27	5.27	5.11	4.50	4.45	4.83	5.29	3.73	3.76	7.42	5.29	6.89	5.48
Nov 13 98	4.86	4.42	4.43	4.34	5.31	5.11	4.57	4.51	4.82	5.27	3.83	3.81	7.34	5.28	6.93	5.56
Nov 20 98	4.70	4.35	4.38	4.33	5.21	4.95	4.60	4.59	4.85	5.26	3.74	3.78	7.33	5.27	6.86	5.52
Nov 27 98	4.69	4.47	4.45	4.38	5.18	4.84	4.64	4.62	4.83	5.21	3.71	3.74	7.28	5.25	6.78	5.54
Dec 4 98	4.79	4.38	4.36	4.26	5.20	5.09	4.42	4.39	4.64	5.05	3.67	3.75	7.19	5.21	6.71	5.52
Dec 11 98	4.76	4.36	4.38	4.31	5.13	5.16	4.43	4.39	4.60	5.00	3.76	3.82	7.19	5.18	6.69	5.53
Dec 18 98	4.91	4.37	4.38	4.27	5.14	5.25	4.41	4.36	4.59	5.01	3.74	3.79	--	5.21	6.69	5.55
Daily																
Dec 2 98	4.58	4.37	4.33	4.22	5.19	5.20	4.34	4.31	4.59	5.03	3.66	3.74	7.16	--	--	--
Dec 3 98	4.66	4.34	4.32	4.22	5.16	5.20	4.33	4.31	4.58	5.02	3.65	3.74	7.18	--	--	--
Dec 4 98	4.67	4.37	4.35	4.29	5.14	5.18	4.43	4.38	4.62	5.05	3.72	3.79	7.22	--	--	--
Dec 7 98	4.71	4.40	4.41	4.38	5.14	5.15	4.51	4.47	4.69	5.05	3.75	3.81	7.22	--	--	--
Dec 8 98	4.66	4.32	4.38	4.35	5.14	5.13	4.43	4.40	4.60	5.00	3.75	3.85	7.19	--	--	--
Dec 9 98	4.70	4.32	4.36	4.26	5.12	5.15	4.40	4.37	4.56	4.97	3.76	3.80	7.16	--	--	--
Dec 10 98	4.97	4.37	4.37	4.25	5.11	5.15	4.37	4.33	4.53	4.95	3.76	3.80	7.16	--	--	--
Dec 11 98	4.91	4.39	4.40	4.29	5.12	5.23	4.42	4.39	4.61	5.02	3.77	3.82	7.21	--	--	--
Dec 14 98	5.09	4.40	4.40	4.27	5.14	5.22	4.39	4.35	4.58	4.99	3.75	3.81	7.19	--	--	--
Dec 15 98	5.10	4.38	4.40	4.29	5.13	5.24	4.44	4.39	4.62	5.03	3.74	3.80	7.22	--	--	--
Dec 16 98	4.91	4.35	4.35	4.24	5.14	5.29	4.38	4.34	4.58	5.01	3.74	3.80	7.20	--	--	--
Dec 17 98	4.80	4.35	4.37	4.25	5.14	5.24	4.39	4.34	4.58	5.01	3.73	3.78	7.20	--	--	--
Dec 18 98	4.68 ^P	4.38	4.39	4.28	5.14	--	4.43	4.38	4.58	5.01	3.73	3.78	--	--	--	--

NOTE: Weekly data for columns 1 through 13 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. Column 14 is the Bond Buyer revenue index, which is a 1-day quote for Thursday. 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 Debt Aggregates

Seasonally adjusted

December 21, 1998

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	5.7	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-Q4	0.9	7.0	9.3	19.5	10.0	0.4	7.9	6.0
1998-Q1	3.0	8.0	9.7	20.3	11.0	0.0	8.3	6.2
Q2	0.2	7.4	9.9	18.8	10.2	-1.4	8.6	6.1
Q3	-2.4	6.6	9.8	8.4	7.1	-1.5	8.5	6.1
Monthly								
1997-Nov.	8.2	7.3	6.9	25.5	11.7	-0.4	8.5	6.2
Dec.	7.6	6.8	6.5	25.6	11.4	1.5	7.9	6.3
1998-Jan.	-2.6	7.5	11.2	19.0	10.4	-0.5	7.9	5.8
Feb.	3.1	9.7	12.0	6.7	9.0	-1.2	8.9	6.4
Mar.	5.1	8.4	9.6	32.8	14.4	1.4	8.2	6.5
Apr.	-0.4	9.6	13.1	14.3	10.7	-1.8	8.6	6.0
May	-3.3	2.8	5.0	20.4	7.3	-4.0	8.8	5.7
June	-3.6	5.2	8.2	10.9	6.6	-1.0	7.9	5.7
July	-3.0	4.8	7.5	-8.0	1.5	-0.9	8.5	6.3
Aug.	-3.1	8.5	12.5	22.0	12.0	-0.8	8.5	6.2
Sep.	3.5	14.8	18.6	13.8	14.5	-3.3	8.9	6.0
Oct.	7.2	12.7	14.6	13.3	12.9	-3.1	9.4	6.5
Nov. p	9.9	10.3	10.5	27.0	14.6			
Levels (\$billions):								
Monthly								
1998-July	1071.8	4210.8	3139.0	1440.1	5650.9	3772.9	11938.6	15711.5
Aug.	1069.0	4240.7	3171.7	1466.5	5707.2	3770.3	12022.8	15793.1
Sep.	1072.1	4292.9	3220.8	1483.4	5776.3	3760.0	12111.7	15871.7
Oct.	1078.5	4338.5	3260.0	1499.8	5838.3	3750.3	12207.0	15957.3
Nov. p	1087.4	4375.9	3288.5	1533.5	5909.4			
Weekly								
1998-Nov. 2	1091.0	4360.3	3269.3	1513.0	5873.3			
9	1081.7	4372.7	3291.0	1515.5	5888.2			
16	1083.1	4379.7	3296.6	1530.7	5910.4			
23	1086.4	4378.9	3292.5	1536.1	5915.0			
30p	1096.1	4375.3	3279.2	1557.8	5933.1			
Dec. 7p	1084.3	4394.3	3310.0	1556.2	5950.5			

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

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

December 18, 1998

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	5,097	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	2,897	---	---	598	2,744	671	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
--Q3	---	---	---	2,024	4,524	654	1,769	1,311	7,659	98	7,536	-6,732
1997 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
September	---	---	---	1,038	3,989	351	---	---	5,377	48	5,329	1,257
October	---	---	---	741	725	---	1,674	602	2,539	15	2,524	-4,825
November	---	---	---	662	2,397	862	698	---	4,619	20	4,599	8,499
Weekly												
September 9	---	---	---	---	---	---	---	---	---	---	---	8,405
16	---	---	---	---	---	---	---	---	---	48	-48	-5,832
23	---	---	---	1,038	3,111	---	---	---	4,148	---	4,148	-377
30	---	---	---	---	878	351	---	---	1,229	---	1,229	2,542
October 7	---	---	---	---	---	---	1,058	---	1,058	---	1,058	-6,504
14	---	---	---	---	---	---	---	602	-602	15	-617	-534
21	---	---	---	---	---	---	---	---	---	---	---	3,930
28	---	---	---	741	---	---	---	---	741	---	741	-4,892
November 4	---	---	---	---	725	---	616	---	1,341	15	1,326	645
11	---	---	---	---	1,178	---	---	---	1,178	---	1,178	-641
18	---	---	---	662	691	---	---	---	1,353	---	1,353	1,946
25	---	---	---	---	528	862	698	---	2,088	5	2,083	1,411
December 2	---	---	---	---	---	---	---	---	---	---	---	-918
9	---	---	---	---	---	---	---	---	---	---	---	956
16	---	---	---	---	---	---	---	---	---	30	-30	4,758
Memor: LEVEL (bil. \$) ⁶												
December 16			215.7	49.5	107.3	44.8	55.7		257.3		473.4	-18.0

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
0.1	0.1	0.2	0.0	0.4

December 16