

Prefatory Note

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MONETARY POLICY ALTERNATIVES

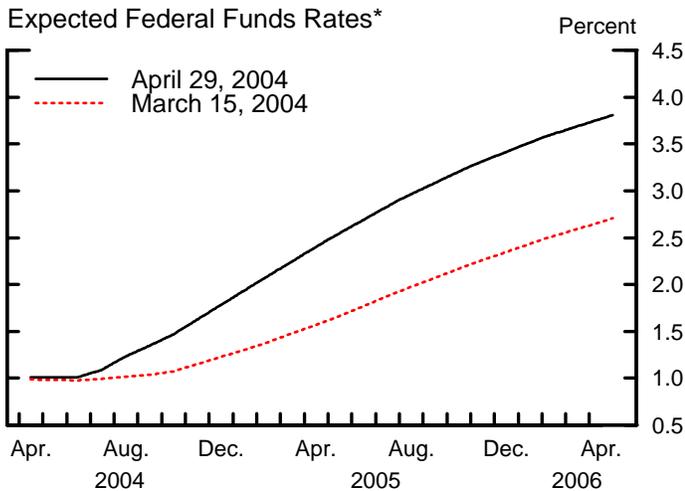
Recent Developments

(1) The FOMC's decision at its March meeting to leave the intended level of the federal funds rate unchanged had been fully anticipated in markets, but the assessment of the economy in the accompanying statement was read as having a soft cast, and interest rates moved lower.¹ In the weeks that followed, however, interest rates rose sharply in response to the much-stronger-than-expected employment report for March and to other data releases pointing to firming household and business spending and rising prices, as well as to the Chairman's statement in congressional testimony that "the threat of deflation is no longer an issue." Futures markets and dealer surveys suggest virtually no expectation of a rate move at the May meeting. With regard to the associated statement, dealers apparently anticipate that the Committee will modify or drop the reference to "patience" and characterize the risks to the achievement of sustainable growth and to price stability as balanced. Market participants now appear to believe that tightening will commence in the third quarter, rather than late in the year as previously thought, and will bring the federal funds rate to nearly 3½ percent by the end of 2005, a full percentage point higher than anticipated at the time of the March meeting (Chart 1).

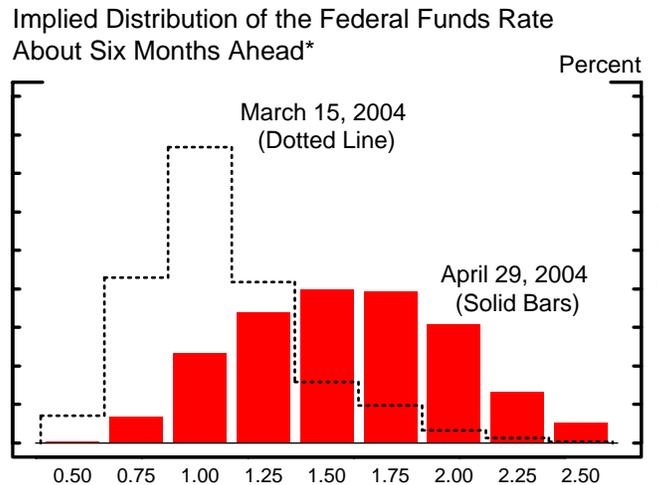
(2) This shift over the intermeeting period toward the expectation of prompter and more substantial monetary policy tightening precipitated increases of over 70 basis points in nominal Treasury yields at maturities between two and ten

¹ The effective federal funds rate averaged 1 percent over the intermeeting period. The Desk expanded the System's outright holdings of securities by \$4.5 billion, with purchases from foreign official customers of \$1.1 billion of Treasury bills and market purchases of \$2.6 billion of Treasury bills and \$0.8 billion of coupon securities. The volume of outstanding long-term RPs increased \$1 billion to \$16 billion.

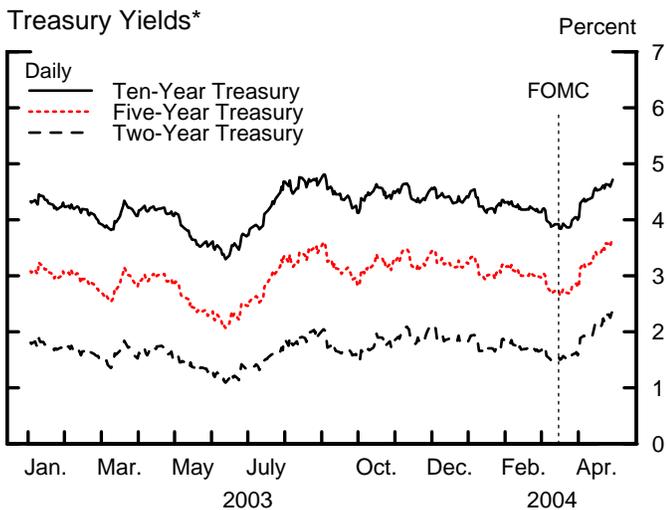
Chart 1 Interest Rate Developments



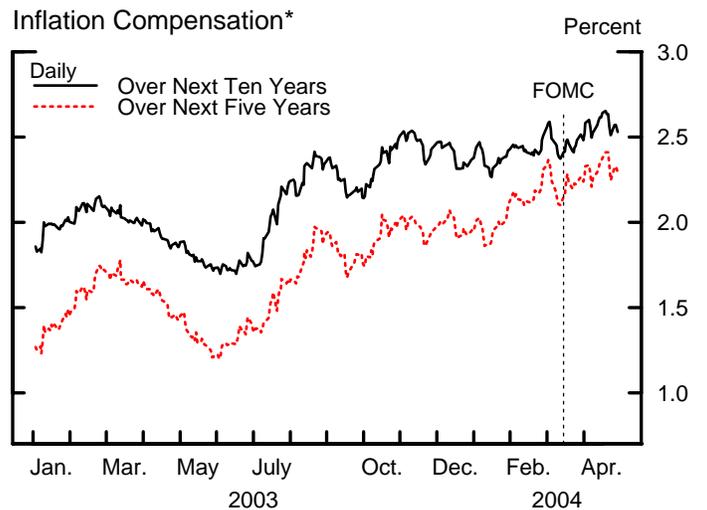
*Estimates from federal funds and eurodollar futures, with an allowance for term premia and other adjustments.



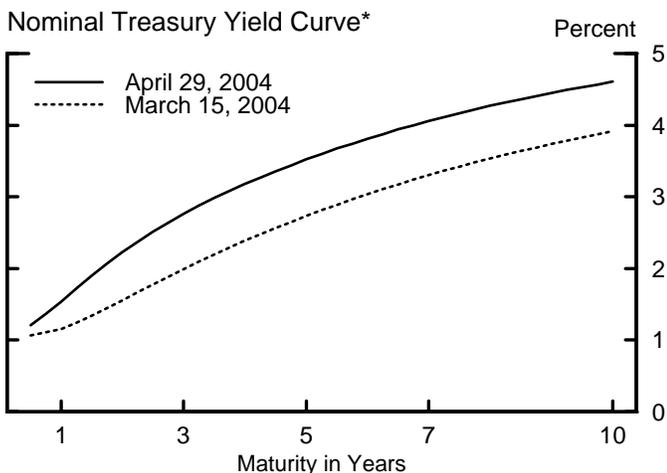
*Based on the distribution of the three-month eurodollar rate five months ahead (adjusted for a term premium), as implied by options on eurodollar futures contracts.



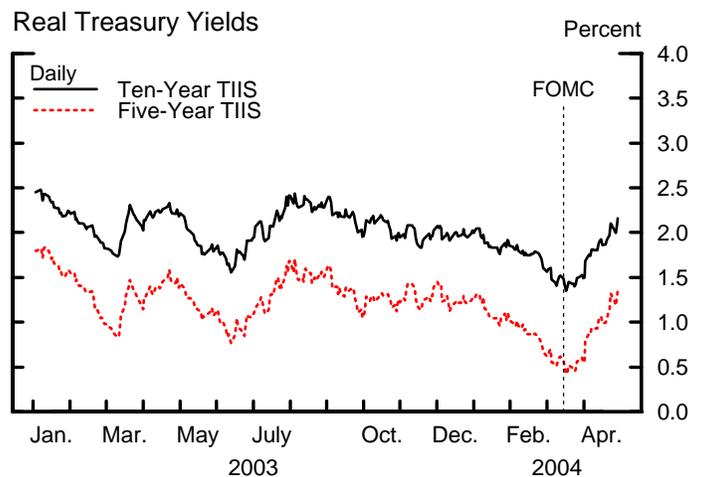
*Par yields from an estimated off-the-run Treasury yield curve.



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



Note: Vertical lines indicate March 15, 2004. Last daily observations are for April 29, 2004.

years.² Rates on inflation-indexed securities rose somewhat less, leaving inflation compensation modestly higher (as discussed in the box entitled “Inflation Expectations and CPI Futures”). Despite the backup in real interest rates, equity indexes edged higher over the intermeeting period, supported importantly by earnings reports that generally outstripped market expectations. Investment-grade private yields moved up in line with Treasuries, but those on lower-rated instruments posted smaller increases, leading to a further narrowing of high-yield risk spreads (Chart 2). Investment-grade yields are now about a percentage point higher than at the time of last June’s policy easing, while those on high-yield instruments are around a percentage point lower.

(3) The dollar appreciated about 1¾ percent on balance against other major currencies during the intermeeting period, principally in response to further indications of strength in the U.S. economy and the associated increases in interest rates (Chart 3). The dollar gained 2½ percent versus the euro as convincing signs of a quickening in economic activity in the euro area failed to emerge. The ECB held policy steady. The Bank of Canada responded to continued sluggish economic performance with another 25-basis-point cut in its policy rates in mid-April—the third such action this year—and the dollar ended the period about 2¾ percent higher against the Canadian dollar. The dollar recorded an unusually wide swing against the yen, dropping more than 6 percent over the second half of March before reversing most of that loss. In addition to the effects of U.S. data surprises, the turnaround may have reflected Japanese investors taking new dollar positions following the end of their fiscal year on March 31. In a distinct break from their previous policy, Japanese

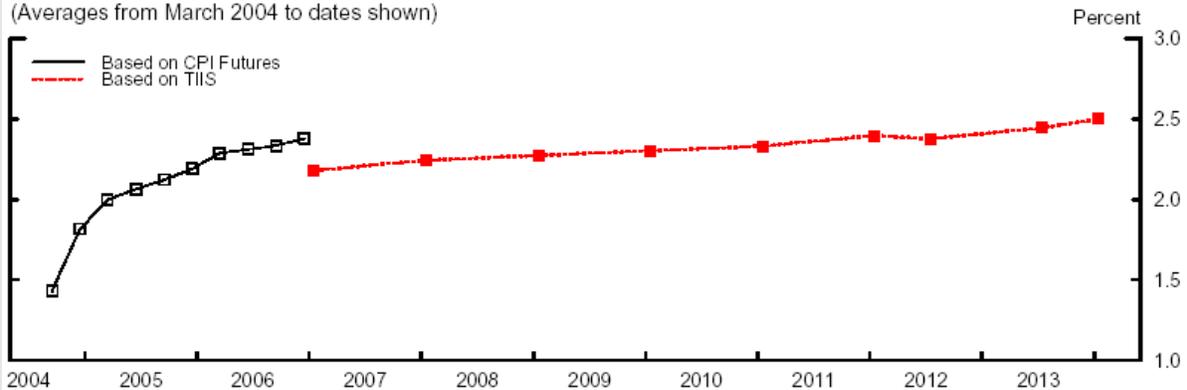
² The rise in longer-term yields over the intermeeting period may have been amplified by efforts to hedge the lengthening duration of mortgage portfolios, which increased about one year on average as interest rates moved higher and the risk of prepayment fell. Nevertheless, with market participants reportedly prepared for increases in interest rates, trading in Treasuries remained orderly.

Inflation Expectations and CPI Futures

Inflation compensation, as measured by the difference between yields on nominal and indexed Treasury securities, edged up over the intermeeting period for both the next five years and the subsequent five years. Inflation compensation over the next five years has been on an uptrend since last summer, likely reflecting strengthening economic activity, rising energy and commodity prices, and recent data showing higher-than-expected realized inflation. By contrast, the forward inflation compensation measure has changed little, on net, over that period.

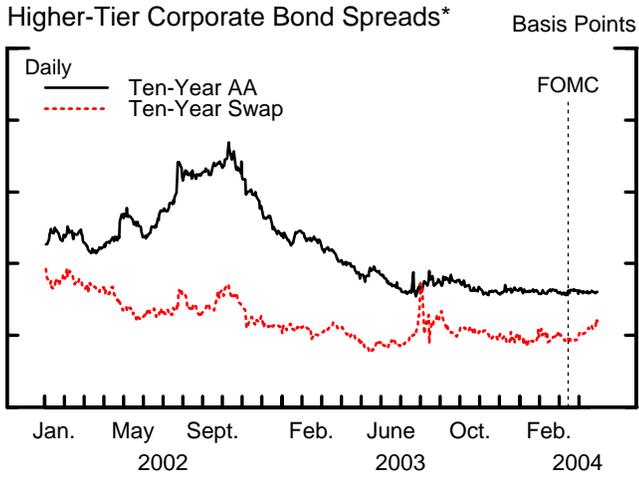
For a more complete view of investors' outlook, inflation compensation can be computed for all outstanding ten-year indexed notes, which have remaining maturities spanning 2007 to 2014 (chart). At shorter maturities, this information can now be supplemented with readings from CPI futures contracts. CPI futures were recently introduced by the Chicago Mercantile Exchange and cover maturities shorter than those of Treasury indexed debt. While CPI futures remain illiquid, the two measures of inflation compensation match up fairly well—although not perfectly—where they meet near the end of 2006. Inflation compensation increases appreciably over the next two years and moves up more gradually thereafter, reaching around 2½ percent at the ten-year maturity. Although some portion of the upward slope to inflation compensation may owe to inflation risk premiums, it seems likely that inflation is also expected to rise over the next few years.

Term Structure of Inflation Compensation*
(Averages from March 2004 to dates shown)

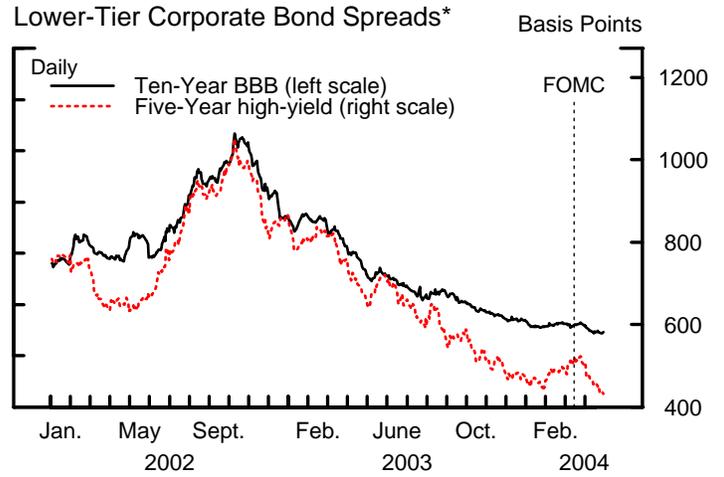


*Annualized, seasonally adjusted inflation compensation.

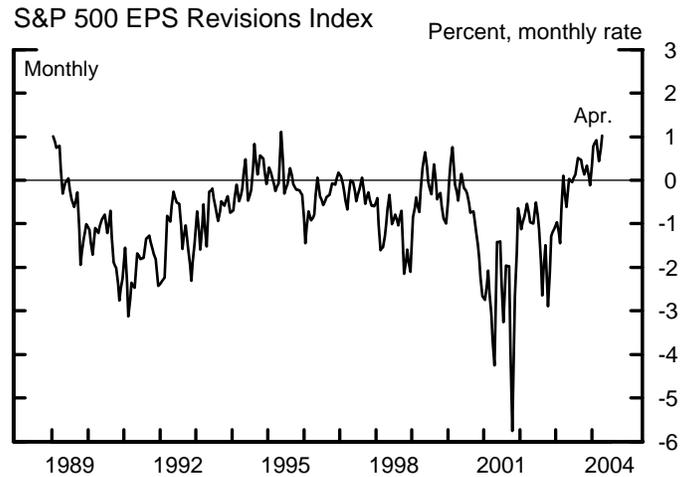
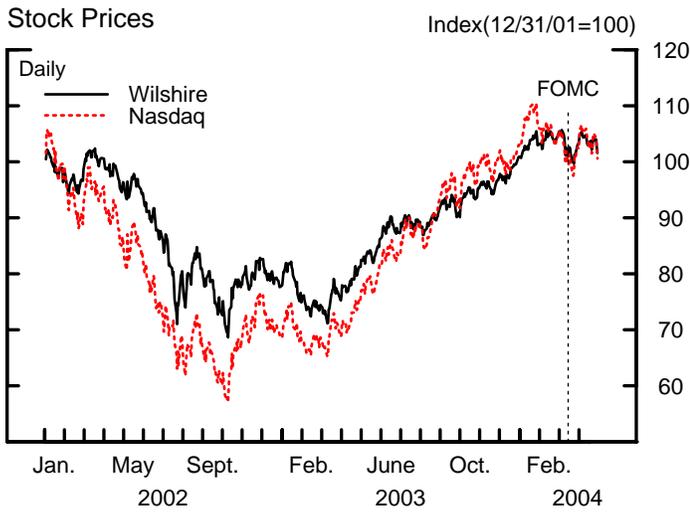
Chart 2 Financial Market Indicators



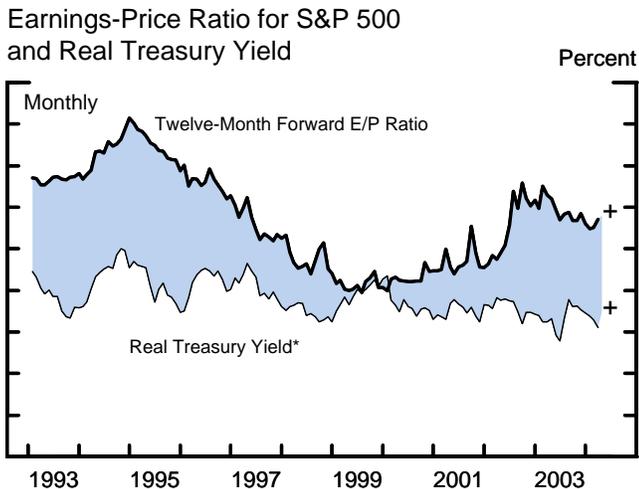
*AA spread measured relative to an estimated off-the-run Treasury yield curve. Swap spread measured relative to the on-the-run Treasury security.



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



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



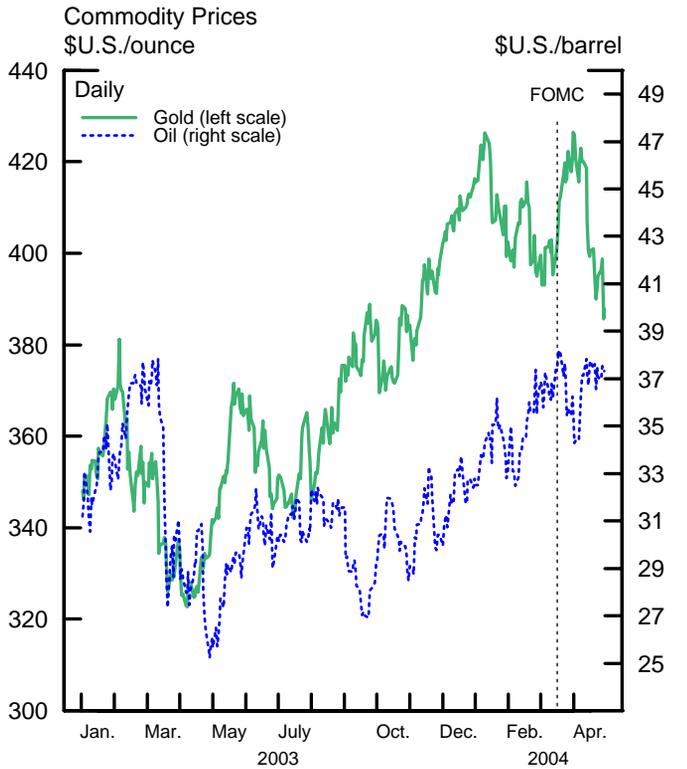
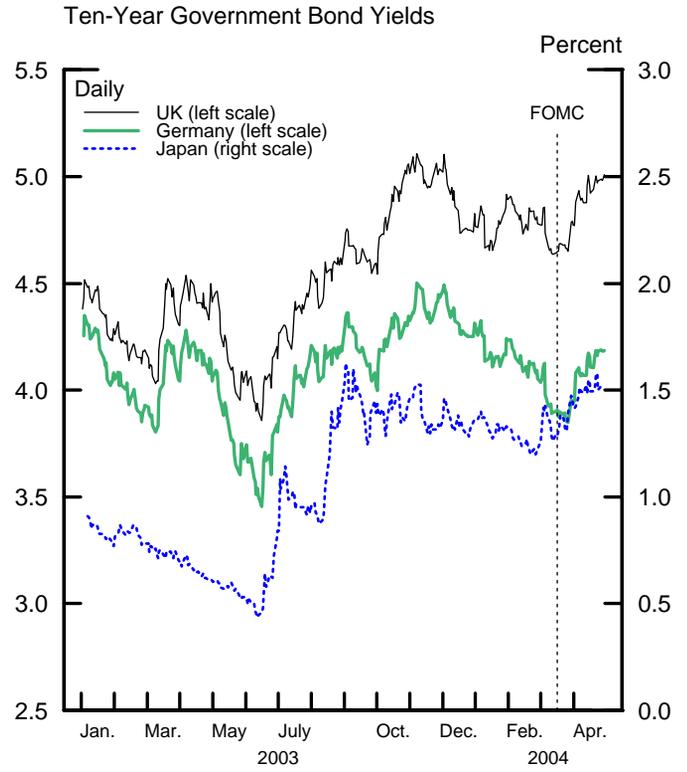
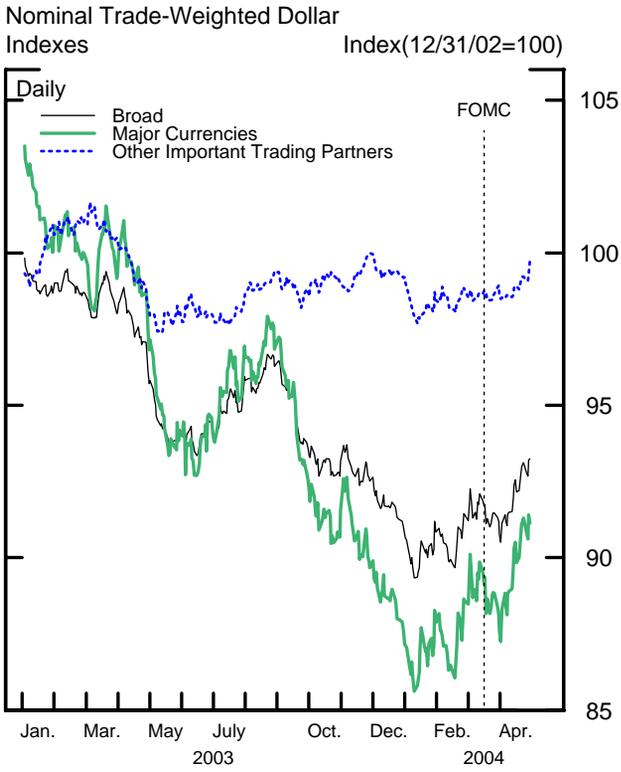
*Yield on synthetic Treasury perpetuity minus Philadelphia Fed ten-year expected inflation.

+ Denotes latest daily observation, April 29, 2004.



Note: Vertical lines indicate March 15, 2004. Last daily observations are for April 29, 2004.

Chart 3 International Financial Indicators



Note: Vertical lines indicate March 16, 2004. Last daily observations are for April 29, 2004.

authorities refrained from intervening in foreign exchange markets after mid-March.³ Yields on longer-term government bonds in major industrial countries rose 25 to 50 basis points over the intermeeting period, considerably less than in the United States. Stock markets in most major foreign economies continued to make solid gains, with the 7 percent average increase in Japanese stocks leading the pack.

(4) The dollar rose about 1 percent during the intermeeting period against an index of currencies of other important trading partners. The dollar moved up more than 3½ percent on balance versus the peso on evidence that economic activity in Mexico was weaker than expected. The Mexican central bank surprised market participants by tightening policy, in part to bring inflation down to within the official target range. Mexico's EMBI+ spread was about unchanged over the intermeeting period, but Brazil's spread widened 100 basis points, to over 6½ percentage points. The People's Bank of China raised reserve requirements and tightened restrictions on lending in late April in an effort to prevent overheating of the Chinese economy.

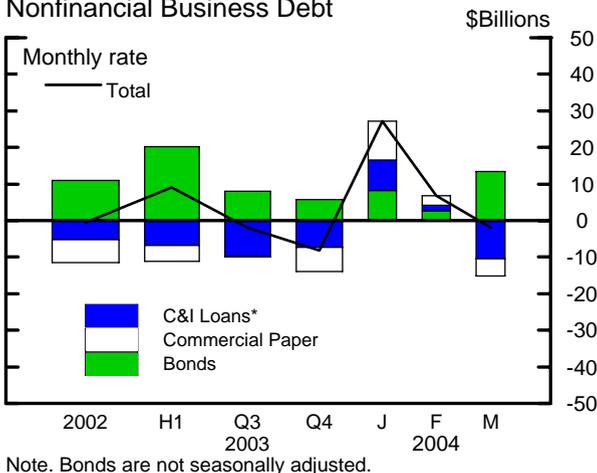
(5) The expansion of domestic nonfinancial sector debt remained brisk in the first quarter, supported by a pickup in federal issuance and strong household borrowing (Chart 4). A further jump in the federal budget deficit resulted in record sales of marketable Treasury debt in the first quarter. Residential mortgage debt growth continues to be rapid, albeit somewhat off the record rates of the last two years, as the recent drop-off in refinancing applications has yet to show through materially to originations. Financing conditions for businesses have continued to improve, with banks further easing standards and terms between January and April as reported in the most recent Senior Loan Officer Opinion Survey. Although business credit demands have strengthened a bit this year along with a faster pace of capital expenditures, borrowing needs have been held down by robust corporate profits. Bond issuance by investment-grade firms rose in the first quarter as interest rates fell but seems to have weakened a bit in April with the backup in rates. Lower-tier bond

³ The Japanese authorities last intervened on March 16th, the day of the FOMC meeting, when they purchased \$615 million.

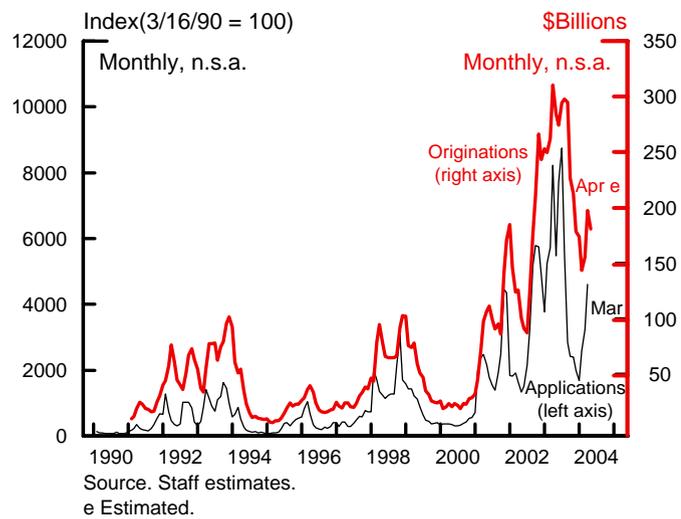
. The Desk did not intervene during the latest period for the accounts of the System or the Treasury.

Chart 4 Debt and Money Growth

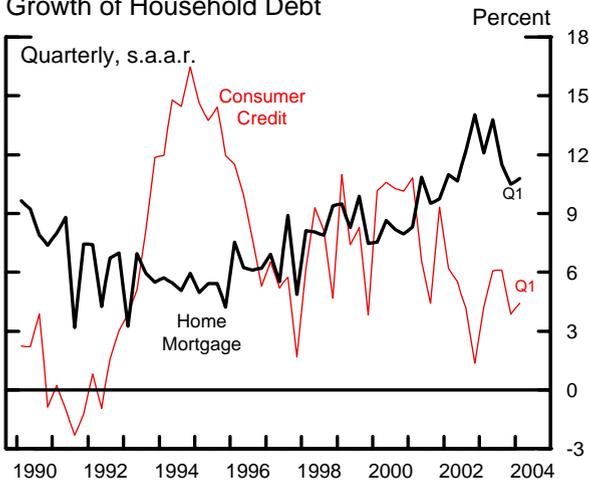
Changes in Selected Components of Nonfinancial Business Debt



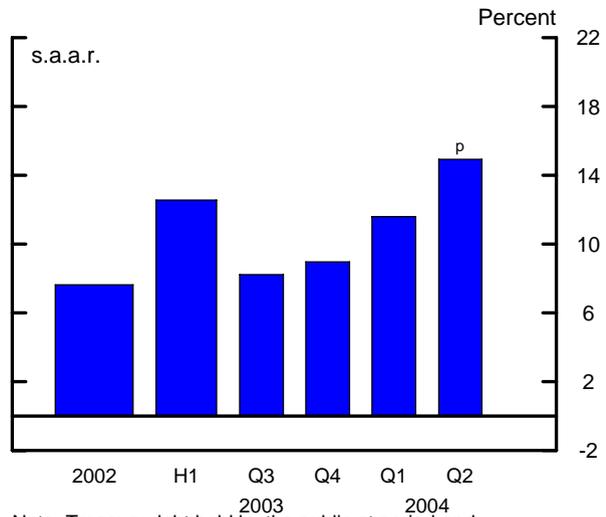
Mortgage Refinancing Activity



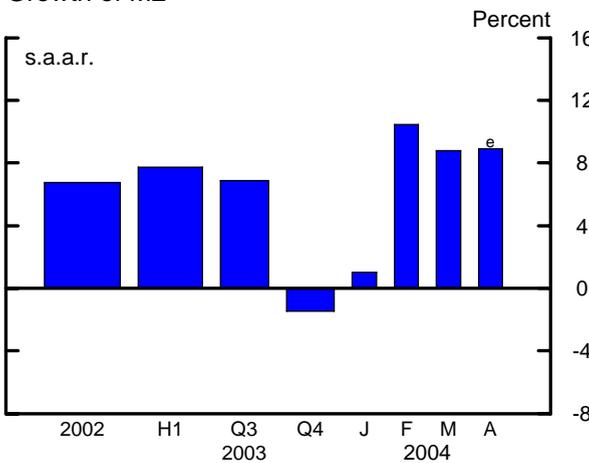
Growth of Household Debt



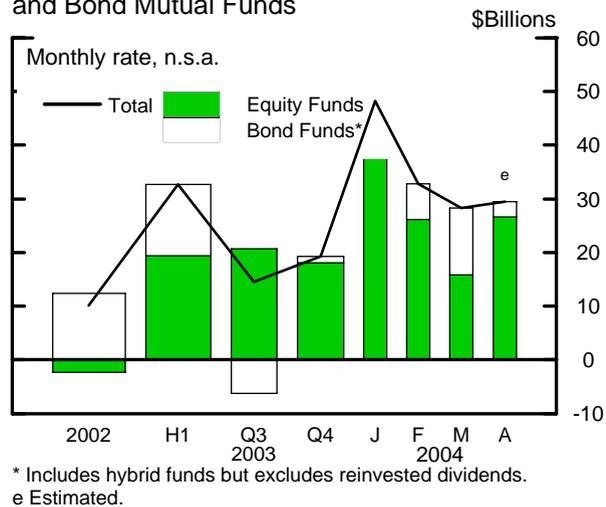
Growth of Federal Debt



Growth of M2



Net Inflows to Equity and Bond Mutual Funds



issuance has remained robust, reflecting in part the narrowing of spreads on such instruments. Short-term business debt contracted again in the first quarter, but at a slower pace than last year, and has edged up in recent weeks.

(6) M2 growth was quite strong in March and April, boosted in part by the temporary effects of elevated refinancing activity in the first quarter. Currency growth, by contrast, has been held down by weak demand from abroad. In addition to ongoing substitution of euros for dollars in Europe and elsewhere, foreign demand for U.S. currency has been damped by relative stability in countries that had been significant sources of demand.

Policy Alternatives⁴

(7) Incoming data on spending and employment over the intermeeting period led the staff to mark up its estimate of first-quarter growth but not to change materially the contours of the forecast of output thereafter. The past few readings on inflation also ran faster than expected, reflecting in part the effects of higher energy and non-oil import prices and outsized increases in a few volatile components. The staff saw some signal in these releases and revised up its projection of core consumer price inflation about $\frac{1}{4}$ percentage point this year and next. In light of these developments, the staff now assumes that the Committee will start tightening in the fall, a quarter earlier than in the March Greenbook, and firm gradually thereafter. Longer-term interest rates move sideways over the forecast period, with the upward push of tighter policy about offsetting the downward pull of revisions to expected future short-term rates as investors realize that inflation is likely to remain lower and policy to tighten by less than currently expected. Equity prices and the foreign exchange value of the dollar have both been marked up to reflect their current, higher-than-anticipated levels. Equity prices are again assumed to rise to yield risk-adjusted returns in line with those on fixed-income instruments and the dollar to edge lower at a rate similar to that assumed in the March Greenbook. With accommodative monetary and fiscal policy supporting growth, real GDP is projected to expand at about a 5 percent rate over the final three quarters of 2004. However, monetary policy tightening and a swing in fiscal policy toward restraint contribute to a moderation of GDP growth to about $3\frac{3}{4}$ percent in 2005—a touch above the estimated growth rate of potential output. The unemployment rate is expected to end the forecast period at $5\frac{1}{4}$ percent, still somewhat above the staff's estimate of the

⁴ All references to output, employment, and inflation measures in this document, as well as the money and debt projections, are based on the data available and the staff forecast when the April Greenbook was published yesterday. The BEA's advance estimate of first quarter GDP, which was released this morning, shows GDP growth of 4.2 percent in the first quarter—a percentage point below the staff projection. The bulk of the difference reflected lower inventory investment than the staff had anticipated.

natural rate, as productivity growth continues to be robust and labor force participation picks up. With oil prices moderating, commodity prices stabilizing, longer-term inflation expectations apparently remaining well-anchored, and a portion of the gap between output and its potential persisting until the end of the forecast period, core PCE inflation is projected to edge lower to about 1¼ percent later this year and remain near that level through next year.

(8) This Bluebook presents three alternatives for the Committee’s consideration, summarized by the draft statements in Table 1. Alternatives A and B assume that the federal funds rate holds at 1 percent but differ as to the Committee’s characterization of the strength of the economy and its willingness to be patient in removing policy accommodation. Alternative C contemplates a quarter-point firming and aligns the wording of the statement accordingly. Under any of these alternatives, several changes seem necessary to update the characterization of economic conditions. In particular, with employment growth averaging 170,000 per month over the first three months of the year, the rationale paragraph could indicate that “*hiring appears to have picked up.*” And the unexpectedly high inflation figures could be acknowledged by stating that “*incoming inflation data have moved somewhat higher.*” Assuming that the Committee now sees the odds of a significant further decline in inflation as remote, the assessment-of-risks paragraph should indicate that “*the upside and downside risks to the goal of price stability are seen as roughly equal.*”

(9) In light of the data released over the intermeeting period, the Committee may feel more confident that vigorous output growth will be sustained and that slack in labor markets will diminish. Moreover, the higher-than-anticipated price data might be taken as evidence that inflation has bottomed. In these circumstances, the Committee might want to adopt language that would provide more flexibility about future action so that it has scope to begin unwinding its current policy accommodation if circumstances soon warrant, as in **Alternative B**. Even if such action were not viewed as imminent, the Committee might favor a change in the wording if members put some weight on the possibility of tightening in the next few months as more information bearing on the strength of the labor market and inflation

Table 1: FOMC Statement Alternatives for the May Bluebook

	March FOMC	Alternative A	Alternative B	Alternative C
Policy Decision	1. The Federal Open Market Committee decided today to keep its target for the federal funds rate at 1 percent.	Unchanged	Unchanged	The Federal Open Market Committee decided today to raise its target for the federal funds rate to 1¼ percent.
Rationale	2. 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	The Committee continues to believe that robust underlying growth in productivity is providing important ongoing support to economic activity.
	3. The evidence accumulated over the intermeeting period indicates that output is continuing to expand at a solid pace. Although job losses have slowed, new hiring has lagged.	The evidence accumulated over the intermeeting period indicates that output is continuing to expand at a solid rate and hiring appears to have picked up.	The evidence accumulated over the intermeeting period indicates that output is continuing to expand at a solid rate and hiring appears to have picked up.	The evidence accumulated over the intermeeting period indicates that output is continuing to expand at a solid rate and hiring appears to have picked up.
	4. Increases in core consumer prices are muted and expected to remain low.	Although incoming inflation data have moved somewhat higher, core inflation is expected to remain low.	Although incoming inflation data have moved somewhat higher, long-term inflation expectations appear to have remained well-anchored.	Long-term inflation expectations appear to have remained well-anchored, although incoming inflation data have moved somewhat higher.
	5. [None]	[None]	[None]	Against this backdrop, the Committee felt that some reduction in the degree of monetary accommodation was desirable to promote price stability and thus help sustain the economic expansion.
Assessment of Risks	6. 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	With this policy action, the Committee perceives that the upside and downside risks to the attainment of sustainable growth for the next few quarters are roughly equal.
	7. 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.	Similarly, the upside and downside risks to the goal of price stability are seen as roughly equal.	Similarly, the upside and downside risks to the goal of price stability are seen as roughly equal.	Similarly, the upside and downside risks to the goal of price stability are seen as roughly equal.
	8. With inflation quite low and resource use slack, the Committee believes that it can be patient in removing its policy accommodation.	Nonetheless, with inflation low and resource use slack, the Committee believes that it can be patient in removing its policy accommodation.	At this juncture, with inflation low and resource use slack, the Committee believes that policy accommodation can likely be removed at a measured pace.	Even following today’s action, the Committee judges that the stance of policy is quite accommodative. However, with inflation low and resource use slack, the Committee believes that policy accommodation can likely be removed at a measured pace.

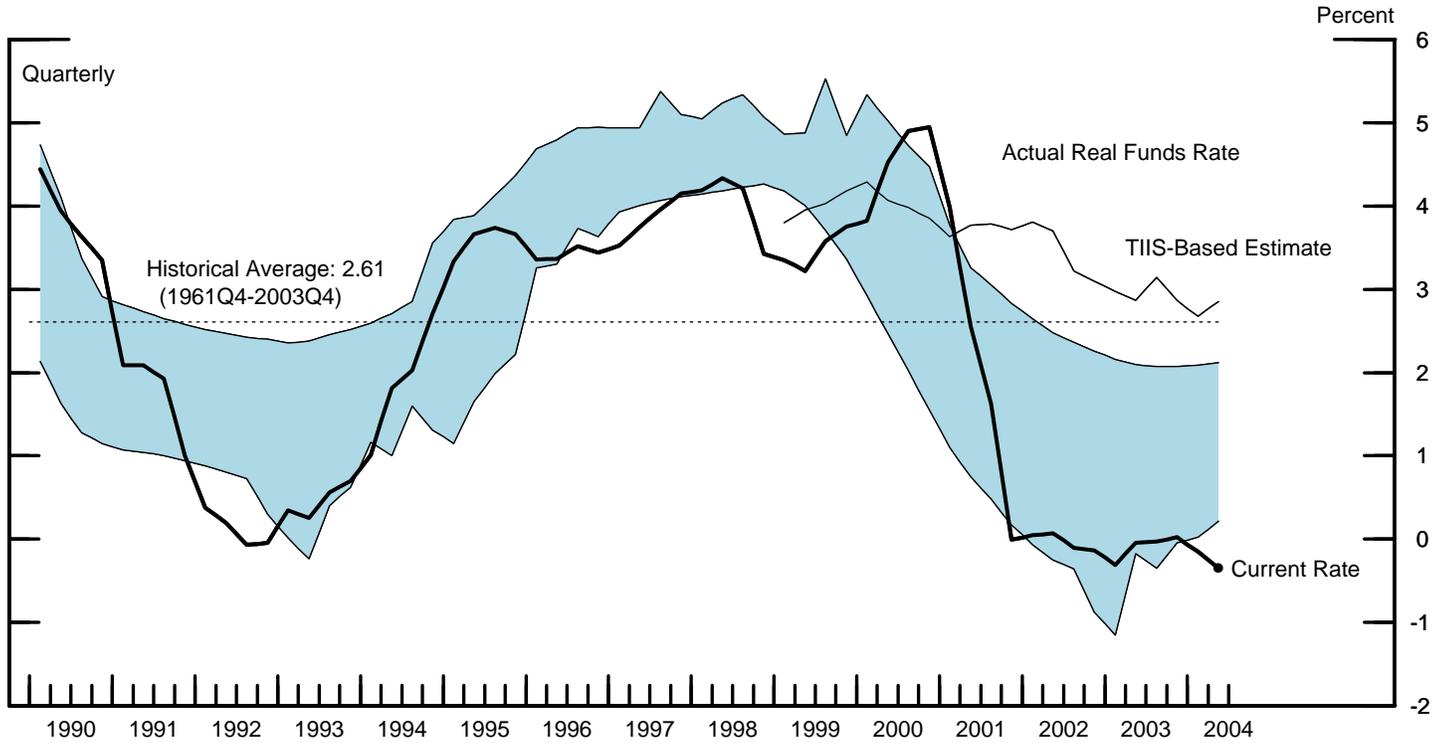
trends becomes available. Deferring policy firming, at least for a time, may not be seen as especially costly: Even if somewhat stronger employment growth and a slowing in the rate of advance of productivity pushed up labor costs, competitive pressure may lead firms to trim currently high profit margins, limiting the pass-through of rising costs to inflation. And, while inflation compensation five to ten years out implied by TIPS yields moved up some over the intermeeting period, it has changed little, on net, since last fall, suggesting that longer-term expectations remain well-anchored.

(10) The Committee has multiple opportunities in its statement to indicate that the odds of policy firming in the near future are higher than at the March meeting, as shown in the column labeled Alternative B in Table 1. At the same time, it might also offer a reason in the rationale paragraph why it does not see the need to tighten immediately by noting that “*longer-term inflation expectations appear to have remained well-anchored.*” With the risks to the outlook balanced and the economy potentially picking up steam as the gloom that weighed on business investment and hiring disperses, Committee members may feel that it is now appropriate to drop the sentence referring to patience in removing policy accommodation. Such a change may be seen as particularly desirable if the Committee believes that investors’ confidence that interest rates will remain low has been encouraging the development of financial market imbalances that could have adverse macroeconomic effects as they unwind. However, members may be concerned that eliminating any characterization of the Committee’s future action might lead market participants to build in outsized expectations about the speed with which policy accommodation will be removed, thereby augmenting the considerable tightening in financial conditions of the past few weeks. The Committee could convey the sense that its current outlook was consistent with a gradual return to a neutral policy stance by providing assurance at the end of the assessment of risks paragraph that, “*At this juncture, with inflation low and resource use slack, the Committee believes that policy accommodation can likely be removed at a measured pace.*” Even with the inclusion of such a sentence, however, a statement along these lines would likely lead market participants to bring a bit closer in time the expected date of

the commencement of monetary policy tightening. In response, interest rates would rise, stock prices likely would decline, and the foreign exchange value of the dollar would tend to appreciate.

(11) If Committee members were sufficiently confident that the expansion was now self-sustaining or saw the recent increase in core inflation as signaling an upturn in underlying inflation, then they might find an increase of $\frac{1}{4}$ percentage point in the federal funds rate at this meeting, as in **Alternative C**, to be appropriate. The Committee may view the advances in investment outlays, coupled with the more recent evidence that hiring is picking up, as suggesting that the tentativeness that had earlier marked business behavior has lifted. Indeed, as increased hiring buoys incomes and consumer confidence, the resulting growth in spending may support faster gains in investment spending and employment than expected by the staff, implying a swifter erosion of resource slack. Members may also be less confident than the staff that aggregate supply will continue to expand at a rapid pace and that the recent increases in energy and non-oil import prices will leave only a small imprint on inflation expectations. If so, the Committee, like financial market participants, may see a significant risk that inflation could move higher, suggesting that the time has come to adjust policy. Indeed, if the Committee believes that expected inflation may rise, then it might see an increase in the target funds rate as necessary just to avoid a reduction in the real federal funds rate and a consequent easing of policy relative to measures of the equilibrium funds rate (Chart 5). The argument for tighter policy would be strengthened to the extent that the Committee wants to keep inflation near its recent lows over the longer term, rather than allowing some increase. While policy tightening might put some strains on financial markets for a time, Committee members might not be convinced that the elevated uncertainty and financial market turbulence of 1994-95 is as relevant a precedent as some observers assert, in part because investors seem to expect that significant tightening will commence soon (see box on “Lessons From the 1994-95 Tightening Cycle”).

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 and 2004Q2.

Equilibrium Real Funds Rate Estimates (Percent)

	<u>2002</u>	<u>2003</u>	<u>2004Q1</u>	<u>2004Q2</u>
Statistical Filter				
- Two-sided:				
Based on historical data and the staff forecast	-0.2	0.0	0.2	0.2
<i>March Bluebook</i>	-0.2	0.0	0.3	--
- One-sided:				
Based on historical data*	0.0	-0.4	0.0	NA**
<i>March Bluebook</i>	0.0	-0.5	-0.1	--
FRB/US Model				
- Two-sided:				
Based on historical data and the staff forecast	2.4	2.1	2.1	2.1
<i>March Bluebook</i>	2.5	2.1	2.0	--
- One-sided:				
Based on historical data*	1.9	0.9	1.2	1.5
<i>March Bluebook</i>	1.9	0.9	1.2	--
Treasury Inflation-Indexed Securities	3.5	3.0	2.7	2.9
<i>March Bluebook</i>	3.5	3.0	2.7	--

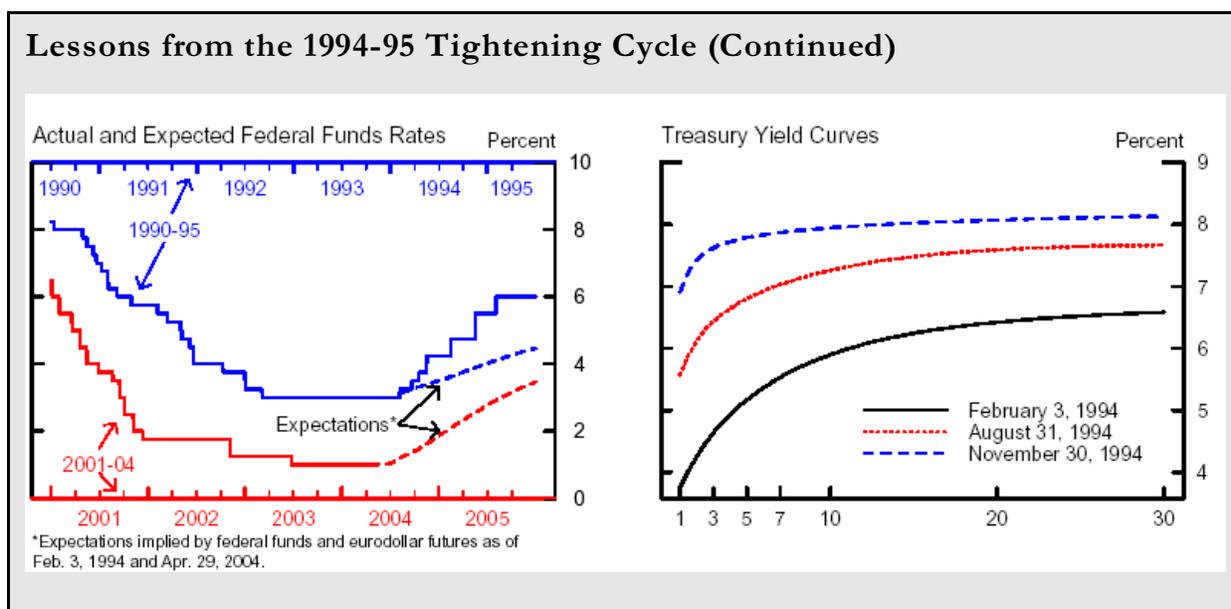
* Also employs the staff projection for the first and second quarters of 2004.
** Because the NIPA data for the first quarter were not available until after the Greenbook was published, this value could not be computed without employing an additional quarter of projected data.

Lessons from the 1994-95 Tightening Cycle

The current policy environment is similar in some respects to that prevailing before the policy tightening in 1994-95. In both cases, an initially sluggish expansion in employment was accompanied by a real federal funds rate that fell to near zero for a time. The nominal federal funds rate target, shown in the left panel on the next page, is currently 2 percentage points lower than at the start of 1994, reflecting in part the net decline in inflation over the intervening ten years. The policy tightening that began in February 1994 sparked a period of financial market turbulence that caused serious difficulties for some financial institutions. This adverse outcome has raised concerns about whether similar volatility could follow a move to tighter policy this year.

The seemingly outsized market reaction to the 1994-95 tightening reflected several factors. First, many market participants had not fully expected a policy tightening at that time and so were poorly positioned. Second, investors considerably underestimated the ultimate extent of tightening, though part of that forecast error reflected the surprising strength of the economy after the tightening process had begun. (The staff was surprised as well, and the Greenbook forecast of the unemployment rate in the fourth quarter of 1994 fell about $\frac{3}{4}$ percentage point over the course of that year.) Third, uncertainty about the timing and magnitude of future policy actions was high, particularly early in the tightening cycle. Investors reacted to the changed economic and policy outlook by selling long-term securities to limit capital losses and hedge the lengthening durations of mortgage portfolios that resulted from higher interest rates. These portfolio adjustments at times took place over short periods of time, leading to volatile moves in long-term rates. As shown in the right panel, long-term yields increased almost as much as short-term rates early in the tightening cycle.

To be sure, the historical record does suggest that changes in the direction of the policy rate tend to elicit a stronger market response than actions extending the existing trend in the policy rate. And the turbulence in financial markets last summer and fall may suggest that hedging flows will magnify the amplitude of any swings in longer-term interest rates. As a result, some firms with large interest rate exposures could face substantial losses when interest rates rise. That said, there are some signs that financial firms and markets may be able to handle policy tightening better than they did in 1994. Although the expected policy path is not as steep now as the actual tightening that took place ten years ago, it is nonetheless considerably steeper than that foreseen immediately before the first tightening in 1994. Even if interest rates do respond strongly to a move toward tighter policy, financial institutions appear better positioned to withstand the impact owing to improved risk-management practices. And, although the size of the mortgage market is now much larger, the recent run-up in interest rates has reduced prepayment rates enough to moderate the extent to which any further increase in rates will induce hedging flows.



(12) If the Committee chooses to tighten policy at this meeting, then it might well be inclined to issue a statement like that shown in the last column of Table 1. This statement starts by noting the change in policy: *“The Federal Open Market Committee decided today to raise its target for the federal funds rate to 1¼ percent.”* To avoid repetition later, the first sentence of the rationale paragraph might refer only to productivity growth—*“Robust underlying growth in productivity is providing important ongoing support to economic activity.”* The explanation for the policy move could follow at the end of the paragraph: *“Against this backdrop, the Committee felt that some reduction in the degree of monetary accommodation was desirable to promote price stability and thus help sustain the economic expansion.”* So long as the Committee believed that the policy move, and the expected reaction to that move in financial markets, was likely to be sufficient to contain upside risks for the time being, then it might want to indicate that, *“With this policy action, the Committee perceives that the upside and downside risks to the attainment of sustainable growth for the next few quarters are roughly equal. Similarly, the upside and downside risks to the goal of price stability are seen as roughly equal.”* In order to leave a sense that additional policy tightening was likely at some point but that the Committee did not foresee a rapid return to a neutral stance, the statement could end with *“Even following today’s action, the*

Committee judges that the stance of policy is quite accommodative. However, with inflation low and resource use slack, the Committee believes that policy accommodation can likely be removed at a measured pace.” While market participants expect policy to tighten in the not-too-distant future, action at this meeting would come as a considerable surprise, especially given the reference to patience included in the March statement. Market interest rates would likely move significantly higher, stock prices would fall, and the dollar would rally. If investors took the final sentence of the statement to heart, then these reactions might be somewhat damped.

(13) While the Committee might find some encouragement in the stronger tone of recent economic data, it may not yet be convinced that the expansion has become self-sustaining and may still expect inflation to remain low. In early 2002, for instance, the expansion appeared to be gaining traction for a time and market expectations about the onset of tightening were building, but the expansion subsequently faltered. If the Committee believed that the case for tighter policy would likely require at least several more months of evidence, it might choose a statement fairly close to the one released following the March meeting, as in **Alternative A**. With investment spending still reported to be primarily for replacement rather than for expansion and with only one month of reasonably strong employment data in hand, the Committee may not yet be confident that business gloom has really lifted all that much. Indeed, with the impetus to both household and business spending from expansionary fiscal policy expected to wane over coming quarters and financial conditions having tightened considerably of late, some members may be concerned that growth could fall back more than in the staff projection. The recent uptick in inflation might be seen as primarily the result of temporary factors and, therefore, leaving open the possibility that the underlying trend in inflation could edge lower (much as is discussed in the “Inflation Reversal” simulation in the Greenbook). Moreover, some Committee members might see the level of inflation over the past year as at the low end of its desirable range over the longer term and so may not be averse to a modest step-up. Against this backdrop, the Committee may continue to view downside surprises to inflation as more costly than upside surprises,

implying that a cautious approach to monetary policy tightening remains appropriate.

(14) If the Committee finds sufficient merit in the selection of Alternative A, it could issue a statement like that shown in the corresponding column of Table 1. While the recent increase in inflation should be noted, the statement could indicate that the rise is likely to be transitory: “*Although incoming inflation data have moved somewhat higher, core inflation is expected to remain low.*” Even in this view, the risks to the attainment of price stability related in the assessment of risks paragraph would presumably be balanced. However, with the vigor of the expansion seen as less certain and the upside risks to inflation less pressing, the Committee might choose to retain with only minor adjustment the sentence indicating its belief that it can be “*patient in removing its policy accommodation.*” Market participants think that the Committee is likely to modify or drop the reference to patience in the statement at this meeting, and its retention would probably lead them to push back somewhat the expected timing of policy tightening. The resulting decline in market interest rates would likely spark a modest rally in stock markets but weigh on the foreign exchange value of the dollar.

Money and Debt Forecasts

(15) M2 growth is projected to slow from its recent rapid pace, as the temporary boost from last quarter’s high level of mortgage refinancing ebbs. Nonetheless, this aggregate is expected to grow about 5½ percent this year, about the same as last year and ½ percentage point faster than projected at the time of the last Bluebook. The higher projected growth reflects in part the stronger-than-expected underlying money growth thus far this year. Foreign demand for U.S. currency is also anticipated to rebound from the low growth rate posted in the first quarter. Nonetheless, as the economic expansion continues, households are expected to shift the composition of their portfolios further toward capital market instruments at the expense of monetary assets, implying a modest rise in M2 velocity this year.

(16) Growth of total domestic nonfinancial debt this year is projected to remain near the 8 percent pace posted in 2003. Household debt growth should slow as higher mortgage rates damp residential investment and refinancing activity, and so

trim mortgage debt growth. However, with increases in investment outlays outpacing gains in profits, business borrowing should gradually pick up, though from a very low level. Federal debt growth is also expected to be a little higher this year, reflecting the wider deficit, before falling back next year as fiscal policy moves toward restraint.

Directive and Balance-of-Risks Language

(17) Should the Committee wish to follow the same procedure as at the last two meetings, 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 identical to those presented 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 _____ † 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. Similarly, the upside and downside risks to the goal of price stability are seen as roughly equal. Nonetheless, with inflation 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. Similarly, the upside and downside risks to the goal of price stability are seen as roughly equal. At this juncture, with inflation low and resource use slack, the Committee believes that policy accommodation can likely be removed at a measured pace.

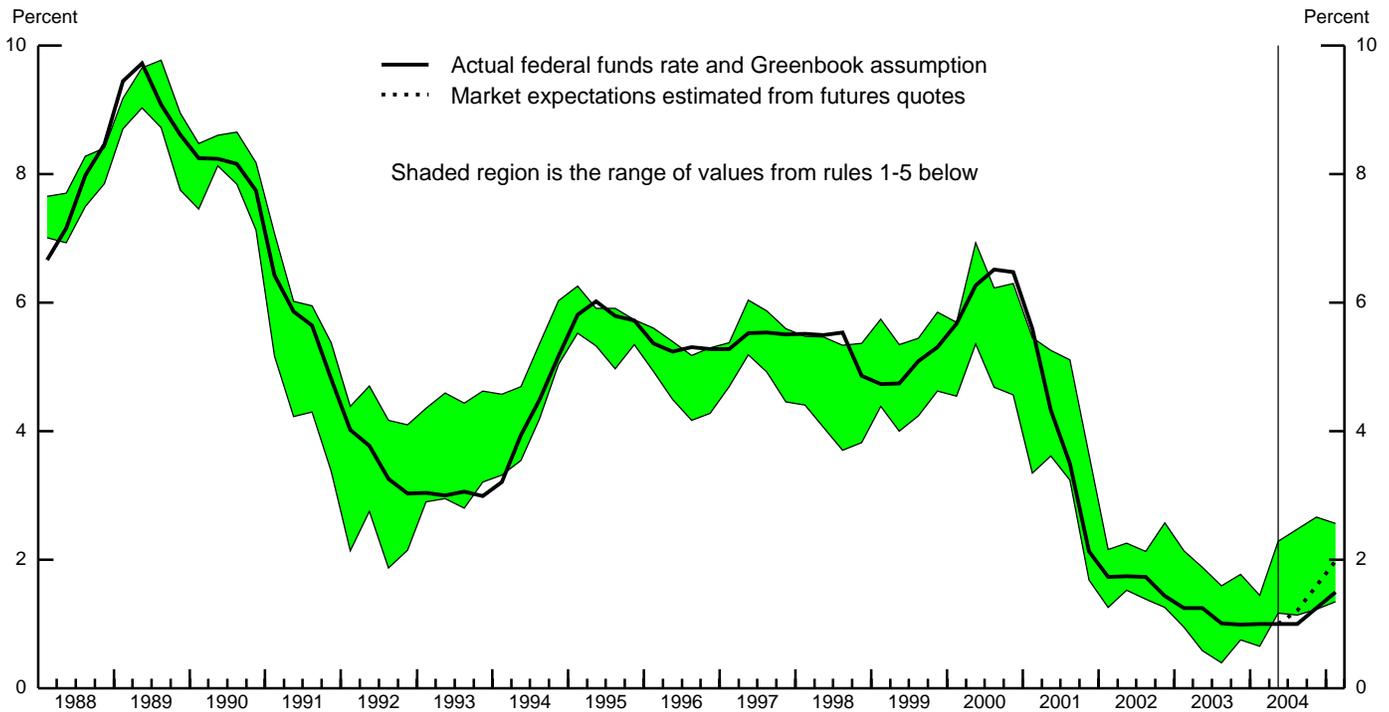
- (C) With this policy action, the Committee perceives that the upside and downside risks to the attainment of sustainable growth for the next few quarters are roughly equal. Similarly, the upside and downside risks to the goal of price stability are seen as roughly equal. Even following today's action, the Committee judges that the stance of policy is quite accommodative. However, with inflation low and resource use slack, the Committee believes that policy accommodation can likely be removed at a measured pace.

M2 Growth Under Alternative Policy Actions

		No Change	Tighten 25 bp
Monthly Growth Rates			
	Jan-04	1.0	1.0
	Feb-04	10.4	10.4
	Mar-04	8.8	8.8
	Apr-04	8.9	8.9
	May-04	9.6	9.3
	Jun-04	6.0	5.3
	Jul-04	5.0	4.2
	Aug-04	4.2	3.5
	Sep-04	4.5	3.9
Quarterly Growth Rates			
	2003 Q4	-1.5	-1.5
	2004 Q1	3.3	3.3
	2004 Q2	8.9	8.8
	2004 Q3	5.5	4.8
Annual Growth Rates			
	2002	6.8	6.8
	2003	5.3	5.3
	2004	5.7	5.3
Growth From	To		
2003 Q4	Jun-04	6.4	6.2
2003 Q4	Sep-04	5.9	5.6
2003 Q4	Dec-04	5.6	5.2
Dec-03	Mar-04	6.8	6.8
Dec-03	Jun-04	7.6	7.4
Apr-04	Sep-04	5.9	5.3
Oct-04	Dec-04	4.3	3.9

* This forecast 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

	2004				2005
	Q1	Q2	Q3	Q4	Q1
Outcome-based Rules					
1. Baseline Taylor	1.45	2.29	2.48	2.67	2.57
2. Aggressive Taylor	0.66	1.50	1.88	2.23	2.18
3. Estimated	1.01	1.28	1.34	1.75	1.98
Forecast-based Rules					
4. Estimated with Greenbook forecasts	1.16	1.17	1.14	1.30	1.44
5. Estimated with FOMC forecasts	1.12	1.17	1.19	1.23	1.35
6. First-difference rule*	1.24	1.16			
From Financial Markets					
7. Estimated TIPS-based rule*	1.24	1.40**			
Memo: Expected federal funds rate derived from futures		1.01	1.21	1.60	1.99
Memo: Greenbook assumption	1.00	1.00	1.00	1.25	1.50

* Not included in the shaded region in the figure.

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

Note: Rule prescriptions for 2004Q2 through 2005Q1 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 this 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	
		1988:1-2004:1	2001:1-2004:1
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	.87
2. Aggressive Taylor Coefficients are benchmark values, not estimated.	$i_t = 2 + \pi_t + (y_t - y_t^*) + 0.5(\pi_t - 2)$	.74	.75
3. Estimated Outcome-based Rule includes both lagged interest rate and serial correlation in residual.	$i_t = 0.55i_{t-1} + 0.45 [1.17 + 0.96(y_t - y_t^*) + 1.45\pi_t] + 0.42\varepsilon_{t-1}$	.25	.27
Forecast-based			
4. Estimated Greenbook Forecast-based Rule includes both lagged interest rate and serial correlation in residual.	$i_t = 0.72i_{t-1} + 0.28 [0.65 + 1.05(y_{t+3|t} - y_{t+3|t}^*) + 1.57\pi_{t+3|t}] + 0.36\varepsilon_{t-1}$	.26	.28
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.	$i_t = 0.49i_{t-2} + 0.51 [0.26 - 2.10(u_{t+3|t} - u_{t+3|t}^*) + 1.60\pi_{t+3|t}]$	.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	.32
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.	$i_t = 0.96i_{t-1} + [-1.31 + 0.76\pi_{comp5|t}]$	.44 [#]	.48

RMSE calculated for 1999:1-2004:1.

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
03 -- 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	1.00	1.19	1.11	1.06	2.37	3.67	4.71	5.44	1.36	2.16	6.70	5.20	6.01	3.76
04 -- Low	0.92	0.73	0.87	0.96	1.04	0.97	1.49	2.65	3.84	4.77	0.42	1.35	6.03	4.73	5.38	3.36
Monthly																
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
Mar 04	1.00	0.96	0.95	1.01	1.05	0.99	1.57	2.78	3.96	4.87	0.55	1.48	6.11	4.78	5.45	3.41
Weekly																
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	1.00	0.96	0.96	1.00	1.04	0.99	1.52	2.71	3.90	4.81	0.57	1.47	6.06	4.75	5.41	3.41
Mar 19 04	1.00	0.94	0.94	1.01	1.04	0.99	1.53	2.71	3.88	4.81	0.49	1.42	6.07	4.73	5.38	3.39
Mar 26 04	1.00	0.95	0.94	1.00	1.04	0.98	1.52	2.71	3.89	4.82	0.49	1.44	6.09	4.79	5.40	3.36
Apr 2 04	1.01	0.95	0.95	1.02	1.06	1.01	1.67	2.90	4.08	4.97	0.62	1.54	6.21	4.91	5.52	3.46
Apr 9 04	1.01	0.94	0.94	1.05	1.07	1.00	1.90	3.18	4.35	5.16	0.90	1.78	6.36	5.07	5.79	3.65
Apr 16 04	1.01	0.92	0.95	1.09	1.08	1.01	2.04	3.36	4.51	5.29	1.01	1.88	6.46	5.18	5.89	3.69
Apr 23 04	0.99	0.89	0.98	1.15	1.09	1.01	2.18	3.48	4.58	5.36	1.11	1.96	6.53	5.20	5.94	3.69
Apr 30 04	--	0.87	0.99	1.17	1.11	0.99	2.31	3.59	4.65	5.39	1.25	2.04	--	--	6.01	3.75
Daily																
Apr 13 04	1.00	0.91	0.95	1.08	1.07	1.02	2.02	3.35	4.50	5.27	1.02	1.88	6.46	--	--	--
Apr 14 04	1.01	0.92	0.96	1.13	1.09	1.04	2.12	3.41	4.55	5.30	1.05	1.91	6.48	--	--	--
Apr 15 04	1.03	0.92	0.95	1.12	1.09	1.00	2.11	3.43	4.57	5.33	1.07	1.93	6.51	--	--	--
Apr 16 04	0.99	0.91	0.93	1.08	1.08	1.00	2.05	3.38	4.52	5.32	0.99	1.86	6.48	--	--	--
Apr 19 04	1.00	0.91	0.97	1.11	1.08	1.00	2.08	3.41	4.55	5.34	0.99	1.87	6.51	--	--	--
Apr 20 04	0.99	0.93	0.98	1.13	1.08	1.00	2.13	3.45	4.58	5.35	1.03	1.92	6.53	--	--	--
Apr 21 04	0.99	0.93	1.00	1.17	1.09	1.06	2.23	3.52	4.61	5.37	1.10	1.95	6.54	--	--	--
Apr 22 04	1.00	0.80	0.97	1.14	1.09	1.03	2.17	3.46	4.55	5.33	1.12	1.97	6.50	--	--	--
Apr 23 04	0.99	0.86	0.98	1.19	1.09	0.97	2.31	3.58	4.64	5.39	1.32	2.10	6.55	--	--	--
Apr 26 04	1.01	0.87	1.00	1.19	1.11	0.99	2.30	3.57	4.62	5.36	1.23	2.03	6.52	--	--	--
Apr 27 04	0.99	0.91	0.99	1.17	1.10	0.99	2.25	3.52	4.59	5.35	1.19	2.00	6.51	--	--	--
Apr 28 04	1.01	0.87	0.98	1.16	1.10	0.98	2.32	3.61	4.66	5.40	1.29	2.09	6.56	--	--	--
Apr 29 04	1.03 ^p	0.84	0.97	1.15	1.11	--	2.37	3.67	4.71	5.44	1.36	2.16	--	--	--	--

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		M3
			In M2	In M3 only	
	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	2.8	4.5
Quarterly (average)					
2003-Q2	8.5	8.1	8.0	0.6	5.8
Q3	7.5	6.9	6.7	6.9	6.9
Q4	2.5	-1.5	-2.5	-1.6	-1.5
2004-Q1	7.1	3.3	2.3	9.2	5.2
Monthly					
2003-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.	2.2	-3.1	-4.6	-5.6	-3.9
Nov.	-0.8	-0.8	-0.9	-3.6	-1.7
Dec.	8.6	-1.0	-3.6	0.3	-0.6
2004-Jan.	-5.5	1.0	2.8	21.0	7.3
Feb.	23.2	10.4	7.0	5.9	9.0
Mar.	17.7	8.8	6.4	10.5	9.3
Apr. e	-13.7	8.9	15.1	8.4	8.8
Levels (\$billions) :					
Monthly					
2003-Nov.	1283.8	6076.1	4792.3	2747.8	8823.9
Dec.	1293.0	6071.0	4777.9	2748.5	8819.4
2004-Jan.	1287.1	6076.2	4789.1	2796.7	8872.9
Feb.	1312.0	6129.1	4817.1	2810.4	8939.5
Mar.	1331.4	6174.0	4842.6	2835.0	9008.9
Weekly					
2004-Mar. 1	1323.8	6152.5	4828.6	2818.3	8970.8
8	1303.2	6142.9	4839.7	2818.8	8961.7
15	1320.0	6162.0	4842.0	2840.3	9002.3
22	1342.8	6183.0	4840.2	2829.8	9012.8
29	1352.6	6195.6	4843.0	2859.7	9055.3
Apr. 5	1325.7	6196.0	4870.3	2849.7	9045.8
12p	1316.9	6212.3	4895.4	2849.8	9062.0
19p	1312.1	6207.6	4895.5	2857.3	9064.9

p preliminary
e estimated

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

Strictly Confidential
Class II FOMC

April 29, 2004

	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						Redemptions (-)	Net Change	Short-Term ⁶	Long-Term ⁷	Net Change
				< 1	1-5	5-10	Over 10							
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
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
2004 QI	1,707	---	1,707	1,311	2,848	1,251	275	---	5,685	---	7,391	-772	-3,515	-4,286
2003 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
Mar	341	---	341	---	1,293	741	40	---	2,074	---	2,414	1,949	-1,803	146
2004 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
Mar 17	96	---	96	---	---	---	---	---	---	---	96	6,403	---	6,403
Mar 24	---	---	---	---	575	250	---	---	824	---	824	-5,536	-1,000	-6,536
Mar 31	71	---	71	---	---	---	---	---	---	---	71	4,352	---	4,352
Apr 7	190	---	190	---	---	---	---	---	---	---	190	-3,727	---	-3,727
Apr 14	403	---	403	---	---	---	---	---	---	---	403	5,420	---	5,420
Apr 21	200	---	200	---	---	---	---	---	---	---	200	-4,484	4,000	-484
Apr 28	1,425	---	1,425	---	---	---	---	---	---	---	1,425	3,917	---	3,917
2004 Apr 29	1,298	---	1,298	---	---	---	---	---	---	---	1,298	-23,369	-2,000	-25,369
Intermeeting Period														
Mar 16-Apr 29	3,657	---	3,657	---	575	250	---	---	824	---	4,481	-17,331	1,000	-16,331
Memo: LEVEL (bil. \$)														
Apr 29			250.1	116.3	183.8	50.0	77.5		427.6	---	677.7	-23.6	16.0	-7.6

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.