

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.

STRICTLY CONFIDENTIAL (FR) CLASS I FOMC

MAY 14, 1999

MONETARY POLICY ALTERNATIVES

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

May 14, 1999

MONETARY POLICY ALTERNATIVES

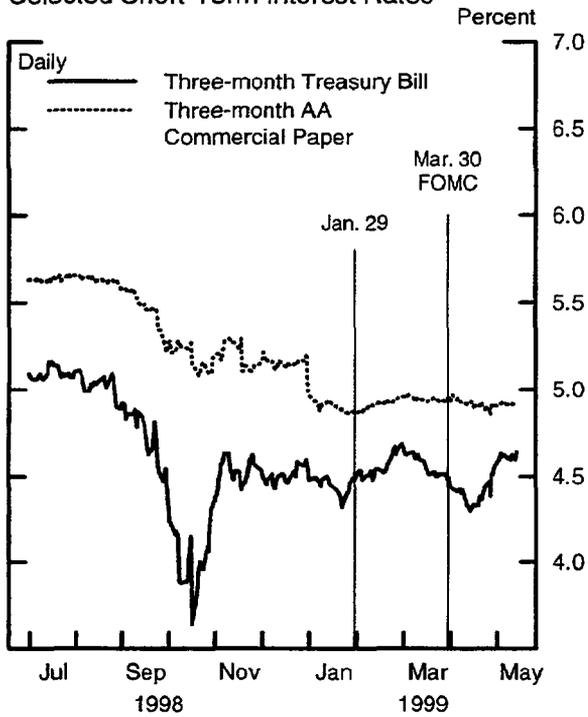
Recent Developments

(1) The Committee's decision at its meeting on March 30 to leave the intended federal funds rate at 4¾ percent was fully anticipated and elicited little market response.¹ On balance, yields on Treasury coupon securities have increased 25 to 35 basis points over the intermeeting period, while bill rates have risen somewhat less. The runup in rates has occurred since late April, responding to strength in U.S. economic data, improved prospects in many foreign economies and the associated increases in commodity prices, as well as the Chairman's comments on May 6 warning of possible inflation risks. Favorable readings on prices and wages over most of the period partly offset these forces, but today's data showing greater-than-anticipated increases in the CPI, industrial production, and consumer sentiment pushed yields up appreciably. Federal funds futures rates, after allowing for term premiums, now indicate that market participants see better than even odds of a quarter-point firming of the intended federal funds rate by the October meeting (Chart 1). Further out the yield curve, implied one-year forward rates have risen the most--35 to 45 basis points--at the two- to five-year maturities, consistent with the view that prospective economic developments

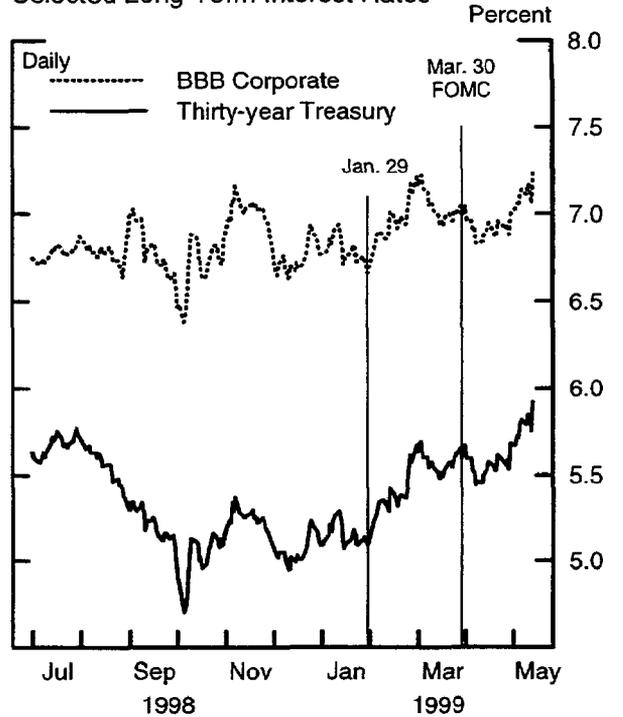
¹ The federal funds rate averaged 4.76 percent over the intermeeting period, but it varied substantially around this level as reserve management was complicated by tax-season uncertainties. Initially, slower-than-projected tax receipts contributed to more plentiful-than-planned reserve supply and pushed the funds rate below target; however, in the final week of April, a surge in receipts produced unexpectedly large reserve drains, as some of these receipts spilled into the Treasury's Federal Reserve account, imparting a firm tone to funds trading in late April and early May.

Chart1

Selected Short-Term Interest Rates

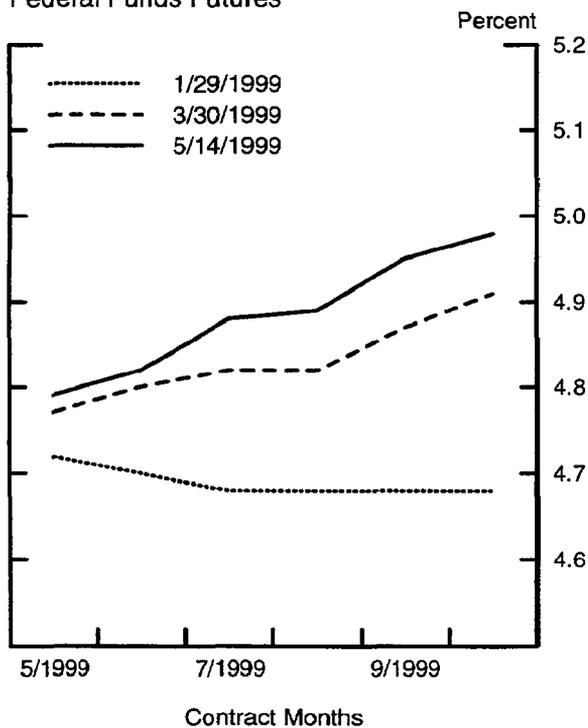


Selected Long-Term Interest Rates

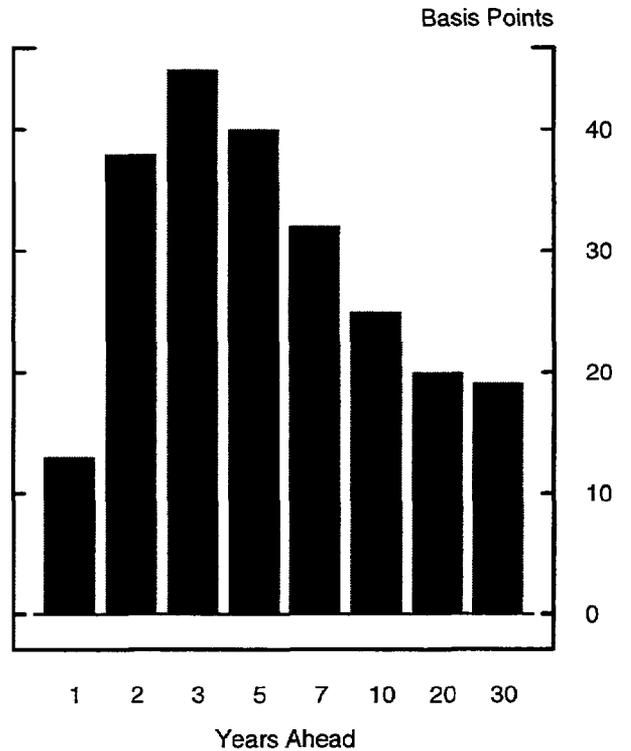


Source: Merrill Lynch

Federal Funds Futures



Change In Implied One-Year Forward Rates Since 3/30/1999



over the intermediate term will ultimately put substantially more pressure on short-term interest rates than had previously been expected. Yields on inflation-protected Treasury securities have declined slightly over the period, widening their spreads below comparable nominal issues. However, this widening seems to have stemmed from investors' heightened willingness to hold less-liquid assets and from some improvement in this market's liquidity as well as from some increase in inflation expectations. The rise in nominal Treasury yields over this intermeeting period has extended the upward movement that began in early February on mounting evidence of the continuing strength of the U.S. economy and diminishing concerns about difficulties overseas. Nominal Treasury coupon yields now stand 70 to 100 basis points above their levels prevailing at the end of January.

(2) Optimism about the economy and generally favorable earnings reports have engendered confidence about the financial condition of private borrowers, apparently inducing investors to reduce their assessment of and aversion to risk. Over the intermeeting period, rates on private investment-grade bonds have registered smaller increases than those on comparable Treasury securities, while rates on below-investment-grade bonds have fallen modestly despite heavy issuance. Business borrowers have seen little change in the terms and standards on loans from commercial banks since late January following some tightening last fall. Broad stock market indexes have posted gains of 1 to 11 percent over the intermeeting period, at times touching record highs. Since late January, measures of credit spreads generally have fallen 30 to 105 basis points, placing these spreads at or somewhat above the

levels prevailing before the financial turmoil of midsummer, and major equity indexes have risen 1 to 17 percent.

(3) The foreign exchange value of the dollar has depreciated somewhat on a weighted-average basis against a broad set of currencies over the intermeeting period as the outlook for economic and financial conditions in many emerging market countries brightened. Relative to major foreign currencies, the dollar has declined $\frac{1}{4}$ percent, on average, over the period, primarily owing to sizable depreciations against the Canadian and Australian dollars. The recovery in commodity prices has supported both currencies, and the Canadian dollar has remained firm even after two 25 basis point cuts in the Bank of Canada's key bank rate. By contrast, the dollar has appreciated $\frac{1}{2}$ and $2\frac{1}{2}$ percent against the euro and yen, respectively, over the intermeeting period. Longer-term interest rates in Europe have been about unchanged, but short-term rates have fallen in response to the 50 basis point paring of the European Central Bank's refinance rate. Political turmoil in Russia and the negative outlook for resolving the Kosovo conflict also are said to have contributed to the euro's weakness. In Japan, the yield on ten-year Japanese government bonds has shed 55 basis points, supporting a rally in equity prices that also was reportedly abetted by substantial stock purchases by foreign investors.

(4) Over the intermeeting period, the dollar has declined about $1\frac{1}{4}$ percent against the currencies of our other important trading partners. In Mexico, the peso and equity prices have been buoyed by the sharp rise in oil prices and lower-than-expected inflation. In Brazil, markets also have rallied, and the dollar fell 7 percent against the *real*, even as the Brazilian

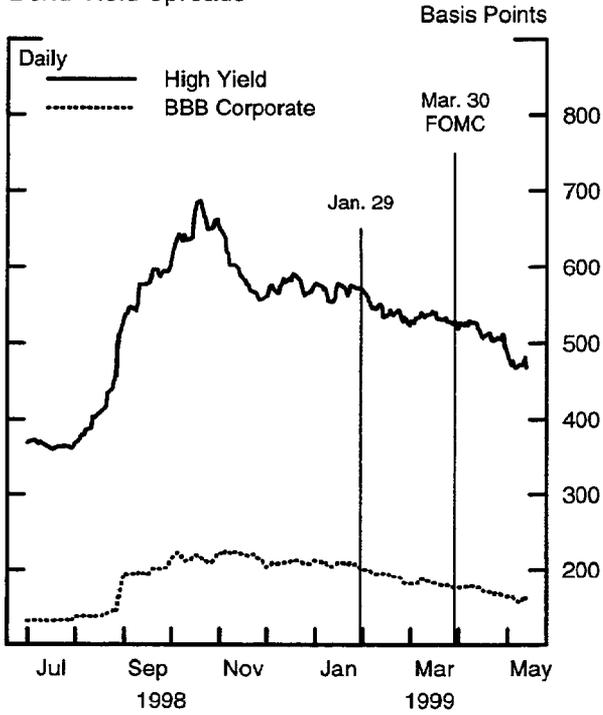
central bank lowered the overnight rate from 42 percent to 27 percent. In Asia, share prices in many countries have risen more than 20 percent, and the dollar has depreciated 1 to 11 percent against the floating currencies of emerging Asia. Credit spreads on emerging market debt have continued to narrow over the intermeeting period (Chart 2). Since their recent peak in late January, when Brazilian prospects seemed at their worst, these spreads have fallen about 400 basis points on average, but for most countries they have remained appreciably above their levels of last summer.

(5) Growth of the broad monetary aggregates surged in April, as households evidently built up liquid balances to meet a larger-than-usual increase in nonwithheld tax payments. The bulge in M2 was reversed in late April and early May, after tax payments cleared, and, as a consequence, M2 growth in May is expected to slow appreciably. Averaging through April and the current projection for May, M2 is estimated to be growing at a 5¼ percent rate, about in line with the expansion seen in the first three months of the year and well below the pace of late last year.² The moderation in growth this year stems from the waning effects of factors that lifted M2 in the latter part of 1998--the three policy easings, the wave of mortgage refinancings, and the heightened preference for holding liquid money balances in response to the turmoil in financial markets. M3 is also growing at a more moderate pace this year, as the contraction in bank credit since December has enabled banks

² The notable exception to this slowing was currency, which has advanced at an 11 percent pace, on average, since December. This robust growth cannot be attributed to foreign demand but rather appears to reflect strong domestic spending and perhaps some initial stockpiling ahead of the century date change.

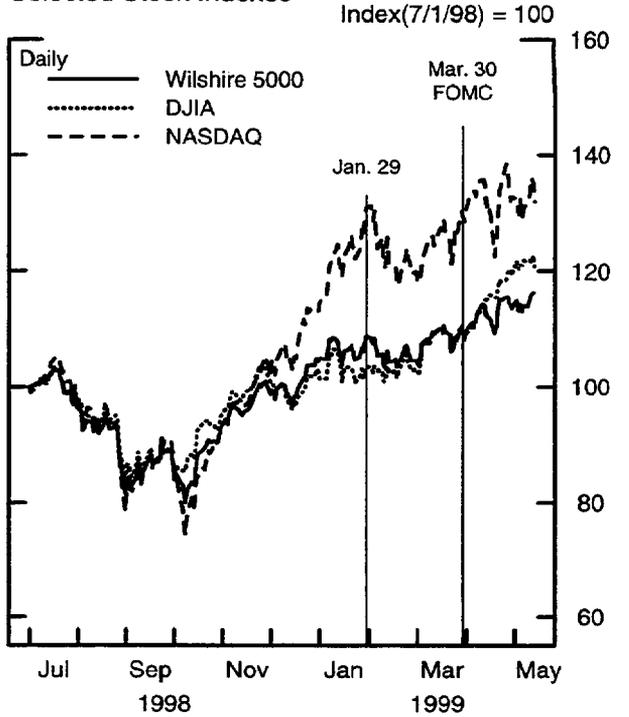
Chart 2

Bond Yield Spreads*

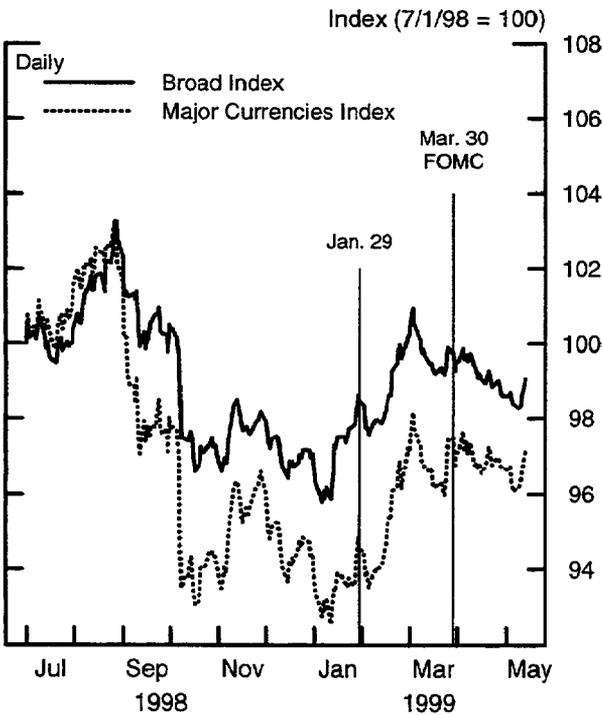


*High yield spread is relative to the seven-year Treasury yield. BBB corporate spread is relative to the ten-year Treasury yield.

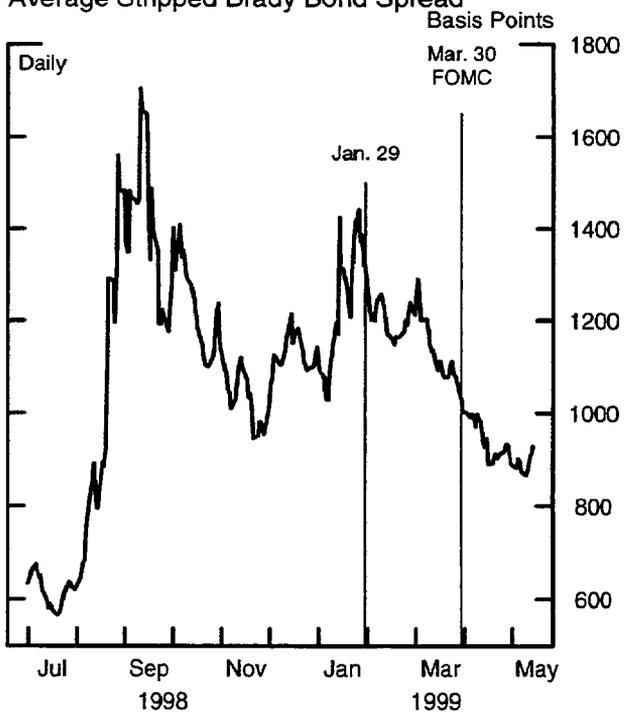
Selected Stock Indexes



Nominal Trade-Weighted Dollar Exchange Rates



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.

to pare back their use of managed liabilities included in M3. Nevertheless, the velocities of both M2 and M3 extended their declines in the first quarter, each falling at a $1\frac{3}{4}$ percent annual rate.

(6) The debt of nonfederal sectors has expanded vigorously in recent months; from the fourth quarter through March, this measure grew at an $8\frac{1}{4}$ percent rate, and partial data suggest a slightly quicker advance in April. Heavy business borrowing has been concentrated in the bond market, in part boosted by attractive yields. Households have continued to accumulate mortgage and consumer debt in keeping with strength in home sales and spending on consumer durables. Robust tax inflows have held back the borrowing needs of state and local governments and have allowed the Treasury to pay down more debt. The cutback in federal debt issuance has restrained the growth of total domestic nonfinancial debt, which expanded at a $5\frac{3}{4}$ percent pace from the fourth quarter through March.

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

	Feb.	Mar.	Apr.	1998:Q4 to Apr. ²
<u>Money and Credit Aggregates</u>				
M1	1.6	10.1	6.6	4.5
Adjusted for sweeps	5.1	10.1	8.8	6.9
M2	5.7	2.7	8.8	6.9
M3	8.7	-2.1	7.9	6.2
Domestic nonfinancial debt	4.7	6.3	n.a.	5.7
Federal	-7.3	-1.1	n.a.	-2.7
Nonfederal	8.3	8.5	n.a.	8.3
Bank credit	-3.5	-8.9	0.2	-2.0
Adjusted ¹	-1.9	-1.7	0.1	0.3
<u>Reserve Measures</u>				
Nonborrowed reserves	-13.0	-21.1	4.4	-3.6
Total reserves	-15.3	-22.5	7.2	-3.3
Adjusted for sweeps	-2.1	-8.7	11.0	4.4
Monetary base	9.4	7.7	10.2	9.2
Adjusted for sweeps	9.8	7.9	10.6	9.6
Memo: (millions of dollars)				
Adjustment plus seasonal borrowing	116	65	166	--
Excess reserves	1215	1305	1164	--

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 March.

Policy Alternatives

(7) Recent economic activity has once again proven more robust than expected, and the staff has boosted its forecast of both aggregate demand and supply. The staff forecast carries forward some of the surprising strength in productivity growth, which buoys profits and equity prices; the higher equity prices have added to the growth of aggregate demand relative to the outlook in the March Greenbook. Still, productivity growth is anticipated to slow from its extraordinary pace of recent quarters, and profits are expected to flatten out at their recent higher level over the forecast period. Although investors could get frustrated at the failure of earnings to rise further, the staff expects that share prices will not deviate greatly, on a sustained basis, from where they have been in recent days. With other financial conditions, including real interest rates and the exchange value of the dollar, also essentially unchanged through next year, real spending slows to a pace more in line with the growth of potential output. Even though the unemployment rate tracks a bit below the path in the March Greenbook, and retail energy prices move higher in the near term than previously projected, core inflation is a tad lower over the forecast period than in the projection in March.³ The better inflation outlook reflects in part the staff's judgment that restraint on costs associated with greater productivity gains will exert countervailing

³ The staff now projects CPI inflation of 2¼ percent over this year, which is at the midpoint of the central tendency of FOMC members' projections of 2 to 2½ percent as of the February Humphrey-Hawkins report. Real GDP growth is expected to be around 3½ percent over 1999 in the Greenbook, above the central tendency of 2½ to 3 percent, while the fourth-quarter unemployment rate, at 4 percent, is below the central tendency of 4¼ to 4½ percent.

downward pressure on prices. Even so, taut labor markets begin to lift core inflation next year in the staff forecast, and the FOMC is assumed to firm the nominal funds rate a little next year, which keeps the real funds rate about unchanged.

(8) If the Committee believes that inflation pressures could well be damped for some time, it might prefer to keep the federal funds rate unchanged at this meeting, as in **alternative B**. The staff forecast shows only a gradual pickup in core inflation to a relatively low level, at least through 2000. In that environment, and in light of the considerable degree of uncertainty regarding the economy's supply side, the Committee may want to wait to get a firmer handle on the likely extent of price pressures before acting. The Committee might see a significant probability of more restraint on cost pressures going forward than in the staff forecast from, for example, a lesser slowing in productivity growth or an extension of the recent subdued pace of wage gains. The Committee might also be encouraged by the behavior of bond rates over recent weeks, which suggests that investors respond promptly to signs the economy might begin to overheat and, by anticipating future monetary policy firming, impart some restraint to spending before the Federal Reserve takes action.

(9) The response of financial markets to the continuation of an unchanged policy stance, as under alternative B, would depend importantly on whether the Committee announces a change in the tilt of the directive. Especially after the publication today of a surprisingly large rise in the CPI in April, market participants reportedly see a good chance that the Committee will announce a directive tilted toward tightening. Against that backdrop, debt and equity markets could rally some if there were no announcement

regarding the symmetry of the directive; market participants would conclude that the Committee chose a symmetric directive and probably would see a reduced likelihood of future action. Over time, longer-term yields would fluctuate near these lower levels as incoming output and price data in line with the Greenbook forecast suggest a slowing economy and damped inflation but still the possibility of eventual tightening. Under these conditions, the average value of the dollar should not move far from its recent range. If, on the other hand, the Committee decided to adopt and announce a tilt in its directive toward tightening, market participants probably would place slightly higher odds on a policy tightening sometime over the next few meetings, pushing up interest and exchange rates modestly further. Also, with the Committee seen as more inclined to act, markets could well become more sensitive to information bearing on the price outlook.

(10) If the Committee saw a pickup in underlying inflation as likely, it might favor the 25 basis point firming of **alternative C**. Even with what would seem to be a generous allowance for expected productivity growth and with relatively restrained pressures on nominal and real wages at projected labor resource utilization rates, the staff still foresees a gradual uptrend in core inflation. The forecast implies that financial conditions must tighten appreciably to contain inflation. Moreover, the April CPI may be a sign that the tendency for higher inflation is stronger than contemplated in the Greenbook forecast. Although most bond yields have backed up since late last fall, in other respects financial market conditions have eased since the Committee's last reduction in the federal funds rate, and economic activity both here and abroad has proven more buoyant than anticipated. The

renewed appetite for risk in financial markets and apparently relentless upward march of the stock market in recent months may suggest the possibility that financial conditions will be more accommodative than in the staff outlook. In this context, the Committee may believe that tightening policy now would be prudent in light of the significant risk that substantial economic imbalances would build if the Committee postponed action until higher inflation became more evident in the data.

(11) Financial market prices embody little expectation of a policy firming at this meeting. As a consequence, the immediate 25 basis point increase in the funds rate of alternative C would trigger a similar rise in short-term interest rates. The extent of the response of other U.S. financial markets would depend on the outlook for further policy firming, which would be importantly affected by the wording of the announcement. Longer-term rates should go up significantly less than short rates, as some later rise in short-term nominal rates already has been built into market prices, and investors might be more confident of the outlook for subdued inflation with such a preemptive move by the Federal Reserve. However, if market participants were to decide that several additional tightening moves were likely, long rates would increase more substantially, as they often have in the past when policy has turned in a firming direction. Some adverse reaction would be expected in foreign financial markets, but absent a steep sell-off in domestic markets, the fallout should be limited, given the recovery in overseas markets and their modest response to the recent increases in U.S. interest rates.

(12) With the projected deceleration in nominal spending under any of the policy alternatives, growth in the debt of nonfederal sectors is expected to soften in the remainder of this year. A slowing in the pace of housing activity and in the growth of household spending on durable goods should lead to a moderation in the recent robust rate of accumulation of mortgage and consumer debt. Business debt growth is expected to edge down even as the financing gap widens owing to a slowdown in cash-financed mergers and share repurchases. Credit supply conditions are likely to remain rather favorable for most borrowers in the months ahead, though they could tighten somewhat later on as earnings prove sluggish. The default rate on lower-rated debt issues is likely to stay near its recently elevated level, and spreads on such issues should hold steady. Lending standards and terms on business loans at banks are also likely to remain stable for a while. The staff projects rising paydowns of federal debt, despite additional spending for the conflict in the Balkans. Total nonfinancial debt is expected to grow 5½ percent over the four quarters of 1999, placing it in the upper half of its annual range.

(13) Abstracting from the estimated effects of refunds and nonwithheld tax payments in recent months, M2 growth has slowed considerably, even relative to the projected deceleration in nominal spending for the second quarter. Some of the fall-off in M2 growth has likely been temporary, reflecting the recovery of financial markets and the unwinding of the general buildup of liquidity that occurred in the last several months of 1998. After softening substantially in May owing to the clearing of tax checks, M2 growth is projected to pick up in the months ahead under alternative B, extending the trend decline in

velocity evident since mid-1997, and leaving growth of this aggregate for the year at about 6 percent, somewhat above its annual range of 1 to 5 percent. The recent sluggish behavior of bank credit also appears to reflect an unwinding of the developments of last fall; as bank credit growth steps up in the months ahead, banks should again need to turn to managed liabilities for financing, and M3 growth should rebound as well. For 1999 as a whole, M3 is projected to post a 6½ percent growth rate, placing it a little above its annual range of 2 to 6 percent.

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							
Apr-99	8.8	8.8	7.9	7.9	6.2		
May-99	1.9	1.7	3.2	3.1	4.8		
Jun-99	5.5	4.9	6.0	5.7	4.9		
Jul-99	5.5	4.7	6.6	6.2	5.4		
Aug-99	5.0	4.2	7.2	6.8	6.0		
Sep-99	5.0	4.4	7.2	7.0	4.5		
Oct-99	5.8	5.8	7.4	7.4	4.0		
Nov-99	6.2	6.2	7.6	7.6	4.6		
Dec-99	6.7	6.7	7.8	7.8	4.2		
Quarterly Averages							
1998 Q4	11.0	11.0	12.9	12.9	6.4		
1999 Q1	7.2	7.2	7.2	7.2	5.7		
1999 Q2	5.2	5.1	4.5	4.5	5.6		
1999 Q3	4.9	4.3	6.3	6.0	5.3		
1999 Q4	5.8	5.5	7.5	7.4	4.5		
Growth Rate							
From	To						
Mar-99	Dec-99		5.7	5.4	6.9	6.8	5.0
Apr-99	Dec-99		5.3	4.9	6.8	6.6	4.9
1998 Q4	May-99		6.1	6.0	5.7	5.7	5.7
1998 Q4	Sep-99		5.8	5.5	6.2	6.1	5.6
1998 Q4	Dec-99		6.0	5.7	6.7	6.5	5.3
1997 Q4	1998 Q4		8.5	8.5	10.9	10.9	6.2
1998 Q4	1999 Q3		5.9	5.6	6.1	6.0	5.6
1998 Q4	1999 Q4		5.9	5.7	6.5	6.4	5.4
1999 Annual Ranges:			1.0 to 5.0		2.0 to 6.0		

Chart 3

Actual and Projected M2

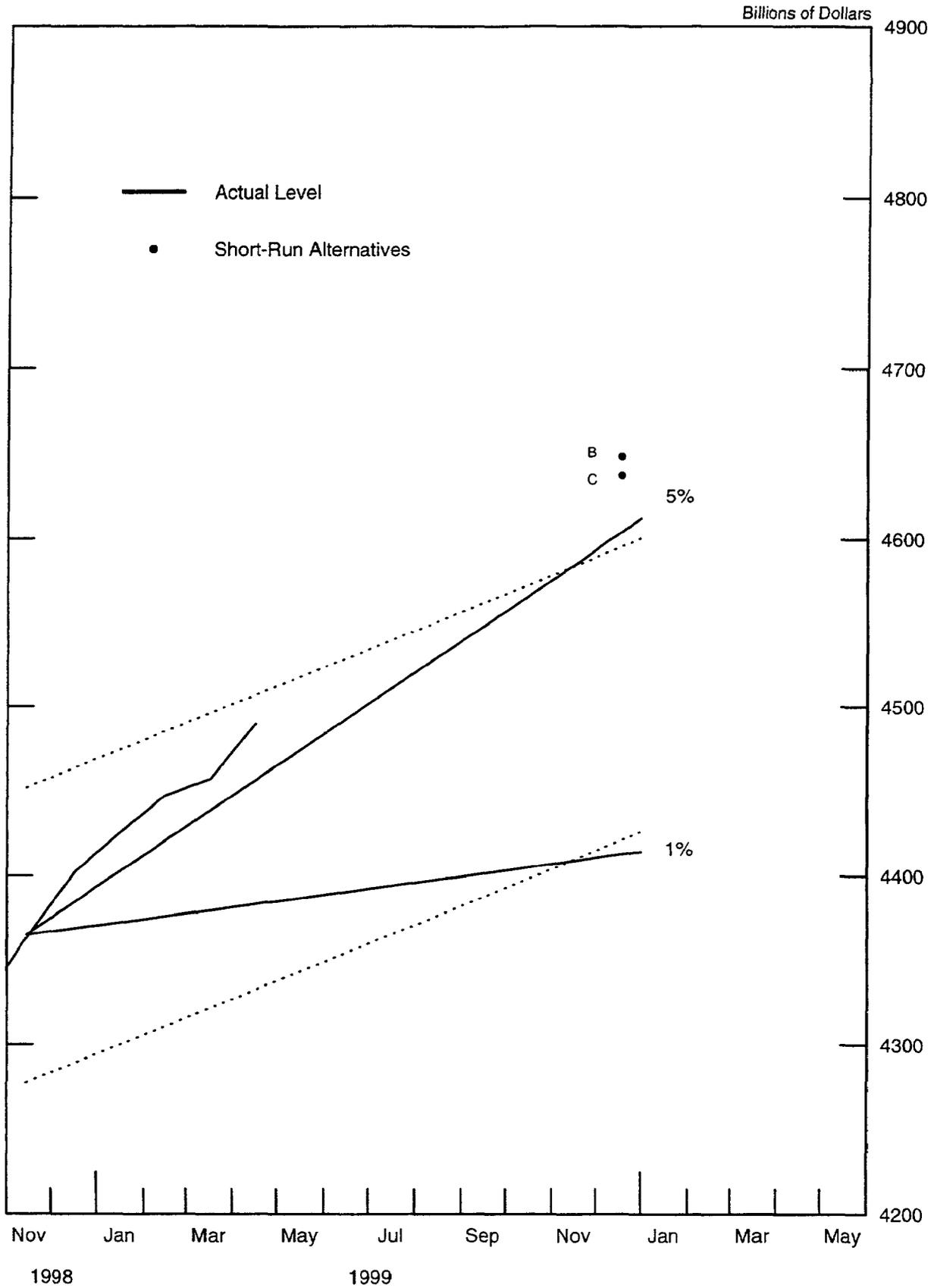


Chart 4

Actual and Projected M3

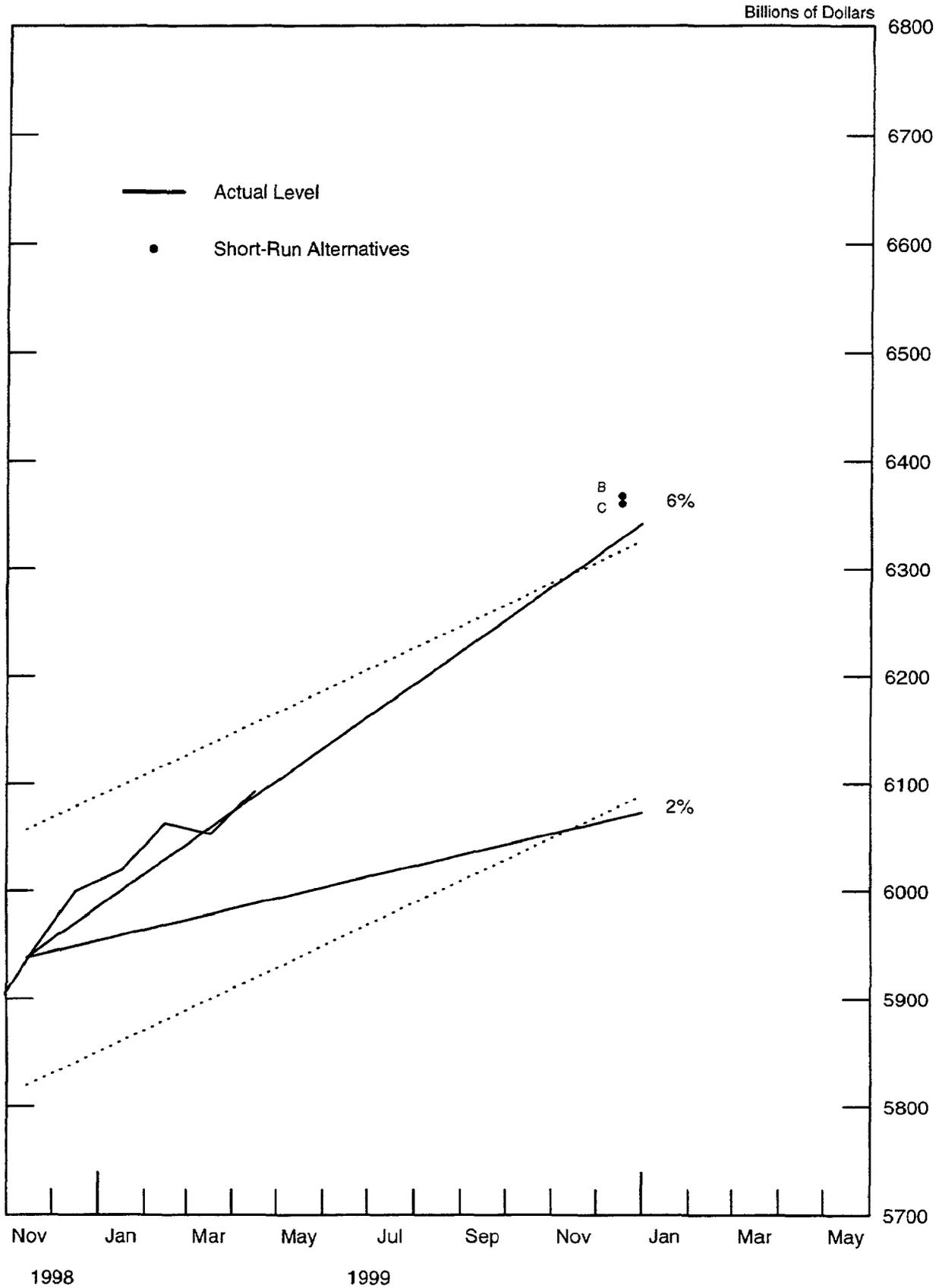
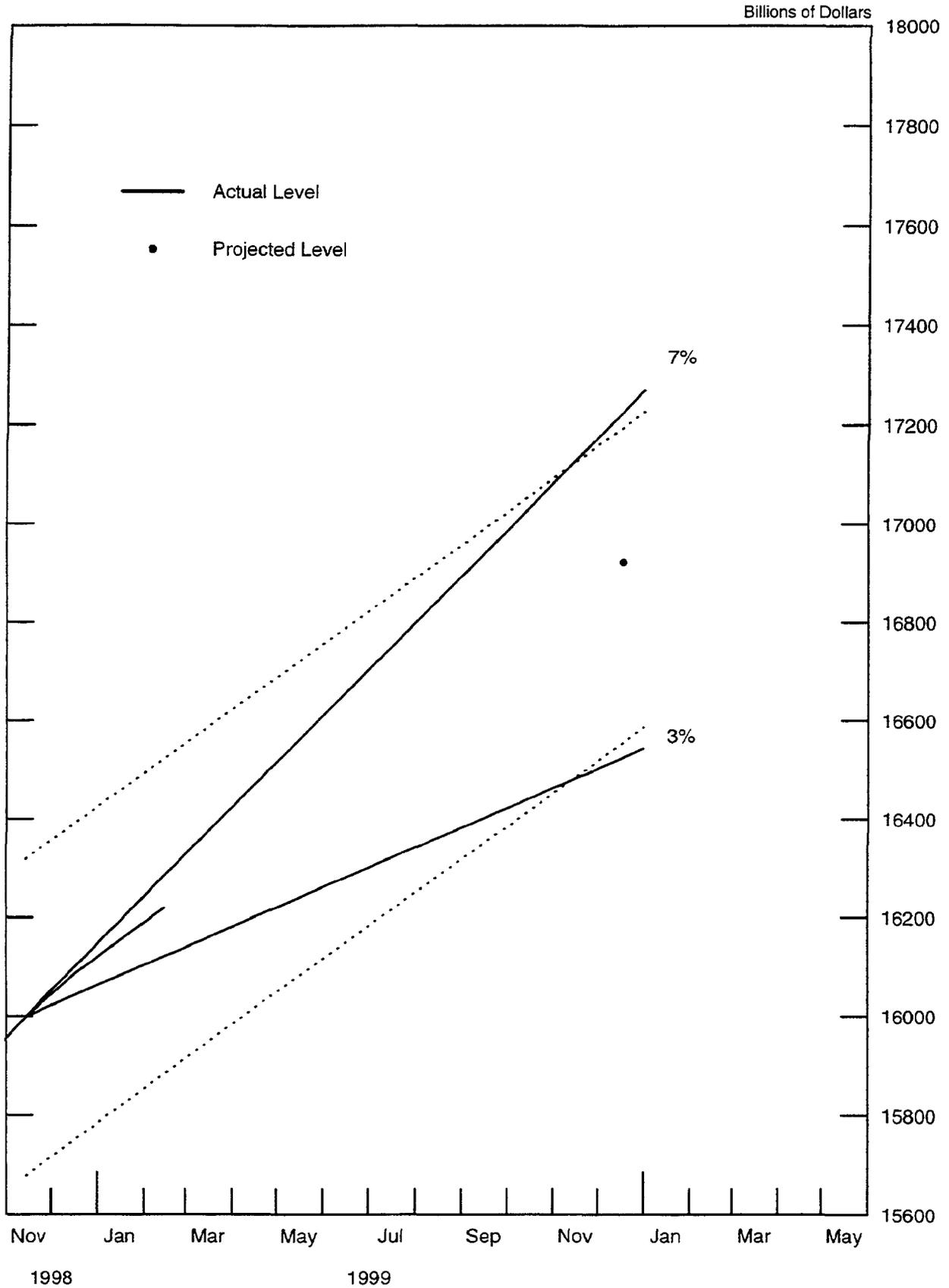


Chart 5

Actual and Projected Debt



SELECTED INTEREST RATES
(percent)

May 17, 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
98 -- 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	4.89	4.53	4.56	4.63	5.09	5.24	5.27	5.39	5.53	5.83	3.88	3.92	7.64	5.35	7.11	5.88
99 -- Low	4.42	4.20	4.30	4.29	4.86	4.76	4.58	4.56	4.67	5.12	3.65	3.76	7.24	5.17	6.74	5.56
Monthly																
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
Mar 99	4.81	4.44	4.47	4.53	4.91	4.82	5.11	5.14	5.23	5.58	3.84	3.90	7.53	5.31	7.04	5.77
Apr 99	4.74	4.29	4.37	4.45	4.88	4.79	5.03	5.08	5.18	5.55	3.72	3.90	7.48	5.29	6.92	5.60
Weekly																
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	4.83	4.39	4.38	4.50	4.90	4.82	5.07	5.11	5.20	5.58	3.83	3.89	7.53	5.29	6.98	5.69
Apr 2 99	4.89	4.35	4.34	4.48	4.90	4.84	5.06	5.12	5.24	5.63	3.81	3.91	7.56	5.29	6.98	5.65
Apr 9 99	4.69	4.29	4.35	4.43	4.88	4.81	4.96	5.00	5.11	5.50	3.76	3.92	7.45	5.29	6.92	5.59
Apr 16 99	4.68	4.20	4.34	4.43	4.88	4.78	5.01	5.05	5.14	5.51	3.68	3.90	7.44	5.28	6.87	5.56
Apr 23 99	4.61	4.26	4.38	4.45	4.88	4.76	5.06	5.10	5.20	5.56	3.68	3.90	7.48	5.30	6.88	5.56
Apr 30 99	4.87	4.39	4.43	4.49	4.87	4.77	5.10	5.15	5.26	5.58	3.69	3.89	7.50	5.29	6.93	5.63
May 7 99	4.83	4.49	4.50	4.54	4.88	4.79	5.21	5.32	5.45	5.74	3.69	3.86	7.64	5.35	7.02	5.68
May 14 99	4.72	4.48	4.52	4.55	4.88	4.77	5.27	5.39	5.53	5.83	3.68	3.85	--	5.34	7.10	5.71
Daily																
Apr 28 99	4.83	4.39	4.42	4.51	4.87	4.77	5.10	5.16	5.27	5.58	3.69	3.89	7.50	--	--	--
Apr 29 99	4.91	4.39	4.42	4.45	4.87	4.78	5.02	5.09	5.22	5.53	3.67	3.87	7.46	--	--	--
Apr 30 99	5.03	4.43	4.48	4.54	4.87	4.78	5.17	5.24	5.36	5.68	3.71	3.89	7.58	--	--	--
May 3 99	5.01	4.47	4.49	4.55	4.89	4.80	5.16	5.25	5.38	5.67	3.70	3.87	7.58	--	--	--
May 4 99	4.71	4.50	4.51	4.56	4.89	4.80	5.20	5.30	5.42	5.72	3.69	3.86	7.63	--	--	--
May 5 99	4.60	4.48	4.49	4.51	4.88	4.79	5.16	5.27	5.40	5.71	3.69	3.86	7.61	--	--	--
May 6 99	4.77	4.49	4.50	4.55	4.88	4.77	5.26	5.39	5.52	5.80	3.68	3.84	7.69	--	--	--
May 7 99	4.67	4.49	4.51	4.54	4.88	4.77	5.27	5.40	5.54	5.82	3.69	3.85	7.71	--	--	--
May 10 99	4.69	4.47	4.50	4.53	4.88	4.77	5.24	5.38	5.54	5.79	3.68	3.84	7.67	--	--	--
May 11 99	4.69	4.49	4.53	4.55	4.88	4.77	5.27	5.40	5.59	5.85	3.69	3.87	7.71	--	--	--
May 12 99	4.72	4.47	4.51	4.54	4.88	4.77	5.27	5.39	5.51	5.83	3.70	3.87	7.70	--	--	--
May 13 99	4.78	4.46	4.50	4.51	4.88	4.78	5.19	5.29	5.41	5.75	3.68	3.85	7.61	--	--	--
May 14 99	4.80 ^P	4.51	4.55	4.61	--	--	5.38	5.48	5.62	5.92	3.63	3.82	--	--	--	--

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

May 17, 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	6.2
Quarterly (average)								
1998-Q2	1.0	7.5	9.8	17.8	10.1	-1.4	8.4	5.9
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	9.0	6.4
1999-Q1	2.8	7.2	8.7	7.1	7.2	-2.6	8.2	5.7
Monthly								
1998-Apr.	1.7	8.4	10.9	13.8	9.8	-1.8	8.4	5.9
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	7.9	5.7
July	-2.7	5.0	7.7	2.0	4.3	-0.9	8.5	6.2
Aug.	-3.6	7.3	11.0	24.4	11.7	-0.8	8.1	6.0
Sep.	2.8	12.4	15.6	15.1	13.1	-3.3	8.2	5.4
Oct.	6.4	11.6	13.3	16.3	12.8	-3.1	9.5	6.5
Nov.	9.6	10.6	11.0	21.2	13.4	-0.5	9.7	7.3
Dec.	4.8	10.1	11.9	17.3	12.0	-0.4	8.2	6.1
1999-Jan.	-2.6	6.6	9.6	-3.2	4.0	-2.1	7.5	5.3
Feb.	1.6	5.7	7.0	16.9	8.7	-7.3	8.3	4.7
Mar.	10.1	2.7	0.3	-15.4	-2.1	-1.1	8.5	6.3
Apr. p	6.6	8.8	9.5	5.6	7.9			
Levels (\$billions):								
Monthly								
1998-Dec.	1093.4	4402.1	3308.7	1597.7	5999.8	3747.4	12338.2	16085.5
1999-Jan.	1091.0	4426.2	3335.2	1593.5	6019.6	3740.9	12415.3	16156.1
Feb.	1092.5	4447.1	3354.6	1616.0	6063.1	3718.2	12501.3	16219.5
Mar.	1101.7	4457.2	3355.5	1595.3	6052.5	3714.7	12590.0	16304.7
Apr. p	1107.8	4489.8	3382.0	1602.7	6092.5			
Weekly								
1999-Apr. 5	1117.8	4477.3	3359.4	1583.7	6061.0			
12	1097.6	4467.9	3370.3	1598.8	6066.6			
19	1107.0	4499.7	3392.7	1609.5	6109.2			
26p	1110.0	4513.9	3403.9	1613.1	6127.1			
May 3p	1114.6	4488.0	3373.3	1602.3	6090.3			

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

May 14, 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	-7,849
1997	9,147	---	9,147	5,549	19,680	3,849	5,897	1,996	32,979	1,540	40,586	-5,202
1998	3,550	2,000	1,550	6,297	12,901	2,294	4,884	2,676	23,699	322	24,902	-11,981
1998 ---Q1	---	2,000	-2,000	1,501	2,262	283	743	478	4,311	60	2,251	-12,184
---Q2	3,550	---	3,550	1,369	2,993	495	---	286	4,571	99	8,022	-13,549
---Q3	---	---	---	2,024	4,524	654	1,769	1,311	7,659	98	7,536	-10,034
---Q4	---	---	---	1,403	3,122	862	2,372	602	7,158	65	7,093	-9,477
1999 ---Q1	---	---	---	3,163	5,180	681	3,019	492	11,551	27	11,524	-8,004
1998 May	---	---	---	---	---	---	---	---	---	---	---	-18,868
June	---	---	---	---	---	---	---	---	---	25	-25	-11,249
July	---	---	---	---	---	---	---	1,311	-1,311	---	-1,311	-11,420
August	---	---	---	986	535	303	1,769	---	3,593	50	3,518	-10,507
September	---	---	---	1,038	3,989	351	---	---	5,377	48	5,329	-9,868
October	---	---	---	741	725	---	1,674	602	2,539	15	2,524	-12,553
November	---	---	---	662	2,397	862	698	---	4,619	20	4,599	-11,659
December	---	---	---	---	---	---	---	---	---	30	-30	-6,096
1999 January	---	---	---	---	---	---	615	492	123	2	121	-7,799
February	---	---	---	2,103	2,752	335	---	---	5,190	---	5,190	-10,380
March	---	---	---	1,060	2,428	346	2,404	---	6,238	25	6,213	-7,243
April	---	---	---	1,677	3,308	219	262	---	6,246	726	5,520	-8,427
Weekly												
January 20	---	---	---	---	---	---	---	---	---	---	---	-7,491
27	---	---	---	---	---	---	---	---	---	2	-2	-10,345
February 3	---	---	---	---	932	---	615	---	1,547	---	1,547	-12,344
10	---	---	---	771	---	---	---	---	771	---	771	-10,601
17	---	---	---	---	---	---	---	---	---	---	---	-11,153
24	---	---	---	---	1,820	335	---	---	2,155	---	2,155	-8,363
March 3	---	---	---	1,333	---	---	---	---	1,333	---	1,333	-8,779
10	---	---	---	---	---	346	1,227	---	1,573	25	1,548	-7,840
17	---	---	---	---	1,017	---	---	---	1,017	---	1,017	-8,589
24	---	---	---	1,060	---	---	675	---	1,735	---	1,735	-5,372
31	---	---	---	---	1,411	---	502	---	1,913	---	1,913	-7,024
April 7	---	---	---	---	255	296	---	---	551	---	551	-6,711
14	---	---	---	810	932	325	262	---	2,329	---	2,329	-9,266
21	---	---	---	---	703	-726	---	---	703	726	-24	-7,714
28	---	---	---	867	1,418	324	---	---	2,663	---	2,663	-11,006
May 5	---	---	---	---	---	---	---	---	---	---	---	-4,525
12	---	---	---	484	1,222	---	---	---	2,819	---	2,819	-11,926
Memo: LEVEL (bil. \$) ⁶												
May 12			215.7	51.6	116.4	48.3	61.0		277.3		493.3	-12.5

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

May 12