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STRICTLY CONFIDENTIAL (FR) CLASS I FOMC

MARCH 26, 1999

MONETARY POLICY ALTERNATIVES

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

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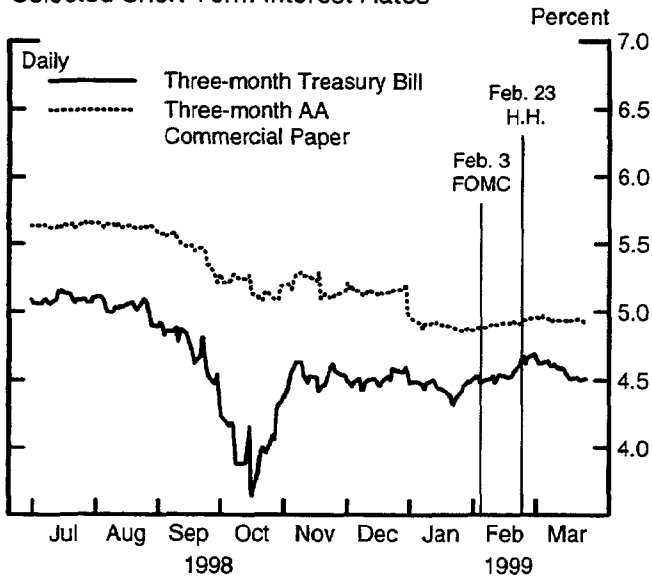
Recent Developments

(1) The Committee's decision at the February meeting to leave the intended federal funds rate unchanged was expected by market participants and elicited little response.¹ However, interest rates on Treasury securities moved up significantly in the first half of the intermeeting period, reflecting incoming data that suggested continued strong momentum in aggregate spending and a perception, arising from market interpretations of the Chairman's Humphrey Hawkins testimony, that the FOMC saw its next action as more likely to be a tightening than an easing (Chart 1). Favorable inflation news later in the period, along with statements by policy-makers conveying a sense that risks were more balanced, led to a reversal of some of the rise in market yields. On net since the February meeting, interest rates on Treasury bills have changed little, but intermediate- and long-term Treasury yields have backed up 30 to 50 basis points. A substantial portion of the increase in nominal yields has probably reflected higher real interest rates, at least judging from the upward movement in rates on inflation-indexed debt and the large increase of intermediate-term forward rates relative to those further out the forward curve. This backup in real Treasury yields likely owed in part to an unwinding of the earlier flight to safety and liquidity, but, more fundamentally, market participants may now believe that a higher path of real short-term rates over the next few years will be needed for the Federal Reserve to keep

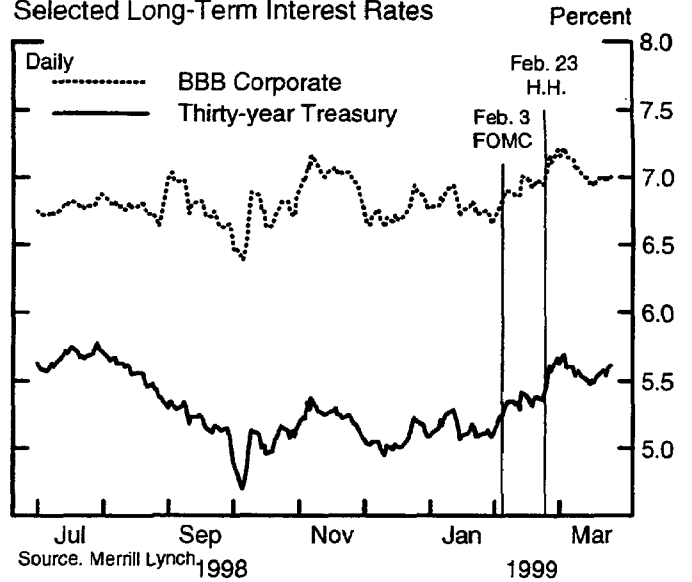
1. Federal funds traded at an average of 4.79 percent over the intermeeting period, close to the intended rate of 4¾ percent. Volatility of the funds rate was significantly lower than in recent previous intermeeting periods; with the abatement of risk and liquidity concerns in financial markets, banks have not been bidding so aggressively for precautionary balances early in the day.

Chart 1

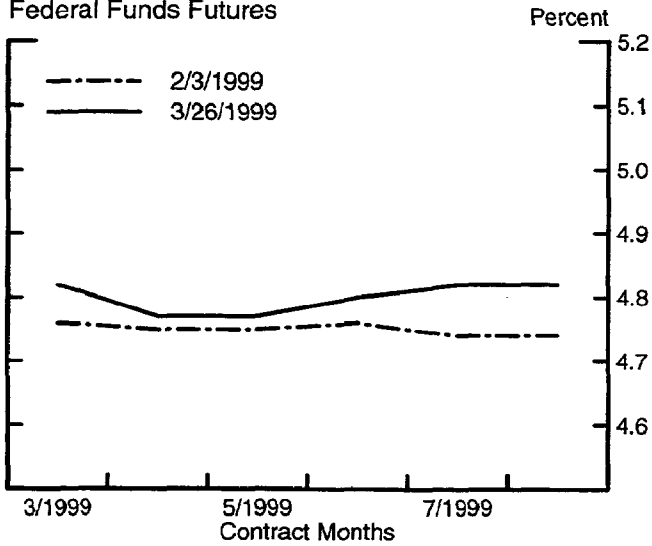
Selected Short-Term Interest Rates



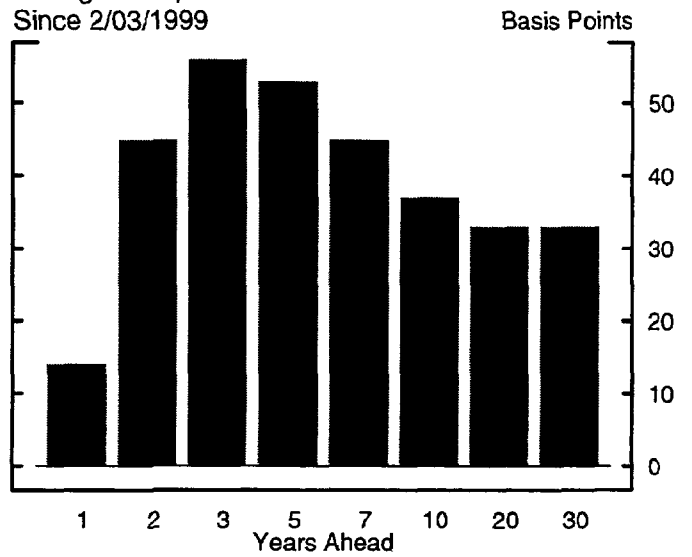
Selected Long-Term Interest Rates



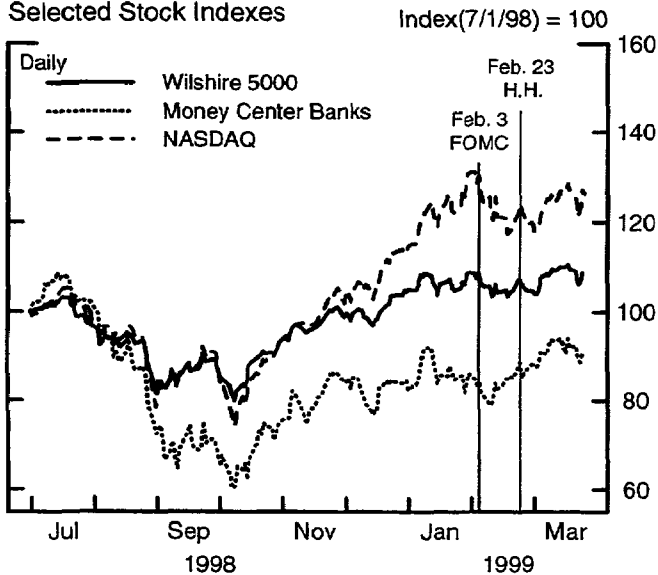
Federal Funds Futures



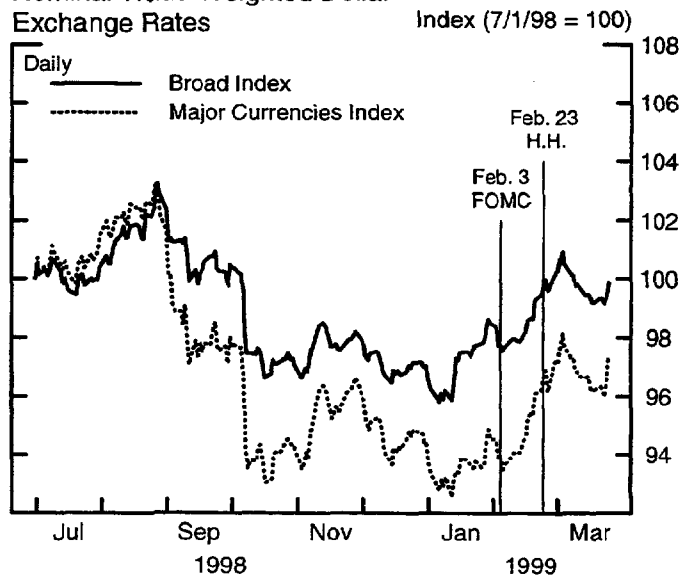
Change In Implied One-Year Forward Rates Since 2/03/1999



Selected Stock Indexes



Nominal Trade-Weighted Dollar Exchange Rates

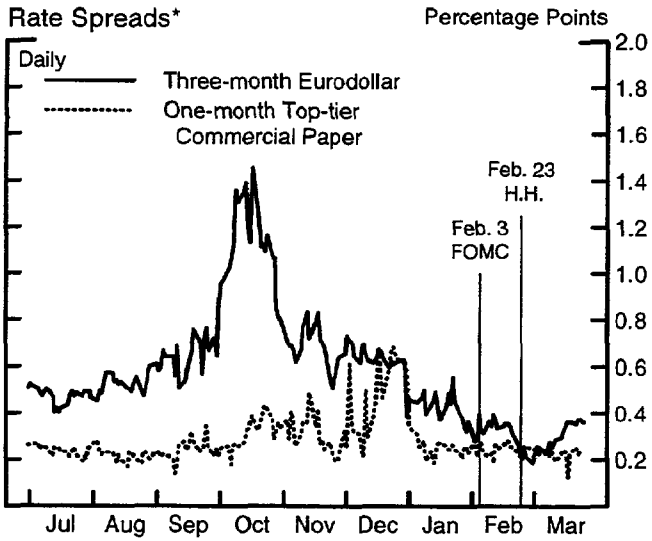


inflation damped. Nonetheless, some of the increase in nominal yields apparently was also accounted for by a rise in inflation expectations, perhaps partly in reaction to the recent increase in oil prices. More favorable perceptions of and appetites for risk in private securities markets have narrowed spreads on corporate bonds vis-à-vis Treasuries, but they remain well above the unusually thin levels prevailing in the first half of 1998 (Chart 2). Indexes of equity prices have been mixed: The Dow Jones and S&P 500 posted net gains, but lower earnings expectations, especially for technology companies, led to a drop in the NASDAQ and the Russell 2000 index of small-cap firms. Bank share prices have moved up sharply, notably for money center banks, reversing earlier declines when a significant fallout from Brazil's difficulties was feared.

(2) The rise in interest rates in the United States has contributed to a 3¾ percent appreciation of the dollar relative to an average of other major currencies since the February FOMC meeting. The dollar has increased 7¼ percent on balance against the yen, as the Bank of Japan eased monetary policy, announcing that it would guide the overnight call rate "as low as possible." In recent weeks, the call rate has remained at or below 5 basis points, the ten-year government yield has fallen 45 basis points, stock prices have risen substantially, and the so-called "Japan premium" in funding costs for Japanese banks has declined markedly. The dollar has appreciated 5¼ percent on balance over the period versus the euro, which was weighed down by continued signs of weakness in German economic activity and, late in the period, by the hostilities in the Balkans. The term structure of euro interest rate futures suggests that market participants continue to expect a modest monetary policy easing by the ECB Council by the fall.

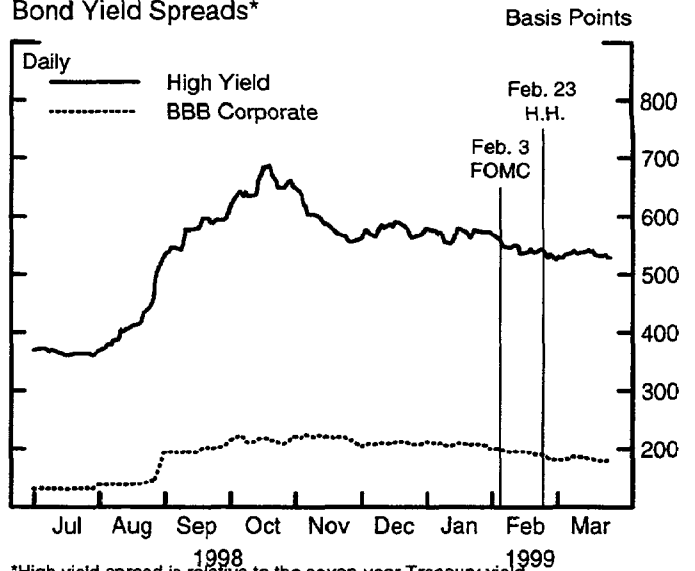
Chart 2

Short-Term Interest Rate Spreads*



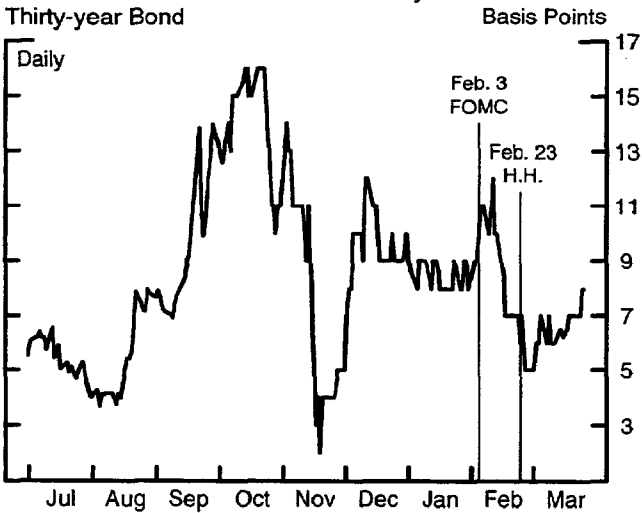
*Three-month eurodollar spread is relative to the three-month Treasury bill rate. One-month commercial paper spread is relative to the one-month repo rate.

Bond Yield Spreads*



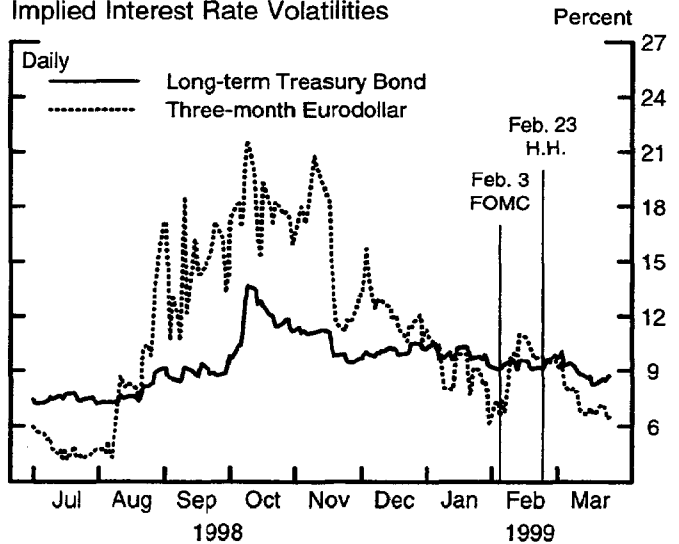
*High yield spread is relative to the seven-year Treasury yield. BBB corporate spread is relative to the ten-year Treasury yield.

On-the-Run Premiums for Treasury Securities*

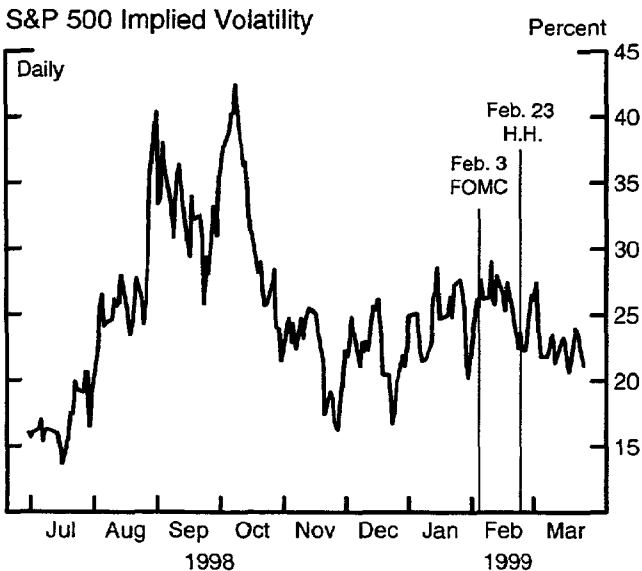


*Spreads of next-to-most-recently over most-recently issued security. Note. The new thirty-year Treasury security was issued on 2/15.

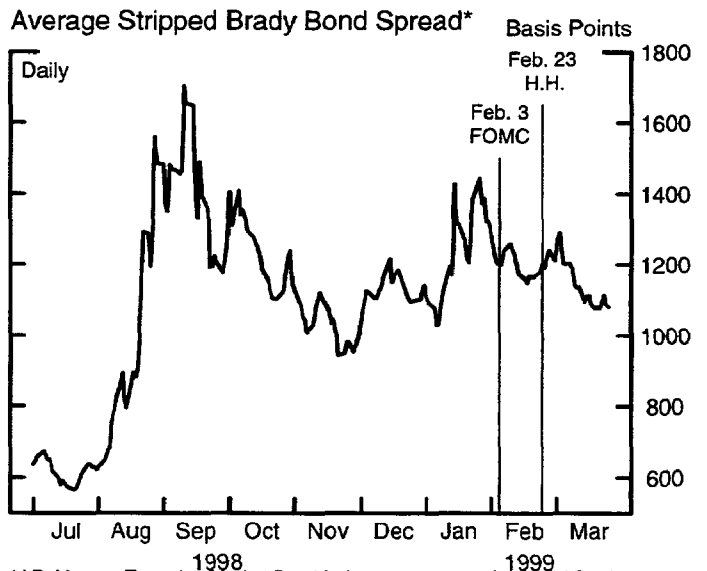
Implied Interest Rate Volatilities



S&P 500 Implied Volatility



Average Stripped Brady Bond Spread*



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

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

(3) Financial market conditions have continued to improve in most emerging market economies, as investor confidence evidently has been bolstered by the limited contagion from Brazilian developments. In Brazil itself, overall financial conditions have stabilized somewhat and the *real* has tended to firm in recent weeks, owing to a number of factors: The Brazilian Central Bank demonstrated its commitment to containing inflation by raising the overnight policy interest rate appreciably early in the period; the government struck an agreement with the IMF, paving the way for the release of the second tranche of multilateral financial assistance; international banks made public commitments to maintain or increase their exposure to Brazil; and its Congress completed passage of the major elements of the fiscal austerity program. The Mexican peso has appreciated 5 percent since the February FOMC meeting, bolstered in part by the snapback in oil prices. Despite financial collapse in Ecuador, yield spreads over Treasuries of Latin American Brady bonds have continued to decline, and prices in most major equity markets in the region are up. Monetary authorities in a number of emerging Asian economies allowed domestic interest rates to fall somewhat over the intermeeting period. The Korean won, the Taiwan dollar, the Indonesian rupiah, and the Thai baht have depreciated between 2 and 5 percent against the dollar over the intermeeting period. In local currency terms, share prices have risen between 5 and 22 percent in the aforementioned countries, with the exception of Indonesia, where equity prices have registered a 3 percent decline.

(4) The broad monetary aggregates have decelerated markedly in recent months and by more than expected at the time of the Committee's last meeting. Data through the first half of

this month suggest that M2 growth has slowed to a 3 percent rate in March, while M3 apparently has posted a slight decline. In part, the deceleration of M2 owed to the ebbing effects of the policy easings of the fall, which had narrowed the opportunity cost of holding M2 assets, thereby inducing portfolio shifts into M2. Indeed, net noncompetitive tenders for Treasury securities, an indicator of retail demand for market securities, have been positive in March for the first time in several months. In addition, a reduced level of mortgage refinancing activity has depressed liquid deposits. However, slower M2 and M3 growth also likely reflected further recovery in financial markets. Until the stock market turbulence of this week, households had resumed substantial purchases of stock mutual funds and halted net acquisitions of money market mutual funds. With corporations paying down bank loans out of the proceeds of security issues, banks have had less need for the managed liabilities in M3. The velocities of M2 and M3 likely have dropped again this quarter, but perhaps at only one-half the rates of more than 4 and 6 percent, respectively, of the fourth quarter of last year.

(5) Private debt growth has edged lower, but has remained quite rapid. A widening gap between capital expenditures and internal cash flows has boosted demands for funding by corporations. With the improved receptivity of securities markets, most of this financing recently has occurred through issuance of bonds and commercial paper. Only a moderate amount of the new issuance has been used to finance merger activity, as most of the recent deals have involved the exchange of equity or acquisitions by foreign firms that have not required U.S. funding. Lower average ratings on corporate debt, an uptick in the default rate on junk bonds, and a slight increase in delinquencies and charge-offs on business loans suggest a little erosion of credit quality in the business sector. With sustained strength in home purchases and durables spending,

households have continued to pile up new debt, though probably at a bit slower pace than in the fourth quarter of last year. Measures of the quality of household loans have not evidenced much change of late: Delinquencies on consumer loans, already elevated, ticked up in the fourth quarter, while delinquencies on home mortgages have edged down to very low levels by historical standards. Larger surpluses in the federal budget in recent months have held down the growth of total nonfinancial debt to a 5½ percent rate in January and February.

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

	Jan.	Feb.	Mar.	1998:Q4 to Mar. ²
<u>Money and Credit Aggregates</u>				
M1	-2.9	1.5	8.6	3.4
Adjusted for sweeps	-0.4	4.9	8.8	5.3
M2	6.5	5.7	3.1	6.4
M3	3.7	10.1	-0.5	6.5
Domestic nonfinancial debt	5.7	5.2	n.a.	5.9
Federal	-2.1	-7.3	n.a.	-3.3
Nonfederal	8.0	8.9	n.a.	8.7
Bank credit	-5.6	-4.1	-5.6	-2.2
Adjusted ¹	-5.3	-2.7	0.9	0.3
<u>Reserve Measures</u>				
Nonborrowed reserves	-2.9	-11.7	-12.6	-4.8
Total reserves	-0.5	-14.1	-14.4	-5.3
Adjusted for sweeps	3.0	-1.5	-4.2	1.7
Monetary base	8.4	9.5	6.6	8.4
Adjusted for sweeps	8.4	9.9	6.8	8.6
Memo: (millions of dollars)				
Adjustment plus seasonal borrowing	206	116	47	--
Excess reserves	1535	1224	1246	--

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.

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

2. For nonfinancial debt and its components, 1998:Q4 to February.

Policy Alternatives

(6) The staff has read incoming data since the February meeting as indicating that aggregate demand has been more vigorous and inflation better behaved than previously expected. However, under the maintained assumption of an unchanged federal funds rate over the balance of this year and the next, the staff still foresees economic growth slowing and inflation picking up. Among the forces working to slow spending are financial conditions, which are not expected to provide the impetus that they did last year given that equity prices and long-term interest rates are anticipated to hold close to current levels. The staff forecasts that real GDP growth will begin to cool in the second half of 1999, to average 3 percent over the year, up ½ percentage point from the forecast for the February meeting, and decline noticeably further in 2000, to about 2¼ percent, a bit weaker than in the last Greenbook. As a result, the unemployment rate edges lower this year, but retraces that decline next year. With the economy producing beyond its potential, core inflation (on a methodologically consistent basis) is projected to pick up ½ percentage point from 1998 to 2000, to 2½ percent, and is poised to rise faster thereafter. The overall CPI accelerates by even more over the two years as a consequence of the rebound in energy prices.²

(7) Despite the likelihood that overall inflation will rise, the Committee might choose the unchanged policy stance of **alternative B** at this meeting. A good part of that rise will owe to the recent increase in oil prices; most measures of wage and price inflation have ticked lower of

2. The central tendency of the Committee members' forecasts compiled for the last meeting was for real GDP growth to be a touch slower over 1999 and the unemployment rate to end the year a bit higher than in the current Greenbook. The Committee members' central tendency for total CPI inflation was about in line with the Greenbook.

late, which should help to contain inflation expectations; and the projected rebound in core inflation is gradual. These considerations suggest that deferring action in the near term would not unduly worsen underlying inflation trends. The Committee might see important benefits from that delay if it thought that only a modest policy adjustment was necessary and wanted to use the time to build a case for such action with the public, thereby fostering a more measured reaction in financial markets than would ensue with unanticipated action. Inaction would be particularly attractive to the Committee if it suspected that the price outlook in the Greenbook was more likely to be subject to further favorable surprises than to adverse ones, implying that firmer evidence of an impending acceleration in prices would be desirable before tightening policy. Indeed, the Committee may be of the opinion that the staff has built in too large an uptick to inflation, perhaps by placing too little emphasis on the disinflationary force of ample industrial capacity and the market discipline now exerted on the ability of firms to pass along price increases, or by giving too much credence to the power of oil producers to enforce their recent curbs on supply.

(8) Continuing the current stance of policy, as envisioned in alternative B, would match the expectations currently embodied in financial market prices. As a result, the immediate market reaction to no adjustment in the federal funds rate should be little movement in other interest rates or in the exchange value of the dollar. Over time, if output were to decelerate and underlying inflation to remain contained, as in the staff forecast, long-term interest rates should fluctuate around their current levels, although, as Congress and the administration address budget issues, markets might become more sensitive to developments regarding the burgeoning federal budget surplus. With the economic environment remaining benign and concerns about near-term

monetary policy tightening mostly quiescent, major equity price indexes are likely to be little changed on net, despite pressure on corporate profit margins.

(9) If the Committee were concerned that inflation was likely to be on an upward path, as in the staff forecast, it might favor the $\frac{1}{4}$ percentage point tightening in the intended federal funds rate of **alternative C**. With aggregate demand remaining strong, credit conditions improving further, and many emerging market economies showing signs of stabilizing, the Committee might believe that the current meeting is an appropriate time to roll back the policy easing of last November, initiating the policy action needed to contain inflation over time. Many on the Committee had viewed the last easing action as an insurance policy taken out as a precaution against further financial turmoil and a significant broadening of the crises in emerging markets. While this action may have helped to forestall these eventualities, in current circumstances they would be unlikely to surface if that action were reversed. The desirability of immediate tightening would be enhanced to the extent that the Committee read recent data on spending as indicating that the growth of aggregate demand would not slow as in the staff projection but rather would remain unsustainably strong absent a tightening of financial conditions. With the unemployment rate already low and perhaps headed lower, real interest rates would seem to be falling short of levels required to contain inflationary pressures. Moreover, while domestic price increases in the past few years have run at a much slower pace than might have been expected in light of labor market conditions, recently some of the forces that may have been responsible for this result--declines in oil prices and inflation expectations--show signs of reversing.

(10) While financial market participants apparently believe that the Committee's next move will be toward restraint, no measurable weight is placed on action at this meeting. As a result, the 25 basis point hike in the intended federal funds rate of alternative C could spark a substantial reaction in financial markets. Short-term interest rates would rise at least as much as the policy rate, the prices of long-term debt instruments and equities could come under considerable downward pressure, and the value of the dollar would probably rise sharply on foreign exchange markets. If the Committee viewed inflation risks to be substantial, such a market reaction might be desired as it would speed up the necessary adjustment of aggregate demand. But if a more modest realignment of market prices were sought, the Committee could attempt to shape market expectations through the wording of the announcement. In particular, stressing that some of last fall's easing was no longer needed might limit the tendency of market participants to extrapolate policy tightening into the future.

(11) If the Committee were chiefly concerned about the risk to inflation but saw the case for tightening as not completely convincing, it may want to consider a directive tilted toward restraint. In that regard, the disclosure policy reaffirmed in December reserved announcement of a change in the tilt to those occasions when Committee viewed the new directive as reflecting a major change in the Committee's thinking that was not recognized by the market. With respect to market expectations, the yield curve now embodies greater odds on a tightening than an easing, but does not build in any tightening action until next year. If the Committee perceived the selection of an asymmetric directive at this meeting only as an incremental step in the policy process and not so much at variance with market expectations as to seriously mislead the public, it might want to delay announcement of the directive tilt until the release of the minutes in May.

In contrast, if the Committee saw a significant possibility that it might well need to raise interest rates before too long, it might wish to alert markets to this fact. There is little precedent to gauge how markets would react to such an announcement, but it is likely that financial prices would embody much higher odds that the Committee would tighten policy within a few months. The resulting increases in market interest rates would impart restraint to the inflation process more promptly than policy tightening later absent such an announcement.

(12) Under any of these alternatives, the debt of the nonfinancial sectors will likely continue to expand at a little more than a 5 percent rate in coming months, with rapid growth in private indebtedness offset by the Treasury's paydown of debt resulting from ongoing federal budget surpluses. Firms' reliance on borrowing should remain heavy, spurred by further advances in capital spending and an erosion of internal funds. With purchases of consumer durable goods expected to be strong, total household debt should continue to expand at a healthy clip, although mortgage borrowing should cool some from its recent torrid pace. By September, total nonfinancial debt is projected to have grown at about a 5½ percent annual rate from its fourth-quarter 1998 base, placing it in the upper half of its 3-to-7 percent annual range.

(13) To an important extent, commercial banks provided a significant offset to the curtailment of credit from financial markets late last year by expanding their own balance sheets to fund firms unwilling or unable to tap markets, albeit at wider spreads. The reversal of those market strains this year has been mirrored in some shrinkage of bank balance sheets. But that process is anticipated to have about played itself out, implying that bank credit should resume expanding at a pace a bit above that of total debt. As a consequence, the growth of M3 is projected to return to around a 7½ percent rate over the next six months. Investors' varying

views of risk-taking have also left their imprint on M2. The slowing of M2 in recent weeks in part is seen by the staff as evidence that households have become more willing to hold instruments exposing them to capital risk that are outside of the monetary aggregates. After this once-off realignment of portfolios is over, M2 is expected to expand a little faster than nominal income. Growth of this aggregate is likely to be especially erratic around the coming tax date, but is expected to average around 5½ percent over the next six months. Under the unchanged stance of monetary policy assumed in the Greenbook, the staff projects that the levels of both M2 and M3 in September will be about 1 percentage point, at an annual rate, above the upper ends of the Committee's price-stability ranges.

Directive Language

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

OPERATIONAL PARAGRAPH

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 ____ ~~4-3/4~~ percent. In view of the evidence currently available, the Committee believes that prospective developments are equally likely to warrant an increase or a decrease [~~MORE LIKELY TO WARRANT AN INCREASE/A DECREASE THAN A DECREASE/AN INCREASE~~] in the federal funds rate operating objective during the intermeeting period.

Alternative Growth Rates for Key Money and Credit Aggregates

	M2		M3		Debt		
	Alt. B	Alt. C	Alt. B	Alt. C	All Alternatives		
Monthly Growth Rates							
Dec-98	10.1	10.1	12.0	12.0	6.5		
Jan-99	6.5	6.5	3.7	3.7	5.7		
Feb-99	5.7	5.7	10.1	10.1	5.2		
Mar-99	3.0	3.0	-0.5	-0.5	5.9		
Apr-99	8.7	8.4	8.5	8.3	4.8		
May-99	3.8	3.0	6.6	6.2	6.2		
Jun-99	5.5	4.7	6.8	6.4	5.4		
Jul-99	5.0	4.3	7.0	6.7	3.9		
Aug-99	5.0	4.5	7.5	7.3	5.3		
Sep-99	5.0	4.6	7.5	7.3	4.7		
Quarterly Averages							
1998 Q4	11.0	11.0	12.9	12.9	6.3		
1999 Q1	7.2	7.2	7.6	7.6	6.0		
1999 Q2	5.7	5.3	6.1	5.9	5.5		
1999 Q3	5.0	4.3	7.1	6.8	4.9		
Growth Rate							
From	To						
Feb-99	Sep-99		5.2	4.7	6.3	6.0	5.2
Mar-99	Sep-99		5.6	5.0	7.4	7.1	5.1
1998 Q4	Jun-99		6.3	6.0	6.9	6.8	5.8
1998 Q4	Sep-99		6.0	5.6	7.1	7.0	5.5
1997 Q4	1998 Q4		8.5	8.5	10.9	10.9	6.1
1998 Q4	1999 Q3		6.1	5.7	7.1	6.9	5.5
1999 Annual Ranges:			1.0 to 5.0		2.0 to 6.0		

Chart 3

Actual and Projected M2

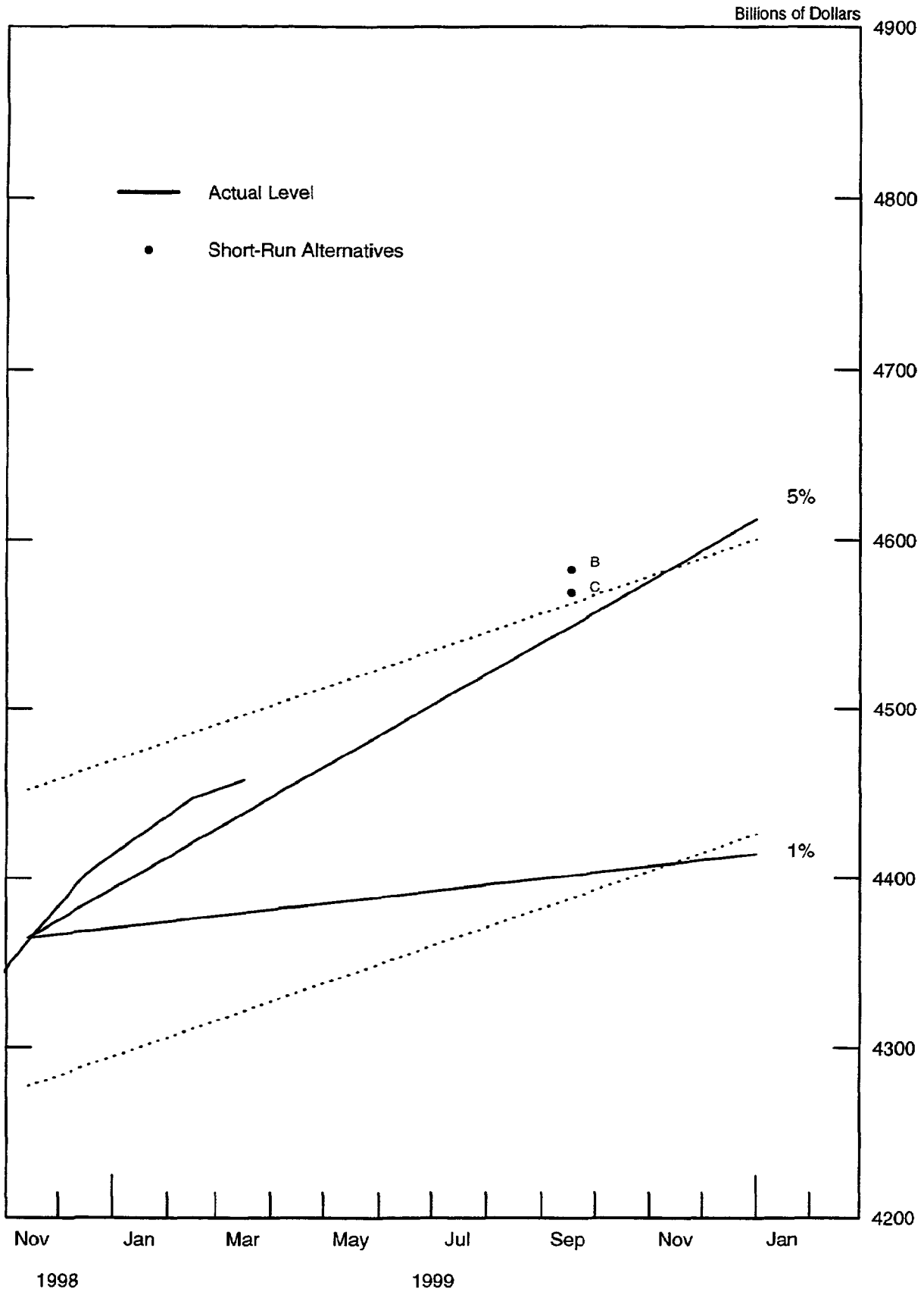


Chart 4

Actual and Projected M3

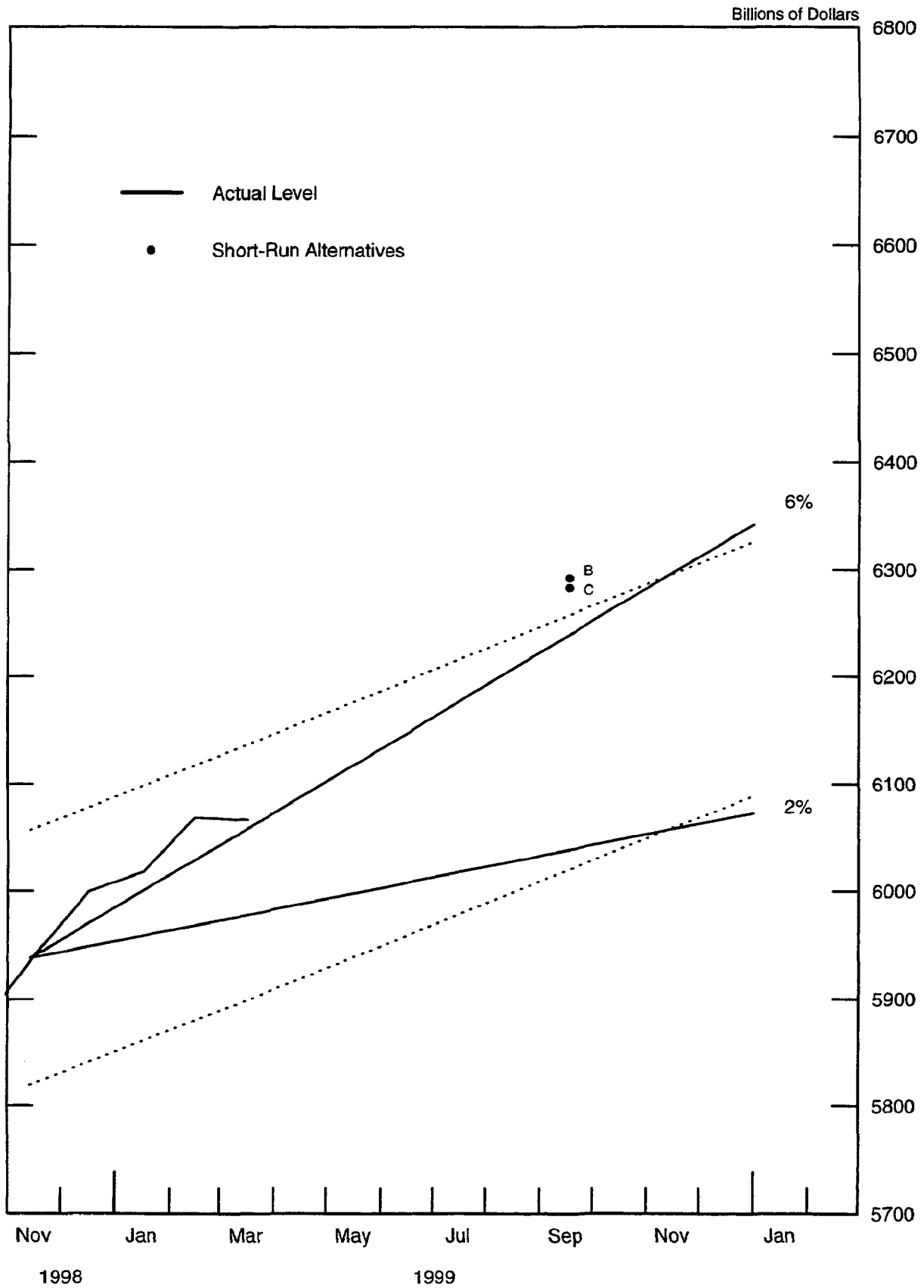
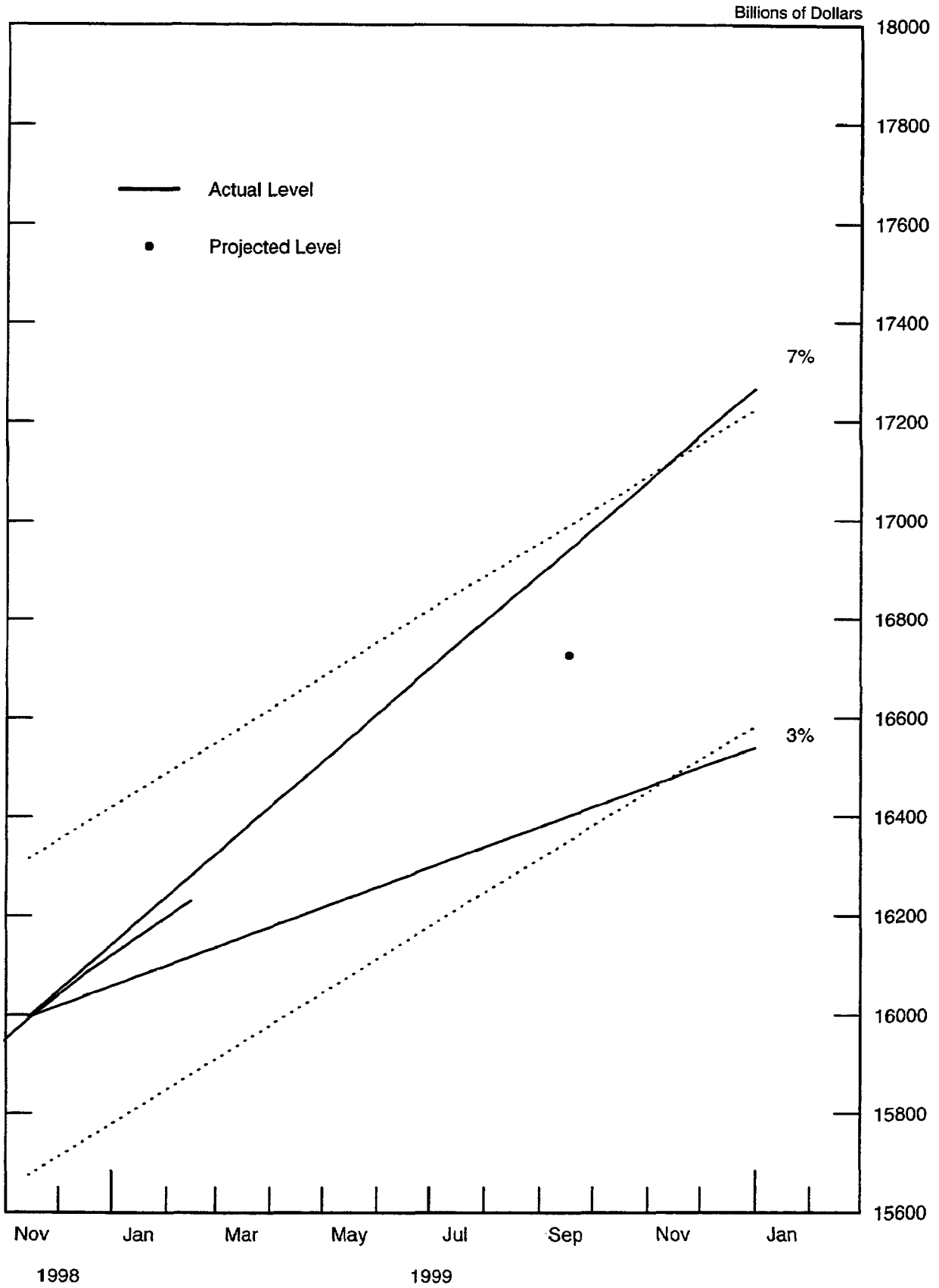


Chart 5

Actual and Projected Debt



SELECTED INTEREST RATES
(percent)

March 29, 1999

	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
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	4.56	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
99 -- High	4.84	4.53	4.56	4.63	5.09	5.24	5.25	5.29	5.38	5.65	3.88	3.90	7.61	5.34	7.11	5.88
-- Low	4.42	4.26	4.30	4.29	4.86	4.78	4.58	4.56	4.67	5.12	3.65	3.76	7.24	5.17	6.74	5.57
Monthly																
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	5.70	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
Dec 98	4.68	4.39	4.40	4.32	5.14	5.24	4.48	4.45	4.65	5.06	3.75	3.80	7.23	5.23	6.72	5.55
Jan 99	4.63	4.34	4.33	4.31	4.89	4.80	4.61	4.60	4.72	5.16	3.73	3.81	7.29	5.23	6.79	5.60
Feb 99	4.76	4.44	4.44	4.48	4.90	4.80	4.90	4.91	5.00	5.37	3.70	3.79	7.39	5.27	6.81	5.65
Weekly																
Jan 22 99	4.57	4.26	4.30	4.29	4.87	4.78	4.62	4.60	4.70	5.14	3.70	3.79	7.27	5.24	6.78	5.57
Jan 29 99	4.75	4.35	4.30	4.30	4.86	4.79	4.58	4.56	4.67	5.12	3.67	3.77	7.24	5.17	6.74	5.57
Feb 5 99	4.76	4.40	4.40	4.40	4.88	4.79	4.75	4.76	4.84	5.26	3.65	3.76	7.34	5.34	6.75	5.63
Feb 12 99	4.74	4.40	4.41	4.45	4.90	4.80	4.83	4.84	4.95	5.35	3.69	3.80	7.37	5.22	6.77	5.58
Feb 19 99	4.76	4.42	4.45	4.49	4.91	4.81	4.95	4.96	5.03	5.36	3.72	3.79	7.38	5.23	6.82	5.67
Feb 26 99	4.79	4.53	4.51	4.58	4.92	4.81	5.09	5.11	5.18	5.49	3.75	3.82	7.47	5.29	6.89	5.71
Mar 5 99	4.84	4.52	4.56	4.63	4.93	4.83	5.25	5.29	5.38	5.65	3.82	3.88	7.61	5.34	7.06	5.74
Mar 12 99	4.79	4.48	4.51	4.53	4.90	4.82	5.10	5.13	5.21	5.56	3.86	3.90	7.52	5.31	7.11	5.88
Mar 19 99	4.78	4.42	4.48	4.50	4.89	4.81	5.03	5.05	5.14	5.50	3.88	3.90	7.47	5.29	7.01	5.75
Mar 26 99	4.84	4.39	4.38	4.50	4.90	4.82	5.07	5.11	5.20	5.58	3.83	3.89	--	5.29	6.98	5.69
Daily																
Mar 10 99	4.82	4.47	4.50	4.51	4.90	4.83	5.09	5.13	5.20	5.56	3.87	3.91	7.51	--	--	--
Mar 11 99	4.80	4.49	4.51	4.53	4.90	4.82	5.11	5.13	5.21	5.57	3.86	3.91	7.52	--	--	--
Mar 12 99	4.74	4.47	4.50	4.52	4.89	4.81	5.06	5.08	5.16	5.54	3.86	3.91	7.49	--	--	--
Mar 15 99	5.01	4.46	4.51	4.52	4.89	4.82	5.03	5.07	5.15	5.51	3.86	3.90	7.47	--	--	--
Mar 16 99	4.77	4.43	4.51	4.50	4.89	4.82	5.01	5.03	5.11	5.48	3.85	3.89	7.45	--	--	--
Mar 17 99	4.73	4.41	4.49	4.50	4.89	4.81	5.05	5.05	5.14	5.51	3.89	3.91	7.48	--	--	--
Mar 18 99	4.72	4.39	4.45	4.48	4.89	4.81	5.00	5.02	5.11	5.49	3.89	3.90	7.47	--	--	--
Mar 19 99	4.75	4.39	4.46	4.49	4.90	4.81	5.05	5.07	5.17	5.53	3.89	3.91	7.50	--	--	--
Mar 22 99	4.81	4.40	4.45	4.52	4.91	4.81	5.10	5.13	5.21	5.57	3.85	3.89	7.53	--	--	--
Mar 23 99	4.79	4.38	4.36	4.49	4.91	4.82	5.09	5.11	5.20	5.57	3.86	3.90	7.53	--	--	--
Mar 24 99	4.93	4.38	4.37	4.48	4.90	4.81	5.04	5.07	5.17	5.54	3.81	3.88	7.50	--	--	--
Mar 25 99	4.97	4.39	4.38	4.52	4.89	4.82	5.07	5.12	5.21	5.59	3.82	3.89	7.53	--	--	--
Mar 26 99	4.85 ^p	4.39	4.36	4.49	4.89	--	5.05	5.10	5.21	5.61	3.81	3.90	--	--	--	--

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

March 29, 1999

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)								
1996	-4.5	4.6	8.6	15.3	6.8	3.8	5.8	5.3
1997	-1.2	5.8	8.5	19.3	8.8	0.7	6.4	4.9
1998	1.8	8.5	10.9	18.2	10.9	-1.2	8.6	6.1
Quarterly(average)								
1998-Q2	1.0	7.5	9.8	17.8	10.1	-1.4	8.5	6.0
Q3	-2.0	6.9	9.9	13.4	8.6	-1.5	8.3	5.9
Q4	5.0	11.0	13.0	18.4	12.9	-2.0	8.9	6.3
1999-Q1 pe	2½	7¼	8¼	8¼	7¼			
Monthly								
1998-Mar.	5.1	7.4	8.2	29.0	12.8	1.4	8.3	6.5
Apr.	1.7	8.4	10.9	13.8	9.8	-1.8	8.7	6.1
May	-4.3	5.7	9.2	18.9	9.0	-4.0	8.6	5.5
June	-0.4	6.8	9.4	15.6	9.1	-1.0	7.8	5.7
July	-2.7	5.0	7.7	2.0	4.3	-0.9	8.6	6.3
Aug.	-3.6	7.3	11.0	24.4	11.7	-0.8	8.0	5.9
Sep.	2.8	12.4	15.6	15.1	13.1	-3.3	8.1	5.4
Oct.	6.4	11.6	13.3	16.3	12.8	-3.1	9.3	6.4
Nov.	9.6	10.6	11.0	21.2	13.4	-0.5	9.5	7.1
Dec.	4.7	10.1	11.8	17.3	12.0	-0.4	8.6	6.5
1999-Jan.	-2.9	6.5	9.6	-3.8	3.7	-2.1	8.0	5.7
Feb.	1.5	5.7	7.1	22.3	10.1			
Mar. pe	9	3	1	-10	0			
Levels (\$billions):								
Monthly								
1998-Oct.	1080.4	4326.9	3246.5	1547.7	5874.5	3750.3	12153.4	15903.6
Nov.	1089.0	4365.3	3276.3	1575.0	5940.2	3748.8	12249.3	15998.0
Dec.	1093.3	4402.0	3308.6	1597.7	5999.6	3747.4	12337.1	16084.5
1999-Jan.	1090.7	4425.7	3335.0	1592.6	6018.3	3740.9	12419.8	16160.7
Feb.	1092.1	4446.6	3354.6	1622.2	6068.9			
Weekly								
1999-Feb. 1	1094.6	4429.7	3335.1	1602.2	6032.0			
8	1083.1	4430.4	3347.3	1621.9	6052.3			
15	1088.7	4444.7	3356.0	1623.7	6068.4			
22	1099.2	4460.5	3361.3	1627.3	6087.8			
Mar. 1	1099.3	4455.5	3356.2	1618.4	6073.9			
8p	1092.1	4442.2	3350.1	1603.3	6045.5			
15p	1093.3	4443.8	3350.5	1607.6	6051.4			

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

March 26, 1999

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					
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
1998	3,550	2,000	1,550	6,297	12,901	2,294	4,884	2,676	23,699	322	24,902	3,616
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
---Q3	---	---	---	2,024	4,524	654	1,769	1,311	7,659	98	7,536	-6,732
---Q4	---	---	---	1,403	3,122	862	2,372	602	7,158	65	7,093	15,050
1998 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	6,499
December	---	---	---	---	---	---	---	---	---	30	-30	13,375
1999 January	---	---	---	---	---	---	615	492	123	2	121	-21,181
February	---	---	---	2,103	2,752	335	---	---	5,190	---	5,190	1,831
Weekly												
December 23	---	---	---	---	---	---	---	---	---	---	---	324
30	---	---	---	---	---	---	---	---	---	---	---	9,463
January 6	---	---	---	---	---	---	---	---	---	---	---	-14,205
13	---	---	---	---	---	---	---	492	-492	---	-492	1,078
20	---	---	---	---	---	---	---	---	---	---	---	-125
27	---	---	---	---	---	---	---	---	---	2	-2	4,490
February 3	---	---	---	---	932	---	615	---	1,547	---	1,547	-12,891
10	---	---	---	771	---	---	---	---	771	---	771	14,183
17	---	---	---	---	---	---	---	---	---	---	---	-5,707
24	---	---	---	---	1,820	335	---	---	2,155	---	2,155	9,688
March 3	---	---	---	1,333	---	---	---	---	1,333	---	1,333	-9,925
10	---	---	---	---	---	346	1,227	---	1,573	25	1,548	7,802
17	---	---	---	---	1,017	---	---	---	1,017	---	1,017	-6,699
24	---	---	---	1,060	---	---	675	---	1,735	---	1,735	11,713
Memo: LEVEL (bil. \$) ⁶												
March 24			215.7	50.0	110.9	46.6	59.5		267.0		483.0	-17.5

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	0.0	0.2	0.0	0.3

March 24