Prefatory Note

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

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[1] In some cases, original copies needed to be photocopied before being scanned into electronic format. All scanned images were deskewed (to remove the effects of printer- and scanner-introduced tilting) and lightly cleaned (to remove dark spots caused by staple holes, hole punches, and other blemishes caused after initial printing).

[2] A two-step process was used. An advanced optical character recognition computer program (OCR) first created electronic text from the document image. Where the OCR results were inconclusive, staff checked and corrected the text as necessary. Please note that the numbers and text in charts and tables were not reliably recognized by the OCR process and were not checked or corrected by staff.

Content last modified 5/28/2009.

Strictly Confidential (F.R.) **August 7, 2003**
Class II – FOMC

MONETARY POLICY ALTERNATIVES

Recent Developments

(1) Longer-term interest rates increased sharply over the intermeeting period in sometimes volatile trading conditions, more than reversing the considerable decline that occurred over the weeks following the May FOMC meeting. Some of the backup took place in response to the FOMC's decision in June to cut the intended federal funds rate 25 basis points to 1 percent, as investors had placed substantial odds on a larger move and were reportedly surprised that the accompanying statement made no mention of unconventional monetary policy measures (Chart 1).[1] Longer-term rates continued to climb over much of the remainder of the intermeeting period. Investors apparently interpreted the Chairman's monetary policy testimony, the release of FOMC members' economic projections, and incoming news on the economy and corporate earnings as signaling that a rebound in economic growth was likely and that substantial further disinflation would probably not materialize, thus obviating the need for further reductions in the federal funds rate or unconventional policy measures. A large volume of hedging activity by holders of mortgage-backed securities, and to a lesser extent a deterioration in the outlook for the federal budget, likely amplified the upward movement in bond rates. On net, the ten-year Treasury yield rose about 100 basis points—the largest intermeeting advance in more than fifteen years. Judging from yields on Treasury inflation-indexed securities, much of this increase represented a

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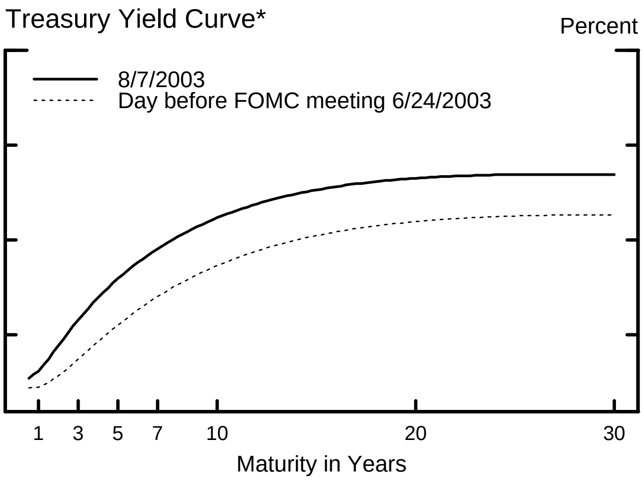
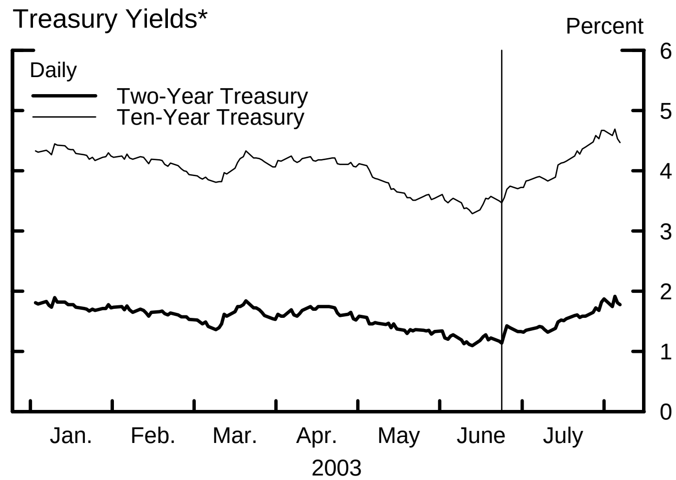
[1] The average effective federal funds rate for the intermeeting period was 1.02 percent. The Desk purchased $1.1 billion of Treasury bills from foreign official institutions and did not purchase any Treasury coupon securities in the market. The outstanding amount of long-term RPs decreased from $19 billion to $13 billion.

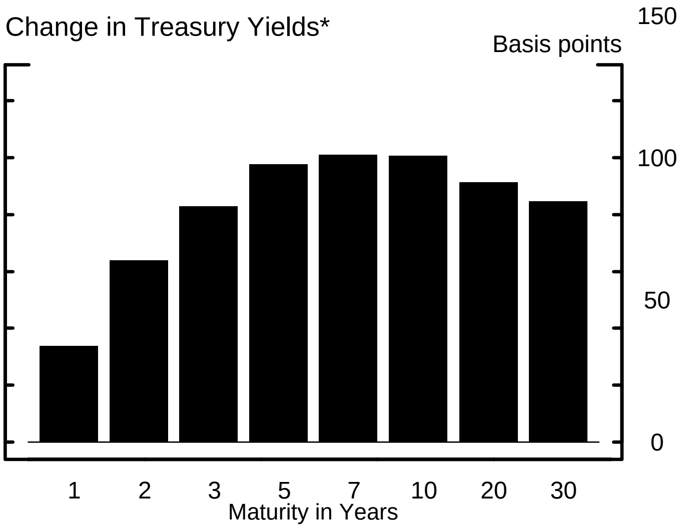
Chart 1
Interest Rate Developments



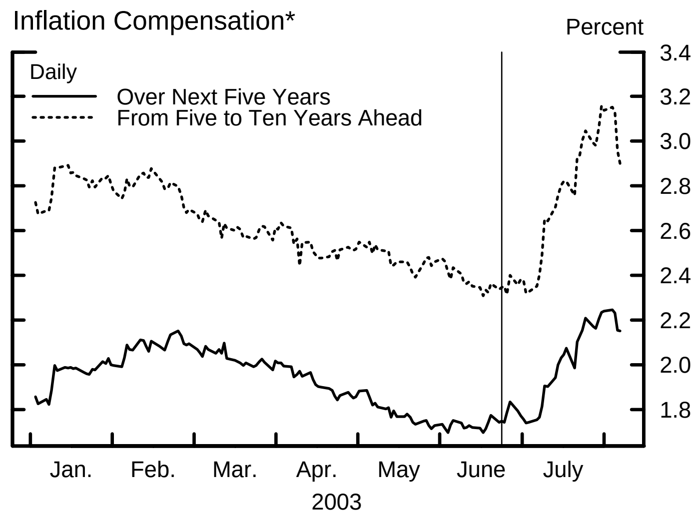
*Smoothed yield curve estimated from off-the-run Treasury coupon securities.



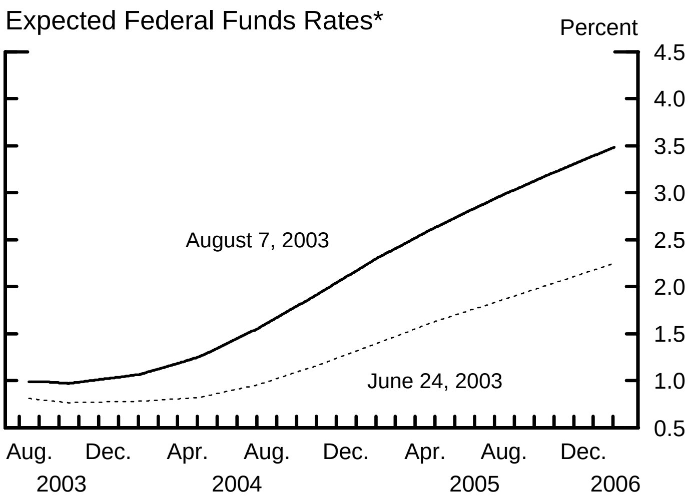
*Par yields from the off-the-run Treasury yield curve.



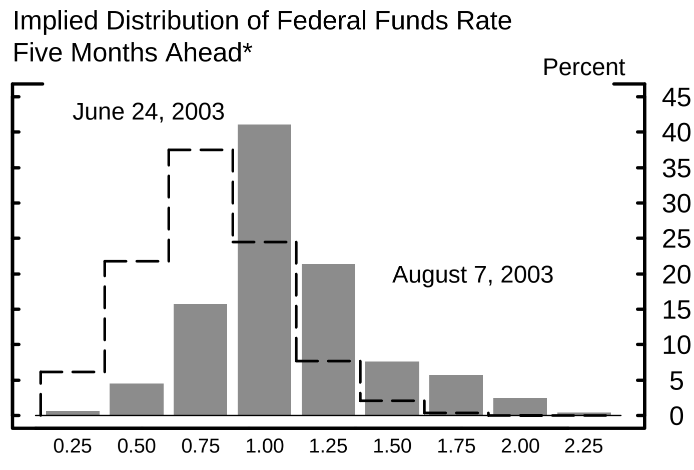
*Change since day before June FOMC meeting.



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



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



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

Note: Vertical lines indicate June 24, 2003.

rise in real interest rates, although inflation compensation also moved appreciably higher. The sizable fluctuations in interest rates were accompanied by a deterioration in the liquidity of certain markets, although conditions have improved considerably over the past few days (see the box entitled "Liquidity Conditions in Fixed-Income Markets").

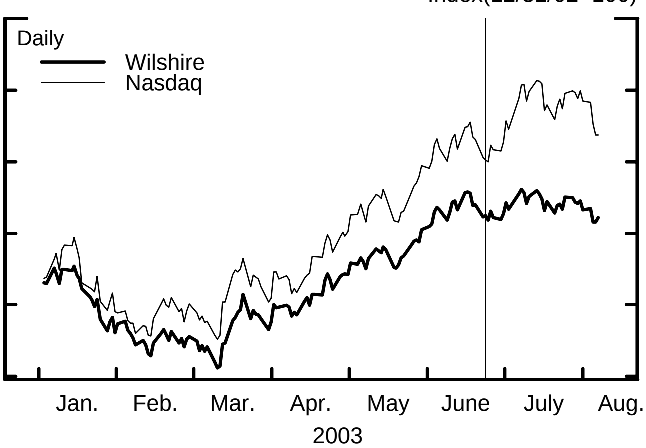
(2) Shorter-term Treasury yields rose by less than those on longer-term issues, in part because the Chairman's testimony helped anchor near-term expectations for monetary policy. Investors appear nearly certain that the funds rate target will be left unchanged at the upcoming FOMC meeting, and rates on money market futures suggest that policy is expected to remain on hold until early 2004.[2] However, the upward trajectory of policy expectations thereafter is now much steeper than at the time of the last FOMC meeting, and quotes on options contracts imply that the perceived odds of additional reductions in the federal funds rate have declined substantially. The current low level of overnight interest rates has apparently contributed to a large increase in the frequency of delivery failures of fixed-income securities, although that step-up reportedly has not had significant adverse effects on the functioning of markets as a whole (see the box entitled "Substantial Rise in Fails-to-Deliver of Treasury and Other Securities").

(3) Despite the sharp rise in Treasury yields, broad equity indexes were down only slightly, on net, over the intermeeting period (Chart 2). Equity prices were supported by earnings reports for the second quarter that surpassed expectations, strong profit forecasts for subsequent quarters, and increased confidence in economic prospects. Investors showed particular interest in riskier stocks, with the Nasdaq and Russell 2000 indexes outperforming the broader market. In addition, investors' perceptions of credit risk appeared to diminish further over the intermeeting period.

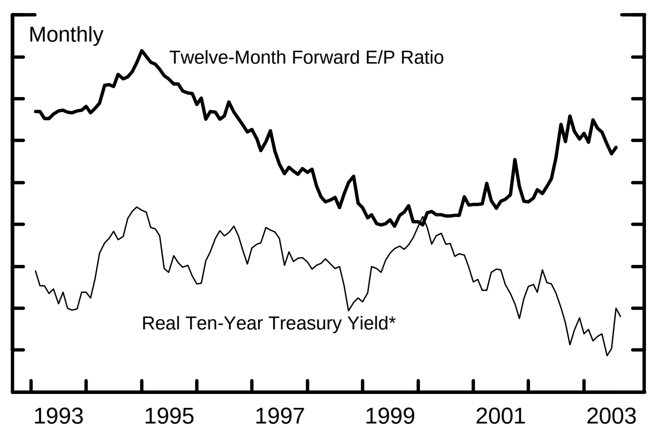
[2] By contrast, surveys indicate that market and business economists generally see a more extended period during which the stance of monetary policy remains unchanged.

Chart 2
Financial Market Indicators

Stock Prices

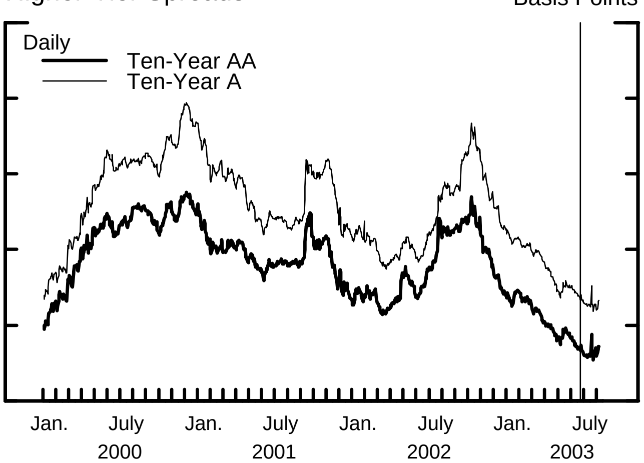


Earnings-Price Ratio for S&P 500 and Ten-Year Treasury



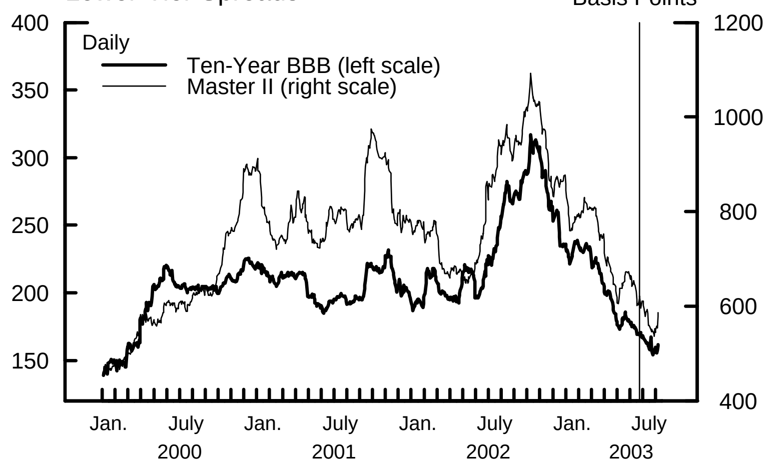
*End-of-month ten-year Treasury yield minus Philadelphia Fed ten-year expect inflation.

Higher-Tier Spreads*



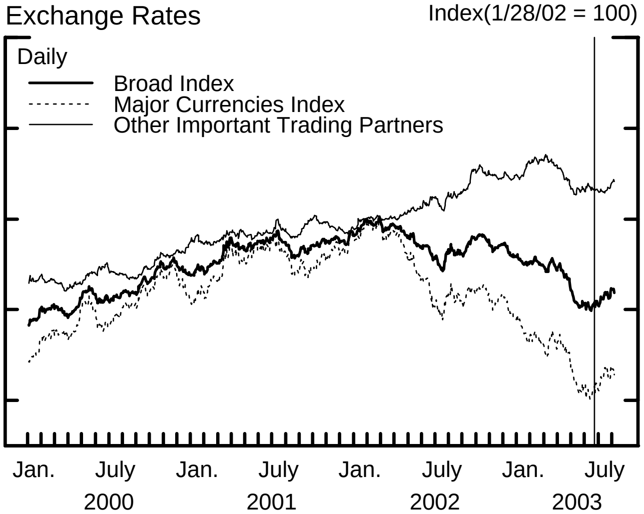
*Measured relative to the off-the-run Treasury yield curve.

Lower-Tier Spreads*

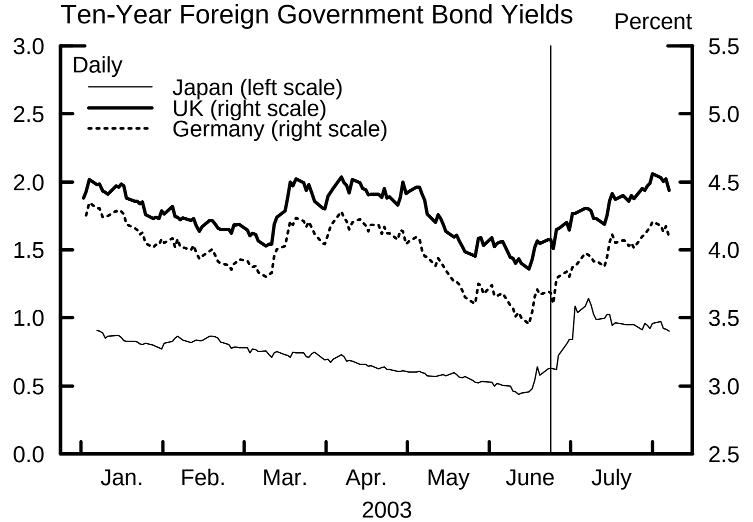


*Measured relative to the off-the-run Treasury yield curve.

Nominal Trade-Weighted Dollar Exchange Rates



Ten-Year Foreign Government Bond Yields



Note: Vertical lines indicate June 24, 2003.

Liquidity Conditions in Fixed-Income Markets

The sharp fluctuations in longer-term interest rates resulted in a notable deterioration in the liquidity of fixed-income markets and a significant widening of yield spreads on swaps, agencies, and mortgage-backed securities around the end of July, but conditions have improved considerably in recent days (Chart 3). The difficulties were primarily associated with the decline in mortgage prepayment risk and the resulting extension in the duration of outstanding mortgage-backed securities (MBS) rather than elevated credit concerns. Investors seeking to offset this increase in duration sold large volumes of Treasury securities and entered into sizable quantities of interest rate swaps to pay fixed rates. Dealers in the Treasury and swap markets at times had difficulty accommodating the selling pressure, and they began to post wider bid-ask spreads to compensate for the risks associated with the greater volatility of the market.

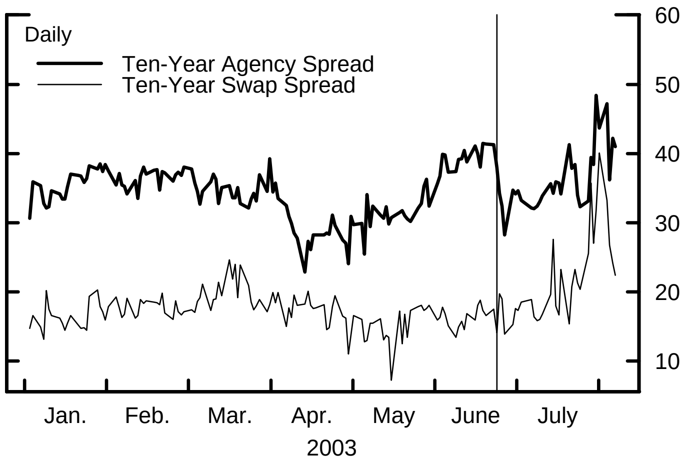
The deterioration in liquidity was particularly notable in the swap market, where bid-ask spreads on ten-year swaps widened to as much as 10 basis points from a typical level of 1 basis point. The liquidity of Treasury securities held up better, but bid-ask spreads for on-the-run issues still widened to ½ basis point from a usual level of ¼ basis point, and market depth reportedly declined some. Investors paid a higher premium for the on-the-run ten-year Treasury note relative to off-the-run issues, although that premium was not outsized relative to those recorded in recent years. The erosion in liquidity also spilled over to the markets for mortgage-backed and agency debt securities.

Spreads on intermediate- and long-term swaps relative to Treasury securities increased sharply over the period. This widening was apparently driven by the magnitude of hedging-related flows and the considerable deterioration in the liquidity of swaps rather than any unusual concern about counterparties or heightened aversion to credit risk. To date, little evidence has emerged that any major market participant has suffered losses sufficient to threaten its viability, and credit default swap premiums do not indicate any unusual concern about the health of financial firms more generally. Poor liquidity also contributed to a widening of spreads on mortgage-backed securities over Treasuries (adjusted for prepayment risk) and on agency debt issues, developments that may have been exacerbated by market speculation that the European Central Bank and euro-area national central banks were reducing their exposure to agency issues.

In recent days, liquidity has recovered substantially for many of these instruments, although conditions have not fully returned to normal levels. Swap, agency, and MBS spreads have also retraced much of their widening as liquidity has improved.

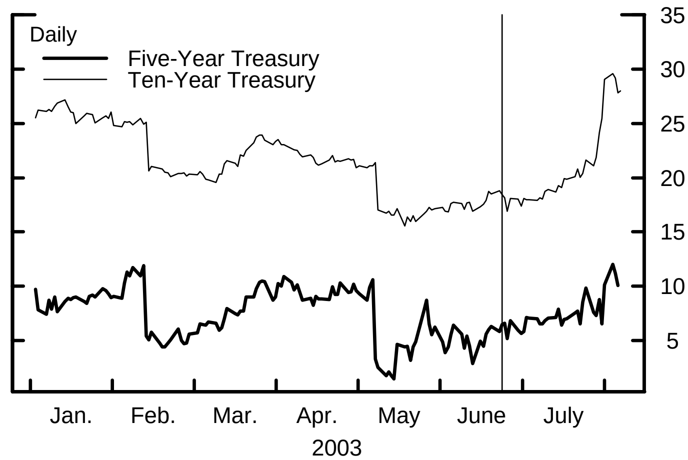
Chart 3
Market Functioning and Liquidity

Swap and Agency Spreads*



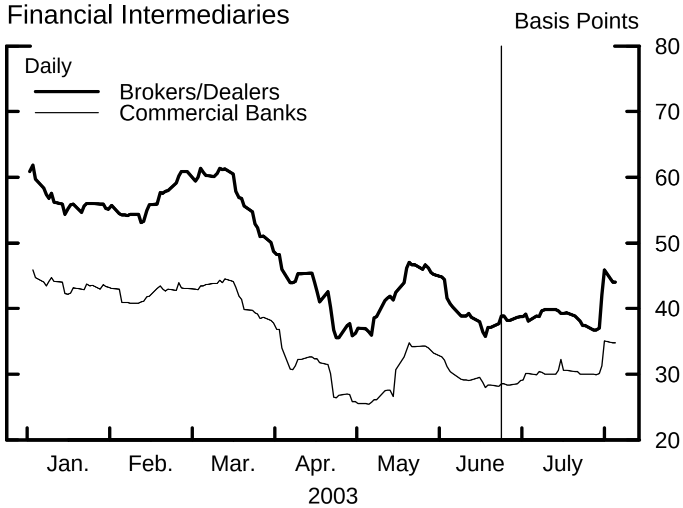
*Measured relative to the off-the-run Treasury yield curve.

On-the-Run Premiums*

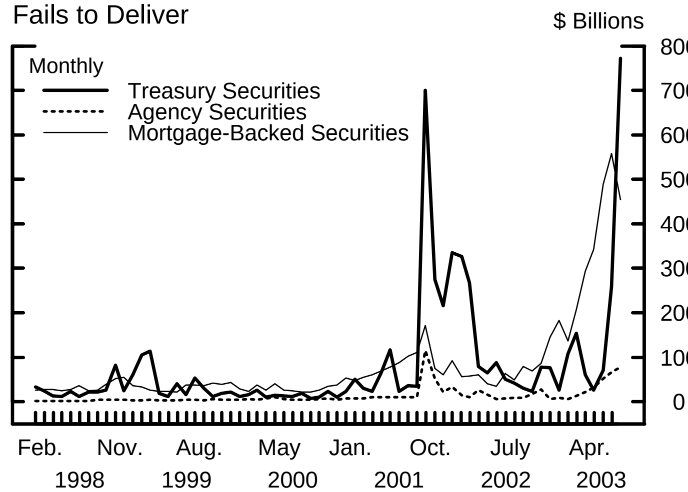


*Amount by which the on-the-run yield falls below the off-the-run yield curve, adjusted for auction cycle effects.

Credit Default Swap Spreads for Selected Financial Intermediaries

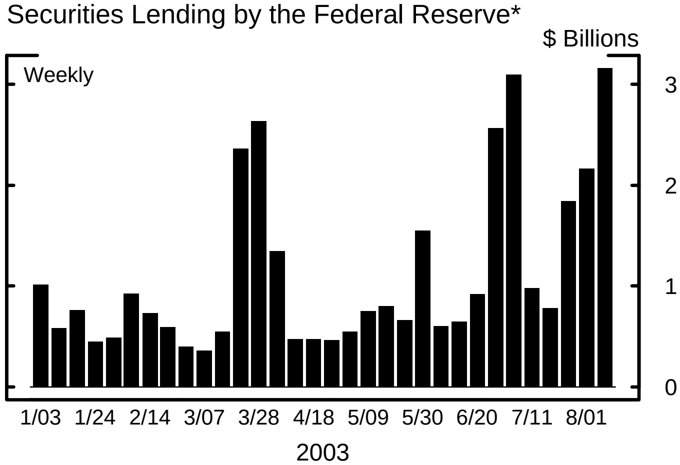


Fails to Deliver



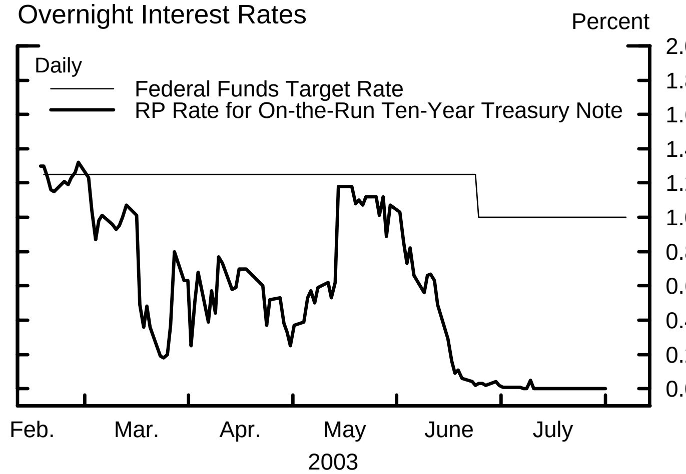
Note: Last observation is average level through July 23.

Securities Lending by the Federal Reserve*



*Average daily volume for week ending on date shown.

Overnight Interest Rates



Note: Vertical lines indicate June 24, 2003.

Substantial Rise in Fails-to-Deliver of Treasury and Other Securities

Failures to deliver securities in the Treasury and other markets have risen substantially since the last FOMC meeting (Chart 3). Fails in the Treasury market have been particularly severe in the ten-year note maturing in May 2013, which, as the on-the-run issue over most of the intermeeting period, was heavily used in hedging transactions. However, fails have been elevated in other Treasury issues and in agency and mortgage-backed securities as well. Dealers have increasingly turned to the Federal Reserve's securities lending program to obtain securities that are difficult to acquire in the market.

A fail-to-deliver takes place when a party that has sold a security does not deliver the security as agreed. In those circumstances, the market convention is to postpone the settlement of the transaction without changing the price. During this intervening period, the firm that was supposed to deliver the security loses the opportunity to earn interest on the proceeds, because it does not receive these funds until the security is delivered.

A firm would presumably avoid failing if it were possible to obtain the security in a repurchase agreement (RP) in which it was lending money at an above-zero interest rate, rather than at the zero percent effective rate it earns if it fails to deliver. When there is considerable demand in the market for a particular security, the rate at which firms are willing to lend money against that issue will often move below the general level of overnight interest rates—that is, the security goes "on special." When the RP rate for a given issue drops all the way to zero, the pecuniary incentive to deliver an issue on a timely basis disappears. Indeed, the RP rate for the May 2013 note has been pinned at zero since late June, coinciding with the high level of fails in that issue. By historical standards, it is not unusual for the RP rate on the on-the-run ten-year note to be 100 basis points less than the federal funds rate; however, this degree of "specialness" would not have generated elevated fails if short-term interest rates had been higher.

Although the increase in fails has had adverse effects in the RP market for certain Treasury issues, market participants report that it has not resulted in any significant deterioration in the functioning and liquidity of fixed-income markets in general.[†] Going forward, fails to deliver may stay elevated as long as short-term interest rates remain low. However, recent increases in the size and frequency of auctions of Treasury securities may help alleviate the volume of fails by increasing the supply of securities in the market.

[†] The elevated level of fails has posed some relatively minor issues for the conduct of open market operations. When foreign central bank customers do not receive securities that they expected, their funds may remain at the Federal Reserve and thus result in a reserve drain. Because of the increase in fails, reserve misses caused by errors in predicting foreign deposits have increased somewhat.

Yield spreads on low-grade corporate bonds narrowed substantially, although they have retraced some of that decline of late. Yields on high-grade corporate bonds, by contrast, moved up roughly in line with those on Treasury securities, leaving their spreads about unchanged.

(4) The improved U.S. economic outlook and the increase in interest rates helped buoy the dollar, which gained 1½ percent over the intermeeting period against an index of currencies of major foreign trading partners. Better U.S. prospects also spurred optimism about likely spillovers to the global economy, and tentative signs of stronger growth were evident in some foreign countries as well. Yields on long-term foreign government securities moved up sharply during the intermeeting period, although by less than in the United States, and stock price indexes in many countries firmed. The dollar recorded its largest gains—about 2½ percent—against the Canadian dollar and sterling; in both cases, authorities surprised markets by easing monetary policy, pointing to signs of lower inflation and weaker activity. Against the euro, the dollar gained less—about 1 percent—as euro-area indicators of business and consumer confidence improved and better earnings reports by euro-area firms helped push up stock indexes in some major European countries. The dollar rose only ¾ percent against the yen.[3] Stock prices in Japan rose about 4 percent and yields on long-term government bonds moved up 25 basis points amid some signs of firming economic conditions.

(5) The dollar rose slightly against an index of the currencies of our other important trading partners. Stock prices in most Asian emerging markets recorded solid gains, as investors were encouraged by confirmation that the SARS epidemic

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

had waned and by improved prospects for global recovery. Toward the end of the intermeeting period, however, rate increases and volatility in U.S. fixed-income markets reverberated in some higher-risk foreign financial markets. Such spillovers, together with worries about the pace of the Brazilian structural reform program, caused the EMBI+ spread for Brazil to widen 90 basis points and the *real* to lose nearly 5 percent versus the dollar.

(6) Available indicators suggest that borrowing by U.S. nonfinancial firms remained sluggish in July (Chart 4). Net corporate bond issuance slowed abruptly from its robust pace of previous months, largely in response to the upswing in yields on investment-grade bonds, while commercial paper rose for the first time in five months. C&I loans continued to run off, even as banks reported in the Senior Loan Officer Opinion Survey that they eased spreads and fees on those loans for the first time since 1998.[4] In the household sector, consumer credit grew at a moderate pace in the second quarter, while mortgage debt expanded briskly, although a bit less so than in previous quarters. More recently, applications for mortgage refinancing dropped sharply in response to the sizable increase in mortgage rates. The Treasury continued to borrow in large quantity: Federal debt expanded at a 24 percent pace on a seasonally adjusted basis in the second quarter, and the Treasury announced that it was raising its estimate of third-quarter borrowing needs substantially from the forecast it made in late April. State and local governments also borrowed heavily in the second quarter, but the pace of advance refundings fell off in July, presumably reflecting the jump in interest rates. Overall, domestic nonfinancial sector debt is estimated to have surged at a 10½ percent pace in the second quarter, with much of that strength owing to government borrowing.

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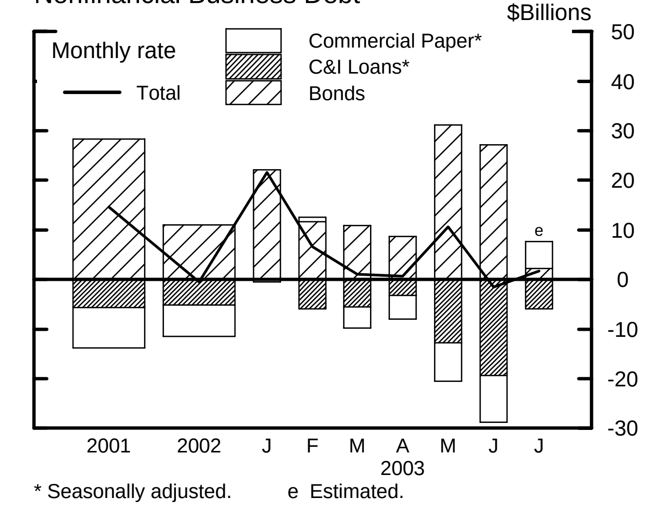
[4] Data on C&I loans presented in this bluebook have been adjusted for the estimated effects of FIN 46, which is a change in accounting rules that required financial institutions to consolidate some "special purpose entities" onto their balance sheets.

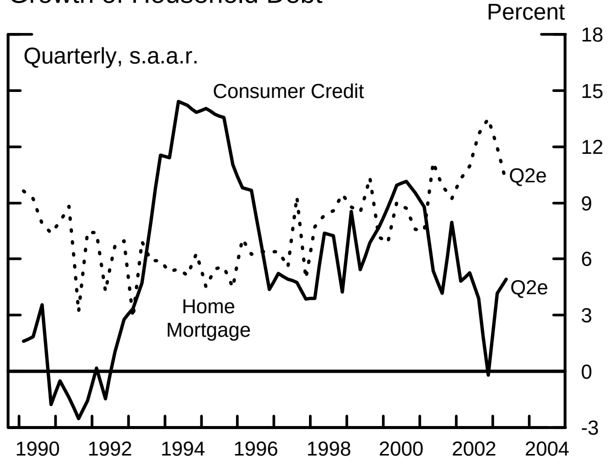
Chart 4
Debt and Money Growth

Growth of Components of Nonfinancial Business Debt



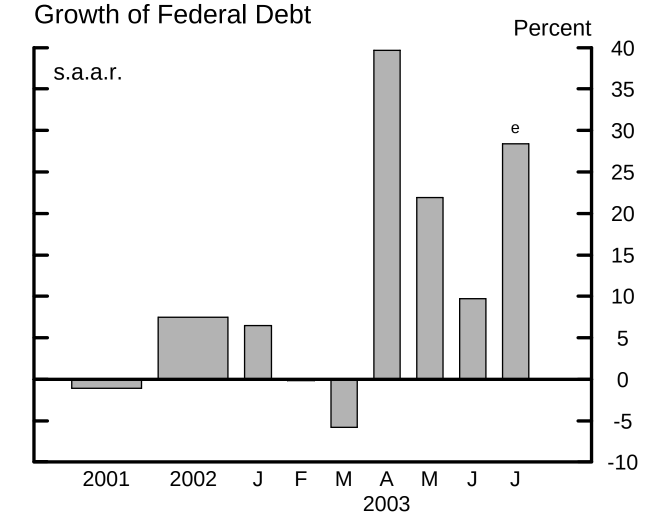
* Seasonally adjusted. e Estimated.
Note. C&I loans are adjusted for the estimated effects of FIN 46.

Growth of Household Debt



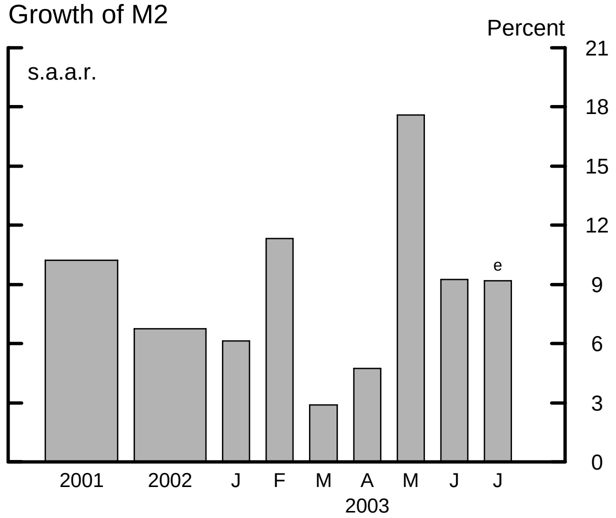
e Estimated.

Growth of Federal Debt



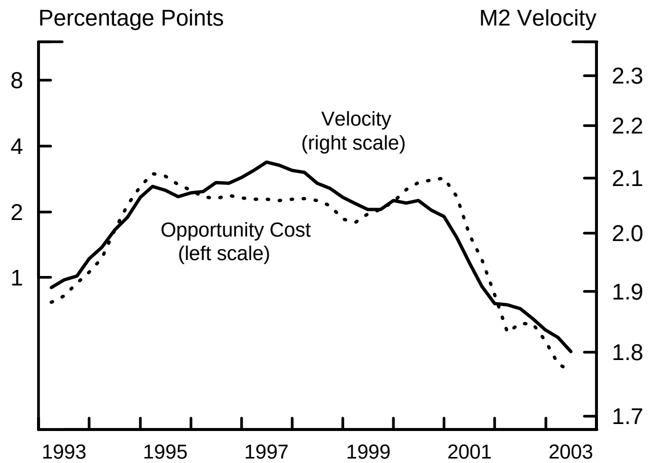
Note. Treasury debt held by the public at month-end.
e Estimated.

Growth of M2



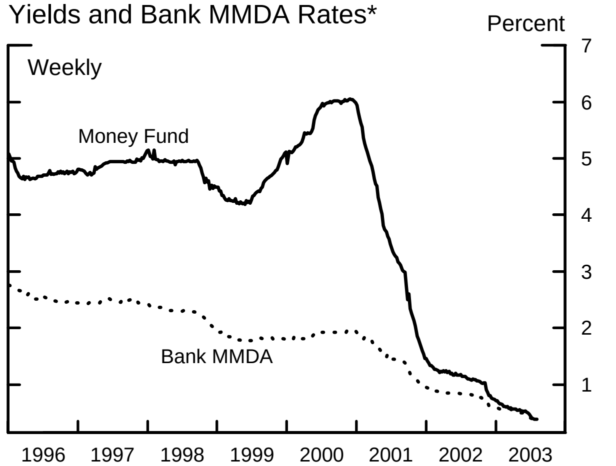
e Estimated.

M2 Opportunity Cost* and Velocity



*Two-quarter moving average.

Retail Taxable Money Fund Yields and Bank MMDA Rates*



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

(7) M2 expanded rapidly in June and July, propelled by the lagged effects of past declines in the opportunity cost of holding money, measured as the yield on three-month Treasury bills less the weighted average rate on the components of M2. In addition, M2 was likely boosted by a surge in escrow accounts associated with the high volume of mortgage refinancing activity and, perhaps, by the increases in disposable incomes resulting from recent changes in tax law. Over the last two weeks of July, households appear to have reduced their portfolios of bond mutual funds, possibly in response to losses suffered during the sharp increase in long-term interest rates, and some of those outflows were likely deposited into M2 accounts.

Policy Alternatives

(8) The staff forecast prepared for this FOMC meeting continues to anticipate a significant acceleration of economic activity over coming quarters, fueled by the sizable degree of monetary accommodation already in place and considerable fiscal stimulus—and perhaps evidenced by some recent economic data. The pickup in growth next year, however, is noticeably less vigorous than that presented by the staff in June, primarily reflecting the marked increase in longer-term interest rates, a slight reduction in equity values, and the modest climb in the foreign exchange value of the dollar since then. In the staff forecast, bond yields stay near their current elevated levels until next spring, when they begin to drift lower as markets come to recognize that economic conditions are such that the FOMC will be maintaining the 1 percent funds rate target for longer than had been expected. Stock prices are predicted to rise sufficiently to generate risk-adjusted returns comparable to those on fixed-income instruments, and the foreign exchange value of the dollar edges lower. With economic growth a little slower than in the June Greenbook, slightly less progress in reducing slack is foreseen over the next year and a half. In the fourth quarter of 2004, the civilian unemployment rate is expected to be ½ percentage point above the staff's estimated NAIRU of 5 percent and the output gap is projected at ½ percent. After picking up slightly in coming months owing to the unwinding of some factors that had damped it during the first half of the year, core PCE inflation is projected to trend down gradually, reaching an average pace next year just under 1 percent. Overall PCE inflation is expected to run a touch lower than the core rate in 2004, reflecting falling energy prices.

(9) Encouraged by recent data pointing to a firming of aggregate demand, FOMC members may continue to see good odds on an acceleration of output over the rest of this year and next year, in line with the contour of their economic projections reported to the Congress in July. Such an outlook may prompt the

Committee to **keep policy unchanged** at this meeting. Even if policymakers would prefer faster progress in boosting rates of resource utilization in the near term, they might believe that, given the usual lags in the effects of policy, an easing now would not significantly affect the economy until a brisk expansion likely was already underway. Thus, the Committee might anticipate that, with a flat federal funds rate, the projected outcomes for real activity, resource use, and inflation are about the best that can be achieved. Moreover, Committee members might view the backup in longer-term interest rates over the past few weeks in part as signaling that the economy could be even stronger than forecast by the staff, reflecting a recent fundamental improvement in business confidence and spending propensities (see the box entitled "Changes in Yields and Revisions to Market Expectations for Economic Activity"). The Committee might also continue to consider substantial further disinflation to be unlikely. Core PCE inflation in the Greenbook moves down only a little next year and, judging by the central tendencies of the inflation projections reported in July, policymakers foresee even less disinflationary pressure than the staff. With the risk of deflation apparently remote and the zero bound on the funds rate still a full percentage point away, policymakers may prefer to keep policy on hold for a time while assessing inflation trends and the strength of the pickup in economic activity, including the response of spending to the additional tax cuts that have just begun to show up in disposable income.

(10) Even if the Committee believes that a pickup in economic growth is in train, as in the staff forecast, it may prefer to take action to reduce resource slack more quickly than in that outlook, and in the process diminish the risk of substantial further disinflation, by **easing 25 basis points** at this meeting. The Committee might view the downward revision to projected growth next year resulting from the jump in bond

Changes in Yields and Revisions to Market Expectations for Economic Activity

The sharp backup in bond yields over the intermeeting period was associated with an upward revision to investors' expected path for the funds rate, presumably owing to a change in their views of underlying economic strength or inflationary pressures. Under the assumption that investors use a Taylor rule to formulate expectations for the funds rate, it is possible to estimate the extent of those upward revisions. For the calculations presented in this box, we also assumed that the market's near-term forecasts for potential GDP and its perceptions of the long-run equilibrium real funds rate and inflation objective of the Federal Reserve—all of which appear in the Taylor rule—were unchanged and that the term premiums in futures contract rates held constant.

Eurodollar futures rates for the fourth quarter of 2004 rose 0.9 percentage point over the intermeeting period. Using a coefficient on the output gap in the Taylor rule of unity and assuming that the market's outlook for inflation was unchanged, the rise in futures contracts would imply a comparable increase in the expected level of real GDP that quarter of about 1 percent. This estimate is similar to one obtained using a simulation of the FRB/US model.

The estimate would be altered if inflation expectations had changed appreciably over the intermeeting period. Although some indicators of short-term inflation expectations edged lower, five-year inflation compensation as measured by the difference between nominal and inflation-indexed Treasury securities increased by about ⅓ percentage point. If inflation expected by investors for the fourth quarter of 2004 also rose by that amount, the Taylor rule would have implied an increase in expectations for the level of economic activity at that time of only ½ percent rather than 1 percent.

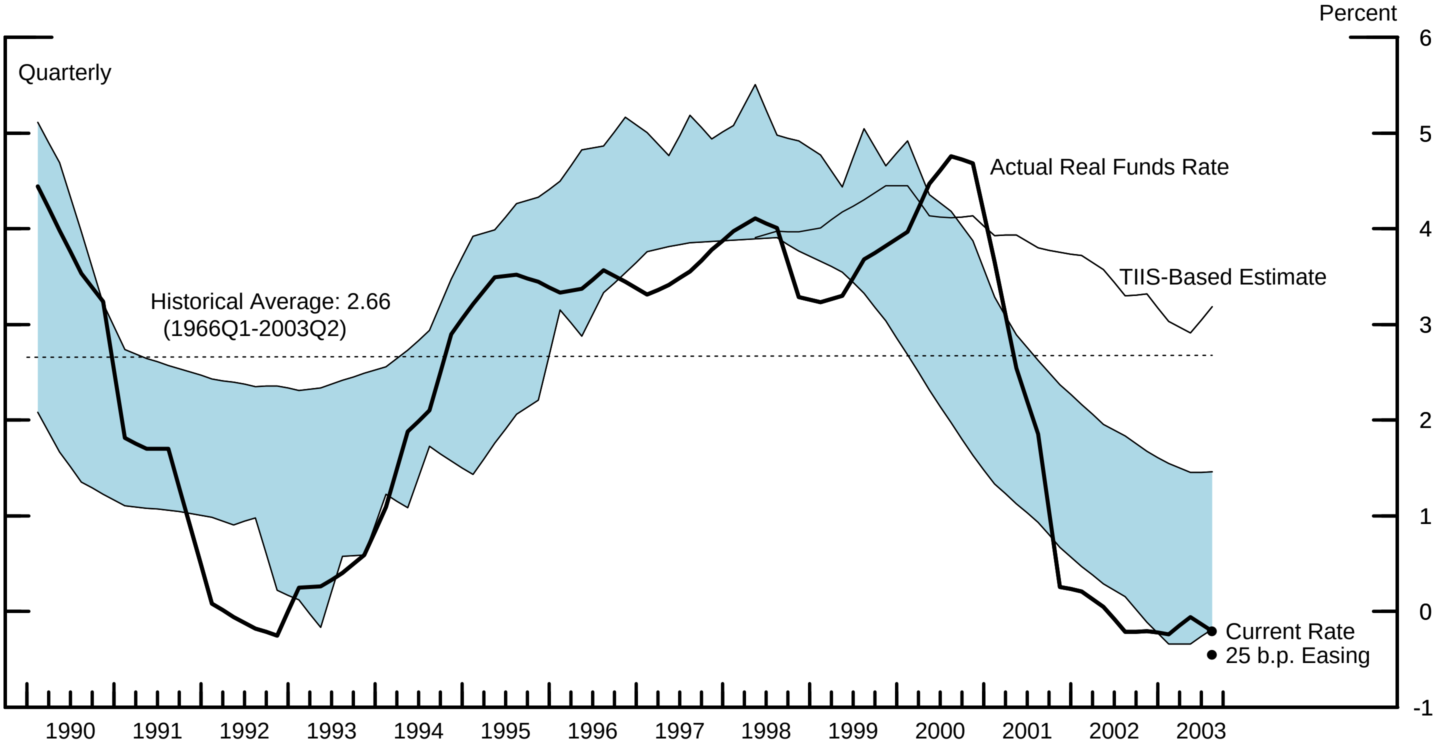
These inferences from financial markets contrast with the 0.4 percent downward revision to the Greenbook outlook for the level of real GDP in the fourth quarter of 2004. The staff forecast can be interpreted as having assumed that the stronger outlook for economic activity that investors have now adopted had already been built into the June Greenbook projection. In consequence, the rise in interest rates had the effect of damping spending in the current Greenbook.

rates as unacceptable and as warranting a prompt policy response. Also, the Committee might believe that the trajectory of inflation in the Greenbook is too low to provide a sufficient buffer against the zero bound on nominal interest rates in coming years and might wish to foster a slightly higher path for inflation by easing policy further. Alternatively, policymakers may anticipate that firms and households will be more cautious about spending than the staff expects, perhaps along the lines of the "prolonged subpar investment" or "weaker fiscal response" alternative simulations in the Greenbook. Even apart from concerns about continued sluggishness in aggregate demand, Committee members may have revised down their inflation projections over the intermeeting period because of supply-side considerations, such as productivity growth that has persistently come in on the high side of expectations. In addition, short-term inflation expectations, as measured by the Michigan survey, have edged lower of late, as have measures of actual core consumer price inflation that sometimes are used as proxies for anticipated inflation, and expectations seem likely to edge down further as actual inflation drifts lower. A policy easing might be seen as desirable to prevent a rise in the real funds rate and, perhaps, to move it back below the range of estimated equilibrium values (Chart 5).

(11) Under either choice for the funds rate, the Committee might wish to maintain the assessment of risks to the outlook adopted in June, despite some significant changes in financial markets and in the staff forecast over the intermeeting period. The Committee might see the risks to inflation as still tilted to the downside, particularly given the low readings on actual inflation, the good news on productivity, and the likely drag on aggregate demand growth from the recent jump in bond yields. And even if policymakers' expectations for real growth next year have been lowered somewhat, as in the Greenbook, they probably remain consistent with a gradual closing of the output gap, suggesting that the risks to attaining sustainable growth are still roughly balanced.

(12) Market participants apparently see almost no chance of a policy move or shift in the FOMC's assessment of risks at this meeting. Financial markets therefore would tend to react little to a Committee decision that confirmed those expectations, although the wording of the announcement could have a noticeable

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 2003Q3.

Equilibrium Real Funds Rate Estimates (Percent)

	2002	2003Q1	2003Q2	2003Q3
Statistical Filter				
- Two-sided:				
Based on historical data and the staff forecast	0.3	0.2	0.3	0.4
June Bluebook	*0.4*	*0.4*	*0.5*	--
- One-sided:				
Based on historical data*	0.7	-0.3	-0.3	-0.2
June Bluebook	*0.7*	*-0.6*	*-0.5*	--
FRB/US Model				
- Two-sided:				
Based on historical data and the staff forecast	1.9	1.5	1.5	1.5
June Bluebook	*1.5*	*1.1*	*1.0*	--
- One-sided:				
Based on historical data**	1.3	0.3	0.1	0.1
June Bluebook	*0.8*	*0.1*	*-0.2*	--
Treasury Inflation-Indexed Securities	3.5	3.0	2.9	3.2
June Bluebook	*3.5*	*3.1*	*3.0*	--

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

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

Note: Re-estimations since June of some long-term trends, including those for term premia, have boosted equilibrium real rates in the FRB/US model over the historical period shown.

effect on market prices for a time. An announcement that emphasized the signs of nascent strength in the economy and suggested little concern about the recent backup in interest rates would tend to support the current higher levels of yields and the foreign exchange value of the dollar. But a statement that underscored the tentativeness of the pickup and alluded to the recent tightening of financial conditions might lead to some easing of market interest rates and the exchange value of the dollar. A 25-basis-point cut in the funds rate accompanied by maintenance of the current risk assessment would surprise markets and likely induce a comparable decline in short-term interest rates. To the extent that the move was seen as a reaffirmation of an intent to keep the federal funds rate low for a considerable period and, more particularly, as a reaction to the backup in longer-term yields, bond and stock markets also might rally considerably.

(13) M2 is projected to decelerate in the months ahead, but growth in that aggregate over the second half of the year should remain considerably faster than that of nominal GDP. The current wave of mortgage refinancings is likely to subside in response to the recent sharp increases in longer-term interest rates, thereby damping growth of the liquid deposits in which prepayments are temporarily held. However, the lagged effect of past decreases in opportunity costs should continue to buoy this monetary aggregate over the balance of this year. Under the Greenbook forecast, M2 is projected to grow around 8 percent over the four quarters of 2003, implying a decline in its velocity of about 3¼ percent.

(14) The debt of domestic nonfinancial sectors is also expected to decelerate over the second half of the year. The growth of home mortgage debt is likely to slow further from the vigorous pace set last year, while the expansion of consumer credit is projected to stay fairly subdued. With the financing gap continuing to be modest as increases in internal funds about keep pace with rising capital expenditures, business borrowing should pick up only slightly. Federal borrowing will presumably remain

robust, though dropping back from its outsized second quarter pace. State and local borrowing is forecast to decelerate sharply as advance refundings are scaled back owing to higher interest rates. Over the four quarters of 2003, total domestic nonfinancial sector debt is expected to grow 7¾ percent, with its nonfederal component expanding 6¾ percent.

Alternative Growth Rates for M2

		25 bp Ease	No Change*
Monthly Growth Rates			
	Jan-03	6.1	6.1
	Feb-03	11.3	11.3
	Mar-03	2.9	2.9
	Apr-03	4.7	4.7
	May-03	17.6	17.6
	Jun-03	9.3	9.3
	Jul-03	9.2	9.2
	Aug-03	8.8	8.6
	Sep-03	7.8	7.2
	Oct-03	6.3	5.5
	Nov-03	5.8	5.0
	Dec-03	5.6	5.0
Quarterly Growth Rates			
	2002 Q4	7.0	7.0
	2003 Q1	6.5	6.5
	2003 Q2	8.5	8.5
	2003 Q3	10.0	9.9
	2003 Q4	6.8	6.1
Annual Growth Rates			
	2002	6.8	6.8
	2003	8.2	8.0
Growth Rates			
From	**To**		
2002 Q4	Jul-03	8.4	8.4
2002 Q4	Aug-03	8.5	8.5
2002 Q4	Dec-03	8.0	7.8
Dec-02	Jul-03	8.9	8.9
Dec-02	Aug-03	9.0	8.9
Jul-03	Dec-03	6.9	6.3
Aug-03	Dec-03	6.4	5.7

* This forecast is consistent with nominal GDP and interest rates in the Greenbook forecast.

Directive and Risk-Assessment Language

(15) Presented below for the members' consideration is (1) draft wording for the directive and (2) draft language to convey the substance of the risk assessment, assuming that the Committee wishes to retain the current form of that assessment:

(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 Assessment

The Committee wishes to include in the official announcement to be released after the meeting (but not to be included in the directive) the substance of the following assessment:

> Against the background of its long-run goals of price stability and sustainable economic growth and of the information currently available: The risks to its outlook for sustainable economic growth over the next several quarters [ARE WEIGHTED TOWARD THE DOWNSIDE] [are balanced] [ARE WEIGHTED TOWARD THE UPSIDE]; the risks to its outlook for inflation over the next several quarters [are weighted toward the downside] [ARE BALANCED] [ARE WEIGHTED TOWARD THE UPSIDE]; and, taken together, the balance of risks to its objectives [are weighted toward the downside] [ARE BALANCED] [ARE WEIGHTED TOWARD THE UPSIDE] in the foreseeable future.

SELECTED INTEREST RATES
(percent)

	Short-term						Long-term									
	Federal funds	Treasury bills secondary market			CDs secondary market	Comm. paper	Off-the-run Treasury yields				Indexed yields		Moody's Baa	Municipal Bond Buyer	Conventional home mortgages primary market	
		4-week	3-month	6-month	3-month	1-month	2-year	5-year	10-year	30-year	5-year	10-year			Fixed-rate	ARM
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
02 -- High	1.92	1.82	1.88	2.16	1.98	1.81	3.75	4.99	5.73	6.04	3.33	3.56	8.23	5.67	7.18	5.26
-- Low	1.15	1.07	1.16	1.23	1.31	1.26	1.59	2.72	3.94	4.85	1.54	2.19	7.30	5.02	5.93	4.01
03 -- High	1.45	1.26	1.22	1.28	1.32	1.28	1.91	3.37	4.70	5.53	1.84	2.48	7.48	5.42	6.34	4.06
-- Low	0.86	0.79	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
Monthly																
Aug 02	1.74	1.68	1.65	1.64	1.73	1.72	2.12	3.37	4.54	5.27	2.04	2.55	7.58	5.30	6.29	4.38
Sep 02	1.75	1.67	1.66	1.64	1.76	1.73	1.98	3.01	4.16	4.97	1.74	2.30	7.40	5.10	6.09	4.29
Oct 02	1.75	1.62	1.61	1.59	1.73	1.72	1.92	3.02	4.25	5.13	1.86	2.44	7.73	5.16	6.11	4.27
Nov 02	1.34	1.26	1.25	1.30	1.39	1.34	1.94	3.13	4.33	5.16	1.99	2.49	7.62	5.25	6.07	4.16
Dec 02	1.24	1.20	1.21	1.27	1.34	1.31	1.84	3.09	4.31	5.12	1.90	2.46	7.45	5.20	6.05	4.12
Jan 03	1.24	1.17	1.19	1.22	1.29	1.25	1.76	3.07	4.30	5.14	1.68	2.32	7.35	5.19	5.92	3.99
Feb 03	1.26	1.20	1.19	1.20	1.27	1.24	1.64	2.92	4.14	5.01	1.28	2.03	7.06	5.15	5.84	3.86
Mar 03	1.25	1.18	1.15	1.16	1.23	1.21	1.59	2.81	4.04	4.98	1.13	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
Weekly																
Jun 6 03	1.25	1.15	1.07	1.05	1.18	1.21	1.26	2.28	3.53	4.57	1.03	1.79	6.22	4.83	5.26	3.59
Jun 13 03	1.24	1.06	0.94	0.93	1.05	1.10	1.14	2.13	3.37	4.45	0.84	1.63	6.08	4.78	5.21	3.54
Jun 20 03	1.25	0.88	0.86	0.87	0.96	0.99	1.22	2.27	3.49	4.53	0.94	1.75	6.17	4.89	5.21	3.51
Jun 27 03	1.17	0.84	0.88	0.91	0.98	0.97	1.28	2.36	3.59	4.64	0.96	1.81	6.26	4.97	5.24	3.45
Jul 4 03	1.09	0.86	0.89	0.96	1.05	1.01	1.33	2.48	3.74	4.77	1.09	1.96	6.36	4.99	5.40	3.49
Jul 11 03	0.97	0.90	0.90	0.96	1.04	1.01	1.38	2.59	3.88	4.86	1.20	2.03	6.42	5.00	5.52	3.55
Jul 18 03	1.03	0.85	0.91	0.96	1.05	1.01	1.49	2.80	4.08	5.02	1.27	2.04	6.57	5.10	5.67	3.58
Jul 25 03	1.02	0.89	0.93	0.98	1.05	1.02	1.58	3.03	4.32	5.19	1.44	2.18	6.75	5.20	5.94	3.67
Aug 1 03	1.03	0.94	0.97	1.02	1.07	1.02	1.75	3.27	4.59	5.42	1.61	2.36	6.97	5.42	6.14	3.68
Aug 8 03	--	0.92	0.96	1.05	1.08	1.03	1.81	3.26	4.57	5.43	1.64	2.37	--	--	6.34	3.80
Daily																
Jul 22 03	1.00	0.89	0.93	0.97	1.05	1.00	1.60	3.05	4.33	5.18	1.48	2.20	6.73	--	--	--
Jul 23 03	1.05	0.90	0.93	0.97	1.05	1.01	1.56	3.00	4.28	5.16	1.39	2.13	6.71	--	--	--
Jul 24 03	1.04	0.91	0.93	0.98	1.05	1.02	1.58	3.04	4.36	5.22	1.43	2.18	6.75	--	--	--
Jul 25 03	1.03	0.92	0.93	0.98	1.05	1.05	1.58	3.07	4.39	5.26	1.39	2.16	6.79	--	--	--
Jul 28 03	1.05	0.97	0.97	1.01	1.05	1.02	1.65	3.17	4.48	5.34	1.51	2.28	6.89	--	--	--
Jul 29 03	1.04	0.99	0.99	1.01	1.06	1.01	1.72	3.28	4.59	5.42	1.63	2.40	6.97	--	--	--
Jul 30 03	1.03	0.94	0.98	1.01	1.07	1.02	1.67	3.23	4.54	5.38	1.56	2.30	6.89	--	--	--
Jul 31 03	1.04	0.91	0.96	1.02	1.07	1.01	1.82	3.33	4.68	5.49	1.68	2.42	7.07	--	--	--
Aug 1 03	1.00	0.91	0.95	1.04	1.10	1.03	1.87	3.36	4.68	5.47	1.68	2.41	7.01	--	--	--
Aug 4 03	1.00	0.91	0.97	1.05	1.08	1.05	1.75	3.23	4.59	5.43	1.56	2.32	6.97	--	--	--
Aug 5 03	0.86	0.93	0.96	1.05	1.08	1.03	1.91	3.37	4.70	5.53	1.70	2.44	7.09	--	--	--
Aug 6 03	0.88	0.92	0.95	1.04	1.08	1.02	1.80	3.24	4.53	5.39	1.58	2.35	6.96	--	--	--
Aug 7 03	--	0.91	0.95	1.04	1.08	--	1.77	3.19	4.47	5.38	1.49	2.29	--	--	--	--

NOTE: Weekly data for columns 1 through 13 are week-ending averages. Columns 2 through 4 are on a coupon equivalent basis. Data in column 6 are interpolated from data on certain commercial paper trades settled by the Depository Trust Company. Column 14 is the Bond Buyer revenue index, which is a 1-day quote for Thursday. Column 15 is the average contract rate on new commitments for fixed-rate mortgages (FRMs) with 80 percent loan-to-value ratios at major institutional lenders. Column 16 is the average initial contract rate on new commitments for 1-year, adjustable-rate mortgages (ARMs) at major institutional lenders offering both FRMs and ARMs with the same number of discount points.

Money Aggregates

Seasonally adjusted

Period	M1	M2	nontransactions components: In M2	nontransactions components: In M3 only	M3
	1	2	3	4	5
Annual growth rates(%):					
Annually (Q4 to Q4)					
2000	-1.7	6.1	8.5	17.3	9.2
2001	6.8	10.2	11.2	18.5	12.7
2002	3.2	6.8	7.7	5.4	6.3
Quarterly(average)					
2002-Q3	3.0	8.8	10.4	3.4	7.1
Q4	4.9	7.0	7.6	9.2	7.7
2003-Q1	7.5	6.5	6.3	3.6	5.6
Q2	9.2	8.5	8.3	0.8	6.1
Monthly					
2002-July	7.0	10.3	11.2	-1.0	6.7
Aug.	-11.3	8.1	13.3	13.0	9.6
Sep.	6.9	5.4	5.1	6.9	5.9
Oct.	11.5	8.0	7.1	-12.4	1.5
Nov.	-0.4	8.3	10.7	38.0	17.6
Dec.	8.1	3.2	1.8	17.6	7.8
2003-Jan.	2.6	6.1	7.1	-13.1	0.0
Feb.	20.3	11.3	9.0	-3.2	6.7
Mar.	3.4	2.9	2.8	6.0	3.9
Apr.	0.4	4.7	5.9	-3.6	2.1
May	20.3	17.6	16.9	0.8	12.3
June	13.3	9.3	8.2	7.4	8.7
July e	-1.0	9.2	11.9	48.1*	21.2*
Levels ($billions):					
Monthly					
2003-Feb.	1233.5	5875.9	4642.4	2690.2	8566.1
Mar.	1237.0	5890.1	4653.1	2703.6	8593.7
Apr.	1237.4	5913.4	4675.9	2695.5	8608.9
May	1258.3	6000.1	4741.7	2697.3	8697.4
June	1272.2	6046.4	4774.2	2713.9	8760.3
Weekly					
2003-June 2	1261.4	6021.3	4760.0	2695.3	8716.6
9	1260.9	6023.4	4762.4	2692.4	8715.7
16	1277.0	6047.5	4770.5	2693.8	8741.3
23	1272.6	6052.7	4780.1	2715.1	8767.7
30	1283.9	6074.2	4790.4	2760.7	8834.9
July 7	1266.8	6092.3	4825.4	2828.8†	8921.0†
14	1266.1	6084.5	4818.4	2833.6†	8918.1†
21p	1275.9	6080.8	4804.9	2809.0†	8889.8†
28p	1279.0	6088.5	4809.4	2823.0†	8911.5†

p preliminary
e estimated

* FIN 46-adjusted growth rates for non-M2 M3 and M3 are 14.5 percent and 10.8 percent, respectively. FIN 46 has had no material impact on M2 as yet.
† Beginning July 7, includes $76 billion due to FIN 46 effects.

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Class II FOMC

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

August 7, 2003

	Treasury Bills			Treasury Coupons						Federal Agency	Net change total	Net RPs[5]		
	Net Purchases[2]	Redemptions (-)	Net Change	Net Purchases[3] < 1	1-5	5-10	Over 10	Redemptions (-)	Net Change	Redemptions (-)	outright holdings[4]	Short-Term[6]	Long-Term[7]	Net Change
2000	8,676	24,522	-15,846	8,809	14,482	5,871	5,833	3,779	31,215	51	15,318	-2,163	7,133	4,970
2001	15,503	10,095	5,408	15,663	22,814	6,003	8,531	16,802	36,208	120	41,496	3,492	636	4,128
2002	21,421	---	21,421	12,720	12,748	5,074	2,280	---	32,822	---	54,242	-5,366	517	-4,850
2002 QII	8,227	---	8,227	5,535	2,580	2,471	210	---	10,796	---	19,023	-2,644	-4,563	-7,207
QIII	6,117	---	6,117	2,835	3,676	1,318	143	---	7,972	---	14,089	-3,067	-5,225	-8,291
QIV	250	---	250	---	339	314	---	---	653	---	903	4,892	-304	4,588
2003 QI	6,024	---	6,024	1,796	2,837	1,291	50	---	5,974	---	11,998	1,957	3,770	5,727
QII	6,259	---	6,259	2,209	1,790	234	---	---	4,232	---	10,491	-2,578	1,056	-1,522
2002 Dec	---	---	---	---	339	314	---	---	653	---	653	-1,097	10,706	9,610
2003 Jan	---	---	---	---	---	---	---	---	---	---	---	1,342	-3,581	-2,239
Feb	4,161	---	4,161	478	2,127	769	---	---	3,374	---	7,534	1,736	-2,262	-526
Mar	1,863	---	1,863	1,318	710	522	50	---	2,600	---	4,463	-2,254	520	-1,734
Apr	3,543	---	3,543	1,422	733	---	---	---	2,155	---	5,699	-265	816	551
May	1,684	---	1,684	786	1,057	234	---	---	2,077	---	3,761	-515	346	-170
Jun	1,032	---	1,032	---	---	---	---	---	---	---	1,032	-3,302	1,354	-1,948
Jul	808	---	808	---	---	---	---	---	---	---	808	2,486	-1,548	938
2003 May 14	348	---	348	---	---	---	---	---	---	---	348	4,791	1,000	5,791
May 21	692	---	692	786	1,057	234	---	---	2,077	---	2,768	-2,810	2,000	-810
May 28	115	---	115	---	---	---	---	---	---	---	115	7,067	-1,001	6,066
Jun 4	539	---	539	---	---	---	---	---	---	---	539	-5,433	1,000	-4,433
Jun 11	207	---	207	---	---	---	---	---	---	---	207	-3,357	---	-3,357
Jun 18	326	---	326	---	---	---	---	---	---	---	326	-754	---	-754
Jun 25	79	---	79	---	---	---	---	---	---	---	79	1,892	---	1,892
Jul 2	366	---	366	---	---	---	---	---	---	---	366	1,979	---	1,979
Jul 9	104	---	104	---	---	---	---	---	---	---	104	-430	---	-430
Jul 16	245	---	245	---	---	---	---	---	---	---	245	-1,330	-1,000	-2,330
Jul 23	142	---	142	---	---	---	---	---	---	---	142	1,747	---	1,747
Jul 30	34	---	34	---	---	---	---	---	---	---	34	-632	-3,000	-3,632
Aug 6	166	---	166	---	---	---	---	---	---	---	166	4,612	-2,000	2,612
2003 Aug 7	---	---	---	---	---	---	---	---	---	---	---	864	---	864
Intermeeting Period														
Jun 25-Aug 7	1,061	---	1,061	---	---	---	---	---	---	---	1,061	-5,280	-6,000	-11,280
Memo: LEVEL (bil. $)														
Aug 7			239.9	110.7	177.7	44.8	80.0		413.2	0.0	653.1	-12.9	13.0	0.1

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

MRA:HRM

BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM

DIVISION OF MONETARY AFFAIRS

Date: August 8, 2003

To: Bluebook Recipients

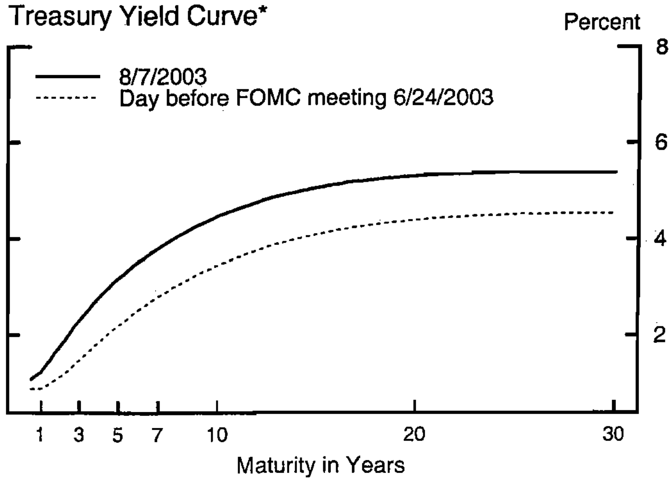
From: Brian Sack

Subject: Corrected Chart 1 from Bluebook

Attached please find a corrected version of Chart 1 from the Bluebook. The updated chart corrects the five-year inflation compensation measure shown in the middle-right panel.

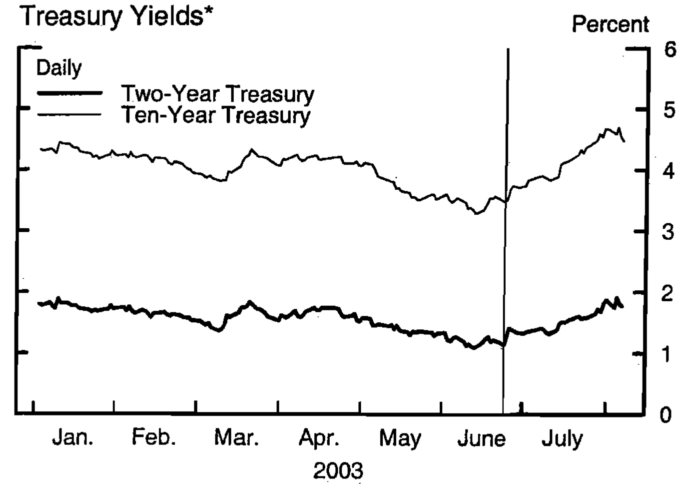
Chart 1
Interest Rate Developments

Treasury Yield Curve*



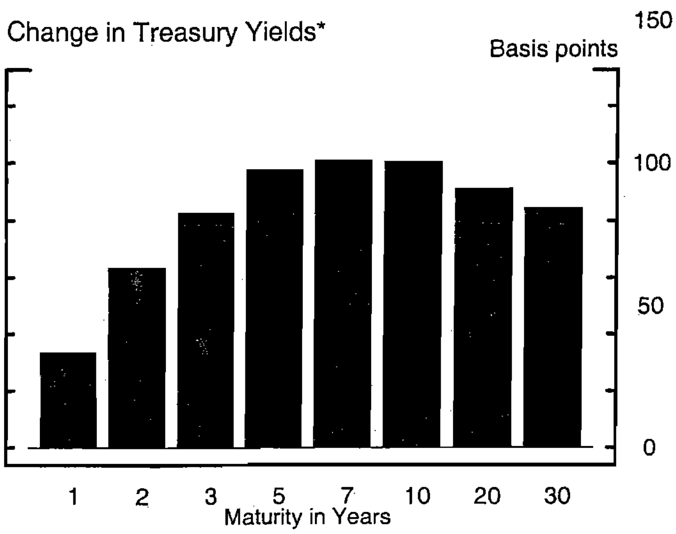
*Smoothed yield curve estimated from off-the-run Treasury coupon securities.

Treasury Yields*



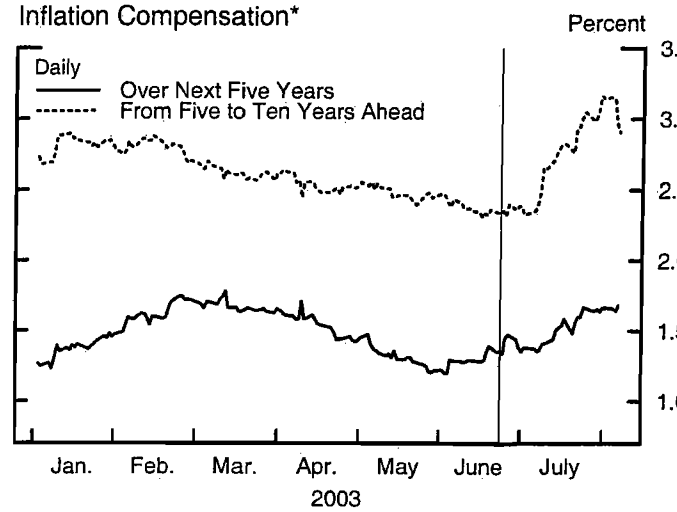
*Par yields from the off-the-run Treasury yield curve.

Change in Treasury Yields*



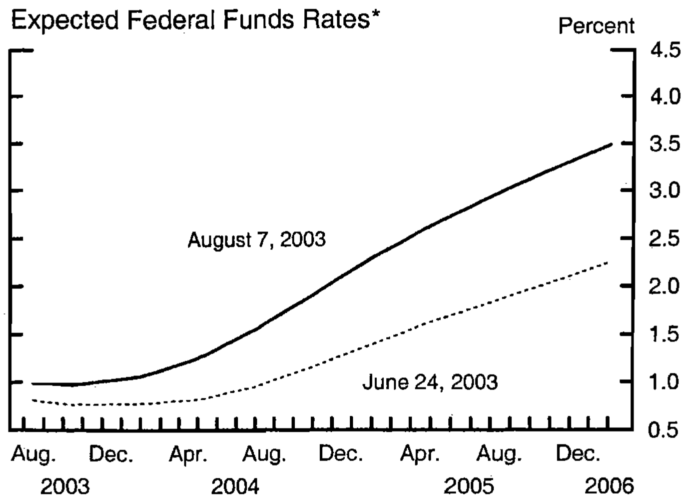
*Change since day before June FOMC meeting.

Inflation Compensation*



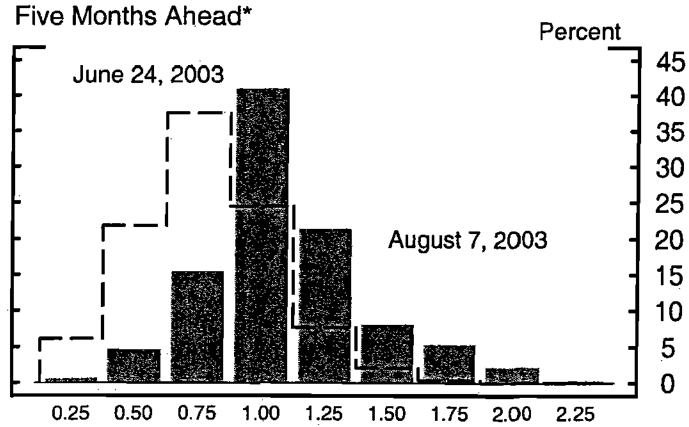
*Based on a comparison of an estimated TIIS yield curve to the nominal off-the-run Treasury yield curve.

Expected Federal Funds Rates*



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

Implied Distribution of Federal Funds Rate Five Months Ahead*



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

Note: Vertical lines indicate June 24, 2003.