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 some material may have been redacted from this document if that material was received on a confidential basis. Redacted material is indicated by occasional gaps in the text or by gray boxes around non-text content. All redacted passages are exempt from disclosure under applicable provisions of the Freedom of Information Act.

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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).

[2] A two-step process was used. An advanced optical 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.

Content last modified 5/26/2009.

Strictly Confidential (F.R.) **June 19, 2003**
Class II – FOMC

MONETARY POLICY ALTERNATIVES

Recent Developments

(1) The FOMC's decision at its May meeting to keep the intended federal funds rate at 1¼ percent came as no surprise to most observers. By contrast, splitting the balance of risks into separate assessments about growth and inflation and emphasizing a concern about further declines of inflation from an already low level led market participants to mark down their policy expectations. The announcement also set the backdrop against which subsequent statements by Federal Reserve officials regarding the possibility of deflation and available policy alternatives were interpreted. Options on federal funds futures indicate that market participants are nearly certain of policy easing at this meeting, with a half-point cut given two-to-one odds over a quarter-point cut. Given the sense that Committee members have become more concerned about inflation turning out too low than too high, market participants now see a substantially longer period of low short-term interest rates; indeed, the funds rate is expected to remain below its current level through this year and most of next.[1] (The box on the next page provides more detail on prevailing market expectations.)

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[1] The average effective federal funds rate for the intermeeting period came in close to 1.25 percent. The Desk purchased $4.5 billion of Treasury securities in outright operations: $2.1 billion of coupons in the market and $2.4 billion of bills from foreign official institutions. The outstanding amount of long-term RPs increased from $16 billion to $19 billion.

Policy Expectations

In addition to marking down the expected path of policy over the intermeeting period, investors became more confident about their forecast for the funds rate (Chart 1). For example, based on options on eurodollar futures, the width of the 90 percent confidence interval around the expected target level one year ahead narrowed substantially over the period to stand at the lowest level in many years.

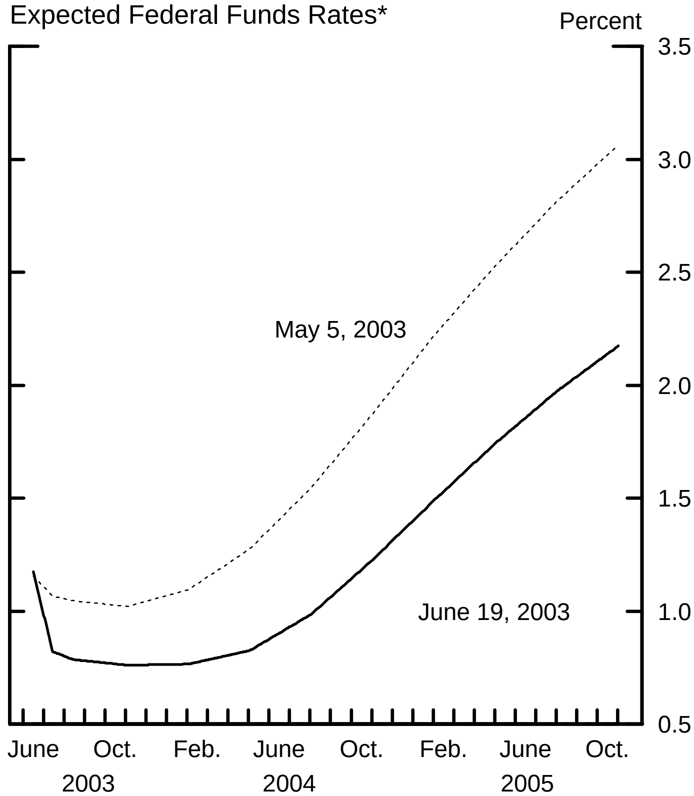
A recently introduced options contract on federal funds futures on the Chicago Board of Trade opens a new window on market participants' near-term policy outlook. Prices of options at different strikes depend on investors' subjective probability assessment that the options will be in the money at expiration. The option-implied probability of no change in policy, the solid line in the bottom left panel, remained above 50 percent until June 3, but has since dropped nearly to zero. At last reading, these option-implied probabilities suggest that investors consider a half-point cut in the target rate about twice as likely as a quarter-point cut.

Prices of options on Eurodollar futures can be used in a similar way to construct the probability distribution of the target rate later in the year, shown in the bottom-right panel. The most recent distribution (in red) has shifted markedly to the left and the weight on rates in the lower tail has been revised up significantly. Indeed, investors apparently place about a 15 percent probability on the funds rate trading at or below ½ percent in six months.

(2) Consistent with a lower expected path for policy, yields on Treasury coupon securities shed 35 to 60 basis points over the intermeeting period, with much of the decline concentrated in implied forward rates at the three- to seven-year horizon (Chart 2). Inflation-indexed yields fell somewhat less, implying that inflation compensation declined moderately. The desire by managers of mortgage-backed security portfolios to extend the duration of their holdings, which has been shortened by the recent wave of mortgage refinancings, may have amplified the downward pressure on longer-term yields. With uncertainty about the future course of interest

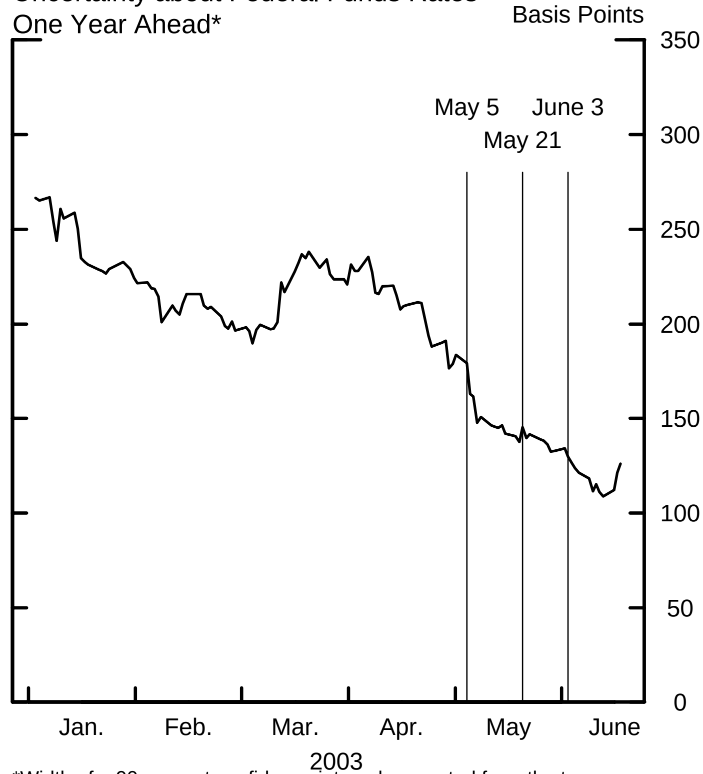
Chart 1
Policy Expectations

Expected Federal Funds Rates*



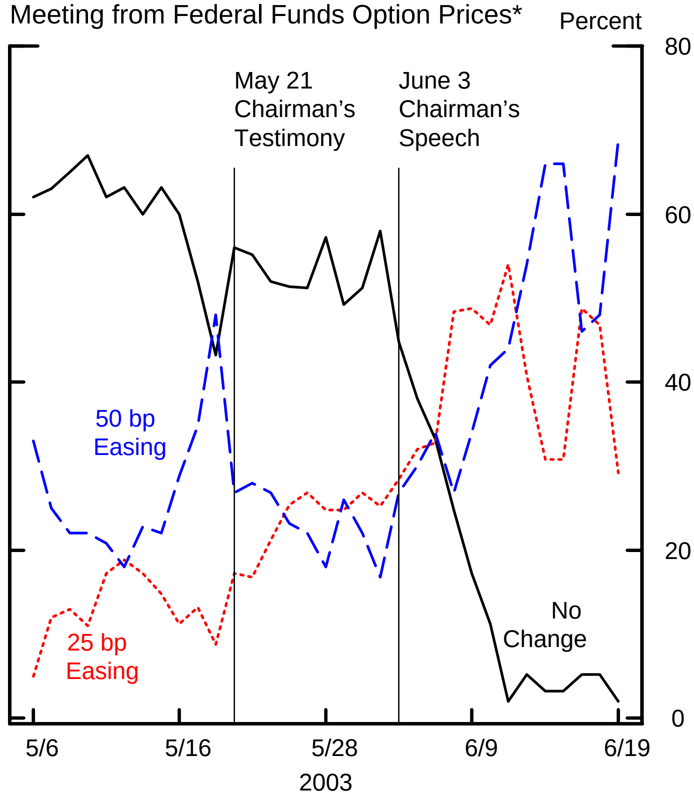
*Estimates from federal funds and eurodollar futures

Uncertainty about Federal Funds Rates One Year Ahead*



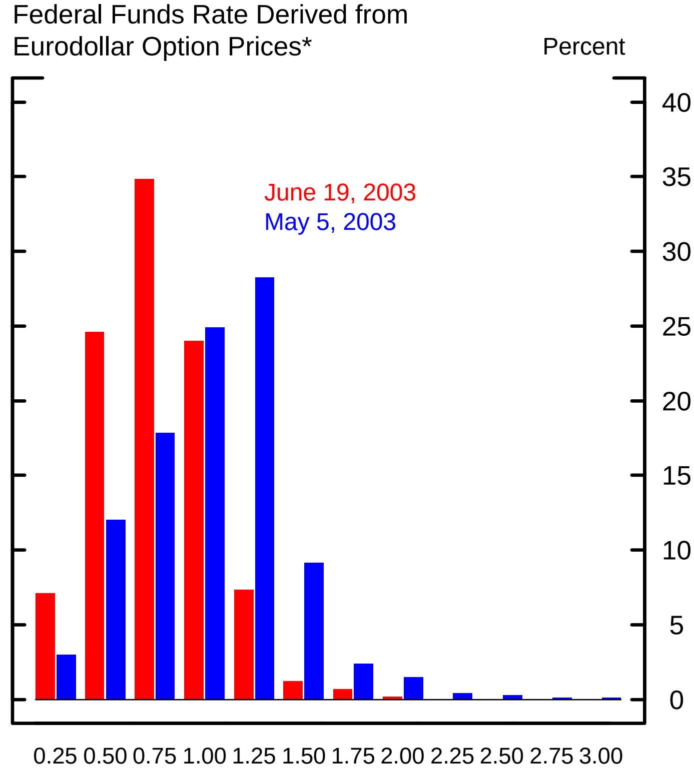
*Width of a 90 percent confidence interval computed from the term structures for the expected federal funds rate and implied volatility. Last observation is June 18, 2003.

Probability of Policy Easing at the June FOMC Meeting from Federal Funds Option Prices*



*Based on options on July 2003 federal funds futures.

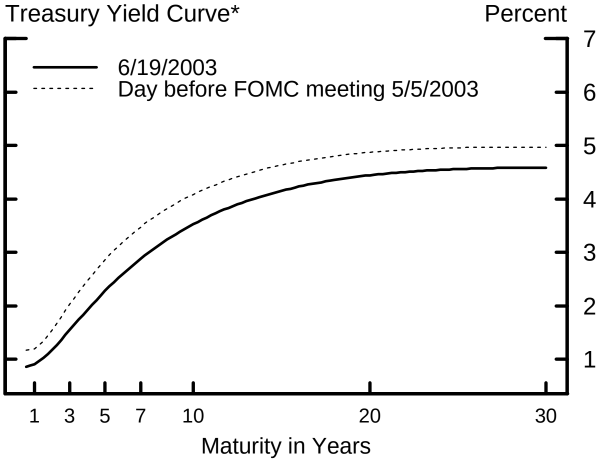
Implied Distribution Five Months Ahead of Federal Funds Rate Derived from Eurodollar Option Prices*



*Estimates from options on eurodollar futures contracts, adjusted to estimate expectations for the federal funds rate.

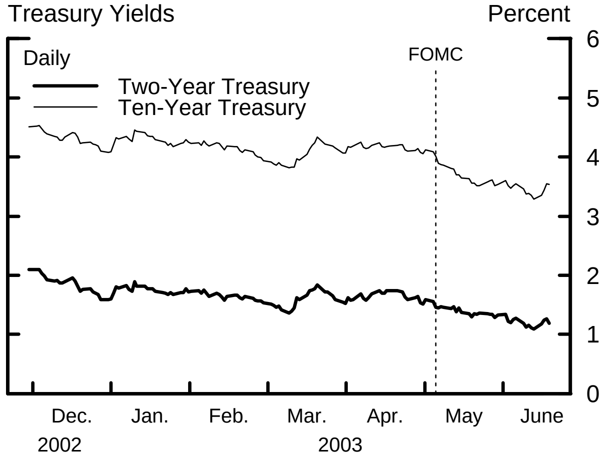
Chart 2
Financial Market Indicators

Treasury Yield Curve*

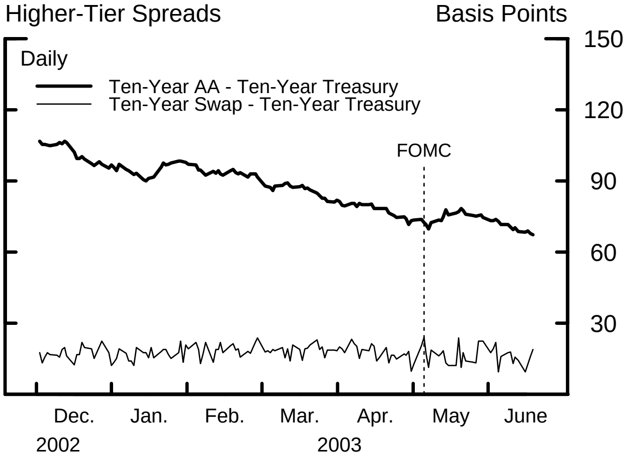


*Smoothed yield curve estimated from off-the-run Treasury coupon securities. Yields shown are those on notional par Treasury securities with semi-annual coupons.

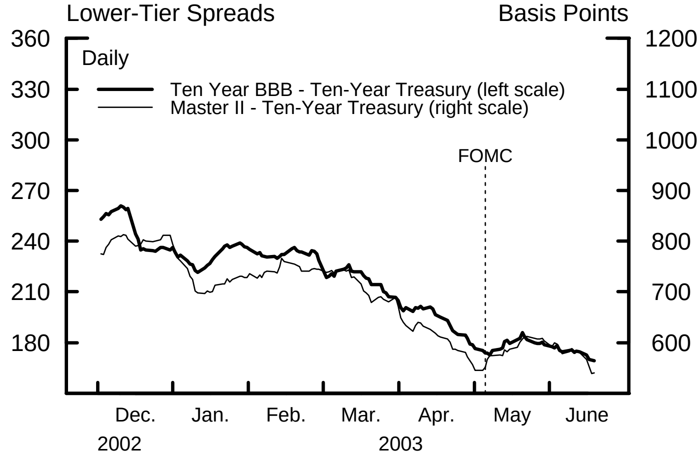
Treasury Yields



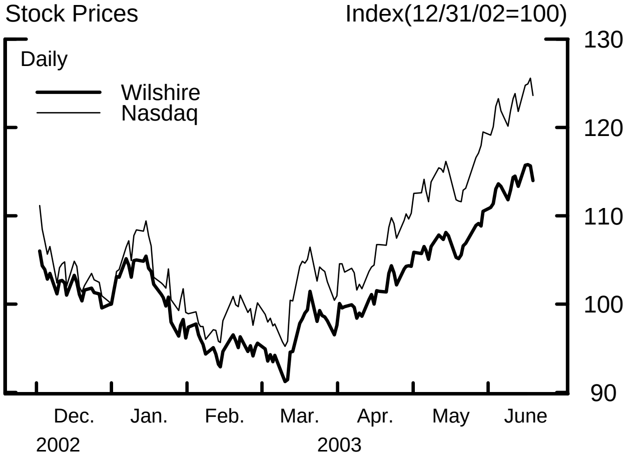
Higher-Tier Spreads



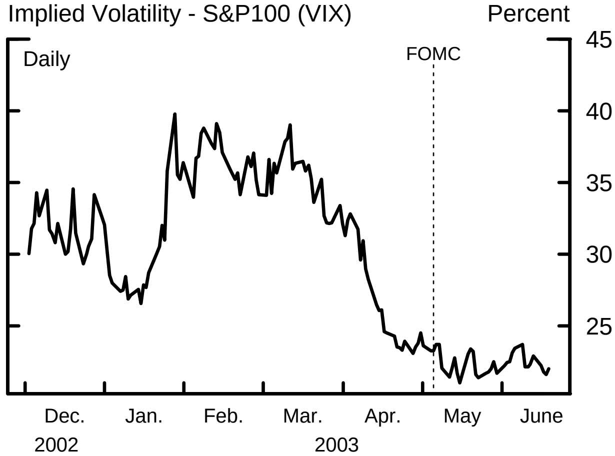
Lower-Tier Spreads



Stock Prices



Implied Volatility - S&P100 (VIX)



rates reduced, term premia may have declined, adding to the drop in bond yields.

(3) Yields on corporate bonds fell about in line with those on Treasuries even as capital markets absorbed a surge in issuance by highly-rated firms. Indeed, even lower-tier issuers found markets receptive, taking advantage of historically low bond yields to issue a record amount of debt in May. Stock price indexes registered sizable gains over the intermeeting period, buoyed by the decline in real yields as well as the improved outlook for economic growth and earnings and, perhaps, the cut in the tax rate on dividends and capital gains.[2]

(4) Since the May FOMC meeting, the dollar has slipped 3 percent further against an index of major foreign currencies (Chart 4). Contributing to the downward pressure were comments by U.S. Administration officials that were interpreted on balance as not opposing some depreciation of the dollar, and some heightening of longstanding concerns about the availability of international capital flows to finance the burgeoning U.S. current account deficit. The dollar declined 4½ percent against the Canadian dollar despite signs of slower activity in Canada. The dollar also dropped substantially against the euro, even as indicators pointed to lackluster domestic demand in the euro area and an increasing drag on its exports from the

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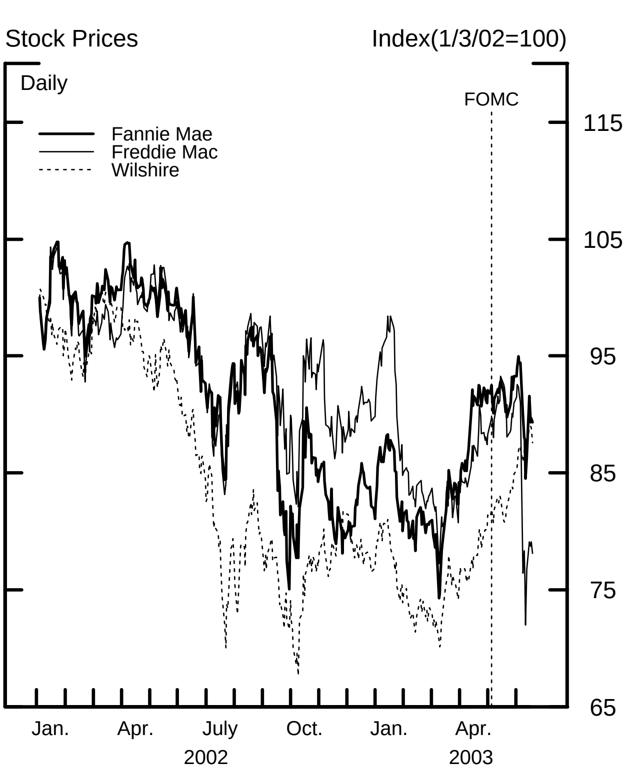
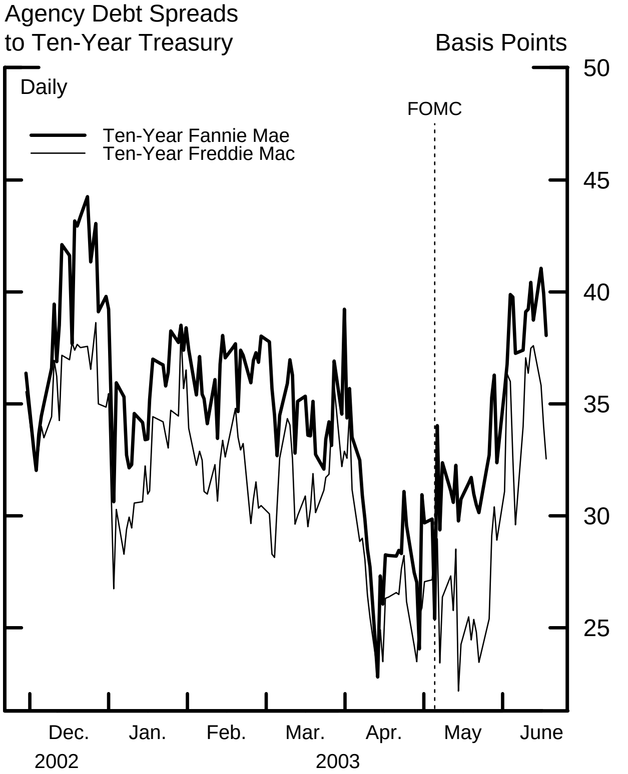
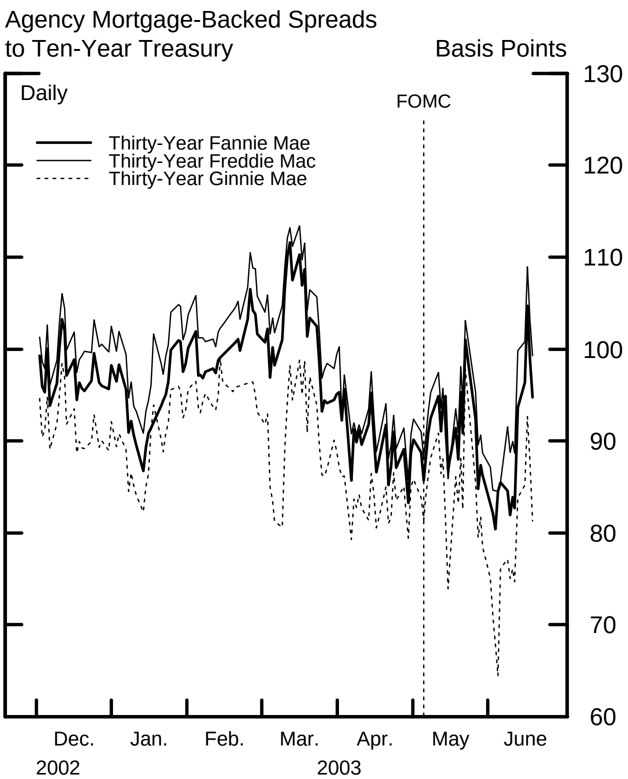
[2] Market attention focused for a time on Freddie Mac following the replacement of its top management in the wake of questions about its accounting practices. Freddie's stock price has declined 15 percent since the shakeup (Chart 3). To reassure investors about the liquidity of its issues and to demonstrate its own financial health, Freddie conducted larger-than-usual buybacks of dollar- and euro-denominated debt. To date, however, there is little evidence that the increase in Freddie's cost of funds is having a negative impact on secondary mortgage market activity. Although not implicated in any irregularities, Fannie Mae saw its stock decline in concert with Freddie Mac's but by less. Although the fallout from this episode has been contained so far, credit default swap spreads show that market participants' perception of Freddie's riskiness as a counterparty has edged up despite the major rating agencies having reaffirmed the housing giant's triple-A credit rating.

Chart 3


Stock Prices
Index(1/3/02=100)
Daily
FOMC
Fannie Mae
Freddie Mac
Wilshire
115
105
95
85
75
65
Jan.
Apr.
July
Oct.
Jan.
Apr.
2002
2003


Agency Debt Spreads
to Ten-Year Treasury
Basis Points
Daily
FOMC
Ten-Year Fannie Mae
Ten-Year Freddie Mac
50
45
40
35
30
25
Dec.
Jan.
Feb.
Mar.
Apr.
May
June
2002
2003


Agency Mortgage-Backed Spreads
to Ten-Year Treasury
Basis Points
Daily
FOMC
Thirty-Year Fannie Mae
Thirty-Year Freddie Mac
Thirty-Year Ginnie Mae
130
120
110
100
90
80
70
60
Dec.
Jan.
Feb.
Mar.
Apr.
May
June
2002
2003

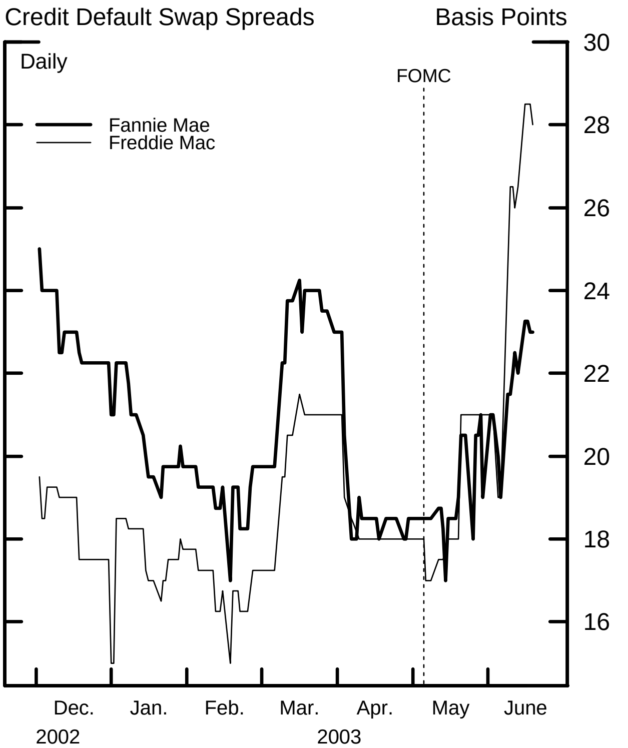
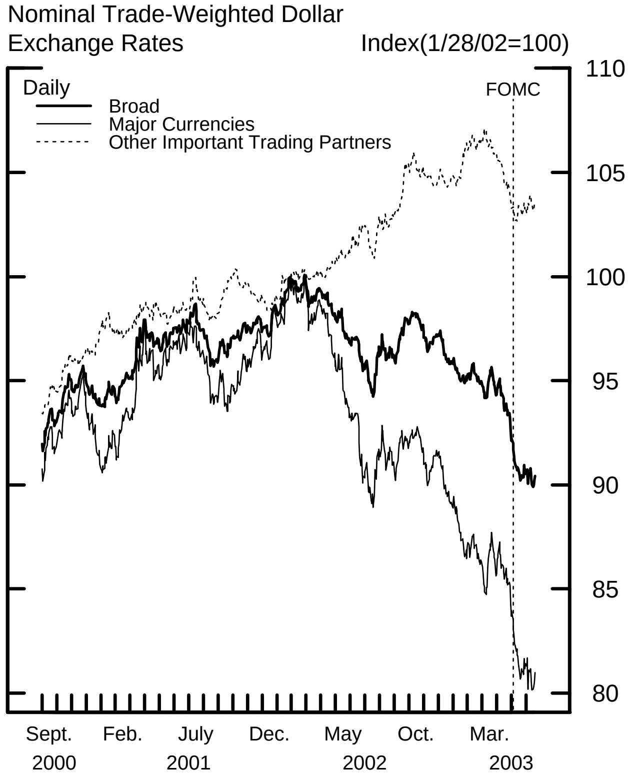
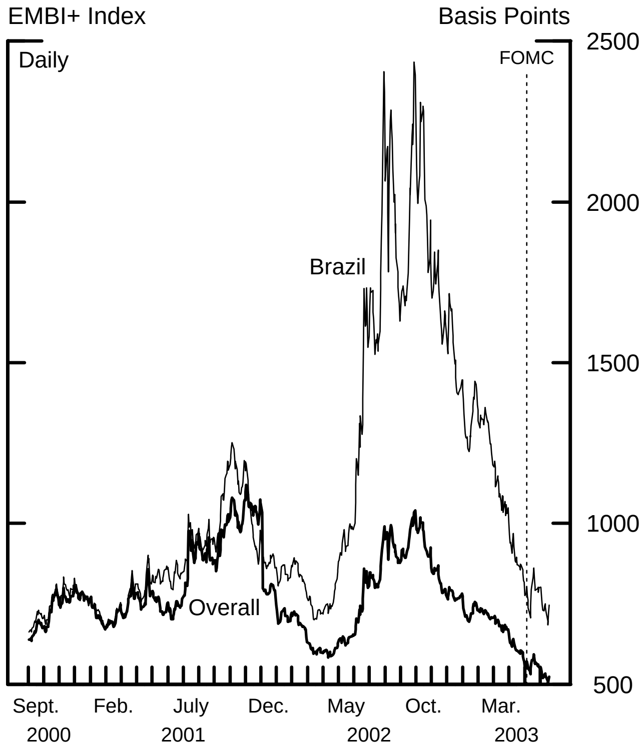
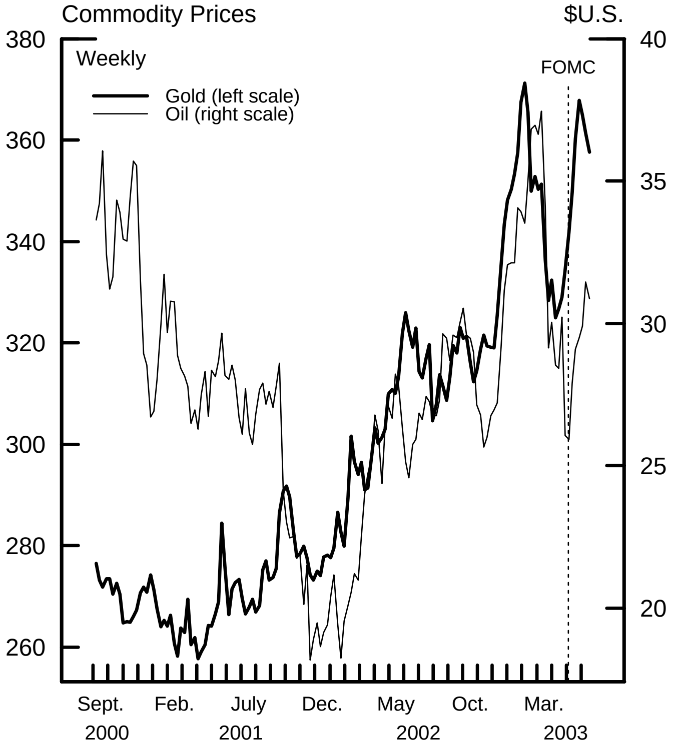
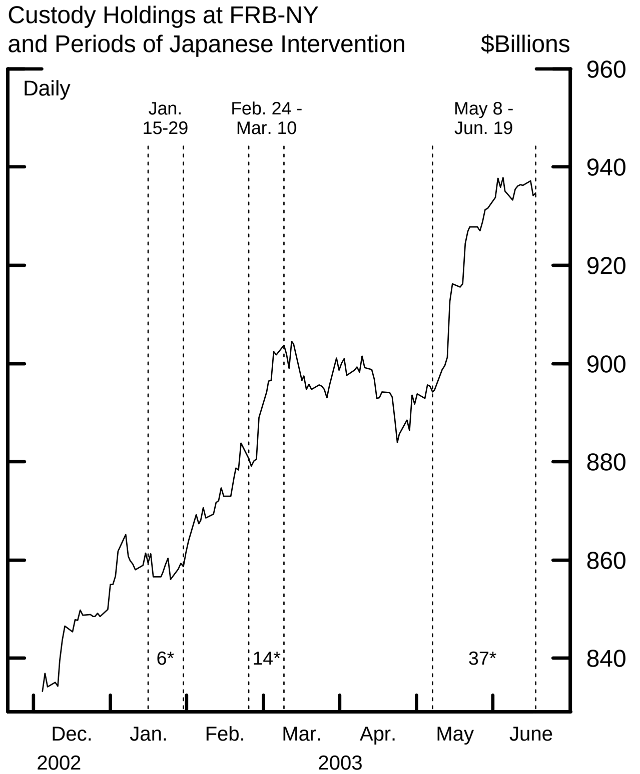

Credit Default Swap Spreads
Basis Points
Daily
FOMC
Fannie Mae
Freddie Mac
30
28
26
24
22
20
18
16
Dec.
Jan.
Feb.
Mar.
Apr.
May
June
2002
2003

Chart 4
International Financial Indicators









*Total period purchases of U.S. dollars in billions by Japanese monetary authorities.

euro's rebound over the past year. The economic slowdown and lower rates of inflation in the euro area have begun to stoke worries about deflation, especially in Germany where the economy has been stagnating. The ECB eased policy 50 basis points on June 5, as had been widely expected. The dollar was unchanged on balance against the yen, as market participants took note of extremely large purchases of dollars by Japanese authorities.[3] The Bank of Japan raised its target somewhat for reserve balances and also announced a new program to purchase asset-backed securities. Yields on foreign long-term government securities moved down but, except for Canada, by less than in the United States. Foreign stock markets largely mirrored the continuing improvement in U.S. stock prices.

(5) The dollar has been about unchanged on net since the May FOMC meeting against an index of the currencies of our other important trading partners, amid divergent movements against individual currencies. The dollar gained 3 percent against the Mexican peso, as Mexico reported an unexpectedly large contraction of GDP in the first quarter and signs of further weakness emerged. In contrast, the dollar lost ground against the Brazilian *real*, which strengthened 3½ percent, as financial markets continued to reward Brazil for achieving progress on key structural issues. Brazil's EMBI+ spread narrowed about 75 basis points more to about 7¼ percentage points, and Brazilian stocks moved up another 5½ percent. Stock markets in several Asian economies–Taiwan, Hong Kong, Korea, Thailand–were buoyed by signs of recovery in the high-tech sector and indications that the impact of the SARS epidemic may be waning.

(6) Households, businesses, and state and local governments continued to

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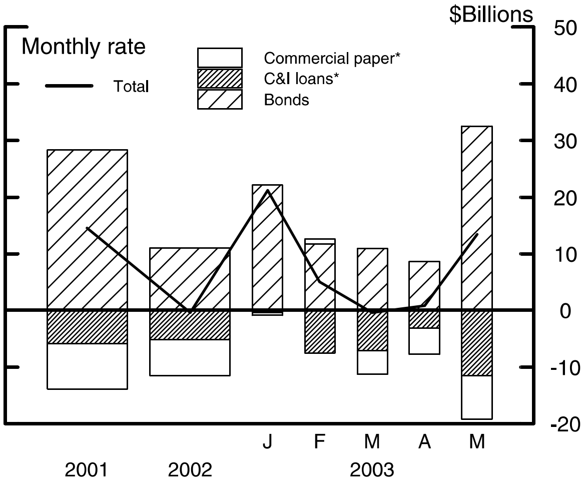
. The Desk d id not intervene during the period for the accounts of the System or the Treasury.

take advantage of low longer-term yields in their funding. Net bond issuance by nonfinancial firms picked up over the period, but total borrowing remained fairly weak as businesses continued to pay down short-term debt (Chart 5). Despite the stock market rally, gross equity issuance recovered only marginally from the depressed levels of the preceding months, with initial public offerings remaining scarce. Data from commercial banks suggest that households continued to pile on mortgage debt as further declines in mortgage interest rates fueled a brisk pace of home purchases and another surge in refinancings. Borrowing by the state and local sector picked up, in part reflecting sizable advance refundings. With tax receipts running on the weak side and expenditures picking up, marketable Treasury borrowing surged, especially after the debt ceiling was raised. Given the extra impetus from the federal sector, domestic nonfinancial sector debt remained on track to expand at a considerably faster rate on balance in the second quarter than the 6½ percent pace registered in the first quarter.

(7) The money stock expanded briskly in May. Even after accounting for estimated special factors boosting M2, including tax effects and mortgage refinancing activity, underlying growth was still quite strong. With M2 likely to grow at an 8 percent rate this quarter but nominal GDP growth shaping up to be 2½ percent, M2 velocity will most likely show a substantial decline even though opportunity costs have fallen only slightly. The decline in the overall cost of holding M2 masks substantial changes in relative returns on some components of the aggregate. In particular, the average yield on taxable retail money market mutual funds (the solid line in the lower left panel of Chart 5) has fallen to the point that those funds have lost their typical rate advantage to MMDAs offered by banks (the dotted line). Within the universe of money market mutual funds, as portrayed in the lower right panel, about 12 percent of assets are held by funds paying yields below ½ percent, suggesting that the scope for

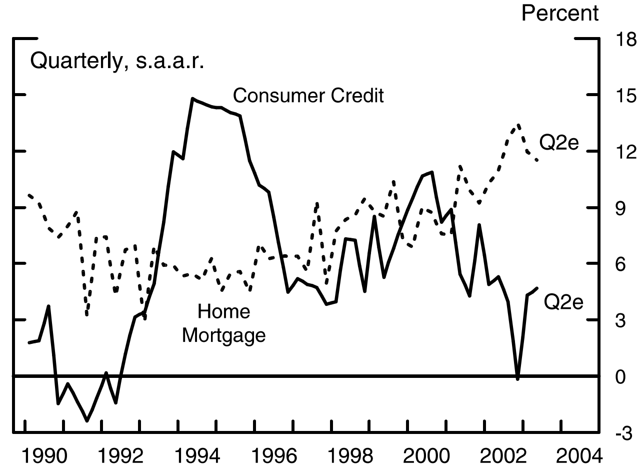
Chart 5
Debt and Money Growth

Growth of Components of Nonfinancial Business Debt



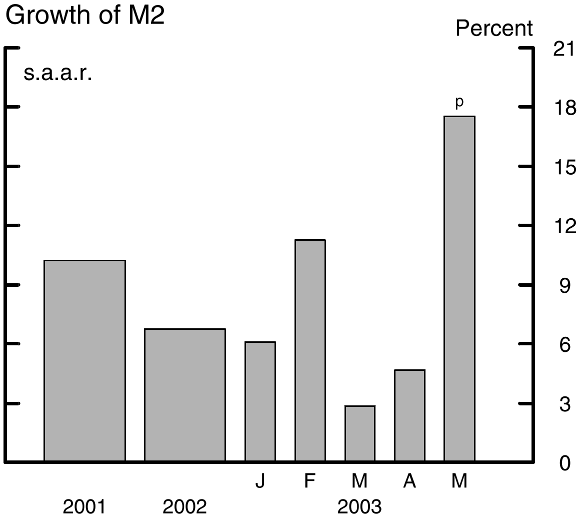
* Seasonally adjusted.

Growth of Household Debt



e Estimated.

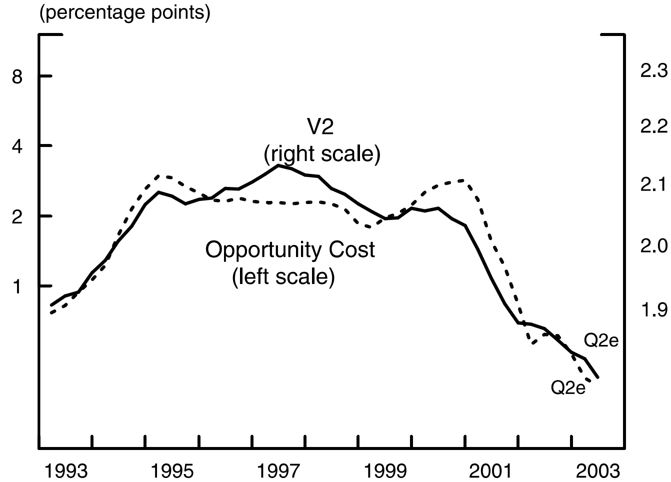
Growth of M2



p Preliminary.

M2 Opportunity Cost* and Velocity

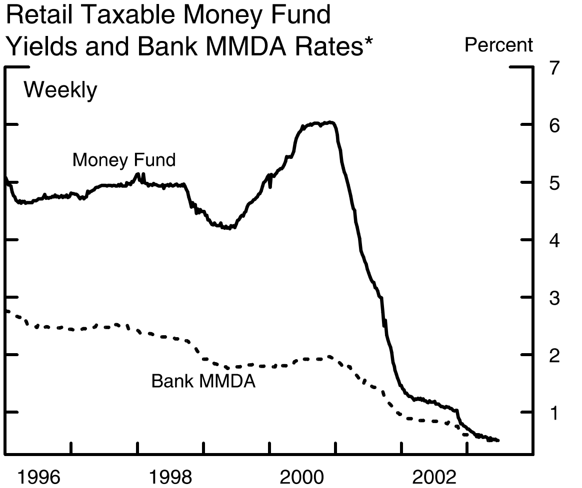
(percentage points)



*Two-quarter moving average.

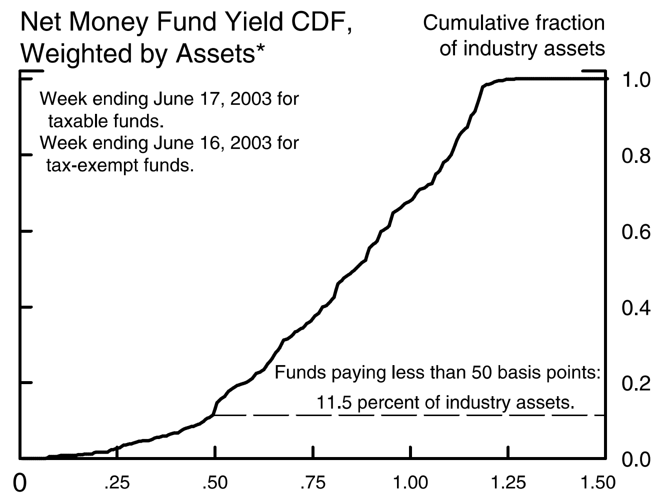
e Estimated.

Retail Taxable Money Fund Yields and Bank MMDA Rates*



*MMDA rates are simple averages of large bank rates. Money funds yields are simple averages of yields at all retail taxable funds.

Net Money Fund Yield CDF, Weighted by Assets*



*Cumulative distribution of net one-day yields.

Source: Staff calculations based on data from iMoneyNet.

continued large gross flows is considerable. Some of those funds, though, would likely shift to other money funds rather than to liquid deposits or out of the monetary aggregates if short rates were reduced further.

Policy Alternatives

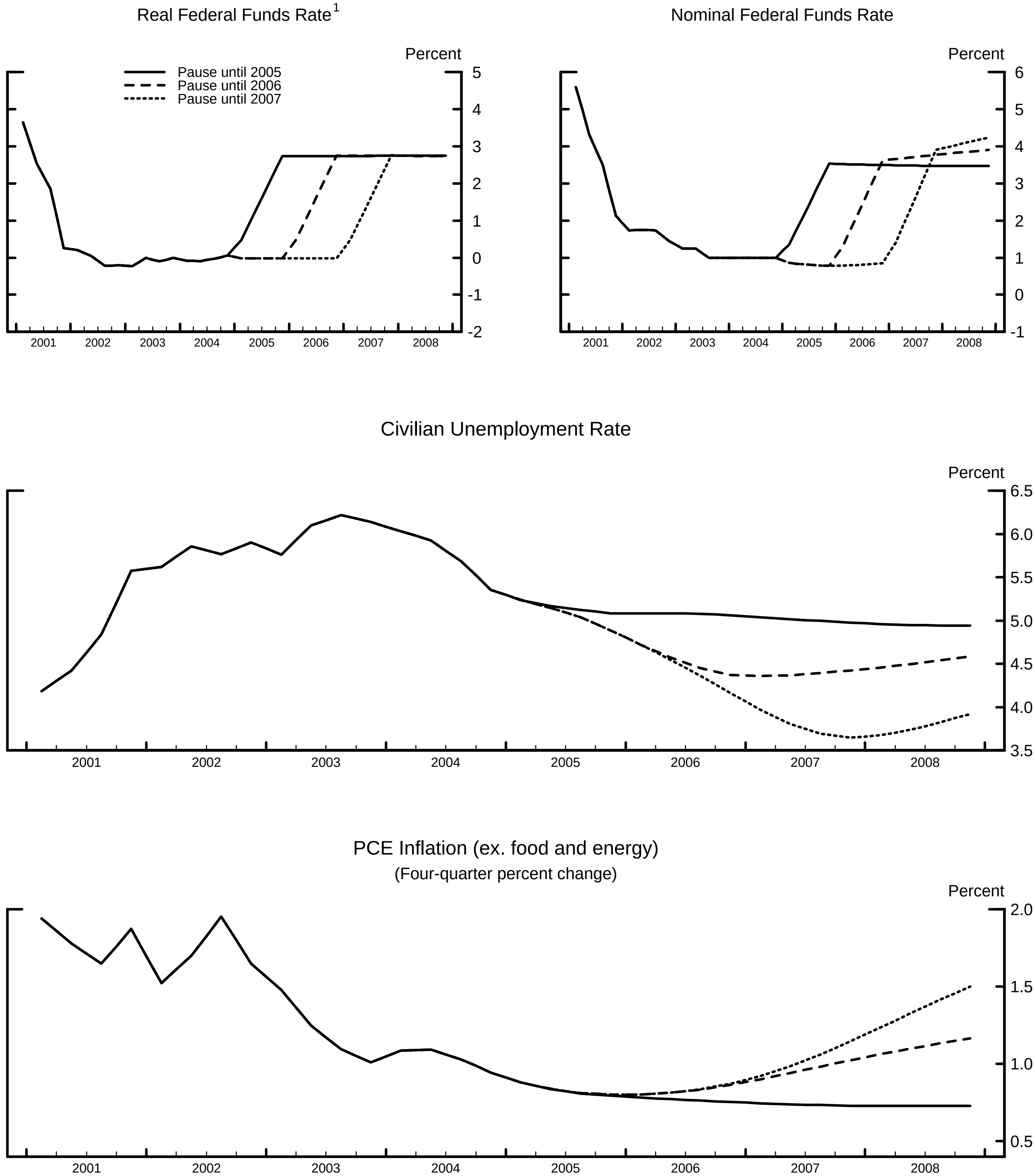
(8) Recent financial developments and the passage of a sizable tax cut over the intermeeting period have created a more supportive outlook for aggregate demand in the staff projection, but data on inflation have mostly run to the soft side of staff expectations. In the Greenbook, the staff now assumes that the FOMC will trim its target by ¼ percentage point and then subsequently keep it unchanged. At the same time, the level of stock prices has been raised and those of the dollar and long-term interest rates lowered in recognition of their respective net movements over the intermeeting period. The staff also has incorporated the greater fiscal stimulus embodied in the recently enacted tax cut than had been anticipated in the prior Greenbook. Thus, while incoming data have moved real GDP growth down a notch over the first half, real growth over the next six quarters has been raised nearly ½ percentage point--to 4¼ percent over the second half of 2003 and 5¼ percent over 2004. This faster advance in production is expected to speed the decline in the unemployment rate next year, which falls to 5.4 percent by late 2004. Given the generally lower-than-expected price data of late, core PCE inflation in the second quarter has been trimmed a bit, implying that four-quarter inflation by this measure will come in at 1 percent over this year. Core inflation is projected to edge down further in 2004, largely because slack in labor and product markets persists through next year.

(9) The staff outlook presents a picture of an economy moving towards, but not yet attaining, equilibrium: While there is still some slack in labor markets, the growth of real GDP is above that of its potential, and both inflation and the real federal funds rate are at unusually low levels. To examine longer-term strategies for monetary policy as these dynamic imbalances adjust, three scenarios were created with the aid of the FRB/US model. The Greenbook forecast is extended through 2008 by

making several judgmental adjustments to the model that preserve the central features of the staff outlook. In particular, trend multifactor productivity is assumed to climb steadily at almost 1½ percent per year, which combined with a modest pickup in capital deepening from its current pace implies potential GDP is expanding at a roughly 3¾ percent rate later in the decade. The natural rate of unemployment remains close to 5 percent–the staff's current long-run estimate. The unified federal budget is projected to settle into a deficit of about 2 percent of nominal GDP. The demand for U.S. exports is bolstered by 4 percent annual real depreciation of the dollar, as well as the gradual recovery of the world economy, so as to cap the current account deficit relative to nominal GDP at a little over 5 percent.

(10) The dynamics of the FRB/US model have the property that, given the forces playing out in the staff forecast, the Committee has considerable time before it needs to realign the current unusually low real federal funds rate to its gradually rising equilibrium value. Three alternative simulations were run to examine the consequences for the economy and long-run inflation of varying degrees of delay in beginning the process of realigning the federal funds rate. In particular, these scenarios envision the consequences of moving the real funds rate to its long-run equilibrium level of about 2¾ percent relatively smoothly over the course of one year. The simulations differ according to when the Committee is assumed to start tightening–either 2005, 2006, or 2007. These simulations, shown in Chart 6, indicate, quite obviously, that the longer the Committee waits to tighten, the more will unemployment be worked down and inflation ultimately step up. Were policy to begin moving the real funds rate up in 2005, shown by the solid line in the upper left panel, the unemployment rate would stay close to 5 percent after 2004 (the middle panel), and core PCE inflation (the bottom panel) would settle around 3/4 percent. Delaying that process by one year–the dashed lines–or by two–the dotted lines–causes

Chart 6
Alternative Simulations



1. The real federal funds rate is calculated as the quarterly average nominal funds rate minus the four-quarter lagged core PCE inflation rate as a proxy for inflation expectations.

the unemployment rate to fall below 5 percent for a time and leads to higher inflation down the road, with growth in core PCE prices settling in at 1½ and 2 percent, respectively.

(11) With regard to the immediate choice of policy, if the Committee both shares the staff assessment that prospective slack in resource use could foster disinflation and views the current inflation rate as already on the low side, it may favor a **25 basis point reduction** in the intended federal funds rate. Such a policy move, by preserving much of the recent rally in financial markets, would provide support to aggregate demand, thereby helping to counter any tendency toward further substantial disinflation, which the Committee announced would be unwelcome in its statement after the May meeting. This benefit to the economy may be seen as coming at a low cost, in that an unwanted upsurge in inflation may be viewed as unlikely in an environment in which the level of output lies well below that of its estimated potential and inflation expectations remain subdued. Indeed, inflation expectations may have ticked lower of late, necessitating a moderate downward adjustment of the nominal rate to keep the real interest rate from rising. Should the action prove to be unnecessary, it could readily be unwound before any material harm is done. And even if inflation picked up a bit, the Committee might see that rise as desirable to increase the size of the cushion against the possibility of having to approach the zero bound on the nominal federal funds rate. Indeed, the alternative long-run scenarios suggest that the Committee may be able to hold the nominal funds rate near 1 percent for a considerable period of time without putting significant upward pressure on inflation.

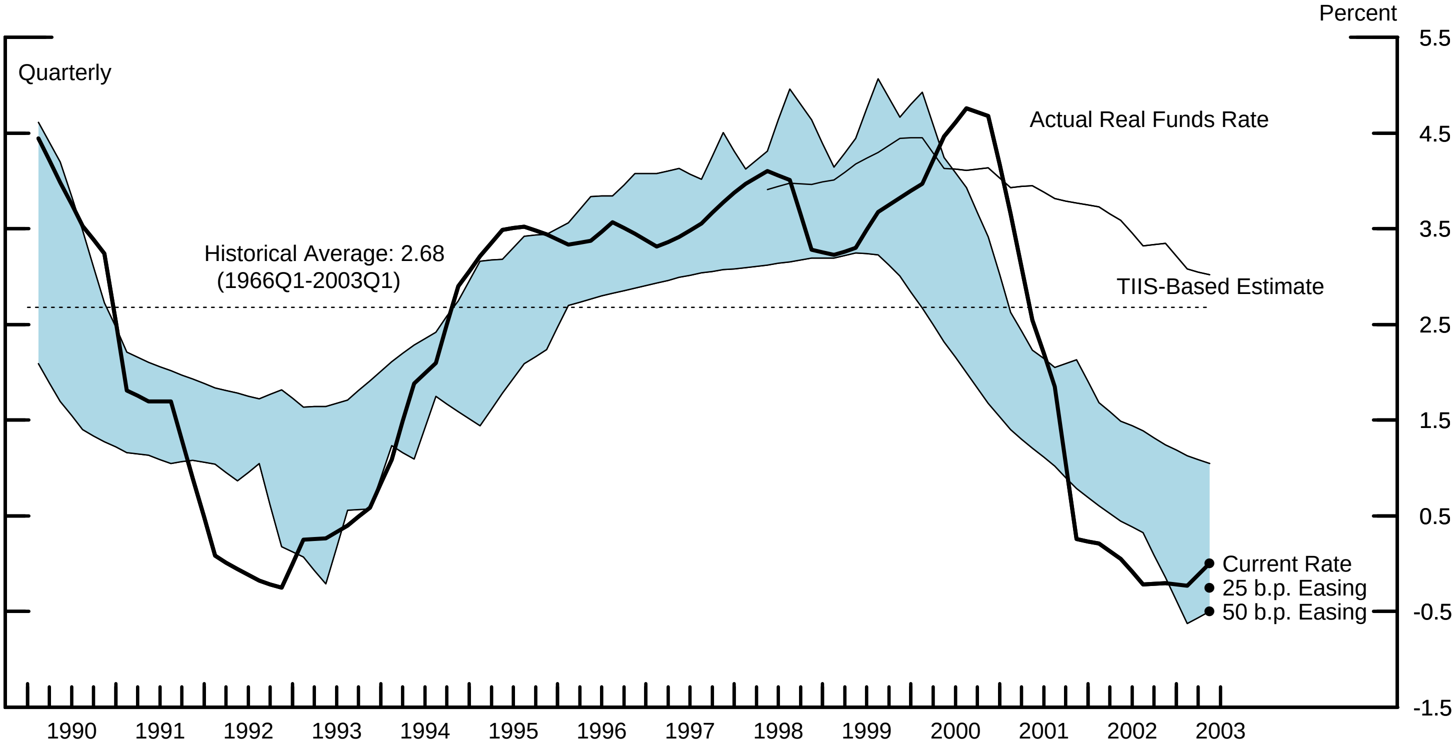
(12) Alternatively, the Committee may find the case for a **50 basis point cut** in the funds rate to a level of 75 basis points to be persuasive. The Committee may wish to push harder against the persistent substantial output gap, which the staff has recently revised upward slightly to an estimated 2¾ percentage points of GDP in the

second quarter. As seen in Chart 7, with the real federal funds rate edging higher and some estimates of its equilibrium level moving lower, a 50 basis point easing may be seen as necessary merely to restore the degree of stimulus in place late last year. If the Committee thinks that the Greenbook is too optimistic about spending–perhaps because the effects of higher oil prices of late are underplayed–then it may be especially concerned about the chance of further disinflation as well.[4] Even if the Committee agrees with the Greenbook assessment of the economy, it may believe that the projected inflation rate would be uncomfortably low given the problems likely to emerge if the economy were to experience adverse shocks and the zero bound were to become an important constraint on policy. In this regard, the Committee may believe that a 50 basis point cut in the funds rate could be taken back later, if need be, at less cost to the economy than that potentially incurred by not moving now and increasing the difficulty of countering future economic weakness because the zero floor to the nominal funds rate became a binding constraint.

(13) If the Committee is reasonably confident that underlying economic growth will turn out at least as strong as projected by the staff, it may view the consequences of an **unchanged funds rate** as the best that are feasible, given the lags with which monetary policy works. In fact, because the staff would forecast rapid GDP expansion over the next six quarters even with an unchanged funds rate, the Committee may view any policy easing at this meeting as risking excessive pressures on resources, exacerbating existing imbalances, or feeding an overshooting in financial markets. This concern could be especially pronounced if the Committee thinks that additional easing would probably induce faster economic growth or a lower

[4] For an analysis of disinflation and deflation, see "Deflation, Low Inflation, and the Conduct of Monetary Policy," a memorandum written by Douglas Elmendorf, Dave Reifschneider, and David Wilcox, which was sent to the FOMC on June 13, 2003.

Chart 7
Actual Real Federal Funds Rate and Range of Estimated Equilibrium Real Rates



Note: The shaded range represents the maximum and the minimum values each quarter of four estimates of the equilibrium real federal funds rate based on a statistical filter and the FRB/US model. Real federal funds rates employ a four-quarter moving average of core PCE inflation as a proxy for inflation expectations, with the staff projection used for 2003Q2.

Equilibrium Real Funds Rate Estimates (Percent)

	2001	2002	2003Q1	2003Q2
Statistical Filter				
- Two-sided:				
Based on historical data and the staff forecast	1.1	0.4	0.4	0.5
May Bluebook	*1.0*	*0.2*	*0.1*	*0.2*
- One-sided:				
Based on historical data*	2.2	0.7	-0.6	-0.5
May Bluebook	*2.2*	*0.6*	*-0.5*	*-0.5*
FRB/US Model				
- Two-sided:				
Based on historical data and the staff forecast	2.1	1.5	1.1	1.0
May Bluebook	*2.2*	*1.6*	*1.3*	*1.3*
- One-sided:				
Based on historical data**	2.0	0.8	0.1	-0.2
May Bluebook	*2.0*	*0.9*	*0.1*	*0.1*
Treasury Inflation-Indexed Securities	3.9	3.5	3.1	3.0
May Bluebook	*3.9*	*3.5*	*3.1*	*3.3*

* Also employs the staff projection for the current and next quarters.

** Also employs the staff projection for the current quarter.

unemployment rate than the staff foresees. Especially with the mounting fiscal stimulus evidently in train, the Committee may anticipate that a reduction in monetary accommodation will be called for in the not-too-distant future, and another ease at this meeting would make such a tightening action more sizable than otherwise. Instead, the Committee may wish to continue to await more readings on the economy collected after the Iraq war before reconsidering the need for any further easing action.

Directive and Assessment of Risks

(14) From January 2000 to January 2003, the Committee summarized its views on the risks to the attainment of its goals of maximum sustainable economic growth and price stability in terms of a single sentence–the "balance-of-risks" assessment. In March, the Committee dropped this sentence from the press statement in light of the elevated uncertainties surrounding its outlook associated with the looming onset of war. The "balance-of-risks" language was refined in May, with the press release including a three-part assessment of the economy that characterized the risks individually surrounding the outlook for the growth of activity and inflation, as well as their joint consequences for the balance of risks to achieving the Committee's goals.

(15) The experience since the May 6th announcement suggests that the three-part risk assessment served the Committee's interests well, in that the public quickly came to understand the Federal Reserve's concerns about additional disinflation without building alarm about the prospects for economic growth. By departing from the routinized words of the prior balance-of-risk statement, the three-point risk assessment was widely seen as meshing more effectively with the rest of the statement. Moreover, going forward, the three-part assessment would provide broader coverage of the range of possible outcomes for the economy than the earlier language, suggesting that the Committee would not be under pressure anytime soon to amend the form of the statement significantly.

(16) While the Committee reviewed the wording of the release in advance of the policy vote in May, it formally voted on only the level of the intended federal funds rate, as will be noted in the minutes of that meeting to be released on Thursday, June 26th. In the past, the members of the Committee appear to have been satisfied with the practice of routinely reviewing the public announcement after the policy vote.

Assuming that the Committee would prefer to return to including an assessment of the risks to its outlook in its vote without reviewing the statement beforehand, it could opt to vote both on the directive and the three-part risk assessment presented below. To retain flexibility, the language of the assessment of risks below conveys the direction of each of the three parts without specifying the exact wording of the three relevant sentences of the announcement.

(1) Directive Wording

The Federal Open Market Committee seeks monetary and financial conditions that will foster price stability and promote sustainable growth in output. To further its long-run objectives, the Committee in the immediate future seeks conditions in reserve markets consistent with maintaining/INCREASING/REDUCING the federal funds rate at/TO an average of around ___~~1-1/4~~ percent.

(2) Risk Assessment

The Committee desires that included in the official announcement released after the meeting (but not included in the directive) be the indications that, against the background of its long-run goals of price stability and sustainable economic growth and of the information currently available: The risks to its outlook for sustainable economic growth over the next several quarters [ARE WEIGHTED TOWARD THE DOWNSIDE] [are balanced] [ARE WEIGHTED TOWARD THE UPSIDE]; the risks to its outlook for inflation over the next several quarters [are weighted toward the downside] [ARE BALANCED] [ARE WEIGHTED TOWARD THE UPSIDE]; and, taken together, the balance of risks to its objectives [are weighted toward the downside] [ARE BALANCED] [ARE WEIGHTED TOWARD THE UPSIDE] in the foreseeable future.

Market Reaction and Monetary and Credit Aggregates

(17) Under any of the three policy alternatives, the Committee may elect to retain the current structure and content of its assessment of the two component risks and their balance overall. It may again judge that equal risks of a shortfall or overshoot in real economic growth, combined with downside risks for inflation, would balance out overall risks to the downside for the foreseeable future. In addition to the assessment of the risks, market participants will pay close attention to the wording of the rest of the announcement, especially for any hints that the Committee considers the likelihood of deflation to be anything other than quite low. In that regard, some reports suggest the expectation that a 50 basis point move would be accompanied by an explanation of the Committee's plan for the alternative implementation of policy, potentially including a rate target for a maturity longer than overnight.

(18) With market participants predicting that an easing is likely at this meeting and that a reduction of 50 basis points is more probable than one of 25 basis points, the market reaction would be most pronounced if the FOMC were to decide to stay on hold. Given that the outlook for corporate earnings with an unchanged funds rate would be less buoyant than market participants expect, a stock price decline would follow such a decision. Unless this decline were quite large, some backup in long-term interest rates would likely be associated with the sizable rise in short-term interest rates. An easing move of 25 basis points would have some of these effects, albeit more muted. By contrast, a 50 basis point reduction would be larger than expected and could induce initial increases in stock and bond prices. Such a cut could cause financial distress for some higher-cost money market mutual funds and also might begin to raise market concerns about the remaining scope for further conventional monetary policy stimulus. Indeed, longer-term Treasuries might be bid up in price

over time as market participants come increasingly to anticipate large-scale purchases by the Federal Reserve.

(19) The Greenbook assumption of a 25 basis point easing, combined with its projection of nominal GDP growth at a 5 percent rate over the second half of this year, probably would induce M2 growth of 7½ percent over the same period. The implied decline in M2 velocity of 2½ percent follows an estimated drop of 4 percent over the first half of this year. On a period-end basis, domestic nonfinancial debt is expected to expand at a pace of 7½ percent over the second half of this year. The federal debt component would grow at an annual rate of 10½ percent, and nonfederal sector debt is projected to record a growth rate of 6¾ percent over the next two quarters, paced by the expansion of home mortgage debt.

Alternative Growth Rates for M2

		Ease 50 bp	Ease 25 bp*	No change
Monthly Growth Rates				
	Jan-03	6.1	6.1	6.1
	Feb-03	11.3	11.3	11.3
	Mar-03	2.8	2.8	2.8
	Apr-03	4.7	4.7	4.7
	May-03	17.5	17.5	17.5
	Jun-03	6.2	6.2	6.2
	Jul-03	6.7	6.3	6.0
	Aug-03	7.4	6.6	5.8
	Sep-03	8.1	7.3	6.5
	Oct-03	8.3	7.6	6.9
	Nov-03	7.9	7.4	6.9
	Dec-03	7.4	7.0	6.6
Quarterly Growth Rates				
	2003 Q1	6.5	6.5	6.5
	2003 Q2	8.1	8.1	8.1
	2003 Q3	8.1	7.7	7.3
	2003 Q4	8.0	7.4	6.7
Semiannual Growth Rates				
	2003 H1	7.4	7.4	7.4
	2003 H2	8.2	7.6	7.1
Annual Growth Rates				
	2002	6.8	6.8	6.8
	2003	7.9	7.6	7.3
	Growth Rates			
From	**To**			
2002 Q4	May-03	8.0	8.0	8.0
2002 Q4	Dec-03	7.9	7.6	7.3
Dec-02	May-03	8.6	8.6	8.6
May-03	Dec-03	7.6	7.0	6.5

* Consistent with the Greenbook forecasts for nominal GDP and interest rates.

SELECTED INTEREST RATES
(percent)

	Short-term						Long-term									
	Federal funds	Treasury bills secondary market			CDs secondary market	Comm. paper	Off-the-run Treasury yields				Indexed yields		Moody's Baa	Municipal Bond Buyer	Conventional home mortgages primary market	
		4-week	3-month	6-month	3-month	1-month	2-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
02 -- High	1.92	1.82	1.88	2.16	1.98	1.81	3.75	4.99	5.73	6.04	3.33	3.56	8.23	5.67	7.18	5.26
-- Low	1.15	1.07	1.16	1.23	1.31	1.26	1.59	2.72	3.94	4.85	1.59	2.13	7.30	5.02	5.93	4.01
03 -- High	1.38	1.26	1.22	1.28	1.32	1.28	1.89	3.24	4.45	5.28	1.81	2.43	7.48	5.20	5.97	4.03
-- Low	1.12	0.83	0.81	0.82	0.93	1.00	1.09	2.06	3.29	4.37	0.59	1.41	6.01	4.78	5.21	3.51
Monthly																
Jun 02	1.75	1.71	1.73	1.83	1.81	1.74	2.97	4.24	5.16	5.71	2.46	3.08	7.95	5.44	6.65	4.65
Jul 02	1.73	1.72	1.71	1.74	1.79	1.74	2.52	3.86	4.90	5.60	2.39	2.92	7.90	5.34	6.49	4.51
Aug 02	1.74	1.68	1.65	1.64	1.73	1.72	2.12	3.37	4.54	5.27	2.11	2.51	7.58	5.30	6.29	4.38
Sep 02	1.75	1.67	1.66	1.64	1.76	1.73	1.98	3.01	4.16	4.97	1.80	2.25	7.40	5.10	6.09	4.29
Oct 02	1.75	1.62	1.61	1.59	1.73	1.72	1.92	3.02	4.25	5.13	1.90	2.40	7.73	5.16	6.11	4.27
Nov 02	1.34	1.26	1.25	1.30	1.39	1.34	1.94	3.13	4.33	5.16	2.00	2.44	7.62	5.25	6.07	4.16
Dec 02	1.24	1.20	1.21	1.27	1.34	1.31	1.84	3.09	4.31	5.12	1.89	2.41	7.45	5.20	6.05	4.12
Jan 03	1.24	1.17	1.19	1.22	1.29	1.25	1.76	3.07	4.30	5.14	1.64	2.26	7.35	5.19	5.92	3.99
Feb 03	1.26	1.20	1.19	1.20	1.27	1.24	1.64	2.92	4.14	5.01	1.21	1.95	7.06	5.15	5.84	3.86
Mar 03	1.25	1.18	1.15	1.16	1.23	1.21	1.59	2.81	4.04	4.98	1.03	1.88	6.95	5.12	5.75	3.76
Apr 03	1.26	1.16	1.15	1.17	1.24	1.22	1.65	2.94	4.16	5.07	1.27	2.12	6.85	5.17	5.81	3.80
May 03	1.26	1.08	1.09	1.10	1.22	1.21	1.41	2.53	3.74	4.70	1.06	1.83	6.38	4.92	5.48	3.66
Weekly																
Apr 18 03	1.27	1.16	1.18	1.21	1.26	1.21	1.72	2.99	4.19	5.10	1.28	2.14	6.89	5.16	5.82	3.79
Apr 25 03	1.26	1.14	1.16	1.19	1.26	1.23	1.68	2.98	4.17	5.05	1.37	2.18	6.79	5.11	5.79	3.79
May 2 03	1.28	1.11	1.13	1.16	1.24	1.22	1.58	2.89	4.10	4.99	1.30	2.11	6.68	5.09	5.70	3.74
May 9 03	1.26	1.08	1.11	1.14	1.23	1.20	1.48	2.70	3.95	4.89	1.16	1.98	6.52	5.01	5.62	3.66
May 16 03	1.27	1.00	1.07	1.10	1.23	1.22	1.42	2.52	3.73	4.71	1.05	1.82	6.39	4.88	5.45	3.67
May 23 03	1.24	1.09	1.06	1.07	1.21	1.21	1.34	2.37	3.56	4.50	0.94	1.67	6.23	4.82	5.34	3.61
May 30 03	1.26	1.19	1.11	1.09	1.22	1.23	1.32	2.34	3.57	4.54	0.97	1.71	6.24	4.82	5.31	3.63
Jun 6 03	1.25	1.15	1.07	1.05	1.18	1.21	1.26	2.28	3.53	4.57	0.88	1.67	6.22	4.83	5.26	3.59
Jun 13 03	1.24	1.06	0.94	0.93	1.05	1.10	1.14	2.13	3.37	4.45	0.67	1.50	6.08	4.78	5.21	3.54
Jun 20 03	--	0.90	0.87	0.88	0.97	1.00	1.22	2.26	3.47	4.51	0.78	1.61	--	--	5.21	3.51
Daily																
Jun 3 03	1.21	1.17	1.08	1.05	1.21	1.23	1.22	2.25	3.51	4.54	0.89	1.67	6.22	--	--	--
Jun 4 03	1.22	1.15	1.05	1.03	1.18	1.21	1.20	2.20	3.47	4.53	0.83	1.63	6.17	--	--	--
Jun 5 03	1.26	1.12	1.04	1.03	1.16	1.21	1.25	2.26	3.52	4.58	0.83	1.65	6.21	--	--	--
Jun 6 03	1.24	1.15	1.05	1.03	1.12	1.19	1.27	2.30	3.54	4.59	0.86	1.66	6.20	--	--	--
Jun 9 03	1.25	1.16	1.03	1.00	1.11	1.14	1.19	2.21	3.46	4.54	0.76	1.59	6.16	--	--	--
Jun 10 03	1.22	1.10	0.97	0.95	1.10	1.14	1.12	2.12	3.37	4.46	0.68	1.51	6.09	--	--	--
Jun 11 03	1.25	1.07	0.94	0.95	1.02	1.11	1.16	2.15	3.39	4.45	0.69	1.51	6.08	--	--	--
Jun 12 03	1.25	1.03	0.92	0.90	1.02	1.06	1.11	2.10	3.35	4.41	0.65	1.48	6.06	--	--	--
Jun 13 03	1.24	0.93	0.86	0.86	0.99	1.05	1.09	2.06	3.29	4.37	0.59	1.41	6.01	--	--	--
Jun 16 03	1.33	0.94	0.87	0.88	0.96	1.00	1.17	2.15	3.36	4.41	0.69	1.49	6.05	--	--	--
Jun 17 03	1.24	0.93	0.90	0.91	0.97	1.00	1.24	2.26	3.44	4.48	0.79	1.59	6.12	--	--	--
Jun 18 03	1.22	0.91	0.89	0.89	1.00	1.01	1.27	2.35	3.54	4.56	0.86	1.69	6.20	--	--	--
Jun 19 03	--	0.83	0.81	0.82	0.93	--	1.18	2.28	3.53	4.59	0.76	1.68	--	--	--	--

NOTE: Weekly data for columns 1 through 13 are week-ending averages. Columns 2 through 4 are on a coupon equivalent basis. Data in column 6 are interpolated from data on certain commercial paper trades settled by the Depository Trust Company. 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.

Money Aggregates

Seasonally adjusted

Period	M1	M2	nontransactions components: In M2	nontransactions components: In M3 only	M3
	1	2	3	4	5
Annual growth rates(%):					
Annually (Q4 to Q4)					
2000	-1.7	6.1	8.5	17.3	9.2
2001	6.8	10.2	11.2	18.5	12.7
2002	3.3	6.8	7.7	5.4	6.3
Quarterly(average)					
2002-Q2	-0.6	3.8	5.0	4.4	4.0
Q3	3.0	8.8	10.4	3.8	7.2
Q4	4.9	7.0	7.6	9.2	7.7
2003-Q1	7.4	6.5	6.3	2.1	5.1
Monthly					
2002-May	10.9	13.6	14.4	-0.7	9.1
June	5.7	6.5	6.7	1.9	5.0
July	7.0	10.3	11.2	-0.6	6.8
Aug.	-11.2	8.1	13.3	12.9	9.6
Sep.	6.9	5.4	5.1	7.0	5.9
Oct.	11.4	8.0	7.0	-12.4	1.5
Nov.	-0.5	8.3	10.7	37.9	17.6
Dec.	8.2	3.1	1.8	17.7	7.8
2003-Jan.	2.5	6.1	7.1	-14.4	-0.5
Feb.	20.0	11.3	8.9	-6.2	5.7
Mar.	3.3	2.8	2.7	3.0	2.9
Apr.	0.4	4.7	5.8	-4.6	1.8
May p	20.3	17.5	16.8	3.2	13.1
Levels ($billions):					
Monthly					
2003-Jan.	1213.6	5821.4	4607.9	2694.3	8515.7
Feb.	1233.8	5876.1	4642.2	2680.3	8556.4
Mar.	1237.2	5890.0	4652.8	2686.9	8576.9
Apr.	1237.6	5913.0	4675.4	2676.6	8589.6
May p	1258.5	5999.3	4740.8	2683.8	8683.1
Weekly					
2003-May 5	1254.3	5983.8	4729.5	2679.5	8663.3
12	1249.8	5993.6	4743.8	2686.0	8679.6
19	1261.9	6003.3	4741.3	2680.3	8683.5
26	1269.6	6011.1	4741.6	2686.5	8697.6
June 2p	1261.5	6020.6	4759.0	2686.7	8707.3
9p	1260.2	6021.4	4761.2	2678.9	8700.3

p preliminary

Strictly Confidential
Class II FOMC

June 19, 2003

Changes in System Holdings of Securities[1]
(Millions of dollars, not seasonally adjusted)

	Treasury Bills			Treasury Coupons						Federal Agency Redemptions (-)	Net change total outright holdings[4]	Net RPs[5]		
	Net Purchases[2]	Redemptions (-)	Net Change	Net Purchases[3] < 1	1-5	5-10	Over 10	Redemptions (-)	Net Change			Short-Term[6]	Long-Term[7]	Net Change
2000	8,676	24,522	-15,846	8,809	14,482	5,871	5,833	3,779	31,215	51	15,318	-2,163	7,133	4,970
2001	15,503	10,095	5,408	15,663	22,814	6,003	8,531	16,802	36,208	120	41,496	3,492	636	4,128
2002	21,421	---	21,421	12,720	12,748	5,074	2,280	---	32,822	---	54,242	-5,366	517	-4,850
2002 QI	6,827	---	6,827	4,349	6,153	971	1,927	---	13,401	---	20,228	-1,961	-2,191	-4,152
QII	8,227	---	8,227	5,535	2,580	2,471	210	---	10,796	---	19,023	-2,644	-4,563	-7,207
QIII	6,117	---	6,117	2,835	3,676	1,318	143	---	7,972	---	14,089	-3,067	-5,225	-8,291
QIV	250	---	250	---	339	314	---	---	653	---	903	4,892	-304	4,588
2003 QI	6,024	---	6,024	1,796	2,837	1,291	50	---	5,974	---	11,998	1,957	3,770	5,727
2002 Oct	---	---	---	---	---	---	---	---	---	---	---	2,779	-4,716	-1,937
Nov	250	---	250	---	---	---	---	---	---	---	250	2,910	4,616	7,526
Dec	---	---	---	---	339	314	---	---	653	---	653	-1,097	10,706	9,610
2003 Jan	---	---	---	---	---	---	---	---	---	---	---	1,342	-3,581	-2,239
Feb	4,161	---	4,161	478	2,127	769	---	---	3,374	---	7,534	1,736	-2,262	-526
Mar	1,863	---	1,863	1,318	710	522	50	---	2,600	---	4,463	-2,254	520	-1,734
Apr	3,543	---	3,543	1,422	733	---	---	---	2,155	---	5,699	-265	816	551
May	1,684	---	1,684	786	1,057	234	---	---	2,077	---	3,761	-515	346	-170
2003 Mar 26	387	---	387	---	---	522	50	---	572	---	959	-5,733	---	-5,733
Apr 2	564	---	564	---	---	---	---	---	---	---	564	6,207	2,000	8,207
Apr 9	2,843	---	2,843	---	733	---	---	---	733	---	3,576	-7,933	---	-7,933
Apr 16	264	---	264	1,422	---	---	---	---	1,422	---	1,686	4,836	---	4,836
Apr 23	81	---	81	---	---	---	---	---	---	---	81	-1,735	-1,000	-2,735
Apr 30	354	---	354	---	---	---	---	---	---	---	354	5,460	-999	4,461
May 7	280	---	280	---	---	---	---	---	---	---	280	-8,590	---	-8,590
May 14	348	---	348	---	---	---	---	---	---	---	348	4,791	1,000	5,791
May 21	692	---	692	786	1,057	234	---	---	2,077	---	2,768	-2,810	2,000	-810
May 28	115	---	115	---	---	---	---	---	---	---	115	7,067	-1,001	6,066
Jun 4	539	---	539	---	---	---	---	---	---	---	539	-5,433	1,000	-4,433
Jun 11	207	---	207	---	---	---	---	---	---	---	207	-3,357	---	-3,357
Jun 18	326	---	326	---	---	---	---	---	---	---	326	-754	---	-754
2003 Jun 19	16	---	16	---	---	---	---	---	---	---	16	391	---	391
Intermeeting Period														
May 6-Jun 19	2,453	---	2,453	786	1,057	234	---	---	2,077	---	4,530	-2,369	2,999	630
Memo: LEVEL (bil. $)														
Jun 19			238.8	106.3	180.2	46.7	80.0		413.2	0.0	652.0	-18.5	19.0	0.5

1. Change from end-of-period to end-of-period. Excludes changes in compensation for the effects of inflation on the principal of inflation-indexed securities.
2. Outright purchases less outright sales (in market and with foreign accounts).
3. Outright purchases less outright sales (in market and with foreign accounts). Includes short-term notes acquired in exchange for maturing bills. Excludes maturity shifts and rollovers of maturing issues, except the rollover of inflation compensation.
4. Includes redemptions (-) of Treasury and agency securities.
5. RPs outstanding less reverse RPs.
6. Original maturity of 15 days or less.
7. Original maturity of 16 to 90 days.

MRA:HRM