Prefatory Note

The attached document represents the most complete and accurate version available based on original files from the FOMC Secretariat at the Board of Governors of the Federal Reserve System.

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.

Content last modified 05/27/2010.

Strictly Confidential (F.R.) **March 11, 2004**
Class I – FOMC

MONETARY POLICY ALTERNATIVES

Recent Developments

(1) Although the Committee's decision at its January meeting to leave the target federal funds rate at 1 percent had been widely anticipated by financial market participants, the substitution of the "can be patient" clause for the "considerable period" phrase in the announcement elicited an appreciable market reaction. Investors apparently perceived the wording change as a precursor of policy tightening and brought forward the expected onset of firming from the fall to the summer (Chart 1). That sentiment did not persist: The Chairman's monetary policy testimony and weaker-than-expected data on nonfarm payroll employment for January and, especially, February seemed to reassure investors that policy tightening was some way off. Implied federal funds rates fell as much as 55 basis points, on net, over the intermeeting period and now indicate that a full 25 basis points of tightening is not expected until around year-end. According to a recent survey by the Trading Desk, none of the twenty-three primary dealers expect a change in the funds rate target at this meeting, and about two-fifths anticipate firming to be deferred until next year.[1]

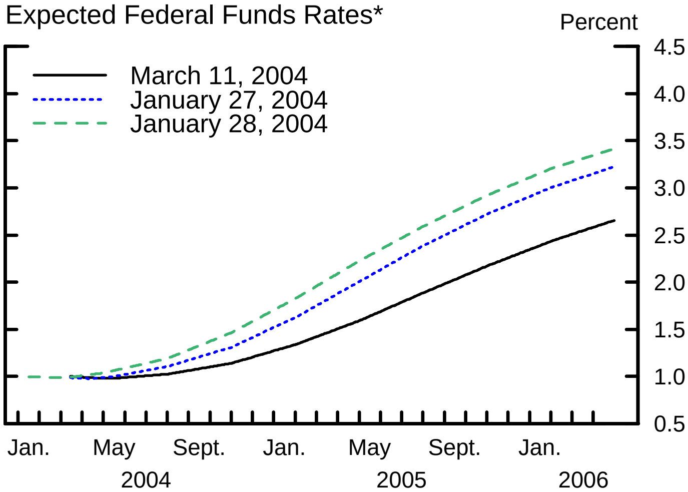
(2) Movements in nominal Treasury yields during the intermeeting period tracked changes in policy expectations, with intermediate- and long-term Treasury yields falling about 20 to 35 basis points on net. Market participants continued to speculate that heavy purchases of Treasury securities by foreign official institutions were holding down these yields, but, as discussed in the box entitled "Foreign Official Holdings of U.S. Treasury Securities," such effects are difficult to quantify. Late in the period, the shortening duration of mortgages as prepayment risks picked up led to

---

[1] The effective federal funds rate averaged about 1 percent over the intermeeting period. The Desk expanded the System's outright holdings of securities by $6 billion, with purchases of $1.1 billion of Treasury bills from foreign official customers and $4.9 billion of Treasury coupon securities in the market, $470 million of which were inflation-indexed securities. The volume of outstanding long-term RPs increased $1 billion, to $15 billion.

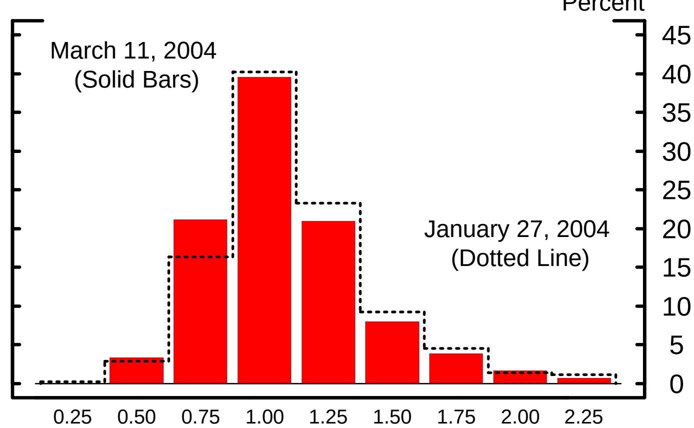
Chart 1
Interest Rate Developments

Expected Federal Funds Rates*



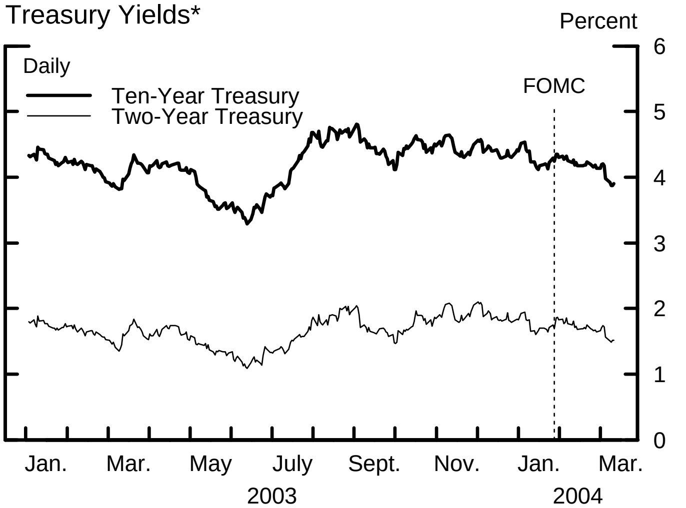
*Estimates from federal funds and eurodollar futures, with an allowance for term premia and other adjustments.

Implied Distribution of the Federal Funds Rate About Six Months Ahead*



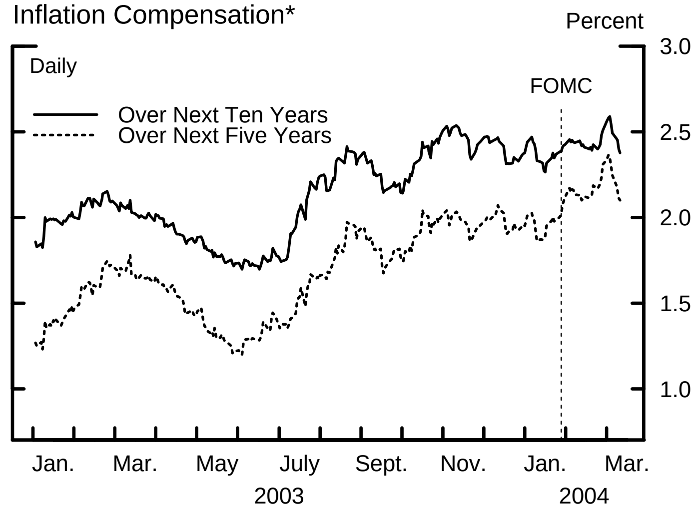
*Based on the distribution of the three-month eurodollar rate five months ahead (adjusted for a term premium), as implied by options on eurodollar futures contracts.

Treasury Yields*



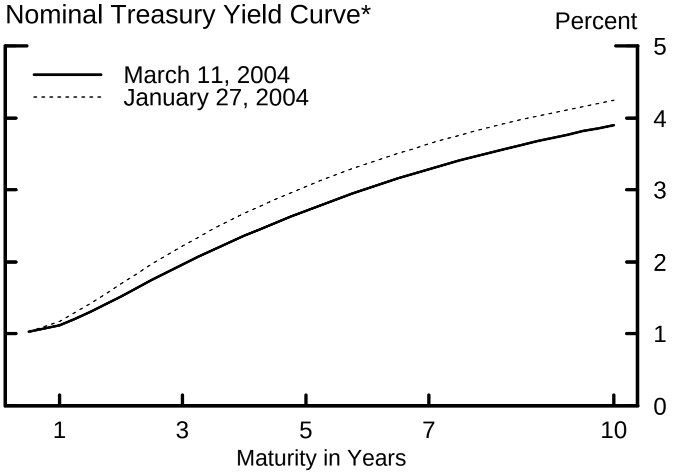
*Par yields from an estimated off-the-run Treasury yield curve.

Inflation Compensation*



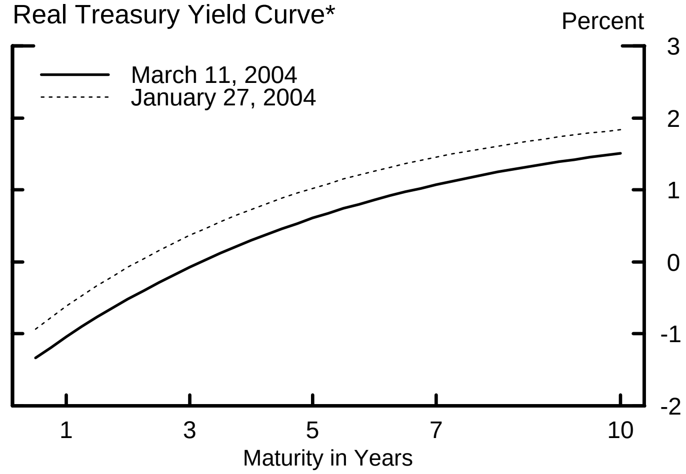
*Based on a comparison of an estimated TIIS yield curve to an estimated nominal off-the-run Treasury yield curve.

Nominal 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.

Real Treasury Yield Curve*



*Smoothed yield curve estimated from Treasury inflation-indexed securities. Yields shown are those on notional par Treasury securities with semi-annual coupons.

Note: Vertical lines indicate January 27, 2004. Last daily observations are for March 11, 2004.

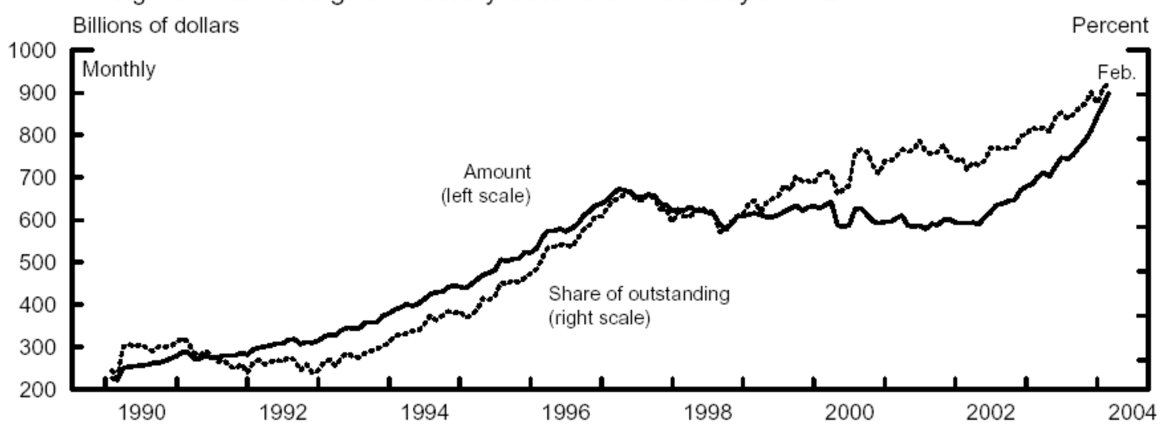
Foreign Official Holdings of U.S. Treasury Securities

Foreign official holdings of U.S. Treasury securities have increased rapidly in recent years,

. Treasury securities held in custody for foreign official institutions at the Federal Reserve Bank of New York have expanded more than $275 billion since mid-2002, to about $900 billion–or about one-quarter of all outstanding marketable Treasury securities (Chart). Market participants have been interpreting the elevated level of indirect bidding at auctions as evidence of increased participation by these institutions.

Some market participants have argued that purchases by foreign official institutions have depressed Treasury yields. While the run-up in foreign official holdings coincided with declines in Treasury yields, it is difficult to quantify the effects of these purchases. One might presume that the purchases would have some impact because they have been quite large–amounting to about one-third of net Treasury issuance since 2002–and have been made by entities that generally do not substitute among alternative instruments. That said, the considerable size and liquidity of the Treasury market should tend to limit any price consequences. Moreover, some of these institutions have concentrated their purchases in shorter-term securities, where more private assets are available to other investors as substitutes and where prices are more strongly anchored by monetary policy expectations. In that regard, swap spreads have generally narrowed, on balance, since mid-2002, in contrast to the widening that would be expected if foreign official purchases were shifting the overall balance of demand toward Treasury securities.

Foreign Official Holdings of Treasury Securities in Custody at FRBNY*



*Excludes U.S. Treasury securities held for international and regional organizations.

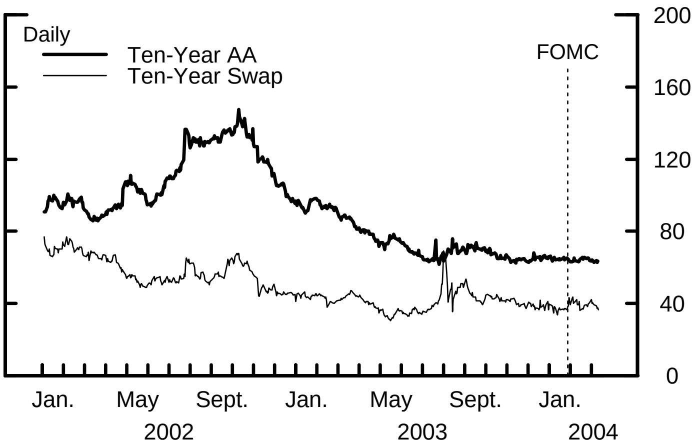
hedging flows that may also have contributed to the downdraft in yields. Yields on inflation-indexed Treasury securities declined roughly in line with their nominal counterparts over the intermeeting period, leaving inflation compensation little changed. Yields on high-grade corporate securities followed those on comparable Treasury securities (Chart 2). In contrast, spreads on speculative-grade corporate bonds, particularly at the lowest quality levels, climbed 20 to 120 basis points, as investors apparently reassessed the riskiness of weaker firms in the wake of soft economic data releases. Also probably indicative of concerns about the economy–and renewed worries about terrorism more recently–was the 3 to 8 percent declines in major equity indexes. These share price declines were posted even as analysts continued to revise up their earnings forecasts, implying a widening of the spread of the forward-looking earnings-price ratio for the S&P 500 over the real long-term Treasury yield, and were associated with an uptick in forward-looking measures of price volatility.

(3) The foreign exchange value of the dollar against other major currencies varied widely over the intermeeting period (Chart 3). The dollar declined, on net, until the middle of February, but subsequently rebounded to end the period up almost 3 percent. On balance, the dollar rose about 5 percent versus the yen, 2½ percent versus the euro, and 1½ percent versus the Canadian dollar and the British pound. Japanese authorities made frequent and large intervention purchases of dollars–including during periods when the dollar was rising–which may have bolstered the dollar's performance against the yen.[2] Factors supporting the dollar against European currencies are harder to identify, but remarks by some euro-area leaders calling for monetary policy easing by the ECB may have contributed to a change in sentiment. Despite this talk, the ECB held policy steady throughout the period. The Bank of England tightened policy 25 basis points in early February, citing concerns

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

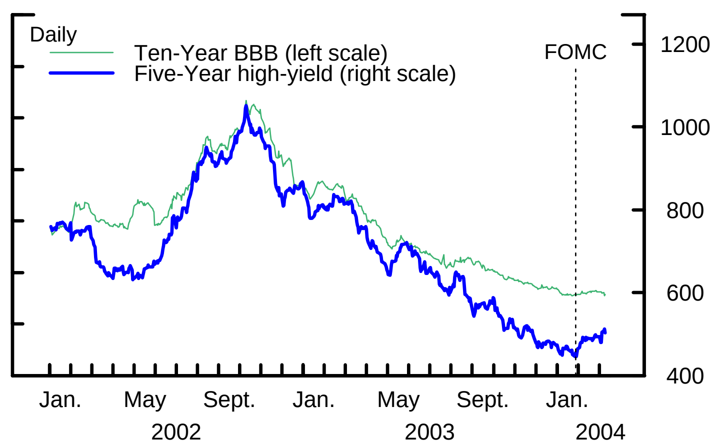
Chart 2
Financial Market Indicators

Higher-Tier Corporate Bond Spreads*



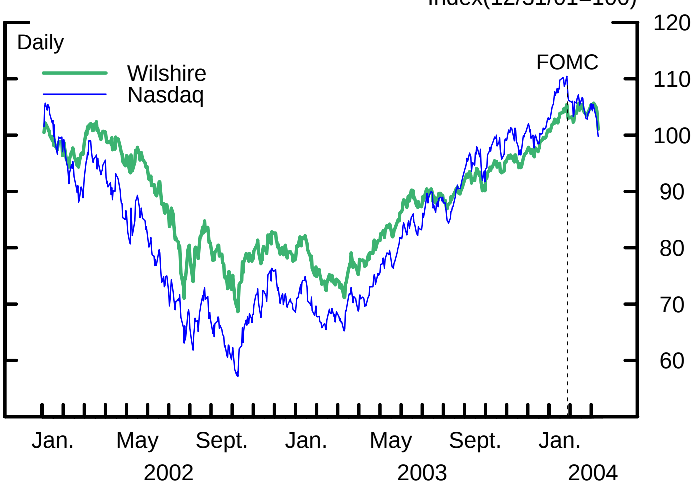
*AA spread measured relative to an estimated off-the-run Treasury yield curve. Swap spread measured relative to the on-the-run Treasury security.

Lower-Tier Corporate Bond Spreads*

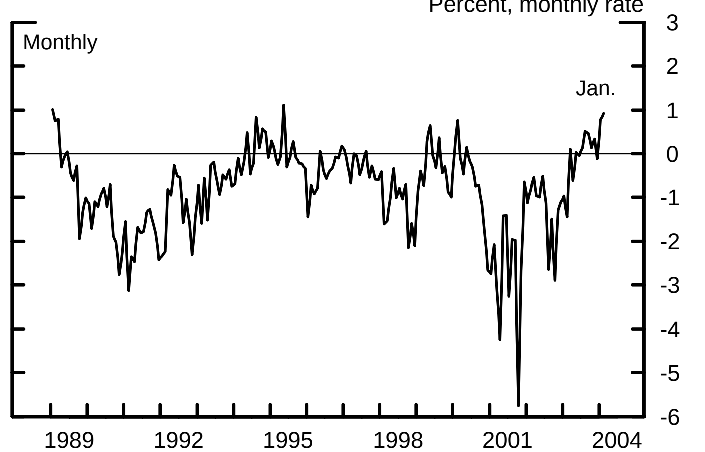


*Measured relative to an estimated off-the-run Treasury yield curve.

Stock Prices

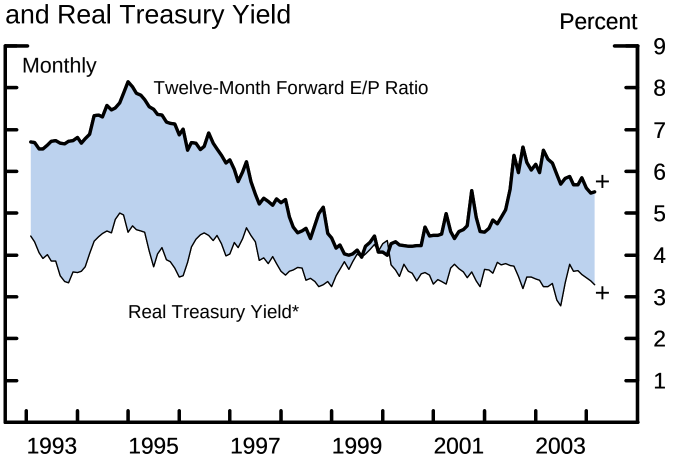


S&P 500 EPS Revisions Index



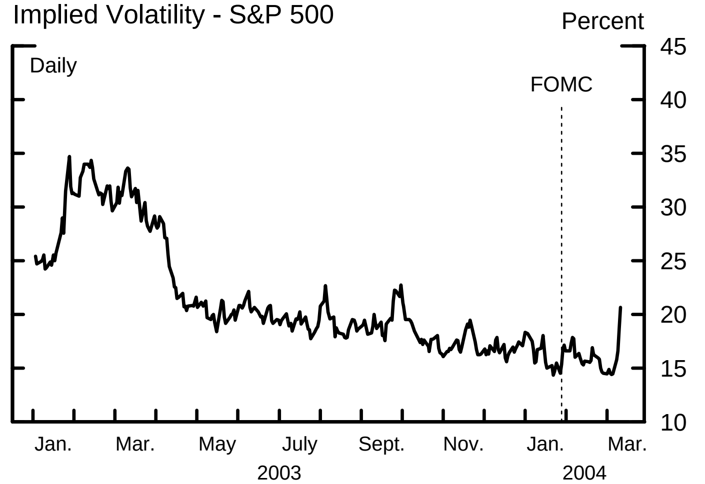
Note. Index is a weighted average of the percent change in the consensus forecasts of current-year and following-year earnings per share.

Earnings-Price Ratio for S&P 500 and Real Treasury Yield



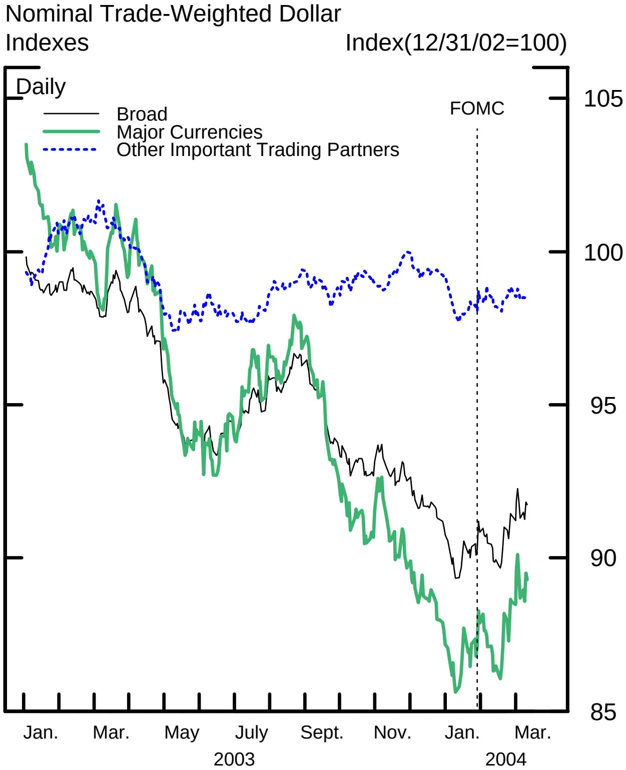
*Yield on synthetic Treasury perpetuity minus Philadelphia Fed ten-year expected inflation.
+ Denotes latest daily observation, March 11, 2004 .

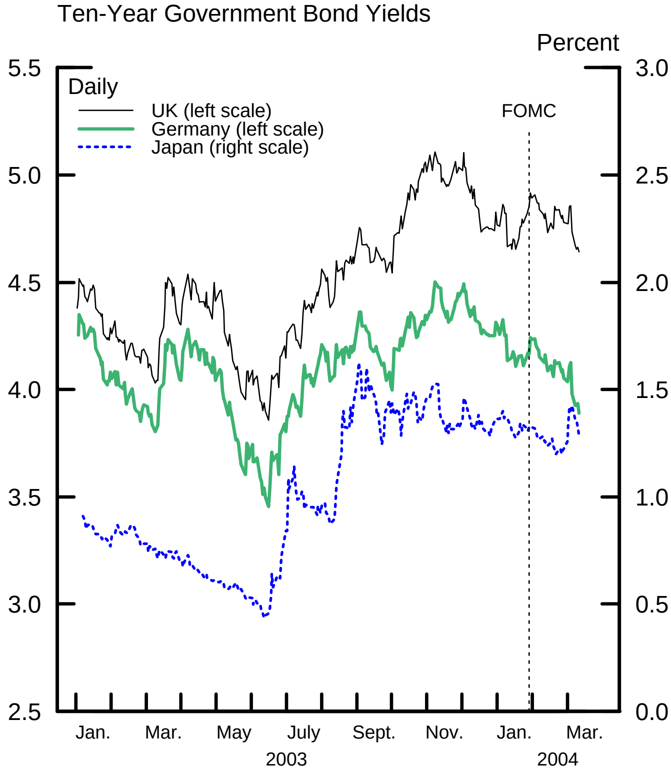
Implied Volatility - S&P 500

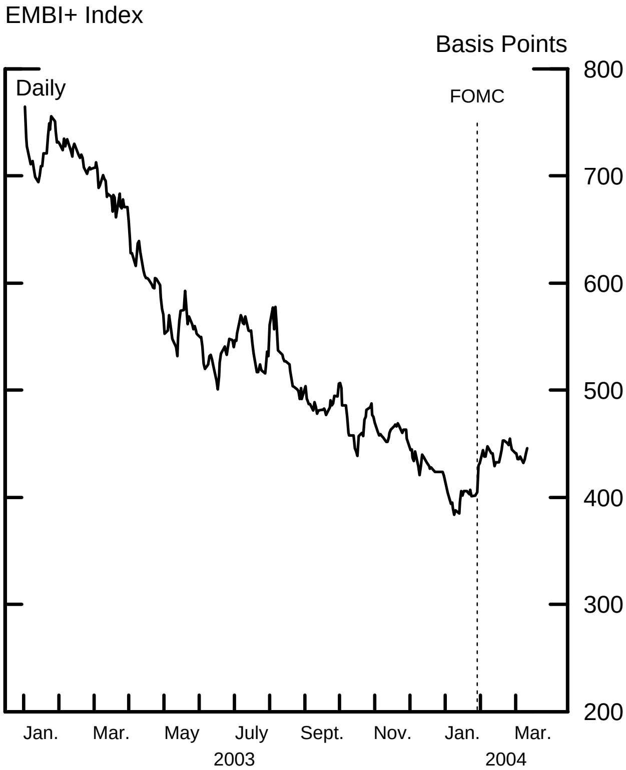


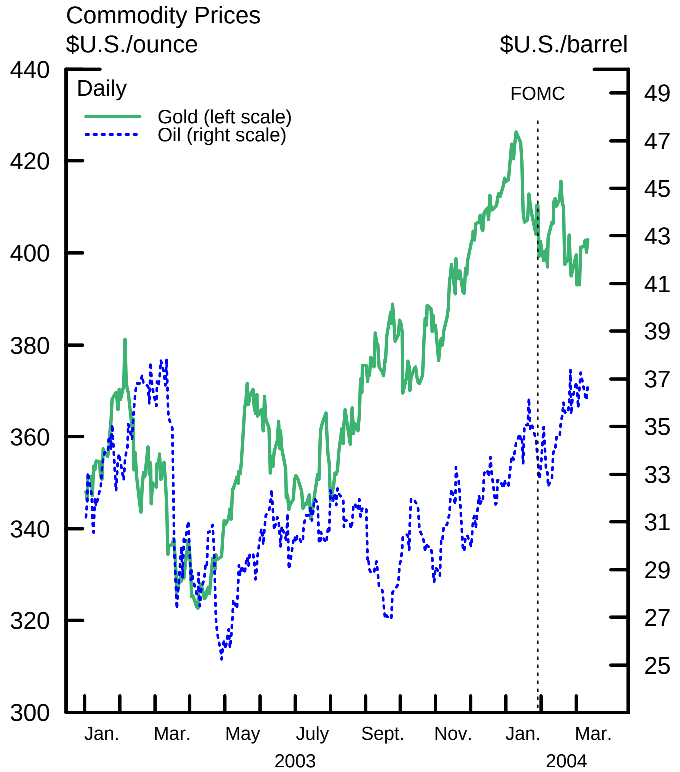
Note: Vertical lines indicate January 27, 2004. Last daily observations are for March 11, 2004.

Chart 3
International Financial Indicators









Note: Vertical lines indicate January 27, 2004. Last daily observations are for March 11, 2004.

about rising house prices, and the Bank of Canada cut its policy rate 25 basis points in early March as inflation there dipped further below its target. Stock prices in most foreign industrial countries rose modestly over much of the period, but erased those gains today in the wake of the act of terrorism in Madrid. Yields on long-term government bonds generally declined–albeit slightly less than those on comparable U.S. Treasury securities. Amid further signs of gathering economic strength in Japan, share prices rose, and long-term yields were about unchanged.

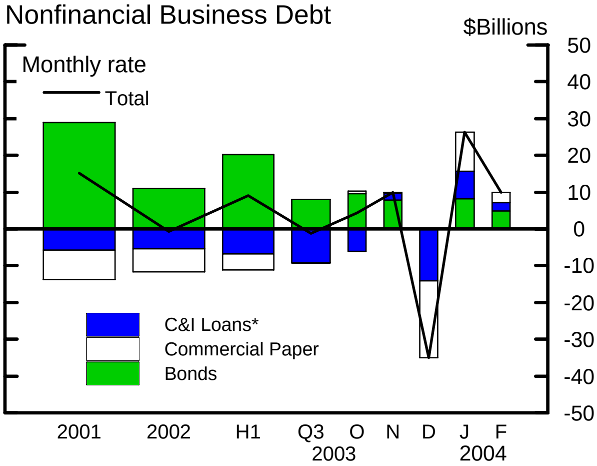
(4) The dollar rose slightly against an index of currencies of our other important trading partners. The Bank of Mexico tightened policy in February, its first firming in nearly a year. The Mexican peso traded in a narrow range and declined about 1 percent on net vis-a-vis the dollar over the intermeeting period. Brazil's EMBI+ spread widened 130 basis points, to about 5½ percentage points, and Brazilian share prices dropped sharply, as prospects for the government's reform program worsened in the face of a corruption scandal. Asian stock markets recorded mixed performances amid concerns about the possible adverse effects of avian flu, but sentiment about the region remained positive overall as economic activity continued to be buoyant.

(5) Debt of the domestic nonfinancial sectors appears to have accelerated of late and is anticipated to rise at an 8 percent pace in the first quarter. Although businesses remain flush with funds in the aggregate, they have stepped up their borrowing both in financial markets and from banks (Chart 4). For the nonfinancial business sector as a whole, debt is estimated to be expanding at a 5 percent rate this quarter, a bit faster than in the fourth quarter. In the household sector, debt is on track to grow at a 9 percent rate in the first quarter. Consumer credit growth registered a substantial pickup in January from the slow pace at the end of last year, and low interest rates and higher house prices have supported mortgage debt growth. Federal debt is projected to expand at a nearly 13 percent rate this quarter.

(6) After four consecutive months of decline, M2 edged up in January and expanded at a 10¼ percent rate in February. The depressing effect of the earlier drop-off in mortgage refinancing has apparently waned so that the ongoing robust growth of nominal income is now showing through to M2 growth.

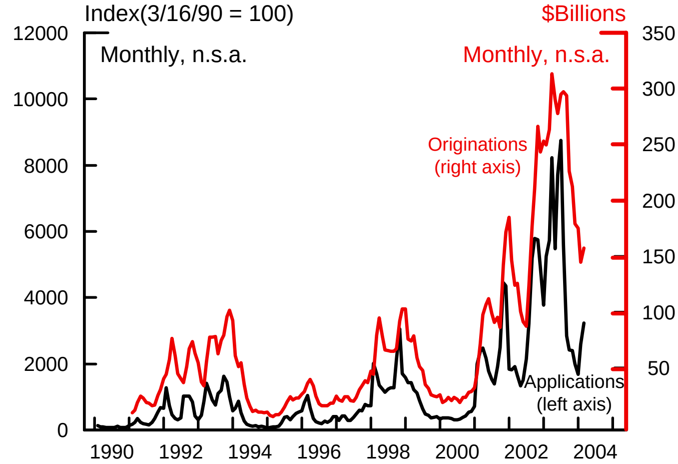
Chart 4
Debt and Money Growth

Changes in Selected Components of Nonfinancial Business Debt



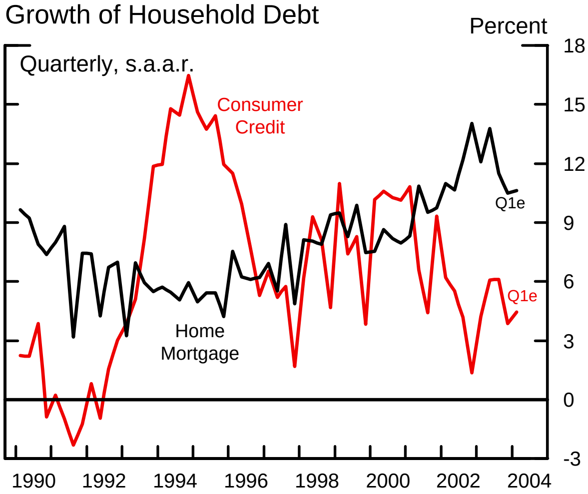
* C&I loans are adjusted for the estimated effects of FIN 46, and February 2004 observation is preliminary.
Note. Bonds are not seasonally adjusted.

Mortgage Refinancing Activity



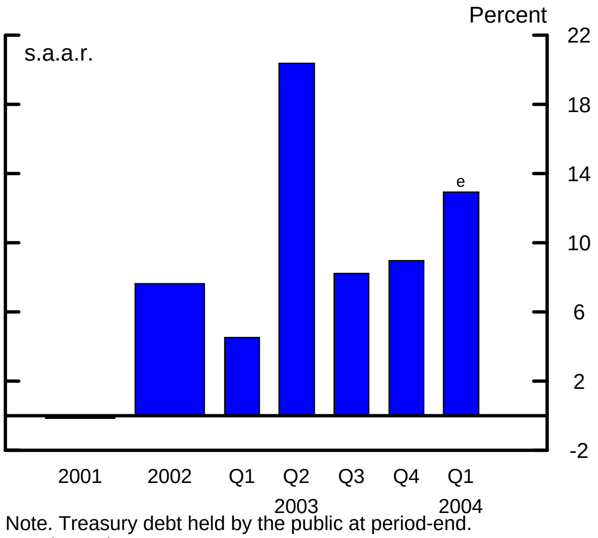
Source. Staff estimates.
Note. Last observation is February 2004.

Growth of Household Debt



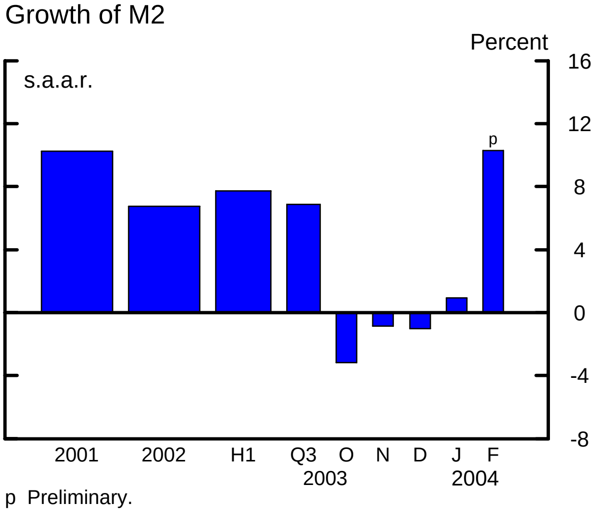
e Estimated.

Growth of Federal Debt



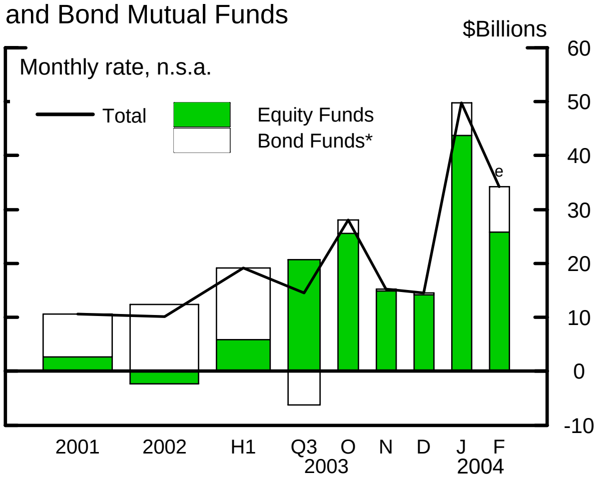
Note. Treasury debt held by the public at period-end.
e Estimated.

Growth of M2



p Preliminary.

Net Inflows to Equity and Bond Mutual Funds



* Includes hybrid funds but excludes reinvested dividends.
e Estimated.

Policy Alternatives

(7) Economic data released over the intermeeting period, especially readings on the labor market, fell short of staff expectations, and the projection of GDP growth over the first half of this year has been marked down about ½ percentage point relative to that in the January Greenbook. Still, accommodative monetary policy and robust productivity gains are expected to support output growth later this year and next, leaving the projection little changed over that period. In this Greenbook as in the previous one, the staff assumes that the Committee will begin to tighten policy in 2005, raising the target federal funds rate to 2 percent by the end of that year. Stock prices are anticipated to appreciate from current levels at a rate that provides investors with risk-adjusted returns comparable to those on fixed-income instruments. Longer-term Treasury yields increase gradually over the forecast period, but corporate yields are expected to hold steady as the improvement in the economic outlook trims risk spreads. The dollar is again assumed to depreciate gradually, albeit starting from its current higher level. The downward revision to economic growth forecasted over the first half of this year implies less headway in reducing resource slack. Although the output gap is cut by more than half over the next two years, it follows a track about ½ percentage point deeper than that in the last Greenbook and ends 2005 at around ¾ percent. The output gap puts downward pressure on inflation over the forecast horizon, offsetting upward pressures from higher oil and non-oil import prices. On net, core PCE inflation is projected to hold steady near 1 percent this year and next. As compared with the forecasts of the Board members and Bank presidents prepared for the January meeting, the staff anticipates that real GDP will grow at the top end of policymakers' central tendency of 4½ to 5 percent for 2004 and that inflation will come in at the lower end of the 1 to 1¼ percent central tendency.

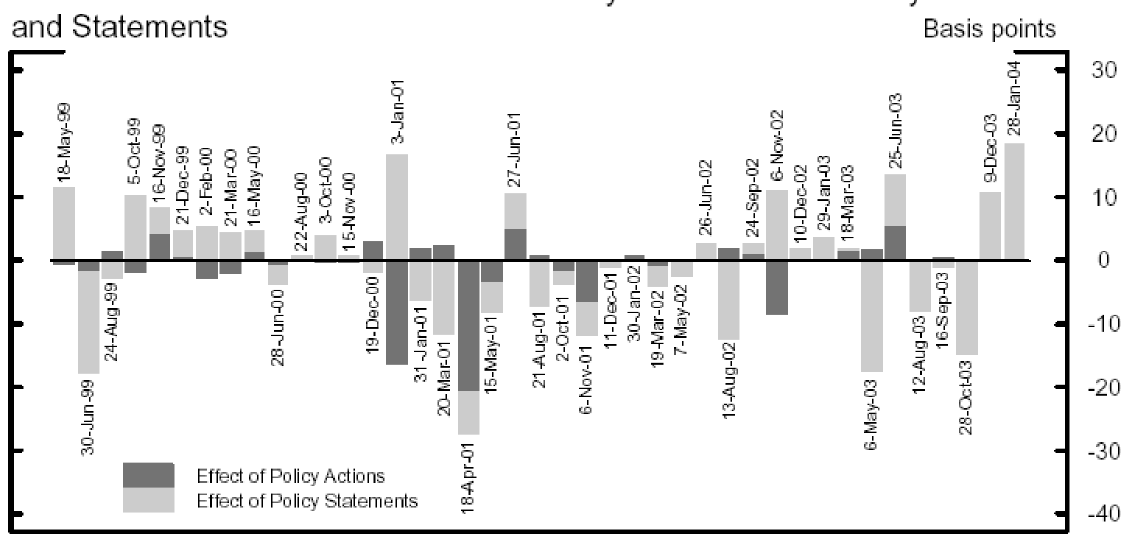
(8) At its last meeting, the Committee instructed the staff to include a more complete analysis in the Bluebook of possible wording choices for the policy announcement (see box entitled "Some General Issues Concerning Statement Language"). Given current economic circumstances and the Committee's January policy announcement, the staff viewed a change in the federal funds rate at this

Some General Issues Concerning Statement Language

As is evident in the chart below, the words of the FOMC's statements are important: The overall tone and content of FOMC statements can elicit significant immediate market reactions and sometimes may color the way market participants respond to subsequent incoming news and events. But while "words matter" in FOMC communications, statement language should not be viewed as an independent instrument of monetary policy. Presumably, the statement influences markets because participants believe that it conveys information that bears directly or indirectly on potential future policy actions. Thus, at least over the longer run, the importance of statement language depends on its connection with observed policy actions.

The likely market reaction to an FOMC statement is hard to judge. When the policy rate is changed, one can forecast the market reaction by using surveys and interest rate futures to measure ex-ante market expectations. When only the wording of the announcement is changed, predicting the market reaction is much more problematic. There is no simple way to map alternative wording in FOMC statements into basis-point equivalents to arrive at the analogue of a policy rate change. And even if this were possible, one would still need to know the language that the market expects. These caveats notwithstanding, the discussion in this Bluebook does hazard speculations about likely market reactions to alternative FOMC statements; these represent the staff's best guesses of the likely market reactions, but the confidence intervals are quite wide.

Estimated Effects on the Two-Year Treasury Yield of FOMC Policy Actions and Statements



Note. Effect of policy actions is estimated by regressing the change in the on-the-run two-year Treasury yield from 15 minutes before to 1 hour after the FOMC decision on the monetary policy surprise measured from federal funds futures. Effect of policy statement is measured by the residual from the regression.

meeting as sufficiently unlikely that this Bluebook presents three draft FOMC statements associated with an unchanged funds rate. These alternatives–A, B, and C in Table 1–are differentiated solely by their characterizations of the economy in the rationale paragraph and in the balance-of-risks assessment.[3]

Alternative B

(9) Although economic data over the intermeeting period have generally run on the soft side of expectations, the Committee might still believe that, with financial conditions registering only a small net change, the economy is positioned to attain sustainable economic growth with measures of core inflation remaining close to levels that many members have characterized as effective price stability. While the Committee may be disappointed that economic slack now seems likely to persist at a higher level than anticipated in January, it might also judge that additional policy ease would likely have its most stimulative effects when the economy was already close to its potential. The case for inaction may be compelling even if members harbor some doubts about the outlook. On the one hand, were capital spending to expand more slowly than in the staff forecast, the alternative simulation in the Greenbook tracing out the effects of lingering caution on the part of business executives would suggest that overall GDP growth would not be materially impaired. On the other hand, if the Committee believed that pressures on resources might build relatively quickly, the potential costs of a policy error associated with an unchanged policy stance might still be judged to be less worrisome than the costs that could be associated with tightening policy at this time. While the current degree of policy accommodation cannot be sustained in the long run, market participants are not likely to view retention of the current stance of policy as a reason to mark up inflation expectations, given persisting resource slack and rapid productivity growth.

(10) In these circumstances, the Committee might choose to retain the January FOMC statement essentially in its entirety, with only minor revisions similar to those

[3] As economic circumstances change over time, the alternatives presented in future Bluebooks will generally include analyses of potential changes in the stance of policy as well as in the proposed wording of the associated statements.

Table 1: FOMC Statement Alternatives				
	January FOMC	**Alternative A**	**Alternative B**	**Alternative C**
Policy Decision	The Federal Open Market Committee decided today to keep its target for the federal funds rate at 1 percent.	Unchanged	Unchanged	Unchanged
Rationale	The Committee continues to believe that an accommodative stance of monetary policy, coupled with robust underlying growth in productivity, is providing important ongoing support to economic activity.	Unchanged	Unchanged	Unchanged
	The evidence accumulated over the intermeeting period confirms that output is expanding briskly.	The evidence accumulated over the intermeeting period indicates that output is continuing to expand briskly.	The evidence accumulated over the intermeeting period indicates that output is continuing to expand briskly.	The evidence accumulated over the intermeeting period indicates that output is continuing to expand briskly.
	Although new hiring remains subdued, other indicators suggest an improvement in the labor market.	New hiring has been disappointing and resource utilization generally appears likely to remain somewhat below levels consistent with the economy operating at its productive potential for some time.	Although new hiring has been disappointing, other indicators suggest continued improvement in the labor market.	Although new hiring remains subdued, other indicators suggest continued improvement in the labor market.
	Increases in core consumer prices are muted and expected to remain low.	Unchanged	Unchanged	To date, increases in core consumer prices have been muted and inflation expectations remain contained.
Assessment of Risks	The Committee perceives that the upside and downside risks to the attainment of sustainable growth for the next few quarters are roughly equal.	Unchanged	Unchanged	Unchanged
	The probability of an unwelcome fall in inflation has diminished in recent months and now appears almost equal to that of a rise in inflation.	The probability, though minor, of an unwelcome fall in inflation has diminished in recent months but likely exceeds that of a rise in inflation.	Unchanged	The probability of a rise in inflation about equals that of an unwelcome decline in inflation.
	With inflation quite low and resource use slack, the Committee believes that it can be patient in removing its policy accommodation.	Unchanged	Unchanged	The Committee recognizes that the stance of monetary policy has been quite accommodative for some time. Nonetheless, with inflation low and resource use slack, the Committee believes that it can still be patient in removing its policy accommodation.

shown in **Alternative B**. Given the incoming data, the Committee might wish to acknowledge that the pace of new hiring has been *"disappointing"* but note that other indicators point to *"continued"* improvement in the labor market. Also, the Committee might want to state that *"evidence . . .indicates that output is continuing to expand briskly*." If the Committee's sense of the economic risks has not changed greatly since the January meeting, the wording of the January balance-of-risks assessment would seem appropriate at this meeting. Market participants would likely read such a statement as confirming that the Committee's economic and policy outlook is basically unchanged, and any market reaction to the statement would probably be small.

Alternative C

(11) In contrast, the Committee may have become more confident, in view of continued brisk spending growth and gains in manufacturing output, that the expansion has become self-sustaining. To be sure, news about the labor market has been disappointing, but this may point to continued strong gains in productivity. Indicators generally suggest that aggregate demand is holding up quite well. The recent strength of capital spending has been particularly noteworthy, perhaps offering increasingly concrete evidence that the pervasive gloom about business prospects evinced by corporate executives over much of the last two years is lifting. Against that backdrop, the Committee also might be more wary about the risk that inflation pressures could begin to emerge despite the current output gap. Indeed, rising oil and commodity prices might be cited as hints of inflation pressures. As in the alternative simulation presented in the Greenbook, a significant pickup in inflation expectations would pull real interest rates below their already-low levels and gradually feed into actual inflation. However, even if the Committee viewed these arguments as compelling, it might see some benefit in deferring tightening to a time when markets were better prepared for such action.

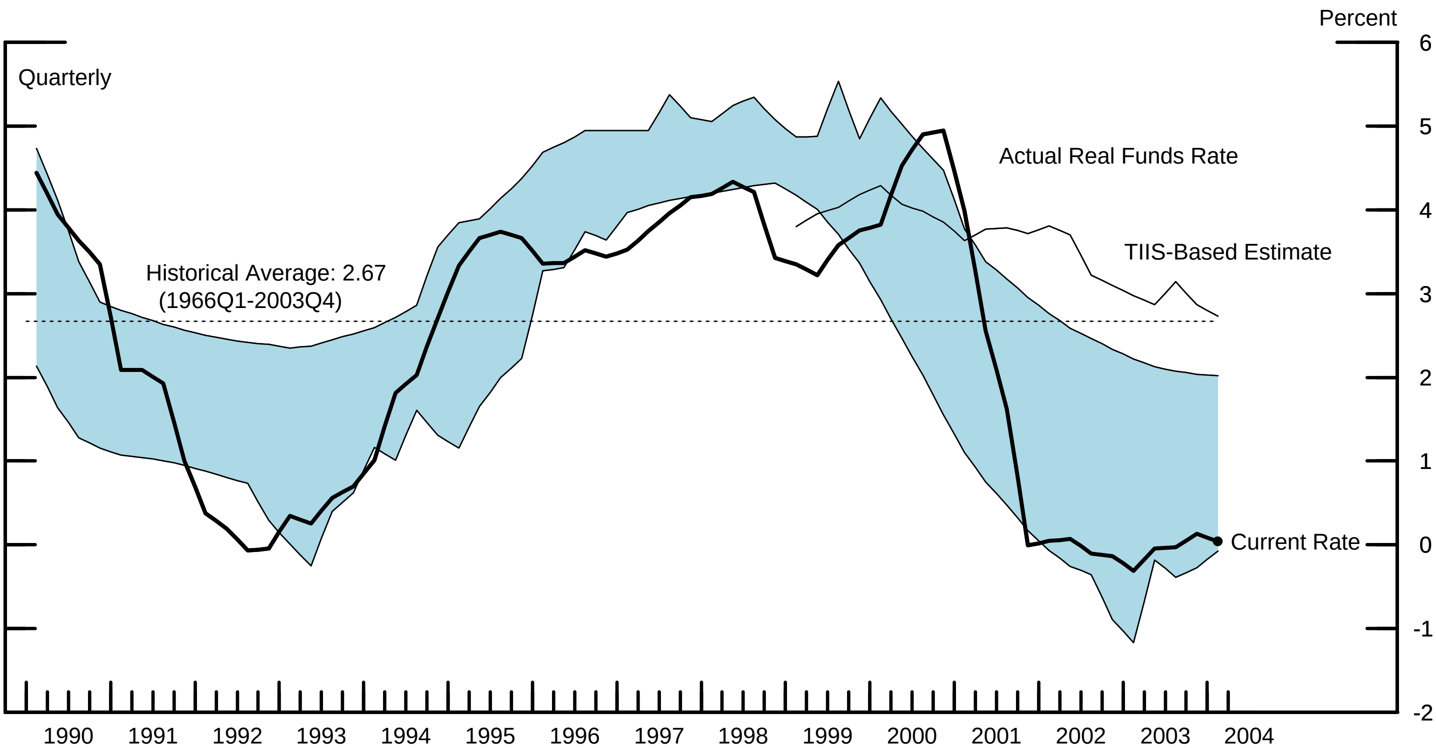
(12) Given this assessment, the Committee might wish to issue a statement structured like that in **Alternative C**. The Committee could convey some sense of increased wariness about inflation pressures in the final sentence of the rationale paragraph by noting simply that "*To date*, *increases in core consumer prices have been muted and*

inflation expectations remain contained," eliminating the forward-looking phrase "and are expected to remain low" that appeared in the January statement. This tone could be reinforced by modest revisions in the balance-of-risks assessment. For example, the Committee could indicate a slight change in its inflation outlook by stating that *"the probability of a rise in inflation about equals that of an unwelcome decline in inflation*." Lastly, while the Committee may not be prepared at this meeting to dispense with references to "patience," it might wish to add a sentence that hints that its patience is not unlimited. This could be accomplished with an insertion so that the revised passage read, "*The Committee recognizes that the stance of monetary policy has been quite accommodative for some time. Nonetheless, with inflation low and resource use slack, the Committee believes that it can still be patient in removing its policy accommodation*." Market participants would be quick to notice these revisions and, in all likelihood, would interpret the changes as further steps aimed at clearing the way for an eventual return of the target federal funds rate to a more neutral setting. Interest rates likely would move up on that reading, resulting in a concomitant dip in stock prices, but the retention of some reference to patience would likely diminish the odds of an outsized market reaction.

Alternative A

(13) The Committee might view the jury as still out as to whether the expansion has become self-sustaining at the current setting of policy. Indeed, members might regard the continued sluggishness in employment as a sign that businesses similarly have yet to reach a judgment on that score. And with fiscal impetus expected to wane, there may be some concern that weak employment growth could begin to weigh on consumer confidence and spending, eventually calling for an easing of policy. Such concern might be all the more acute if the Committee viewed a stable nominal funds rate in the face of downward revisions to many measures of the equilibrium federal funds rate (Chart 5) as an effective tightening of policy. The Committee would be particularly uncomfortable with this development if the prevailing inflation rate were viewed to be already on the low side of its preferred inflation cushion. While the Committee might see some benefit to an easier stance of policy, it might stay its hand at this meeting because of the offsetting risk that currently

Chart 5
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 2004Q1.

Equilibrium Real Funds Rate Estimates (Percent)

	2002	2003H1	2003H2	2004Q1
Statistical Filter				
- Two-sided:				
Based on historical data and the staff forecast	-0.2	-0.1	0.1	0.3
January Bluebook	*0.0*	*0.3*	*0.5*	*0.6*
- One-sided:				
Based on historical data*	0.0	-0.7	-0.3	-0.1
January Bluebook	*0.1*	*-0.5*	*0.0*	*0.4*
FRB/US Model				
- Two-sided:				
Based on historical data and the staff forecast	2.5	2.2	2.1	2.0
January Bluebook	*2.9*	*2.6*	*2.4*	*2.4*
- One-sided:				
Based on historical data**	1.9	0.7	1.1	1.2
January Bluebook	*2.1*	*1.1*	*1.2*	*1.3*
Treasury Inflation-Indexed Securities	3.5	2.9	3.0	2.7
January Bluebook	*3.5*	*2.9*	*3.0*	*2.8*

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

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

benign inflation expectations could respond in an adverse manner if its already considerable policy accommodation were augmented.

(14) With this view, the Committee might wish to issue a statement structured like that shown in **Alternative A**. The Committee could convey a sense of its concerns through a somewhat less sanguine assessment of the labor market in the rationale paragraph. The third sentence could drop the reference to other indicators pointing to improvement in labor markets and state simply that *"New hiring has been disappointing."* Adding a clause to this sentence suggesting that *". . .and resource utilization generally appears likely to remain somewhat below levels consistent with the economy operating at its productive potential for some time*" would underscore the Committee's concern about economic slack. The Committee's assessment could be amplified still more by modest revisions to its characterizations of the balance of risks. For example, the Committee might note that *"the probability, though minor, of an unwelcome fall in inflation has diminished in recent months but likely exceeds that of a rise in inflation."* Interest rates would probably move a bit lower following an announcement of this sort. Equity prices might be buoyed somewhat if the statement was read primarily as reaffirming the FOMC's resolve to foster sustainable output growth at a pace sufficient to eliminate economic slack. The rise in stock prices could be damped or even reversed, however, if investors took the statement as implying higher odds that the vigor of economic growth could wane over coming quarters.

Money and Debt Forecast

(15) Stronger money growth of late has led the staff to nudge up its forecast for M2 growth this year about ½ percentage point, to 5 percent, relative to that in the January Greenbook. Still, households are expected to continue tilting the composition of their portfolios toward capital market instruments at the expense of monetary assets, pushing up M2 velocity about 1 percent for the year. The staff forecast for total domestic nonfinancial debt growth in 2004 has also been marked up by about ½ percentage point. For the corporate sector, the staff's projections of profits and internal funds for this year have been trimmed. Faced with less ample internal funds and also heavier funding needs associated with mergers and acquisitions and equity

paydowns, businesses are expected to tap credit markets more intensively. Nonfinancial business debt growth is now projected at 5½ percent this year, up about ¾ percentage point since the January Greenbook. Although household debt is expected to decelerate over the forecast horizon, the forecast for household borrowing has also been revised up significantly since the last round, primarily on a much stronger outlook for home price appreciation and the attendant impetus to mortgage borrowing. The outlook for federal borrowing is about the same as in the last round. A sizable fiscal deficit implies growth in federal debt at about a 12¼ percent pace this year. Federal debt growth is projected to slow in 2005 with the anticipated expiration of investment tax incentives at the end of this year and as tax receipts pick up as the economy expands. On balance, total domestic nonfinancial debt growth–projected at 8 percent in 2004 and 7 percent in 2005–exceeds that of nominal GDP in each year by about 2 percentage points.

Directive and Balance-of-Risks Language

(16) Should the Committee wish to follow the same procedure as at the January meeting, it could vote on the directive and on the language of the assessment of risks. Draft language with a range of options for the assessment of risks consistent with those described in Table 1 is provided below.

(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~~ percent.

(2) Risk Assessments

(A) The Committee perceives that the upside and downside risks to the attainment of sustainable growth for the next few quarters are roughly equal. The probability, though minor, of an unwelcome fall in inflation has diminished in recent months but likely exceeds that of a rise in inflation. With inflation quite low and resource use slack, the Committee believes that it can be patient in removing its policy accommodation.

(B) The Committee perceives that the upside and downside risks to the attainment of sustainable growth for the next few quarters are roughly equal. The probability of an unwelcome fall in inflation has diminished in recent months and now appears almost equal to that of a rise in inflation. With inflation quite low and resource use slack, the Committee believes that it can be patient in removing its policy accommodation.

(C) The Committee perceives that the upside and downside risks to the attainment of sustainable growth for the next few quarters are roughly equal. The probability of a rise in inflation about equals that of an unwelcome decline in inflation. The Committee recognizes that the stance of monetary policy has been quite accommodative for some time. Nonetheless, with inflation low and resource use slack, the Committee believes that it can still be patient in removing its policy accommodation.

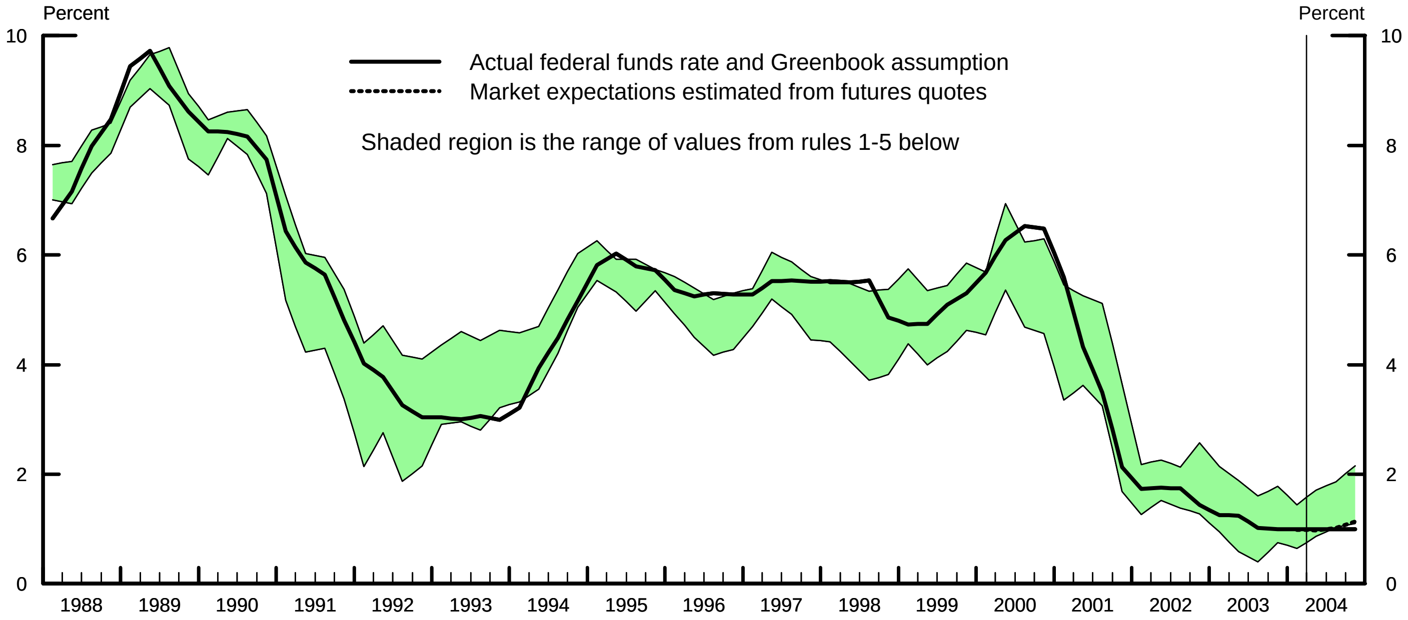
M2 Growth Rate*

Monthly Growth Rates		
	Jan-04	0.9
	Feb-04	10.3
	Mar-04	5.7
	Apr-04	4.0
	May-04	7.3
	Jun-04	4.6
	Jul-04	5.0
	Aug-04	5.0
	Sep-04	5.0
Quarterly Growth Rates		
	2003 Q4	-1.5
	2004 Q1	2.9
	2004 Q2	5.9
	2004 Q3	5.2
Annual Growth Rates		
	2002	6.8
	2003	5.3
	2004	5.0
Growth From	To	
2003 Q4	Mar-04	4.0
2003 Q4	Jun-04	4.6
Dec-03	Mar-04	5.7
Dec-03	Jun-04	5.5
Feb-04	Jun-04	5.4
Jul-04	Dec-04	5.6

* Forecasted M2 growth is consistent with nominal GDP and interest rates in the Greenbook forecast.

Chart 6

Actual and Assumed Federal Funds Rate and Range of Values from Policy Rules and Futures Markets



Values of the Federal Funds Rate from Policy Rules and Futures Markets

	2003 Q4	2004 Q1	Q2	Q3	Q4
Outcome-based Rules					
1. Baseline Taylor	1.78	1.44	1.71	1.86	2.15
2. Aggressive Taylor	0.75	0.65	0.86	1.19	1.68
3. Estimated	0.95	1.02	1.09	1.25	1.52
Forecast-based Rules					
4. Estimated with Greenbook forecasts	1.15	1.17	1.03	1.12	1.24
5. Estimated with FOMC forecasts	0.94	1.05	1.04	1.03	1.10
6. First-difference rule*	1.33	1.25	1.09	1.04	0.87
From Financial Markets					
7. Estimated TIPS-based rule*	1.21	1.31**			
Memo: Expected federal funds rate derived from futures	0.99	0.99	0.98	1.02	1.14
Memo: Greenbook assumption	1.00	1.00	1.00	1.00	1.00

* Not included in the shaded region in the figure.

** Computed using average TIPS and nominal Treasury yields to date.

Note: Rule prescriptions for 2004Q1 through 2004Q4 are calculated using Greenbook projections for inflation and the output gap (or unemployment gap). It is assumed that there is no feedback from the rule prescriptions to the Greenbook projections over the indicated horizon.

Rules Chart: Explanatory Notes

In all of the rules below, i_t denotes the federal funds rate, π_t the staff estimate at date t of trailing four-quarter core PCE inflation, (y_t-y_t*) the staff estimate (at date t) of the output gap, i_{t-1} the lagged federal funds rate, ε_{t-1} the residual from the rule's prescription the previous quarter, $(y_{t+3|t}-y_{t+3|t}^*)$ the staff's three-quarter-ahead forecast of the output gap, $(\Delta y_{t+3|t}-\Delta y_{t+3|t}^*)$ the staff's forecast of output growth less potential output growth three quarters ahead, $\pi_{t+3|t}$ a three-quarter-ahead forecast of inflation, and $(u_{t+3|t}-u_{t+3|t}^*)$ a three-quarter-ahead forecast of the unemployment gap. Data are quarterly averages taken from the Greenbook and staff memoranda closest to the middle of each quarter, unless otherwise noted.

Rule	Specification	Root-mean-square error	
		1988:1-2003:4	2001:1-2003:4
Outcome-based			
1. Baseline Taylor Coefficients are benchmark values, not estimated.	$i_t = 2 + \pi_t + 0.5(y_t-y_t^*) + 0.5(\pi_t-2)$	.92	.90
2. Aggressive Taylor Coefficients are benchmark values, not estimated.	$i_t = 2 + \pi_t + (y_t-y_t^*) + 0.5(\pi_t-2)$	.75	.77
3. Estimated Outcome-based Rule includes both lagged interest rate and serial correlation in residual.	$i_t = 0.55i_{t-1} + 0.45\ [1.18 + 0.96(y_t-y_t^*) + 1.45\pi_t] + 0.43\varepsilon_{t-1}$	.25	.28
Forecast-based			
4. Estimated Greenbook Forecast-based Rule includes both lagged interest rate and serial correlation in residual.	$i_t = 0.71i_{t-1} + 0.29\ [0.72 + 1.04(y_{t+3\|t}-y_{t+3\|t}^*) + 1.55\pi_{t+3\|t}] + 0.35\varepsilon_{t-1}$	.26	.29
5. Estimated FOMC Forecast-based Unemployment and inflation forecasts are from semiannual "central tendency" of FOMC forecasts, interpolated if necessary to yield 3-qtr-ahead values; u_t* forecast is from staff memoranda. Inflation forecasts are adjusted to core PCE deflator basis. Rule is estimated at semiannual frequency, and projected forward using Greenbook forecasts.	$i_t = 0.48i_{t-2} + 0.51\ [0.31 - 2.09(u_{t+3\|t}-u_{t+3\|t}^*) + 1.59\pi_{t+3\|t}]$	.45	.72
6. First-difference Rule Coefficients are benchmark values, not estimated.	$i_t = i_{t-1} + 0.5(\Delta y_{t+3\|t}-\Delta y_{t+3\|t}^*) + 0.5(\pi_{t+3\|t}-2)$	.87	.33
From Financial Markets			
7. Estimated TIPS-based $\pi_{comp5\|t}$ denotes the time-t difference between 5-yr nominal Treasury yields and TIPS. Sample begins in 1999 due to TIPS volatility in 1997-8.	$i_t = 0.94i_{t-1} + [-1.39 + 0.84\pi_{comp5\|t}]$	.44#	.49

RMSE calculated for 1999-2003 period.

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
03 -- High	1.45	1.26	1.22	1.28	1.32	1.28	2.11	3.60	4.80	5.61	1.84	2.48	7.48	5.50	6.44	4.06
-- Low	0.86	0.75	0.81	0.82	0.93	0.91	1.09	2.06	3.29	4.37	0.77	1.56	6.01	4.78	5.21	3.45
04 -- High	1.08	0.98	0.97	1.05	1.09	1.06	1.94	3.35	4.54	5.32	1.32	2.05	6.70	5.05	5.87	3.76
-- Low	0.92	0.73	0.87	0.96	1.04	0.97	1.49	2.68	3.87	4.80	0.51	1.40	6.03	4.81	5.41	3.41
Monthly																
Mar 03	1.25	1.18	1.15	1.16	1.23	1.21	1.59	2.81	4.04	4.98	1.13	1.99	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	1.39	2.21	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	1.19	1.94	6.38	4.92	5.48	3.66
Jun 03	1.22	0.98	0.94	0.94	1.04	1.06	1.23	2.27	3.51	4.56	0.95	1.75	6.19	4.87	5.23	3.52
Jul 03	1.01	0.89	0.92	0.97	1.05	1.01	1.50	2.84	4.14	5.06	1.33	2.12	6.62	5.14	5.63	3.57
Aug 03	1.03	0.95	0.97	1.05	1.08	1.03	1.89	3.36	4.64	5.46	1.53	2.32	7.01	5.43	6.26	3.79
Sep 03	1.01	0.91	0.96	1.03	1.08	1.02	1.70	3.16	4.45	5.30	1.34	2.19	6.79	5.30	6.15	3.86
Oct 03	1.01	0.91	0.94	1.02	1.10	1.02	1.75	3.17	4.45	5.30	1.24	2.07	6.73	5.27	5.95	3.74
Nov 03	1.00	0.94	0.95	1.04	1.11	1.02	1.92	3.27	4.45	5.27	1.29	1.97	6.66	5.15	5.93	3.75
Dec 03	0.98	0.89	0.92	1.01	1.10	1.03	1.90	3.25	4.41	5.22	1.26	1.99	6.60	5.11	5.88	3.76
Jan 04	1.00	0.84	0.90	0.99	1.06	0.99	1.75	3.10	4.28	5.13	1.11	1.88	6.44	4.99	5.74	3.65
Feb 04	1.01	0.92	0.95	1.01	1.05	0.99	1.73	3.05	4.22	5.06	0.88	1.77	6.27	4.86	5.64	3.55
Weekly																
Jan 9 04	0.98	0.87	0.90	1.02	1.07	1.00	1.82	3.20	4.40	5.23	1.24	1.96	6.56	5.03	5.87	3.76
Jan 16 04	1.00	0.84	0.89	0.97	1.05	0.98	1.65	2.97	4.17	5.06	1.07	1.85	6.37	4.92	5.66	3.62
Jan 23 04	1.00	0.78	0.89	0.97	1.05	0.98	1.68	3.00	4.18	5.05	1.02	1.81	6.37	4.94	5.64	3.56
Jan 30 04	1.02	0.86	0.92	1.00	1.05	1.00	1.80	3.14	4.31	5.13	1.07	1.88	6.40	5.02	5.68	3.59
Feb 6 04	1.01	0.90	0.94	1.02	1.06	0.99	1.81	3.14	4.29	5.12	0.98	1.83	6.32	4.96	5.72	3.61
Feb 13 04	1.00	0.90	0.94	1.00	1.06	1.00	1.74	3.05	4.22	5.05	0.92	1.77	6.26	4.85	5.66	3.57
Feb 20 04	1.01	0.92	0.94	1.00	1.05	0.98	1.71	3.02	4.20	5.05	0.87	1.77	6.25	4.83	5.58	3.53
Feb 27 04	1.01	0.96	0.96	1.02	1.05	1.00	1.67	2.99	4.17	5.03	0.76	1.71	6.23	4.81	5.58	3.50
Mar 5 04	1.02	0.97	0.96	1.02	1.05	0.99	1.68	2.96	4.14	4.99	0.64	1.57	6.20	4.85	5.59	3.47
Mar 12 04	--	0.97	0.96	1.00	1.04	0.99	1.51	2.70	3.89	4.81	0.54	1.44	--	--	5.41	3.41
Daily																
Feb 24 04	0.99	0.97	0.97	1.02	1.05	1.00	1.69	2.99	4.17	5.03	0.80	1.74	6.23	--	--	--
Feb 25 04	1.02	0.96	0.96	1.02	1.05	0.99	1.66	2.97	4.16	5.02	0.76	1.71	6.23	--	--	--
Feb 26 04	1.03	0.97	0.96	1.02	1.05	0.98	1.68	3.00	4.19	5.05	0.75	1.69	6.25	--	--	--
Feb 27 04	1.04	0.95	0.96	1.01	1.05	1.00	1.65	2.98	4.13	5.01	0.67	1.61	6.20	--	--	--
Mar 1 04	1.04	0.97	0.97	1.02	1.05	0.99	1.66	2.96	4.14	4.99	0.62	1.56	6.20	--	--	--
Mar 2 04	1.00	0.98	0.97	1.03	1.06	0.99	1.72	3.02	4.19	5.03	0.65	1.59	6.24	--	--	--
Mar 3 04	1.00	0.97	0.97	1.02	1.06	0.99	1.74	3.03	4.21	5.03	0.68	1.60	6.25	--	--	--
Mar 4 04	0.99	0.97	0.96	1.02	1.06	0.98	1.72	3.00	4.17	5.01	0.70	1.61	6.22	--	--	--
Mar 5 04	1.00	0.95	0.95	0.99	1.04	0.98	1.57	2.80	3.98	4.87	0.55	1.47	6.10	--	--	--
Mar 8 04	1.00	0.95	0.95	0.99	1.04	0.99	1.51	2.73	3.92	4.84	0.53	1.45	6.08	--	--	--
Mar 9 04	0.99	0.98	0.96	1.00	1.04	0.98	1.49	2.68	3.87	4.80	0.51	1.40	6.03	--	--	--
Mar 10 04	1.00	0.97	0.96	1.00	1.04	0.99	1.52	2.69	3.88	4.80	0.57	1.46	6.05	--	--	--
Mar 11 04	1.00 p	0.96	0.97	1.00	1.04	--	1.52	2.71	3.90	4.81	0.61	1.51	--	--	--	--

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.

p - preliminary data

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)					
2001	6.8	10.3	11.2	18.3	12.7
2002	3.3	6.8	7.7	5.6	6.4
2003	6.7	5.3	4.9	2.7	4.4
Quarterly(average)					
2003-Q1	7.9	7.2	7.0	5.1	6.5
Q2	8.5	8.1	8.0	0.6	5.8
Q3	7.5	6.9	6.7	6.9	6.9
Q4	2.4	-1.5	-2.5	-2.0	-1.6
Monthly					
2003-Feb.	14.3	8.8	7.4	-2.5	5.2
Mar.	5.2	5.2	5.2	2.7	4.4
Apr.	5.0	8.8	9.8	-3.0	5.1
May	11.7	9.8	9.3	2.9	7.7
June	12.6	7.4	6.1	5.7	6.9
July	4.4	8.7	9.8	14.4	10.5
Aug.	8.5	7.6	7.4	-0.1	5.2
Sep.	0.1	-4.3	-5.4	4.7	-1.5
Oct.	2.1	-3.1	-4.6	-5.9	-4.0
Nov.	-0.7	-0.8	-0.8	-4.1	-1.9
Dec.	8.6	-1.0	-3.6	-1.4	-1.1
2004-Jan.	-5.8	0.9	2.7	19.6	6.7
Feb. p	22.9	10.3	6.9	3.9	8.3
Levels ($billions):					
Monthly					
2003-Oct.	1284.6	6080.3	4795.6	2755.4	8835.6
Nov.	1283.8	6076.0	4792.3	2745.9	8821.9
Dec.	1293.0	6070.8	4777.8	2742.7	8813.5
2004-Jan.	1286.8	6075.5	4788.7	2787.5	8862.9
Feb. p	1311.4	6127.6	4816.2	2796.6	8924.2
Weekly					
2004-Feb. 2	1293.4	6093.3	4799.9	2787.7	8881.0
9	1290.7	6098.3	4807.6	2792.5	8890.8
16	1315.6	6130.0	4814.4	2797.9	8928.0
23p	1323.2	6143.1	4819.9	2799.6	8942.6
Mar. 1p	1323.2	6150.8	4827.6	2801.8	8952.6

p preliminary

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

March 11, 2004

	Treasury Bills			Treasury Coupons						Federal	Net change	Net RPs [5]		
	Net Purchases [2]	Redemptions (-)	Net Change	Net Purchases [3] < 1	Net Purchases [3] 1-5	Net Purchases [3] 5-10	Net Purchases [3] Over 10	Redemptions (-)	Net Change	Agency Redemptions (-)	total outright holdings [4]	Short-Term [6]	Long-Term [7]	Net Change
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
2003	18,150	---	18,150	6,565	7,814	4,107	220	---	18,706	10	36,846	2,223	1,036	3,259
2002 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
QII	6,259	---	6,259	2,209	1,790	234	---	---	4,232	---	10,491	-2,578	1,056	-1,522
QIII	2,568	---	2,568	---	---	1,232	150	---	1,382	---	3,950	1,712	-554	1,158
QIV	3,299	---	3,299	2,561	3,188	1,350	20	---	7,118	10	10,407	-561	2,750	2,189
2003 Jul	808	---	808	---	---	---	---	---	---	---	808	2,486	-1,548	938
Aug	981	---	981	---	---	---	---	---	---	---	981	3,195	-935	2,259
Sep	780	---	780	---	---	1,232	150	---	1,382	---	2,162	-1,562	1,817	256
Oct	880	---	880	---	1,447	280	---	---	1,728	---	2,608	-73	-527	-600
Nov	925	---	925	2,561	1,503	787	---	---	4,851	---	5,775	-382	894	512
Dec	1,494	---	1,494	---	237	283	20	---	540	10	2,024	-767	5,268	4,500
2004 Jan	619	---	619	---	---	---	---	---	---	---	619	-424	-5,097	-5,520
Feb	747	---	747	1,311	1,555	510	235	---	3,611	---	4,358	-568	-2,423	-2,991
2003 Dec 17	347	---	347	---	---	---	---	---	---	---	347	-788	1,714	926
Dec 24	267	---	267	---	---	---	---	---	---	---	267	3,679	2,714	6,393
Dec 31	452	---	452	---	---	---	---	---	---	---	452	724	2,571	3,295
2004 Jan 7	65	---	65	---	---	---	---	---	---	---	65	-1,414	-3,429	-4,843
Jan 14	88	---	88	---	---	---	---	---	---	---	88	-5,930	-5,571	-11,502
Jan 21	43	---	43	---	---	---	---	---	---	---	43	8,910	1,000	9,910
Jan 28	238	---	238	---	---	---	---	---	---	---	238	-5,691	-6,000	-11,691
Feb 4	239	---	239	---	---	---	---	---	---	---	239	3,715	---	3,715
Feb 11	342	---	342	1,311	825	85	---	---	2,221	---	2,563	-4,798	-1,000	-5,798
Feb 18	209	---	209	---	730	---	---	---	730	---	939	3,757	5,000	8,757
Feb 25	86	---	86	---	---	425	235	---	660	---	746	-5,018	2,000	-3,018
Mar 3	99	---	99	---	---	---	---	---	---	---	99	7,103	-4,000	3,103
Mar 10	132	---	132	---	718	491	40	---	1,249	---	1,381	-4,997	-1,000	-5,997
2004 Mar 11	2	---	2	---	---	---	---	---	---	---	2	4,188	---	4,188
Intermeeting Period														
Jan 28-Mar 11	1,109	---	1,109	1,311	2,273	1,001	275	---	4,860	---	5,969	5,588	1,000	6,588
Memo: LEVEL (bil. $)														
Mar 11			246.4	116.4	183.1	49.7	77.4		426.6	---	673.1	-11.3	15.0	3.7

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 13 days or less.
7. Original maturity of 14 to 90 days.

MRA:HAW