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[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).

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May 15, 1998

MONETARY POLICY ALTERNATIVES

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

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

May 15, 1998

MONETARY POLICY ALTERNATIVES

Recent Developments

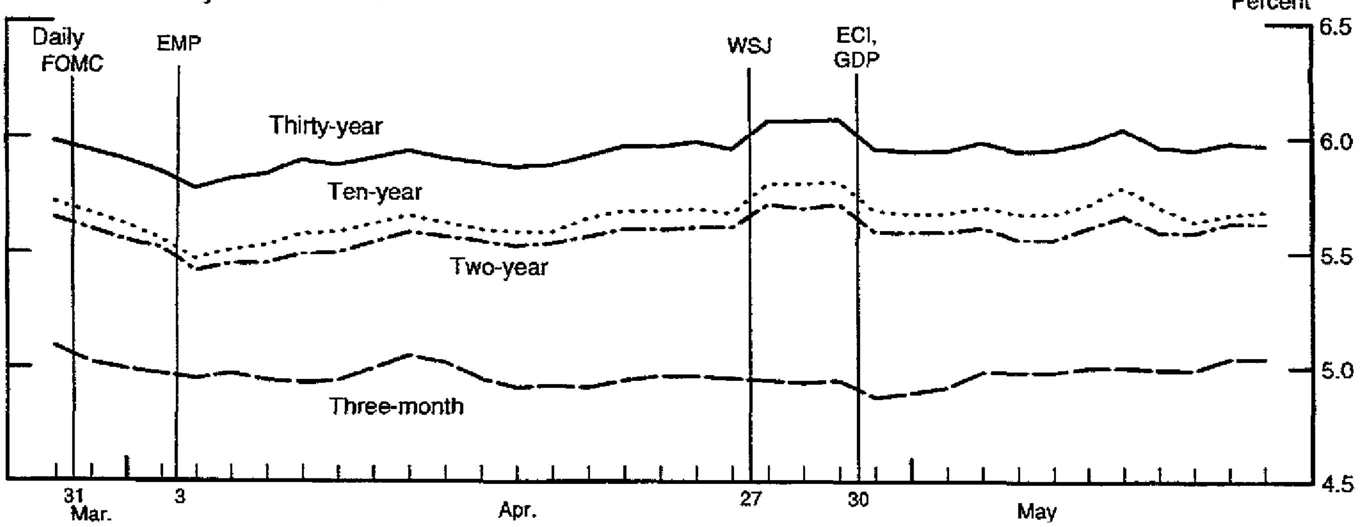
(1) Keeping the federal funds rate close to its intended level of 5½ percent, which was reaffirmed at the FOMC meeting on March 31, proved challenging at times over the intermeeting period. The Desk added reserves on a permanent basis early in the period and arranged some large temporary injections to offset April tax inflows. More recently, after the Treasury balance retreated to a more normal level, the Desk has been draining reserves. In the event, depositories seemed inclined to hold fewer excess reserves than had been expected, and the federal funds rate traded shy of its intended level through the latter part of April and into May before returning to the 5½ percent area of late.[1]

(2) Most other market interest rates have registered small net declines since the March meeting (chart). News stories in late April reporting that the Committee had switched to an asymmetric directive toward tightening were a focus of market attention for a time, in part because they appeared consistent with the more hawkish tone taken by several Federal Reserve officials in speeches and interviews. These reports triggered a spike in market yields, engendered skittishness about the prospects for rates going forward, and set back stock prices some. The effects proved fleeting once investors learned that wage and price inflation in the first quarter remained well contained. In that context, they seemed to play down other data suggesting that the economy retained considerable momentum and that the margin of unused resources was slim. Most recently, heightened turmoil in Asian economies augmented the

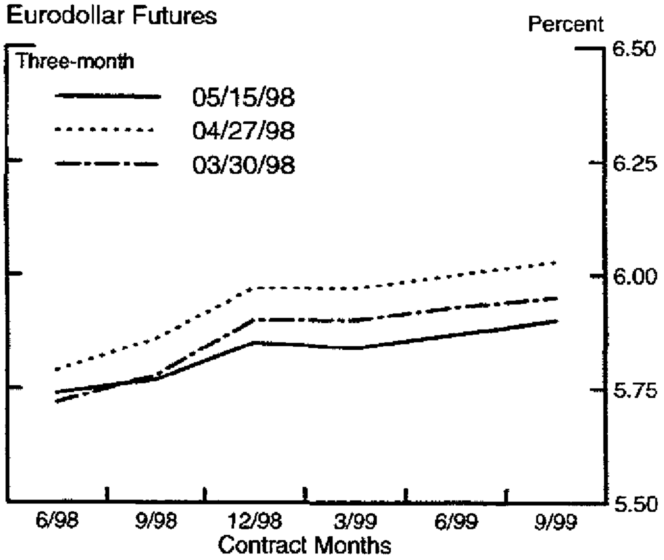
1. At the start of the current maintenance period, the assumption for excess reserves was lowered $200 million, to $1.2 billion, in response to this apparent downshift.

Chart 1

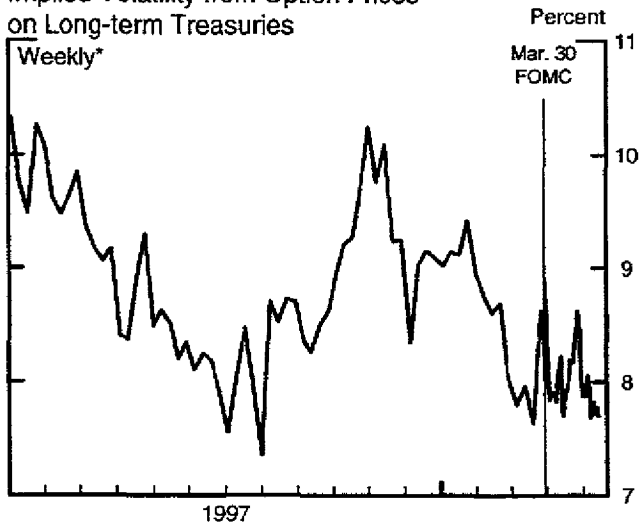
Selected Treasury Interest Rates



Eurodollar Futures

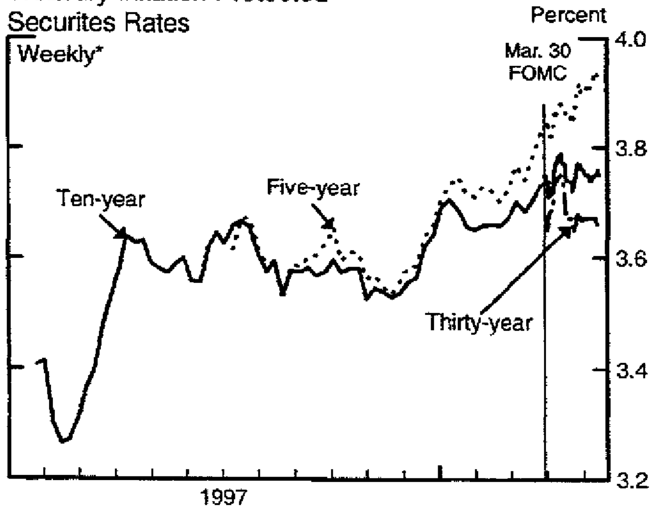


Implied Volatility from Option Prices on Long-term Treasuries



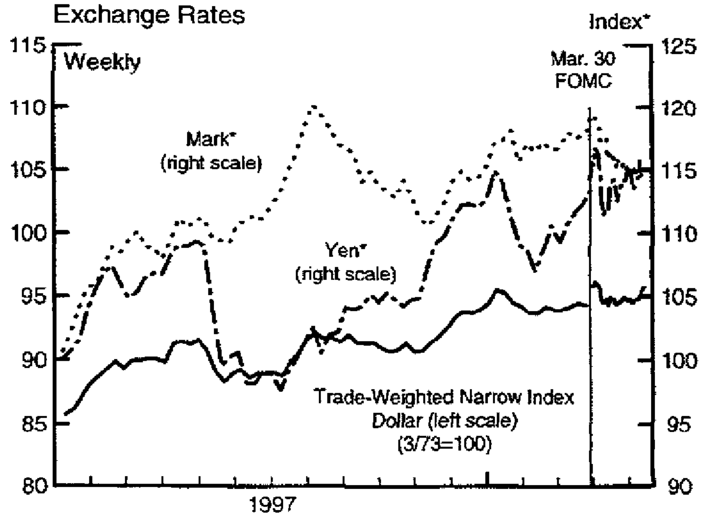
* Daily beginning March 30.

Treasury Inflation-Protected Securites Rates



* Daily beginning March 30.

Exchange Rates



*Index, Jan 1997=100
Daily beginning March 30.

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demand for dollar assets, raising the foreign exchange value of the dollar and trimming interest rates. Judging from futures rates, market participants are currently putting little weight on the possibility of policy tightening over coming months. With reported inflation a touch lower and survey measures of inflation expectations continuing to decline, real short rates appear to have extended their gradual upcreep. Real rates at longer maturities seem to have firmed, too: While the illiquidity of the indexed debt market makes inference about underlying real rates problematic, the yields on inflation-indexed debt rose somewhat further, on net, over the intermeeting period. The advance in the real federal funds rate may be one factor behind increases of 1/4 percentage point or more in rates on inflation-indexed debt since last fall. Indeed, the downward tilt to the term structure of indexed yields--which has become more pronounced in recent months--could be read as indicating that market participants believe that real short rates will eventually reverse some of that increase. Higher real rates and soft earnings reports, however, did not prove to be much of a check on equity prices on balance, as major indexes gained from 1½ to 3¾ percent.

(3) Since the March FOMC meeting, the trade-weighted exchange value of the dollar relative to major currencies is little changed on balance. The dollar has depreciated about 3½ percent relative to the mark and other continental European currencies, while appreciating from 1½ to 3 percent against the yen, the Canadian dollar, and sterling. Over the intermeeting period, signs of strong German economic growth and significant progress in settling outstanding issues necessary for next year's launch of the euro contributed to the mark's rise. German interest rates are up a little over the intermeeting period. The depreciation of the yen against the dollar has occurred against the backdrop of continued

indications of weak economic activity in Japan, very accommodative monetary conditions, and considerable declines in short- and long-term yields. Following the release of the details of Japan's latest fiscal stimulus package on April 9, Japanese authorities sold dollars for yen on a massive scale. The effects of the intervention, amounting to more than $20 billion over two days, were short-lived; the dollar immediately depreciated 3 percent but recouped these losses within ten days.

. The Desk did not intervene in the foreign exchange market for U.S. accounts.

(4) Other Asian financial markets have come under renewed pressure after two months of relative calm. Although Indonesian and IMF officials reached an agreement that accelerated reform measures and allowed for a resumption of IMF payments in early April, subsequent social unrest has triggered a 20 percent fall in the rupiah against the dollar over the intermeeting period. Labor unrest in Korea has also emerged as unemployment continues to rise and a number of chaebols have announced restructuring plans that are expected to generate significant layoffs. With the exception of the rupiah, currencies in the region have been relatively stable since the last FOMC meeting, though achieving that stability has taken substantial increases in market interest rates in some cases. Equity prices in emerging Asian economies have fallen as much as 25 percent over the intermeeting period. Renewed difficulties in Asia have not prompted substantial declines in the prices on financial markets of emerging economies elsewhere, although spreads on Latin American and Eastern European debt have moved a bit higher and their equity markets are generally lower.

(5) Growth of the monetary aggregates has been whipsawed by special factors of late. M2 expanded at a 9½ percent clip in April, but is falling early this month. Households evidently built up their deposits in late March and early April to meet unusually heavy nonwithheld tax liabilities. As those tax payments have cleared in recent weeks, M2 has run off. Heavy mortgage prepayments, as households took advantage of lower longer-term yields to refinance, provided an additional spur to M2 in April, as they had in March, but, with mortgage refinancings leveling out, their effect on money growth is estimated to be waning in May. Averaging the performance of M2 in April with the projection for May, which should leave virtually no net imprint of tax effects, suggests that its growth has downshifted substantially this quarter relative to its rapid first-quarter pace, about in line with staff expectations. M3 also appears to be moderating in April and May as a whole relative to earlier in the year; not only has M2 growth slowed, but spectacular growth in institution-only money funds has been offset somewhat by a runoff in large time deposits. Commercial banks evidently have needed to raise a smaller volume of funds in the market of late, given the heavy influx of nonwithheld tax receipts into Treasury deposits, as well as the apparent slowing in bank credit expansion, on average, over the past two months.

(6) While businesses have continued to tap the bond market in volume of late, some of the proceeds have been used to pay down bank loans and commercial paper, so that their total borrowing appears to have receded from its rapid first-quarter pace. In contrast, household borrowing likely has remained fairly robust, as mortgage debt expansion appears to have maintained the strong pace of the past half year, no doubt reflecting the considerable vigor of the housing market. In recent weeks, quality spreads on marketable business debt

instruments have widened slightly, albeit from very low levels, as issuance has been brisk. Commercial banks, however, have reported in the most recent senior loan officer survey that business lending spreads, particularly for larger firms, have been narrowed further. With state and local governments continuing to issue debt aggressively, in part to fund new capital projects, the debt of nonfederal sectors has grown at about an 8 percent rate in recent months. However, robust tax inflows have allowed the Treasury to pay down federal debt, even on a seasonally adjusted basis, holding total debt growth to around 6 percent over March and April.

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

	Feb.	Mar.	Apr.	97:Q4 to Apr.
Money and Credit Aggregates				
M1	3.1	5.1	-1.8	2.3
Adjusted for sweeps	6.4	7.9	4.9	6.4
M2	9.5	8.2	9.6	8.5
M3	8.9	14.1	10.2	11.4
Domestic nonfinancial debt	6.9	6.9	5.2	6.4
Federal	-0.8	1.8	-2.3	0.1
Nonfederal	9.5	8.5	7.7	8.5
Bank credit	8.8	12.1	-4.0	8.5
Adjusted[1]	9.7	13.1	-2.8	8.6
Reserve Measures				
Nonborrowed reserves	-16.3	9.0	-4.5	-1.2
Total reserves	-20.1	8.5	-3.6	-2.1
Adjusted for sweeps	-5.8	12.4	9.4	6.9
Monetary base	3.5	4.1	2.4	5.4
Adjusted for sweeps	4.3	4.9	3.9	6.3
Memo: (millions of dollars)				
Adjustment plus seasonal borrowing	58	41	72	--
Excess reserves	1524	1316	1399	--

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

NOTE: Monthly reserve measures, including excess reserves and borrowing, are calculated by prorating averages for two-week reserve maintenance periods that overlap months. Reserve data incorporate adjustments for discontinuities associated with changes in reserve requirements.

Policy Alternatives

(7) In light of incoming data indicating robust domestic demand, the Greenbook projection for real GDP growth over the first half of this year has been strengthened appreciably. Output growth, as before, is projected to slow after the middle of this year, to a little less than the pace of its potential, assuming an unchanged nominal funds rate. With the drag from net exports expected to have peaked in the first quarter, the slowdown in GDP growth reflects the restraint associated with a drop in inventory investment and, partly as a result of associated multiplier effects, a cooling of domestic final demand. The latter reflects the scaling back of purchases of consumer durables and business capital owing partly to the earlier buildup in their stocks relative to income and production, the waning effects of prior interest rate declines, and the projected softening in equity prices. However, the path of the unemployment rate, while rising, has been revised down a tad over the forecast period. Even so, the outlook for inflation is little changed; we continue to predict that the measured increase in the core CPI will stay reasonably stable, averaging near a 2¼ percent rate through the end of next year. Further technical corrections will help to hold down published inflation, but a number of economic forces are also at work: Non-oil import prices are projected to continue to decline, though at a diminishing rate, capacity utilization is seen as easing noticeably, the rate of increase in unit labor costs is projected to slip back next year to below a 2 percent pace, and inflation expectations should continue to edge lower.

(8) If the Committee views the Greenbook forecast as both likely and acceptable, it might be inclined to maintain its current 5½ percent intended federal funds rate, as under **alternative B**. Although that forecast has an underlying upward tilt to inflation in 1999 as

labor markets remain quite tight, that tilt is gradual and starts from a lower inflation rate in 1998 than the Committee had anticipated only a few months ago, judging from the central tendencies of members' CPI projections in February.[2] Even if the Committee were troubled by the underlying uptrend of inflation in the staff forecast, it might still be willing to adopt the unchanged federal funds rate of alternative B. The vulnerable state of many financial markets in Asia, which could react adversely to an increase in U.S. interest rates, might weigh against action at this time. When the Committee's directive tilt was disclosed prematurely in late April, interest rates in those markets rose along with dollar interest rates, indeed by somewhat more than those here. In addition, the Committee may feel that a small uptick in underlying inflation, should it unfold as in the staff forecast, would generate only minimal costs in potential resource distortions and could be readily countered in the future. If so, the Committee may be willing to accept the significant probability of such an uptick through 1999 because recent experience has led it to place greater weight on the possibility that the economy will prove able to sustain the high operating rate built into the staff forecast without a rise in underlying inflation.

(9) In that regard, maintaining the current stance of policy might simply be based on the high degree of uncertainty about the inflation outlook. The persistent underpredictions of real output growth and employment and overpredictions of inflation that have confronted policymakers and forecasters alike have been symptomatic of several factors on the supply side of the economy. Some of these factors are likely to be temporary but others may reflect

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2. The staff CPI projection for 1998 of 1.6 percent is below the Committee members' 1-3/4 to 2-1/4 percent central tendency range in February.

ongoing structural shifts in the economy that permanently raise the path of potential output. Forecasters have not been very successful in either anticipating these forces or sorting out the extent to which their effects will be transitory, suggesting, perhaps, that less weight should be placed on such forecasts at present in the making of policy. Even though unemployment has fallen to a historically low rate, the point at which inflation will actually start to rise remains sufficiently uncertain that the appropriate policy posture may be to keep standing pat and allowing the economy's momentum to continue until clearer evidence of mounting inflationary pressures begins to surface. At that point, policy might need to respond quickly and vigorously, but the process of accelerating prices is likely to unfold gradually enough that such a reaction has a good chance of being successful in keeping inflation subdued. Until that point, however, the economy can continue to reap the benefits of greater employment and production than previously thought sustainable without inflationary side effects.

(10) Market participants seem to have incorporated virtually no odds of policy action at the May FOMC meeting, so a decision to keep the intended federal funds rate unchanged should elicit little immediate reaction in financial markets. Moreover, market participants appear to be anticipating economic events over the intermeeting period along the lines of the Greenbook forecast, so market interest rates should vary around current quotes. The exchange value of the dollar against major currencies also is not expected to break out of its recent trading range.

(11) The Committee instead may prefer to raise its intended federal funds rate by 25 basis points at the May meeting, as under **alternative C**. The Committee was concerned about the inflation outlook at its last meeting, and in some respects that outlook may have

worsened. In particular, the unemployment rate may be seen as having now fallen so low that, even if it were to edge up a little, as it does with the slowing of real growth in the staff forecast, the risks of burgeoning inflationary pressures have become unacceptably high. Although the first-quarter ECI increase was less than expected, total compensation, its wage component, and average hourly earnings have all been on an accelerating trend for some time. With the unemployment rate likely to remain far below any plausible estimate of its sustainable level, nominal compensation gains may well continue to mount, in contrast to the staff forecast. If so, expansion of labor compensation would increasingly exceed even optimistic views of a step-up in productivity growth. Moreover, the slowdown in output growth in the staff forecast is by no means a foregone conclusion, absent a tighter monetary policy stance. The effects of Asian woes on net exports may not of themselves be a sufficient offset to buoyant domestic final demand at current levels of short-term interest rates. Although real interest rates are high relative to historical norms, medium- and long-term real rates still may not be elevated enough at present to exert adequate restraint on spending for consumer durables, housing, and business fixed investment in light of optimistic "animal spirits" and rising equity prices. Even if the Committee were not dissatisfied with the likely intermediate-term economic outlook, it might see the possibility that an equity price bubble was building as representing a sufficient threat in the more distant future to the health of the economy and the financial system to warrant consideration of tightening policy. The appendix provides additional perspective on the potential role of equity prices in monetary policy decisions.

(12) In any event, part of the transmission of policy restraint to spending may work through a correction in equity markets. Whether an increase in the funds rate of only ¼ point would be enough to leave a lasting imprint on stock prices is not clear. To the extent that the unexpected monetary tightening were interpreted by market participants as suggesting heightened inflation concerns of the Committee, and, hence, as only the first of a number of upward steps, it could induce a significant backup in bond yields. In that case, stock prices might register substantial declines, reflecting both a less favorable outlook for corporate earnings and a higher discount rate applied to those earnings. Alternatively, were the tightening seen as an isolated "mid-course correction" in response to a modest shift in inflation risks, the reaction in bond and equity markets would be muted. Absent a substantial downdraft in the prices of U.S. financial assets, the value of the dollar would tend to firm on exchange markets. Although a tightening of U.S. monetary policy at this time might have negative impacts on financial conditions in Asian, and perhaps other, emerging market economies, the Committee would need to weigh those effects against the possibility that delay would necessitate more substantial actions later.

(13) Under the stable money market conditions of alternative B, the staff's projected 2½ percentage point moderation in the pace of nominal GDP from the first to the third quarter of this year should be associated with a noticeable slowdown in the expansion of the debt and monetary aggregates. Household borrowing should slow along with spending on consumer durables and houses, and business demand for credit should subside as inventory investment downshifts substantially. Still, the debt of both sectors is expected to exceed the expansion of income, with the upturn in debt-servicing burdens held down by recent and continuing

refinancing of outstanding higher-cost obligations. While slower economic growth and narrower profit margins may make lenders a little more cautious, a significant restriction in credit availability does not appear likely, given the healthy financial condition of both borrowers and lenders. In the federal sector, outstanding debt should run off, even on a seasonally adjusted basis, reflecting the government's widening budget surplus. From April to September, the growth of domestic nonfinancial debt is foreseen as slowing to a 4½ percent annual rate, bringing its average advance from the fourth quarter to 5½ percent, somewhat above the midpoint of its annual range.

(14) Under alternative B, M2 growth is expected to slow significantly to a 3 percent average rate over the April-to-September period, with a little more than 1 percentage point of the slowdown from the first four months of 1998 representing the projected unwinding of the previous artificial boost related to special tax and mortgage-refinancing factors. Even so, over the second and third quarters, M2 growth averaging 5 percent on a quarterly average basis is projected to exceed the 4 percent average rate of nominal GDP expansion, implying a further 1 percent rate of decline in M2's velocity. From the fourth quarter through September, implied M2 growth would be at a 5¾ percent rate. Looking a little further out, the staff now envisions growth of this aggregate for the year at a 5½ percent rate, putting it above the 1 to 5 percent annual range judged by the FOMC to be consistent with conditions of price stability and stable velocity behavior; this projection embodies a 1 percent decline in velocity in 1998.

(15) Projected M3 growth under alternative B would dip to a 5½ percent rate from April through September, reflecting some expected reduction in the growth of depository funding needs associated with the anticipated marked slowing in depository credit expansion

over that interval. The rapid rate of securities acquisitions of late 1997 and earlier this year, which appeared to be related to some large banks' efforts to increase leverage, is expected to slow. The pace of lending, too, is likely to remain below that of the first four months of the year as credit demands moderate. From the fourth quarter through September, M3 is seen as advancing at an 8½ percent annual rate, and for the year as a whole at 8¼ percent, well above the upper bound of its 2 to 6 percent annual range.

<u>Directive Language</u>

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

<u>OPERATIONAL PARAGRAPH</u>

In the implementation of policy for the immediate future, the Committee seeks conditions in reserve markets consistent with maintaining/INCREASING/DECREASING the federal funds rate at/TO an average of around ___ ~~5-1/2~~ percent. In the context of the Committee's long-run objectives for price stability and sustainable economic growth, and giving careful consideration to economic, financial, and monetary developments, a somewhat/SLIGHTLY higher federal funds rate would/MIGHT or a SOMEWHAT/slightly lower federal funds rate WOULD/might be acceptable in the intermeeting period. The contemplated reserve conditions are expected to be consistent with considerable moderation in the growth in M2 and M3 over coming months.

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-97		6.8	6.8	12.1	12.1	6.2
Jan-98		7.4	7.4	10.8	10.8	6.2
Feb		9.5	9.5	8.9	8.9	6.9
Mar		8.2	8.2	14.1	14.1	6.9
Apr		9.6	9.6	10.2	10.2	5.2
May		-0.5	-0.6	3.4	3.4	3.9
Jun		4.8	4.5	6.0	5.9	4.0
Jul		3.6	3.2	6.0	5.8	4.3
Aug		3.6	3.2	6.0	5.8	4.5
Sep		3.5	3.2	6.0	5.9	5.2
Oct		3.5	3.3	5.9	5.8	5.1
Nov		3.6	3.4	5.9	5.8	5.0
Dec		3.6	3.4	5.9	5.8	4.8
Quarterly Averages						
97 Q3		5.5	5.5	8.1	8.1	4.2
97 Q4		6.9	6.9	10.2	10.2	5.7
98 Q1		7.9	7.9	11.3	11.3	6.5
98 Q2		6.5	6.5	9.0	9.0	5.4
98 Q3		3.4	3.1	5.7	5.6	4.3
98 Q4		3.6	3.3	6.0	5.9	5.0
Growth Rates						
From	To					
Apr-98	Sep-98	3.0	2.7	5.5	5.4	4.4
97 Q4	Apr-98	8.5	8.5	11.4	11.4	6.4
97 Q4	May-98	7.0	7.0	10.1	10.1	6.0
97 Q4	Sep-98	5.8	5.6	8.6	8.5	5.4
95 Q4	96 Q4	4.6	4.6	6.9	6.9	5.3
96 Q4	97 Q4	5.6	5.6	8.8	8.8	4.9
97 Q4	98 Q4	5.4	5.3	8.2	8.2	5.4

1998 Annual Ranges: 1.0 to 5.0 (M2); 2.0 to 6.0 (M3)

Chart 2

Actual and Projected M2

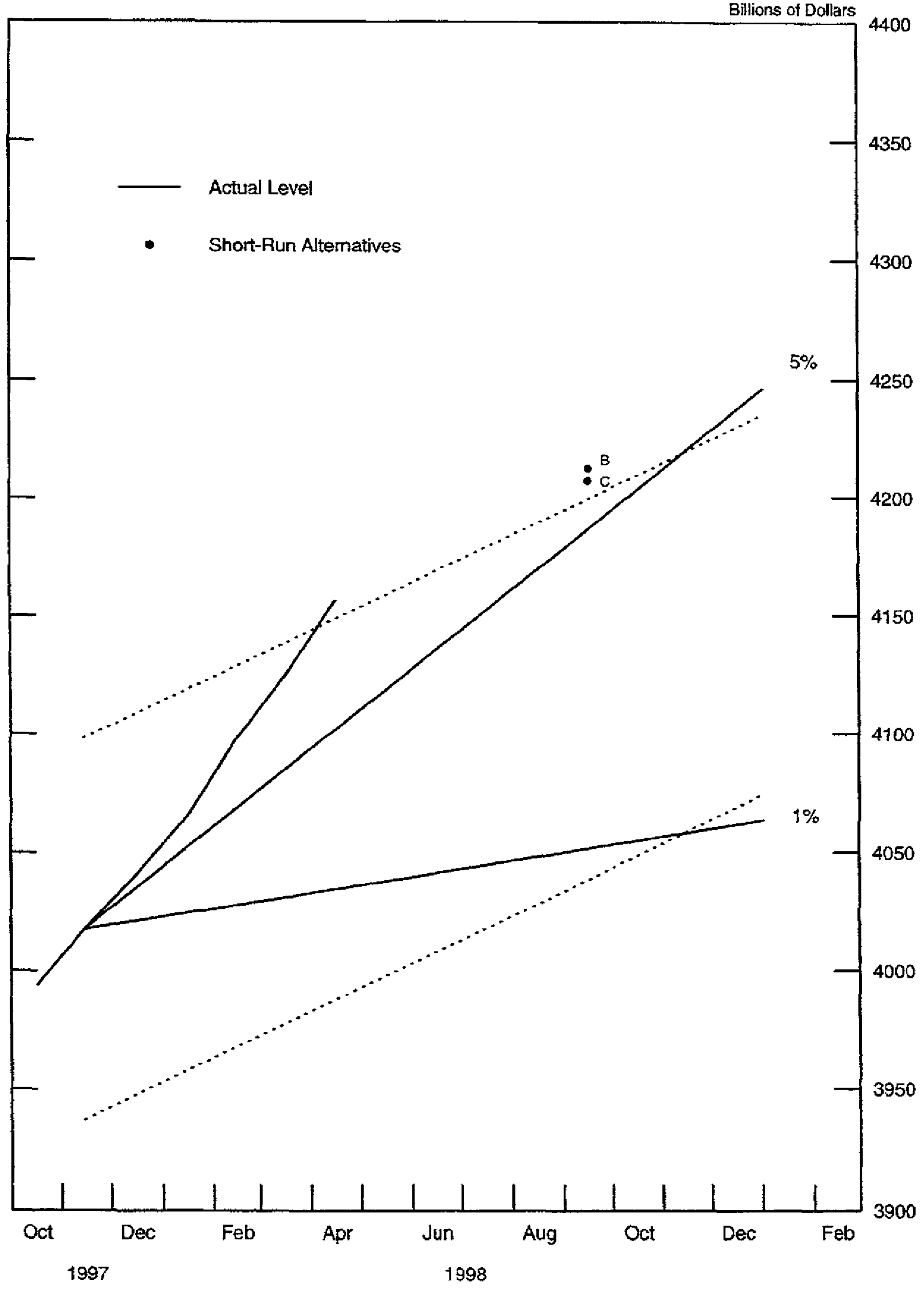


Chart 3

Actual and Projected M3

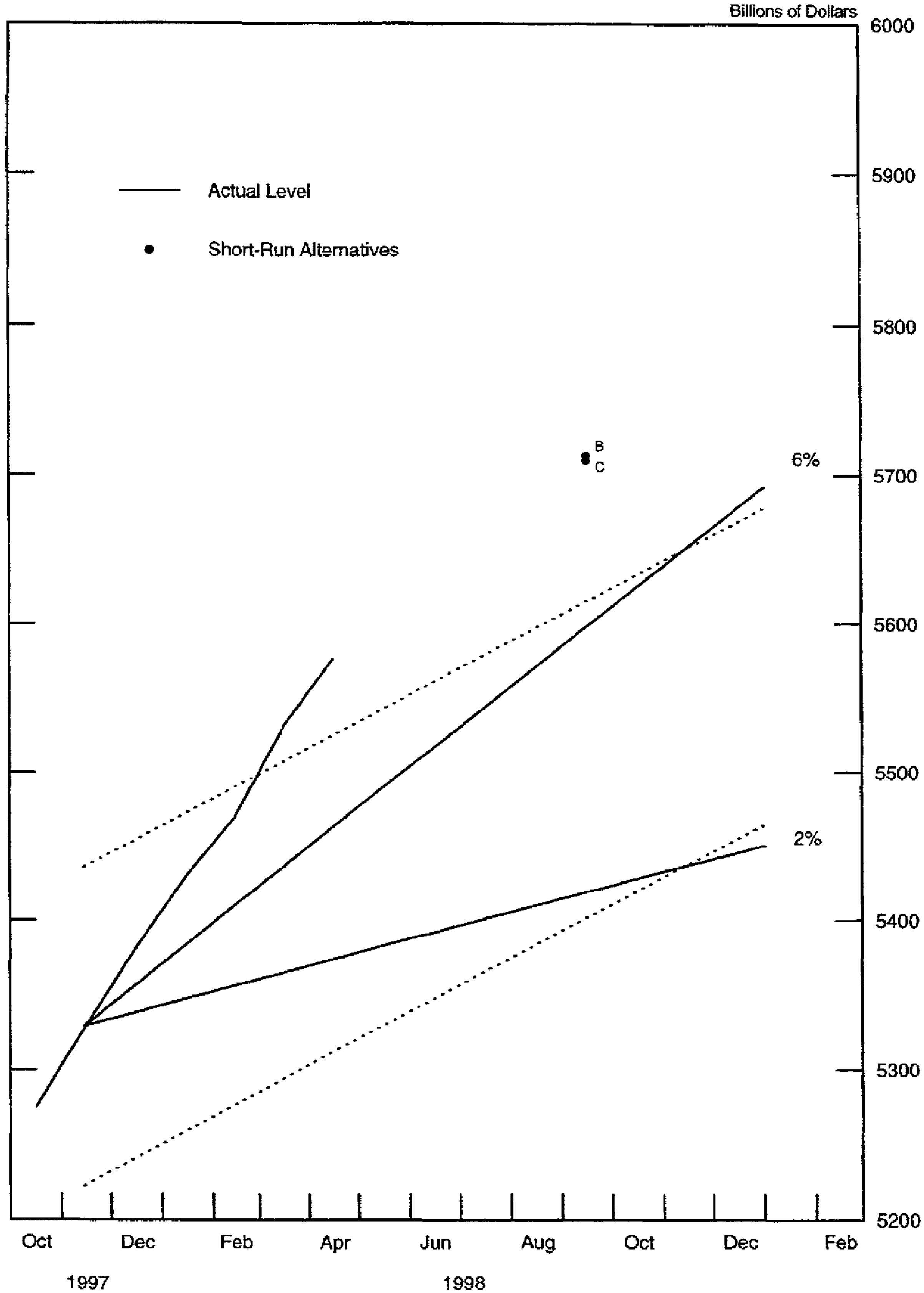
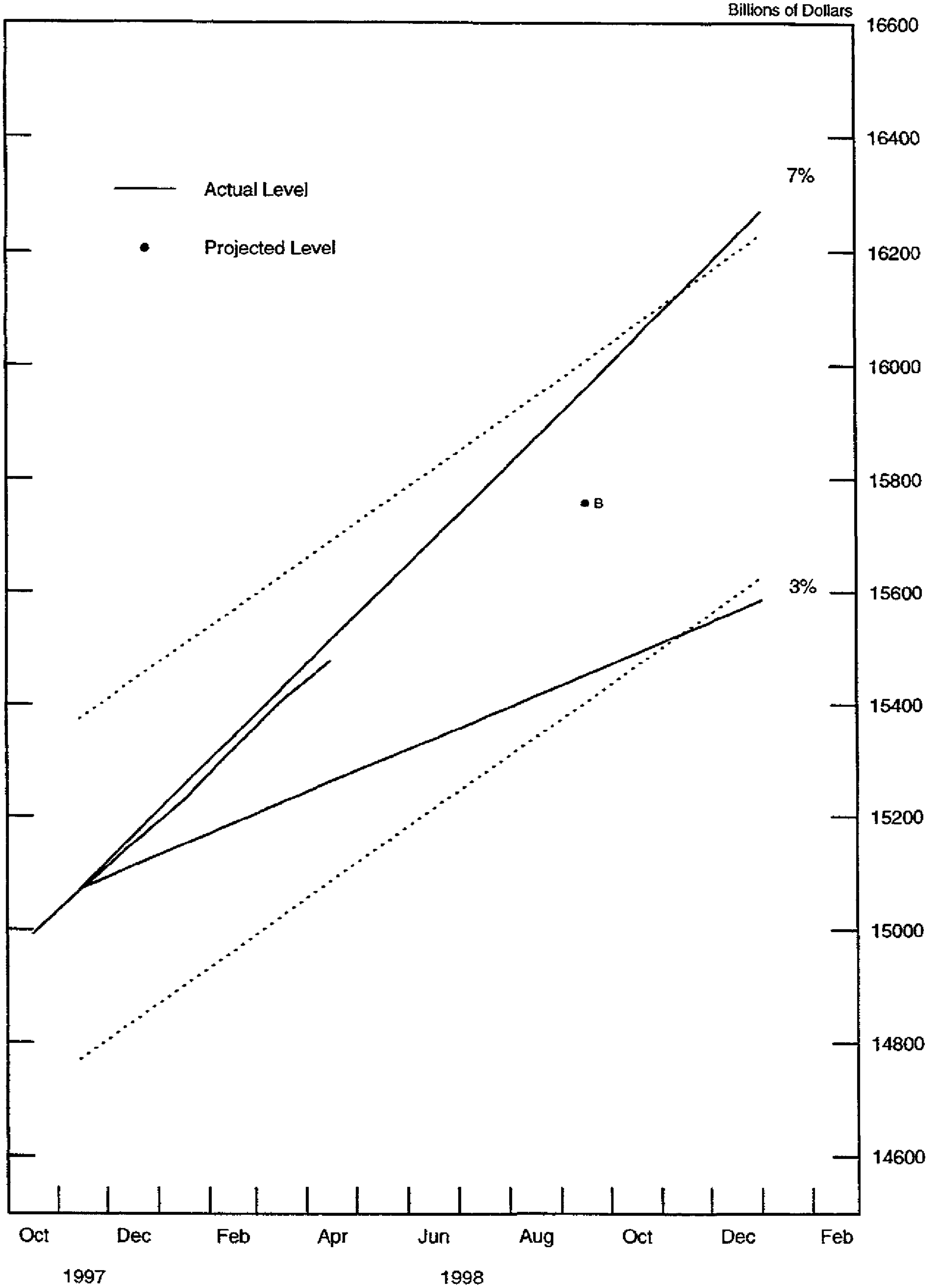


Chart 4

Actual and Projected Debt



Appendix: Equity Prices and Monetary Policy

(17) The capital appreciation on major equity markets of late has pushed prices further beyond the predictions of conventional models of equity-price fundamentals. Rising share values, even as the outlook for earnings has become less ebullient, have increased the odds that an asset-price bubble is inflating. This possibility has drawn considerable attention to the question of how the Committee should factor equity market developments into its policy deliberations. In the standard formulation of monetary policy, equity prices are important for what they imply about future spending and inflation, not for their own sake. Indeed, they have the same status as any of the other critical determinants of spending, production, and inflation--such as the foreign exchange value of the dollar, the federal budget position, and foreign economic activity. In that regard, high and rising equity prices--particularly if they were accompanied by a general increase in the value of other long-lived assets--might signal excessive liquidity, accommodative financial conditions, and a penchant for speculation on price increases, presaging the buildup of strains on resources. Presumably, though, such effects are embodied in the Committee's outlook for output and inflation and would warrant a policy response only to the extent that they threatened the achievement of its macroeconomic goals.

(18) The case for altering the course of policy in response to equity price movements beyond what would be called for on the basis of their contribution to current and future pressures on resources would seem to rest on one or both of two considerations. For one, the Committee might be concerned that the inflating of an asset bubble implied a significant misallocation of resources that would prevent the economy from producing most

efficiently. In an environment of ready capital gains, households might be consuming and building up debt on the basis of ephemeral additions to wealth, and firms might be adding to capacity because the inflated market values of their existing capital were high relative to replacement costs. These purchases of durable goods, to the extent that they were viewed with regret once equity prices fell back into their proper alignment, would also have the potential to amplify cyclical swings in economic activity.

(19) As another possibility, although the Committee might be satisfied that the most likely path for equity prices was consistent with its macroeconomic objectives, it might also feel that there was a significant risk of substantially faster asset inflation that would sow the seeds of problems when it corrected. In particular, absent effective efforts to prick the bubble, once begun, an asset inflation might continue on its own momentum, and the relative price misalignment become increasingly severe. The resulting threat of a large price decline when the bubble bursts may be troubling because of concerns about systemic risk to the financial system, knock-on effects on spending and confidence, and the risk of subsequent undershooting of equity prices.

(20) By tightening monetary policy beyond that expected to be required to achieve desired macroeconomic outcomes, the Committee would be tolerating some straying in the intermediate term from the fundamental goals of maximum employment and stability of the prices of goods and services in order to lessen the risks of systemic problems or severe macroeconomic dislocations. Such action requires both that the Committee believes that it has a more accurate view of fundamentals than the market and that it doubts that market forces will discover and correct the imbalance in a timely fashion. Given the complex

interaction of equity price determination and short-term interest rates, the Committee would need to be mindful of the high degree of uncertainty surrounding the extent of monetary policy action ultimately required to burst the bubble without causing significant undershooting of equity prices. Moreover, the Committee would need to make the judgement that standard regulatory and supervisory practices, discount window lending, and post-crash provision of liquidity and easing of monetary policy might be insufficient to prevent systemic problems or severe macroeconomic disturbances should the bubble be allowed to inflate for now only to burst at a later date.

SELECTED INTEREST RATES
(percent)

May 18, 1998

	Short-Term							Long-Term								
	federal funds	Treasury bills secondary market			CDs secondary market	comm. paper	bank prime loan	U.S. government constant maturity yields			indexed yields		corporate A-utility recently offered	municipal Bond Buyer	conventional home mortgages primary market	
		3-month	6-month	1-year	3-month	1-month		3-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	8.50	6.64	6.92	7.12	3.67	3.67	8.27	6.14	8.18	5.91
-- Low	5.05	4.85	4.99	5.07	5.34	5.37	8.25	5.69	5.74	5.90	3.52	3.27	7.05	5.40	6.99	5.45
98 -- High	5.68	5.24	5.24	5.23	5.74	5.71	8.50	5.70	5.75	6.05	3.93	3.77	7.19	5.52	7.22	5.71
-- Low	5.32	4.91	4.97	4.92	5.50	5.44	8.50	5.28	5.45	5.74	3.70	3.65	6.86	5.25	6.89	5.50
Monthly																
May 97	5.50	5.05	5.30	5.54	5.70	5.61	8.50	6.42	6.71	6.94	--	3.58	8.01	5.94	7.94	5.81
Jun 97	5.56	4.93	5.13	5.38	5.66	5.60	8.50	6.24	6.49	6.77	--	3.60	7.85	5.79	7.69	5.69
Jul 97	5.52	5.05	5.12	5.24	5.60	5.56	8.50	6.00	6.22	6.51	3.64	3.64	7.62	5.62	7.50	5.57
Aug 97	5.54	5.14	5.19	5.27	5.60	5.55	8.50	6.06	6.30	6.58	3.57	3.57	7.67	5.68	7.48	5.55
Sep 97	5.54	4.95	5.09	5.23	5.60	5.49	8.50	5.98	6.21	6.50	3.61	3.58	7.58	5.64	7.43	5.55
Oct 97	5.50	4.97	5.09	5.17	5.65	5.49	8.50	5.84	6.03	6.33	3.60	3.57	7.44	5.63	7.29	5.51
Nov 97	5.52	5.14	5.17	5.17	5.74	5.53	8.50	5.76	5.88	6.11	3.55	3.54	7.24	5.59	7.21	5.49
Dec 97	5.50	5.16	5.24	5.24	5.80	5.78	8.50	5.74	5.81	5.99	3.63	3.60	7.10	5.44	7.10	5.52
Jan 98	5.56	5.04	5.03	4.98	5.54	5.46	8.50	5.38	5.54	5.81	3.73	3.68	6.97	5.32	6.99	5.54
Feb 98	5.51	5.09	5.07	5.04	5.54	5.47	8.50	5.43	5.57	5.89	3.72	3.66	7.02	5.33	7.04	5.60
Mar 98	5.49	5.03	5.04	5.11	5.58	5.51	8.50	5.57	5.65	5.95	3.79	3.71	7.11	5.41	7.13	5.69
Apr 98	5.45	4.95	5.06	5.10	5.58	5.49	8.50	5.58	5.64	5.92	3.86	3.75	7.10	5.44	7.14	5.67
Weekly																
Mar 13 98	5.46	4.97	5.02	5.09	5.58	5.51	8.50	5.53	5.62	5.93	3.74	3.68	7.06	5.40	7.16	5.70
Mar 20 98	5.44	5.02	5.05	5.08	5.58	5.50	8.50	5.50	5.57	5.89	3.78	3.71	7.06	5.36	7.08	5.67
Mar 27 98	5.47	5.05	5.02	5.12	5.59	5.52	8.50	5.59	5.63	5.92	3.83	3.73	7.14	5.42	7.08	5.70
Apr 3 98	5.58	5.00	5.03	5.09	5.58	5.52	8.50	5.57	5.61	5.89	3.84	3.74	6.99	5.39	7.15	5.68
Apr 10 98	5.48	4.95	5.01	5.03	5.56	5.49	8.50	5.50	5.55	5.86	3.85	3.75	7.09	5.40	7.09	5.68
Apr 17 98	5.46	4.97	5.09	5.11	5.57	5.49	8.50	5.56	5.61	5.90	3.87	3.77	7.09	5.40	7.17	5.67
Apr 24 98	5.38	4.94	5.06	5.12	5.58	5.48	8.50	5.61	5.67	5.95	3.85	3.73	7.19	5.47	7.15	5.64
May 1 98	5.42	4.91	5.09	5.17	5.60	5.49	8.50	5.69	5.75	6.02	3.91	3.77	7.19	5.52	7.22	5.69
May 8 98	5.32	4.97	5.11	5.15	5.58	5.48	8.50	5.62	5.68	5.96	3.91	3.75	7.19	5.49	7.14	5.65
May 15 98	5.58	5.01	5.16	5.18	5.59	5.49	8.50	5.64	5.70	5.98	3.93	3.75	7.18	5.48	7.19	5.71
Daily																
Apr 29 98	5.33	4.94	5.11	5.20	5.61	5.50	8.50	5.75	5.81	6.08	3.92	3.77	--	--	--	--
Apr 30 98	5.59	4.87	5.04	5.12	5.60	5.48	8.50	5.62	5.68	5.95	3.90	3.76	--	--	--	--
May 1 98	5.46	4.89	5.06	5.13	5.58	5.48	8.50	5.62	5.67	5.94	3.90	3.76	--	--	--	--
May 4 98	5.22	4.91	5.08	5.14	5.59	5.49	8.50	5.62	5.67	5.94	3.90	3.75	--	--	--	--
May 5 98	5.22	4.98	5.11	5.16	5.59	5.49	8.50	5.64	5.70	5.98	3.91	3.75	--	--	--	--
May 6 98	5.04	4.98	5.11	5.13	5.58	5.48	8.50	5.59	5.67	5.94	3.90	3.75	--	--	--	--
May 7 98	5.34	4.98	5.11	5.14	5.58	5.47	8.50	5.60	5.67	5.95	3.91	3.74	--	--	--	--
May 8 98	5.47	5.00	5.14	5.16	5.58	5.47	8.50	5.64	5.71	5.98	3.91	3.74	--	--	--	--
May 11 98	5.53	5.00	5.15	5.19	5.58	5.47	8.50	5.70	5.79	6.04	3.93	3.75	--	--	--	--
May 12 98	5.54	4.99	5.15	5.16	5.59	5.49	8.50	5.60	5.70	5.96	3.93	3.75	--	--	--	--
May 13 98	5.58	4.99	5.17	5.16	5.59	5.49	8.50	5.60	5.64	5.95	3.94	3.75	--	--	--	--
May 14 98	5.66	5.04	5.17	5.19	5.59	5.50	8.50	5.64	5.67	5.98	3.93	3.76	--	--	--	--
May 15 98	5.80 p	5.04	5.17	5.18	5.60	--	8.50	5.64	5.68	5.97	3.92	3.75	--	--	--	--

NOTE: Weekly data for columns 1 through 12 are week-ending averages. As of September 1997, data in column 6 are interpolated from data on certain commercial paper trades settled by the Depository Trust Company; prior to that, they reflect an average of offering rates placed by several leading dealers. Columns 13 and 14 are 1-day quotes for Friday or Thursday, respectively. Column 14 is the Bond Buyer revenue index. Column 15 is the average contract rate on new commitments for fixed-rate mortgages (FRMs) with 80 percent loan-to-value ratios at major institutional lenders. Column 16 is the average initial contract rate on new commitments for 1-year, adjustable-rate mortgages (ARMs) at major institutional lenders offering both FRMs and ARMs with the same number of discount points.

p - preliminary data

Strictly Confidential (FR)-
Class II FOMC

May 18, 1998

Money and Debt Aggregates

Seasonally adjusted

Period	Money stock measures and liquid assets					Domestic nonfinancial debt		
	M1	M2	nontransactions components in M2	nontransactions components in M3 only	M3	U. S. government[1]	other[1]	total[1]
	1	2	3	4	5	6	7	8
Annual growth rates(%):								
Annually (Q4 to Q4)								
1995	-1.6	3.9	6.6	15.4	6.1	4.4	5.8	5.4
1996	-4.5	4.6	8.7	15.7	6.9	3.7	5.8	5.3
1997	-1.2	5.6	8.3	20.0	8.8	0.6	6.4	4.9
Quarterly(average)								
1997-Q2	-4.5	4.4	7.9	18.9	7.7	0.4	6.6	5.0
Q3	0.3	5.5	7.4	16.8	8.1	-0.6	5.9	4.2
Q4	0.9	6.9	9.1	20.8	10.2	0.9	7.3	5.7
1998-Q1	3.0	7.9	9.7	21.8	11.3	0.5	8.5	6.5
Monthly								
1997-Apr.	-7.5	6.5	11.9	22.9	10.3	2.1	7.5	6.1
May	-4.5	0.8	2.9	13.5	3.8	-4.3	6.9	4.0
June	1.2	4.8	6.1	7.5	5.4	-4.2	5.0	2.6
July	0.2	4.3	5.8	25.9	9.4	0.9	6.0	4.7
Aug.	6.2	9.6	10.9	13.6	10.5	1.6	6.0	4.9
Sep.	-8.5	6.4	11.8	16.4	8.8	1.1	6.0	4.7
Oct.	-1.8	5.9	8.7	17.4	8.7	0.5	7.7	5.9
Nov.	8.2	7.4	7.0	28.3	12.4	0.3	8.6	6.5
Dec.	7.6	6.8	6.5	28.3	12.1	2.2	7.6	6.2
1998-Jan.	-2.7	7.4	11.1	21.0	10.8	0.0	8.3	6.2
Feb.	3.1	9.5	11.8	6.9	8.9	-0.8	9.5	6.9
Mar.	5.1	8.2	9.3	31.4	14.1	1.8	8.5	6.9
Apr. p	-1.8	9.6	13.6	11.9	10.2			
Levels ($billions):								
Monthly								
1997-Dec.	1076.0	4041.3	2965.3	1342.4	5383.7	3797.3	11354.3	15151.6
1998-Jan.	1073.6	4066.3	2992.7	1365.9	5432.1	3797.4	11432.5	15230.0
Feb.	1076.4	4098.6	3022.1	1373.7	5472.2	3794.9	11523.0	15317.9
Mar.	1081.0	4126.6	3045.6	1409.7	5536.3	3800.5	11605.1	15405.6
Apr. p	1079.4	4159.6	3080.2	1423.7	5583.3			
Weekly								
1998-Apr. 6	1083.5	4150.2	3066.7	1430.8	5581.0			
13	1075.0	4151.0	3076.0	1436.1	5587.1			
20	1084.8	4173.1	3088.3	1413.3	5586.4			
27p	1076.9	4164.9	3088.1	1412.0	5576.9			
May 4p	1081.7	4161.6	3080.0	1432.7	5594.3			

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

May 15, 1998

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

Period	Treasury bills: Net purchases[2]	Treasury bills: Redemptions (-)	Treasury bills: Net change	Treasury coupons: Net purchases[3]: within 1 year	Net purchases[3]: 1-5	Net purchases[3]: 5-10	Net purchases[3]: over 10	Treasury coupons: Redemptions (-)	Treasury coupons: Net Change	Federal agencies redemptions (-)	Net change outright holdings total[4]	Net RPs[5]
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	5,748	20,299	3,101	5,827	1,996	32,979	1,540	40,586	-64
1997 ---Q1	---	---	---	818	3,985	---	1,117	607	5,314	230	5,084	-11,149
---Q2	4,602	---	4,602	877	5,823	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	1,868	2,816	416	15,471	241	19,775	8,807
1998 ---Q1	---	2,000	-2,000	---	3,763	283	743	478	4,311	60	2,251	-15,420
1997 May	---	---	---	383	1,102	734	988	---	3,206	---	3,206	-42,864
June	596	---	596	494	2,797	499	906	---	4,696	474	4,818	7,771
July	---	---	---	---	---	---	---	598	-598	287	-885	-11,981
August	---	---	---	---	---	---	---	---	---	179	-179	7,669
September	---	---	---	644	2,697	---	---	---	3,341	105	3,236	-181
October	---	---	---	---	---	770	648	416	1,002	215	787	-4,412
November	---	---	---	1,462	3,323	485	954	---	6,224	26	6,198	5,519
December	4,545	---	4,545	1,947	4,471	613	1,214	---	8,245	---	12,790	7,700
1998 January	---	2,000	-2,000	---	---	---	---	478	-478	---	-2,478	-21,985
February	---	---	---	---	---	---	---	---	---	10	-10	4,251
March	---	---	---	---	3,763	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	-8,427
Weekly												
January 21	---	750	-750	---	---	---	---	478	-478	---	-1,228	-987
28	---	250	-250	---	---	---	---	---	---	---	-250	784
February 4	---	250	-250	---	---	---	---	---	---	---	-250	-9,947
11	---	---	---	---	---	---	---	---	---	10	-10	5,010
18	---	---	---	---	---	---	---	---	---	---	---	838
25	---	---	---	---	---	---	---	---	---	---	---	9,506
March 4	---	---	---	---	---	---	---	---	---	---	---	-9,275
11	---	---	---	---	3,763	---	---	---	3,763	50	3,713	5,512
18	---	---	---	---	---	---	---	---	---	---	---	-5,952
25	---	---	---	---	---	283	743	---	1,026	---	1,026	2,943
April 1	---	---	---	---	---	---	---	---	---	---	---	-3,213
8	---	---	---	1,369	---	---	---	---	1,369	---	1,369	-1,551
15	3,550	---	3,550	---	1,113	495	---	286	1,322	60	4,812	-14,879
22	---	---	---	---	1,880	---	---	---	1,880	---	1,880	7,464
29	---	---	---	---	---	---	---	---	---	14	-14	15,594
May 6	---	---	---	---	---	---	---	---	---	---	---	-32,580
13	---	---	---	---	---	---	---	---	---	---	---	-38
Memo: *LEVEL (bil. $)*[6]												
May 13			215.7	52.3	98.8	40.6	50.8		242.5		458.8	-38.4

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
May 13	0.2	0.1	0.2	0.0	0.5