Prefatory Note

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

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

Content last modified 03/31/2011.

AUGUST 4, 2005

MONETARY POLICY ALTERNATIVES

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

MONETARY POLICY ALTERNATIVES

Recent Developments

(1) The Committee's decision at its June meeting to raise the target federal funds rate 25 basis points to 3¼ percent, to retain an assessment that the risks to price stability and to sustainable growth were balanced, and to reiterate the "measured pace" language was largely anticipated by investors, and the market reaction was muted. Over subsequent weeks, a string of better-than-expected data releases on spending and output along with upbeat corporate earnings reports painted a consistent picture of solid economic expansion. News on inflation was read as more mixed: Revisions to the national income and product accounts indicated that PCE inflation last year was noticeably higher than previously estimated, but readings for recent months came in below market expectations. Against this background, and with the monetary policy report and public statements of policymakers seeming to point to continued measured firming, investors marked up the expected path for policy.[1] Options on federal funds futures suggest that investors have become virtually certain of a 25-basis-point tightening at this meeting, which is consistent with the Desk's latest survey of primary dealers.[2] Respondents to that survey anticipate no significant changes to the wording of the FOMC statement this round and expect additional

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[1] The minutes of the June FOMC meeting were released shortly after the conclusion of the second round of the Chairman's monetary policy testimony and prompted little market reaction.

[2] Market anticipation of a firming move has pushed up the federal funds rate in advance of the FOMC meeting, with federal funds trading about one-third of the way to the expected new target rate today, the first day of the new maintenance period. Over the intermeeting period through August 3, the effective federal funds rate averaged 3.27 percent. The Desk purchased no Treasury bills or coupon securities in the market, and it redeemed $1.3 billion of coupon securities to remain within the per-issue limits on security holdings. The volume of outstanding long-term RPs rose $2 billion, to $19 billion.

25-basis-point policy moves at the September and November meetings. Money market futures quotes indicate that the expected funds rate at year-end was boosted about 35 basis points over the intermeeting period to a bit above 4 percent, and the rate for year-end 2006 was lifted around 45 basis points to about 4¼ percent (Chart 1).

(2) Yields on nominal Treasury notes climbed about 35 to 40 basis points over the intermeeting period. With much of the increase concentrated in forward rates at the front end of the curve, the spread between two- and ten-year Treasury yields narrowed further to around 30 basis points. The London bombings did not appear to prompt much in the way of safe-haven flows to Treasury securities or greater market uncertainty. Similarly, the announcement of a revaluation of the Chinese renminbi reportedly had no lasting effect in the Treasury market.[3] Over the intermeeting period, yields on inflation-protected Treasury securities rose roughly in line with those on their nominal counterparts, implying little net change in inflation compensation. Inflation expectations as gauged by the Michigan survey also were little changed, edging down for the short-term measure but rising slightly for the longer-term measure. The spot price of West Texas intermediate crude oil rose about $4.00 per barrel, ending the period close to a record high in nominal terms (Chart 2). Prices of far-dated oil futures moved up more than $3.00 on balance.

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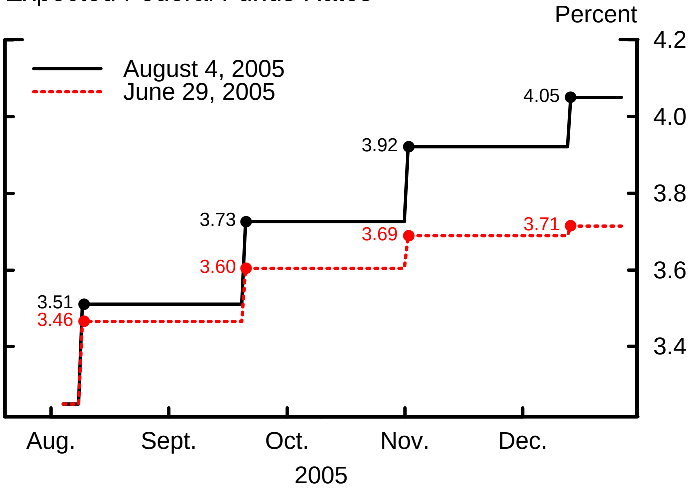
[3] On July 21, the People's Bank of China (PBOC) announced that it was dropping the renminbi's peg to the dollar in favor of a managed float with reference to an unspecified currency basket, at an initial setting that implied an immediate 2 percent appreciation versus the dollar. Concern that the new currency regime would lead to fewer purchases of dollar assets by the Chinese authorities, or that it might put upward pressure on U.S. prices, prompted a rise of 6 to 12 basis points in Treasury coupon yields that day. However, most of this effect appeared to be reversed over the next few days, as subsequent exchange rate movements and a second statement by the PBOC led investors to conclude that any further near-term revaluation of the renminbi would be limited. Judging from nondeliverable forward contracts, the value of the renminbi expected in twelve months increased only modestly on balance over the intermeeting period.

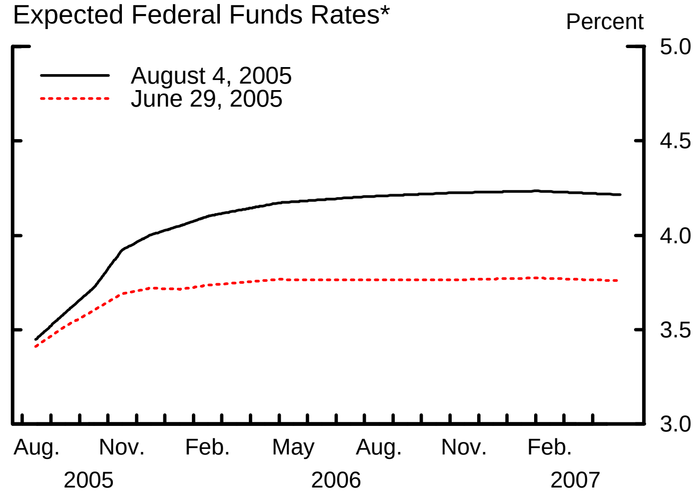
Chart 1
Interest Rate Developments

Expected Federal Funds Rates



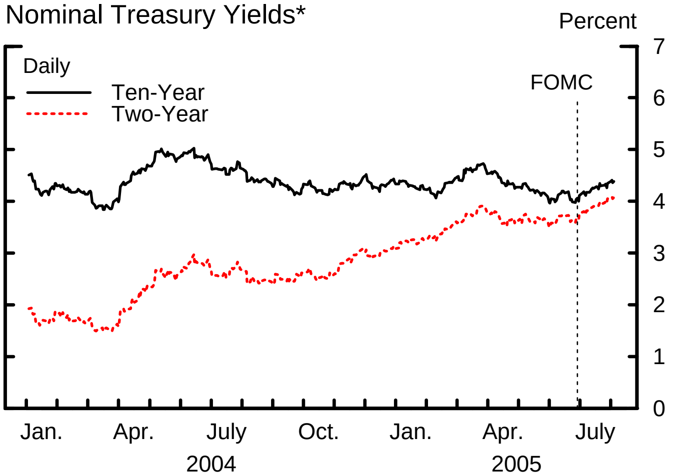
Note. Estimates assume a 1.0 basis point per month term premium and zero probability of intermeeting moves.

Expected Federal Funds Rates*



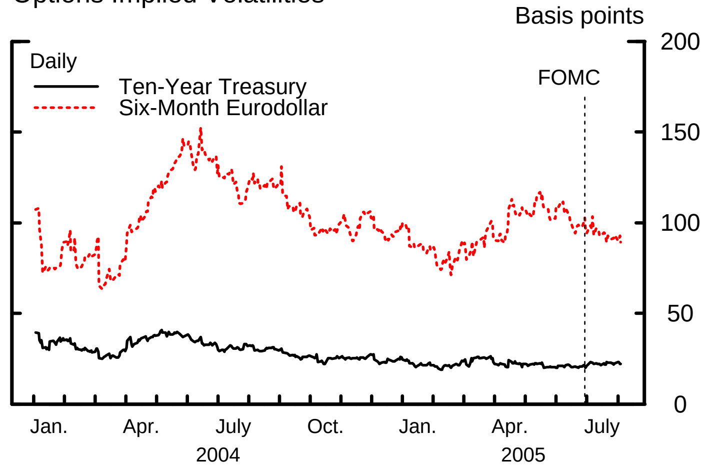
*Estimates from federal funds and eurodollar futures, with an allowance for term premia and other adjustments.

Nominal Treasury Yields*

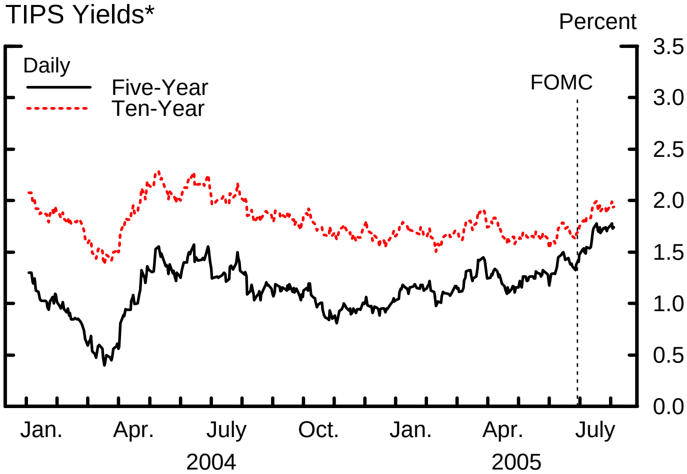


*Par yields from an estimated off-the-run Treasury yield curve.

Options Implied Volatilities

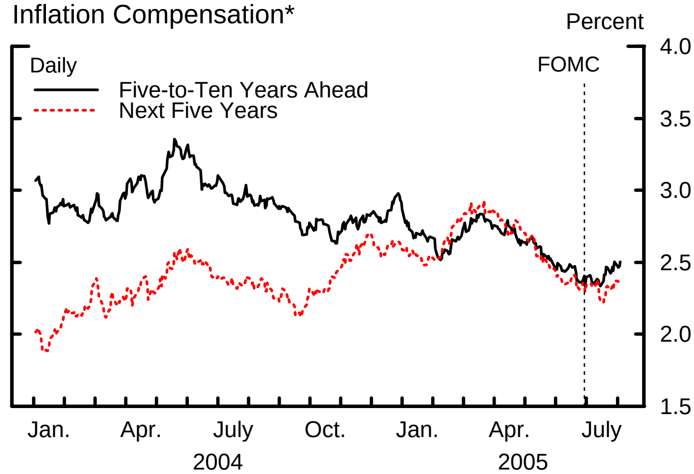


TIPS Yields*



* Estimates are from a smoothed inflation-indexed yield curve.

Inflation Compensation*

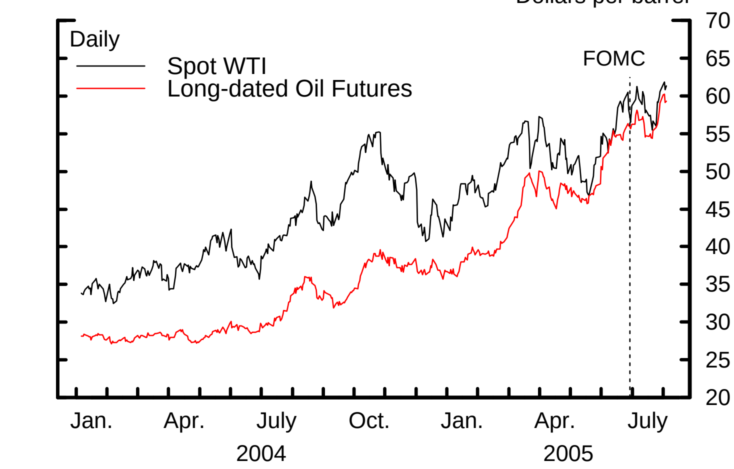


*Based on a comparison of an estimated TIPS yield curve to an estimated nominal off-the-run Treasury yield curve.

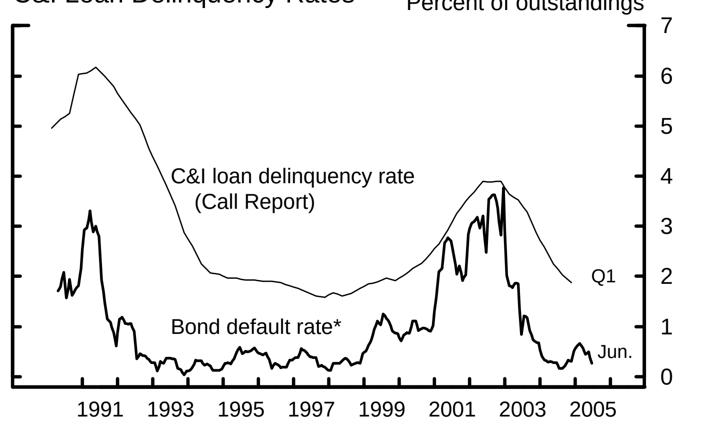
Note: Vertical lines indicate June 29, 2005. Last daily observations are for August 4, 2005.

Chart 2
Asset Market Developments

Oil Price

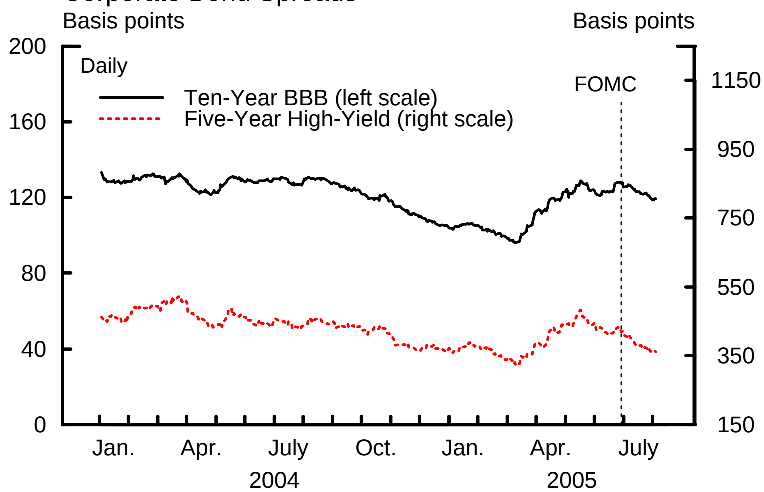


Bond Default and C&I Loan Delinquency Rates



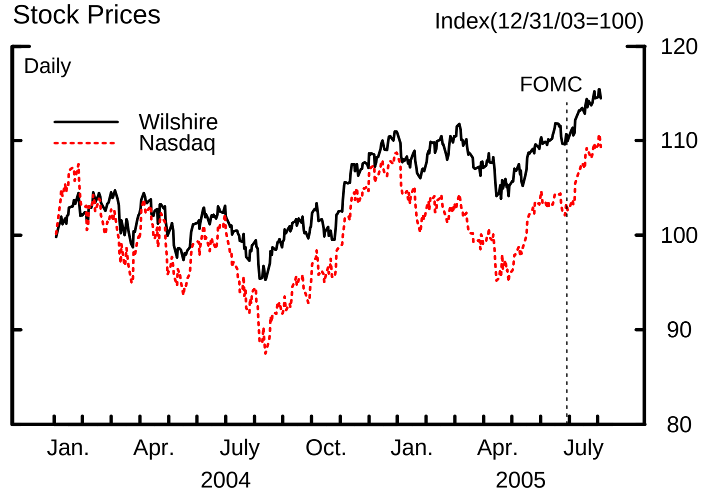
*Six-month moving average, from Moody's Investors Service.

Corporate Bond Spreads*

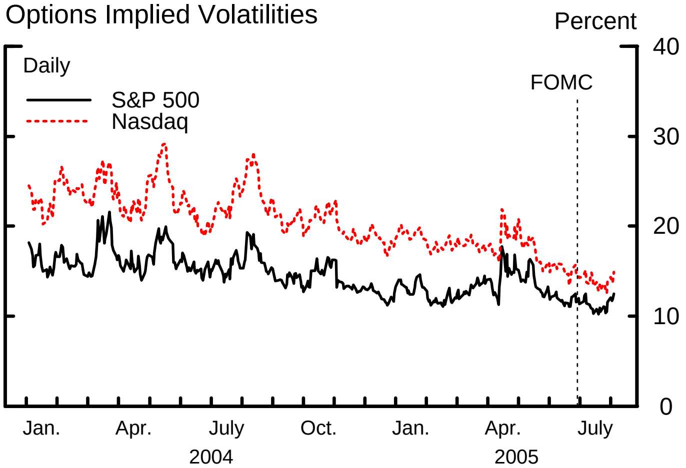


*Measured relative to an estimated off-the-run Treasury yield curve.

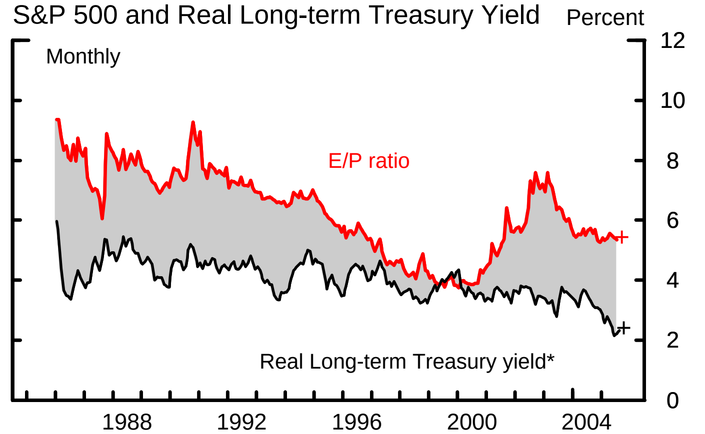
Stock Prices



Options Implied Volatilities



12-Month Forward Trend Earnings-Price Ratio for S&P 500 and Real Long-term Treasury Yield



* Perpetuity Treasury yield minus Philadelphia Fed 10-year expected inflation.
Note. + Denotes the latest observation using daily interest rates and stock prices and latest earnings data from I/B/E/S.

Note: Vertical lines indicate June 29, 2005. Last daily observations are for August 4, 2005.

(3) Reflecting positive earnings announcements and strong economic data, spreads on investment-grade corporate bonds edged lower over the intermeeting period. Those on speculative-grade securities fell about 60 basis points, nearly reversing their runup of this spring. Broad equity indexes rose 3 to 6 percent over the period, paced by large gains in technology shares, and the implied volatility of equity prices remained low. Nonetheless, a rough measure of the equity premium—the gap between the twelve-month forward trend earnings-price ratio and the real long-term Treasury yield—held steady at a fairly high level.

(4) Although dollar interest rates rose noticeably relative to those of other major currencies, the trade-weighted foreign exchange value of the dollar against other major currencies declined about 1 percent on balance over the intermeeting period (Chart 3).[4] The dollar initially rose after the June FOMC meeting, but it gave up these gains late in the intermeeting period. On net, the dollar depreciated about 2 percent against the euro and 1 percent against the Canadian dollar, while registering modest gains against sterling and the yen. On August 4, the Bank of England announced a cut in its official target rate of 25 basis points to 4½ percent, citing downside risks to the economy in the near term. This decision had been widely anticipated, and its announcement prompted little market reaction. Share prices in foreign industrial countries increased 2 to 6 percent over the intermeeting period.

(5) Against an index of the currencies of our other important trading partners, the dollar fell about 1½ percent on balance over the period, pulled down by decreases in its value versus the Mexican peso and Chinese renminbi. The dollar also declined against the currencies of several other Asian emerging economies in the wake of China's revaluation. Immediately after China's announcement, the Malaysian

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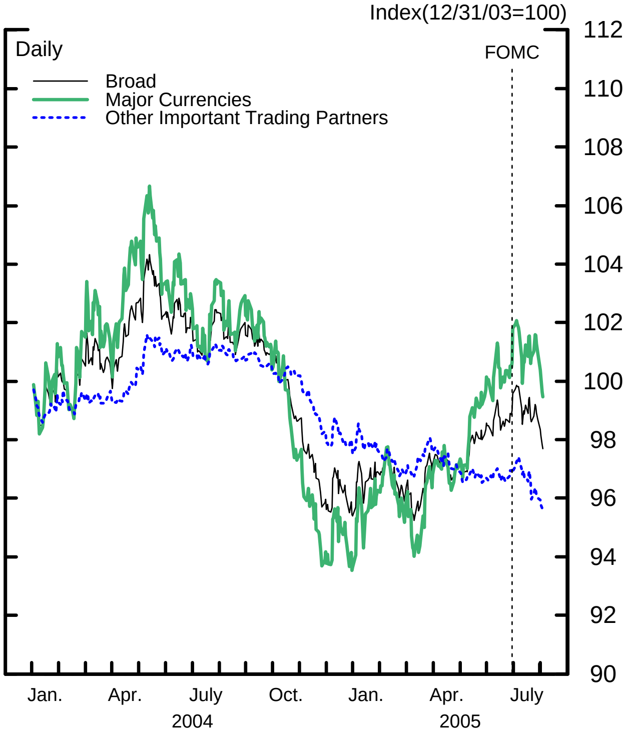
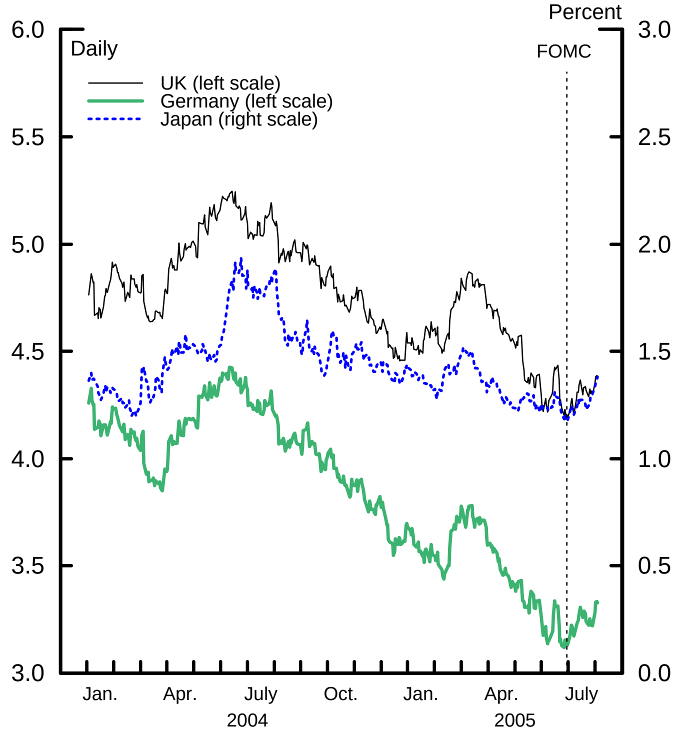
Chart 3
International Financial Indicators

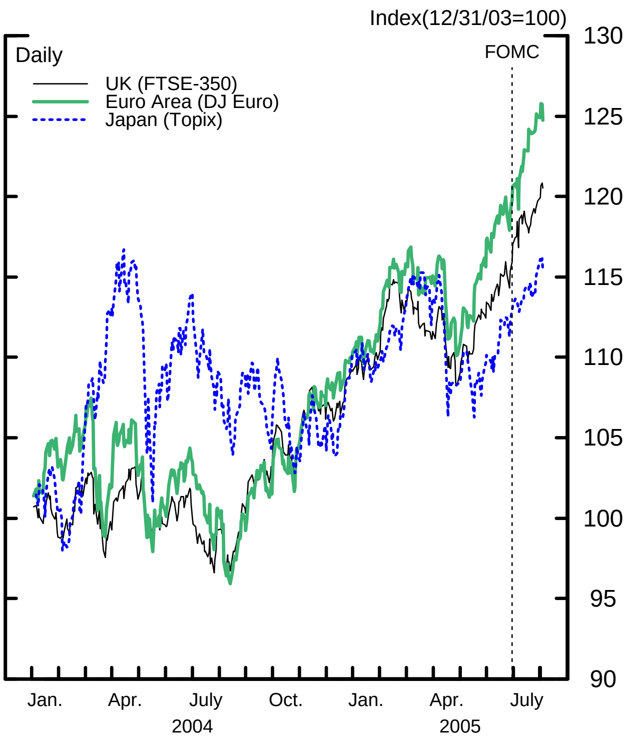
Nominal Trade-Weighted Dollar Indexes



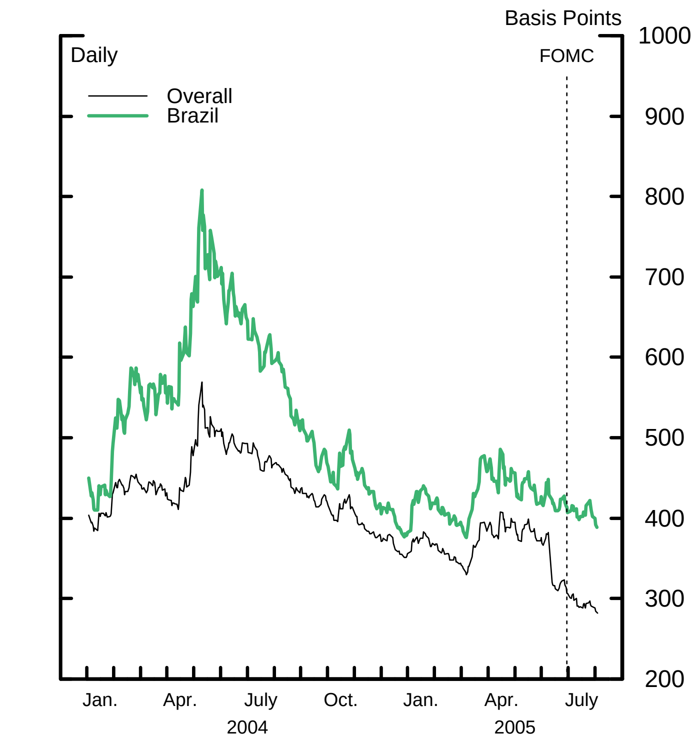
Ten-Year Government Bond Yields



Stock Price Indexes



EMBI+ Index



Note: Vertical lines indicate June 29, 2005. Last daily observations are for August 4, 2005.

authorities announced that they were adopting a managed float for the ringgit exchange rate.

(6) Domestic nonfinancial debt appears to have decelerated in the second quarter, with all major sectors contributing to the slowing (Chart 4). In the business sector, internal funds evidently are abundant and capital expenditures are apparently expanding at only a moderate pace, holding down borrowing by nonfinancial firms in recent months. Net bond issuance remained tepid in June and July, and commercial paper outstanding dropped somewhat, on net, over the same period. In contrast, business loans continued to expand briskly on balance. Data from the Senior Loan Officer Opinion Survey indicate a further easing of standards and terms on C&I loans over the past three months and also a further strengthening in demand for such loans, supported by increased financing needs for investment and mergers and acquisitions. Household borrowing seems to have slowed a bit in the second quarter but apparently remained quite brisk, propelled by continued expansion of mortgage debt at close to a 10 percent rate. Federal debt growth dropped off markedly last quarter, consistent with higher-than-expected tax receipts and a narrowing of the deficit in recent months.

(7) M2 growth picked up to a 6 percent rate in June, but fell back in July to around the pace registered over the first five months of the year. The strength in M2 in June owed primarily to an increase in liquid deposits; a rise in mortgage prepayments and a bulge in nonwithheld individual income tax payments likely played a role in that pickup. Over the first two quarters of 2005, the growth of M2, at a 2¾ percent annual rate, was somewhat above the pace predicted by standard historical relationships with income and short-term interest rates, perhaps owing to the flattening of the yield curve.

Chart 4
Debt and Money

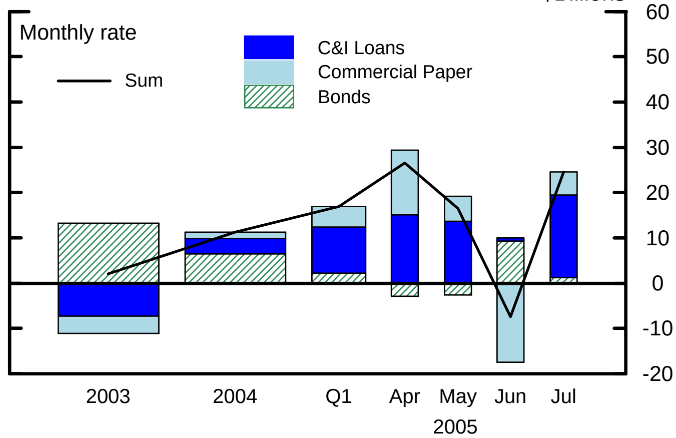
Growth of Nonfinancial Debt

Percent, s.a.a.r.

		Total	Nonfederal
2003		8.1	7.5
2004	Q1	9.3	8.7
	Q2	7.7	7.0
	Q3	8.2	8.9
	Q4	8.2	8.4
2005	Q1	10.0	9.1
	Q2 p	6.3	7.3

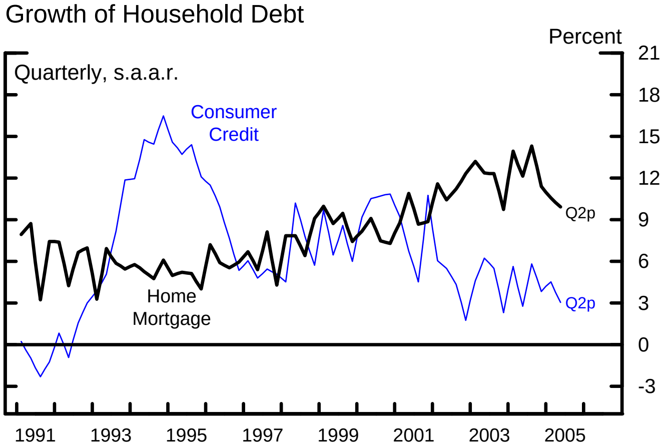
p Projected.

Changes in Selected Components of Nonfinancial Business Debt



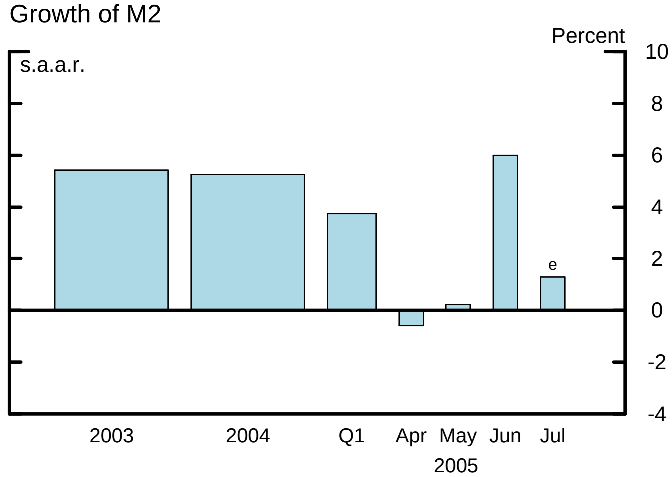
Note. Commercial paper and C&I loans are seasonally adjusted, bonds are not.

Growth of Household Debt



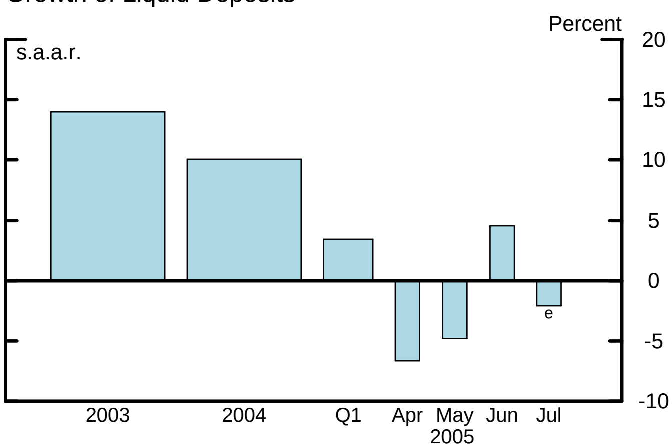
p Projected.

Growth of M2



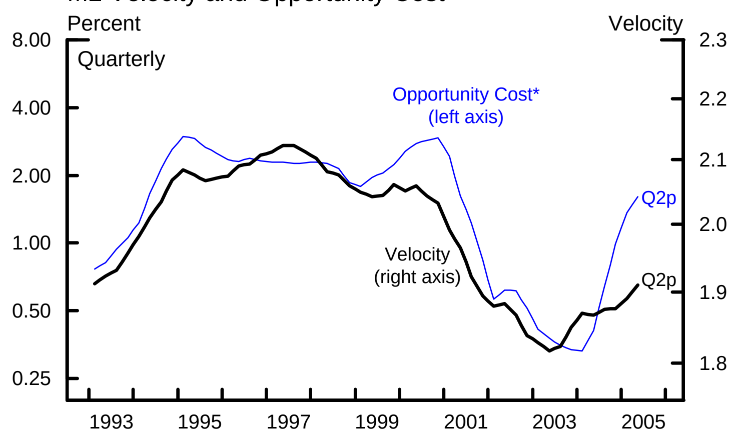
e Estimated.

Growth of Liquid Deposits



e Estimated.

M2 Velocity and Opportunity Cost



p Projected.

*Two-quarter moving average.

Economic Outlook

(8) Incoming data on spending and production have led the staff to mark up its assessment of near-term strength in the economy, and the annual revisions to the national income and product accounts have induced the staff to trim its estimates of the level and growth rate of potential output. Inflation pressures are also greater in this projection, partly because of the upward revision to the outlook for energy prices. Consequently, the staff has assumed more policy tightening than in the June Greenbook, with the target federal funds rate reaching 4 percent in the fourth quarter of this year and 4¼ percent by the middle of next year, 50 basis points higher than in June—a path roughly the same as that priced into asset markets. Bond yields are expected to remain close to their current higher levels, while equity prices are assumed to increase further at a pace sufficient to generate risk-adjusted returns in line with those on fixed-income instruments. Relative to the last round, the foreign exchange value of the dollar starts at a level that is a bit lower than anticipated in June and declines over the forecast period at a slightly faster pace. The price of West Texas intermediate crude oil is projected to stay near its recent higher level, in line with futures market quotes. Under these assumptions, real GDP is forecast to expand at a pace slightly above 4 percent over the second half of this year, essentially closing the output gap by the fourth quarter. Next year, real output is projected to grow at the same rate as its potential, about 3 percent. The flattening out of oil prices and a deceleration in non-oil import prices cause total PCE inflation to drop from 2½ percent this year to 2 percent in 2006, while core PCE inflation holds about steady near 2 percent over the forecast period.

Policy Alternatives

(9) Table 1 presents three policy alternatives for consideration by the Committee. The federal funds rate would be boosted 25 basis points at this meeting under Alternatives A and B, and 50 basis points under Alternative C. Apart from updating the description of the current economic situation, the proposed announcement associated with Alternative B is little changed from that issued after the June meeting. In contrast, the announcement accompanying Alternative A would hint at a near-term slowing in the pace of policy tightening, in part by noting that policy accommodation has been substantially reduced. The proposed announcement for Alternative C emphasizes the strength of aggregate spending, suggests that pressures on business costs and inflation could be increasing, and eliminates all forward-looking language. As usual, the Committee could consider combining the policy action and draft language from more than one alternative or view some of the language options as possibilities for the future.

(10) If the Committee agrees with the staff's assessment that a small amount of slack remains in the economy and that the current configuration of financial asset prices is likely to prove consistent with the expansion of aggregate spending coming into line with potential output growth before long, it may be attracted to the 25-basis-point firming and statement language of **Alternative B.** Investors currently anticipate a quarter-point move at this meeting followed by several additional firmings—expectations that should be largely preserved by the combination of policy action and language proposed under this alternative. And, while recent indicators suggest that the growth of aggregate demand has been surprisingly buoyant of late, the Committee may interpret the relatively low inflation readings for recent months as indicating that prices are not currently in the process of accelerating. Although the stance of monetary policy evidently remains accommodative, the gap between the actual real funds rate and current estimates of its equilibrium value has narrowed considerably

Table 1: Alternative Language for the August FOMC Announcement

	June FOMC	Alternative A	Alternative B	Alternative C
Policy Decision	1. The Federal Open Market Committee decided today to raise its target for the federal funds rate by 25 basis points to 3-1/4 percent.	The Federal Open Market Committee decided today to raise its target for the federal funds rate by 25 basis points to **3-1/2** percent.	The Federal Open Market Committee decided today to raise its target for the federal funds rate by 25 basis points to **3-1/2** percent.	The Federal Open Market Committee decided today to raise its target for the federal funds rate by **50** basis points to **3-3/4** percent.
Rationale	2. The Committee believes that, even after this action, the stance of monetary policy remains accommodative and, coupled with robust underlying growth in productivity, is providing ongoing support to economic activity.	The Committee believes that ~~, even after this action, the stance~~ **the degree** of monetary policy ~~remains accommodative and, coupled with robust underlying growth in productivity, is providing ongoing support to economic activity.~~ **accommodation has been substantially reduced.**	[no change]	The Committee believes that, even after this action, the stance of monetary policy remains accommodative and~~, coupled with robust underlying growth in productivity~~, is providing ongoing support to economic activity.
	3. Although energy prices have risen further, the expansion remains firm and labor market conditions continue to improve gradually.	~~Although energy prices have risen further, t~~**T**he expansion remains firm **despite high energy prices,** and labor market conditions continue to improve gradually.	~~Although energy prices have risen further, the expansion remains firm~~ **Aggregate spending, despite high energy prices, appears to have strengthened since late winter,** and labor market conditions continue to improve gradually.	~~Although energy prices have risen further, the expansion remains firm~~ **Aggregate spending appears to be expanding briskly despite high energy prices**, and labor market conditions continue to improve gradually.
	4. Pressures on inflation have stayed elevated, but longer-term inflation expectations remain well contained.	~~Pressures on inflation have stayed elevated, but~~ **Core inflation has been relatively low in recent months, and** longer-term inflation expectations remain well contained.	~~Pressures on inflation have stayed elevated, but~~ **Core inflation has been relatively low in recent months and** longer-term inflation expectations remain well contained, **but pressures on inflation have stayed elevated.**	~~Pressures on inflation have stayed elevated, but~~ **Core inflation has been relatively low in recent months and** longer-term inflation expectations ~~remain~~ **seem** well contained, **but pressures on business costs and inflation appear to be increasing.**
Assessment of Risk	5. The Committee perceives that, with appropriate monetary policy action, the upside and downside risks to the attainment of both sustainable growth and price stability should be kept roughly equal.	[no change]	[no change]	[none]
	6. With underlying inflation expected to be contained, the Committee believes that policy accommodation can be removed at a pace that is likely to be measured. Nonetheless, the Committee will respond to changes in economic prospects as needed to fulfill its obligation to maintain price stability.	With underlying inflation expected to be contained, the Committee believes that **remaining** policy accommodation can be removed at a pace that is likely to be measured. Nonetheless, the Committee will respond to changes in economic prospects as needed to fulfill its obligation to maintain price stability.	[no change]	[none]

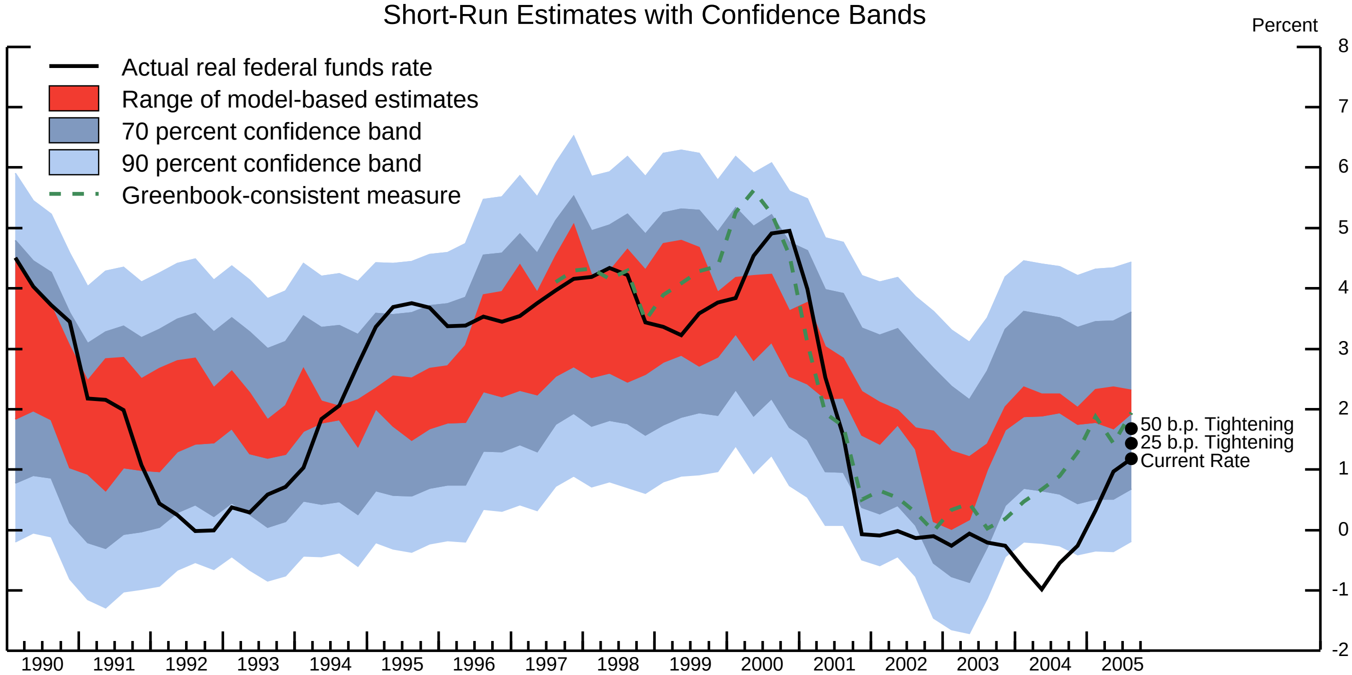
since mid-2004 (Chart 5). According to those estimates, continued policy firming at a pace of 25 basis points per meeting would bring the real funds rate within the range of staff estimates of its equilibrium value by November. But even if members believe that such a sequence of policy actions is likely to produce sufficient restraint on inflation, they might judge it premature to send any signal at this time that the course of policy tightening is nearing completion. Indeed, in light of the recent indications of strong economic activity, policymakers may have boosted their sense of the degree of policy tightening that will prove necessary and may now even see an appreciable probability that the federal funds rate will need to be raised for a time above its estimated short-run equilibrium value. Even with such an assessment, though, members may judge that continuing to tighten policy at a measured pace, albeit over a slightly longer period than previously anticipated, should provide adequate restraint on spending and inflation.

(11) As shown in Table 1, the statement for Alternative B updates the wording employed in June in light of incoming data on spending, output, and employment by noting that "Aggregate spending, despite high energy prices, appears to have strengthened since late winter, and labor market conditions continue to improve gradually."[5] The Committee might acknowledge incoming price data by noting that "Core inflation has been relatively low in recent months," and, with both survey and TIPS-based measures of inflation expectations little changed, it could reiterate that "longer-term inflation expectations remain well contained." However, it might wish to emphasize that "pressures on inflation have stayed elevated" by moving that thought to the end of the sentence. The statement could again indicate that "with appropriate monetary policy action, the upside and downside risks to the attainment of both sustainable growth and price stability should be kept roughly equal." That

[5] This statement will need to be reviewed in light of Friday's labor market report. A revised Table 1 will be distributed to the Committee should changes appear warranted.

Chart 5
Equilibrium Real Federal Funds Rate

Short-Run Estimates with Confidence Bands



Notes: The real federal funds rate is constructed as the difference between the quarterly average of the actual nominal funds rate and the log difference of the core PCE price index over the previous four quarters. For the current quarter, the nominal funds rate used is the target federal funds rate as of the Bluebook publication date.

Short-Run and Medium-Run Measures

	Current Estimate	*Previous Bluebook*
Short-Run Measures		
Greenbook-consistent measure	1.9	*1.5*
Single-equation model	1.9	*1.9*
Small structural model	2.2	*2.8*
Large model (FRB/US)	2.3	*2.1*
Confidence intervals for three model-based estimates		
70 percent confidence interval	0.7 - 3.6	
90 percent confidence interval	-0.2 - 4.4	
Medium-Run Measures		
TIPS-based measure	1.9	*1.7*
Single-equation model	2.1	*2.2*
Small structural model	2.4	*2.7*
Confidence intervals for two model-based estimates		
70 percent confidence interval	1.4 - 3.2	
90 percent confidence interval	0.7 - 3.7	
Memo		
Actual real federal funds rate	1.19	*1.26*

Notes: Confidence intervals and bands reflect uncertainties about model specification, coefficients, and the level of potential output. The final column indicates the values for the current quarter based on the estimation for the previous Bluebook, except that the TIPS-based measure and the actual real funds rate are the values published in the previous Bluebook.

Equilibrium Real Rate Chart: Explanatory Notes

The equilibrium real rate is the real federal funds rate that, if maintained, would be projected to return output to its potential level over time. The short-run equilibrium rate is defined as the rate that would close the output gap in twelve quarters given a model's projection of the economy, and the medium-run concept is the value of the real funds rate projected to keep output at potential in seven years under the assumption that monetary policy acts to bring actual and potential output into line in the short run and then keep them equal thereafter. The real federal funds rate employs the log difference of the core PCE price index over the previous four quarters as a proxy for expected inflation, with the staff projection used for the current quarter. Since TIPS indexation is based on the total CPI, the TIPS-consistent measure incorporates an adjustment for the expected difference between CPI inflation and core PCE inflation.

Measure	Description
Single-Equation Model	The measure of the equilibrium real rate in the single-equation model is based on an estimated aggregate-demand relationship between the current value of the output gap and its lagged values as well as the lagged values of the real federal funds rate. In light of this model's simple structure, the short-run measure of the equilibrium real rate depends only on the recent position of output relative to potential, and the medium-run measure is virtually constant.
Small Structural Model	The small-scale model of the economy consists of equations for five variables: the output gap, the equity premium, the federal budget surplus, the trend growth rate of output, and the real bond yield. Unlike the estimates from the single-equation model, values of the equilibrium real rate also depend directly on conditions associated with output growth, fiscal policy, and capital markets.
Large Model (FRB/US)	Estimates of the equilibrium real rate using FRB/US—the staff's large-scale econometric model of the U.S. economy—depend on a very broad array of economic factors, some of which take the form of projected values of the model's exogenous variables. These projections make use of several simple forecasting rules which are appropriate for the three-year horizon relevant for the short-run concept but are less sensible over longer horizons. Thus, we report only the short-run measure for the FRB/US model.
Greenbook-consistent	Measures of the equilibrium real rate cannot be directly obtained from the Greenbook forecast, because the Greenbook is not based on a formal model. Rather, we use the FRB/US model in conjunction with an extended version of the Greenbook forecast to derive a Greenbook-consistent measure. FRB/US is first add-factored so that its simulation matches the extended Greenbook forecast, and then a second simulation is run off this baseline to determine the value of the real federal funds rate that closes the output gap. The medium-run concept of the equilibrium real rate is not computed because it requires a relatively long extension of the Greenbook forecast.
TIPS-consistent	Yields on TIPS (Treasury Inflation-Protected Securities) incorporate investors' expectations of the future path of real interest rates. The seven-year instantaneous real forward rate derived from TIPS yields as of the Bluebook publication date reflects the short-term real interest rate expected to prevail in seven years. This forward rate is adjusted down for a term premium, assumed to be 70 basis points, and adjusted up for the difference between total CPI inflation and core PCE inflation, projected to be 40 basis points in the medium run.

assessment would also support retention of the phrase indicating that the removal of policy accommodation can likely proceed at a measured pace.

(12) Investors appear virtually certain that the FOMC will increase the target federal funds rate 25 basis points at this meeting, and they reportedly put high odds on an announcement that retains both the measured pace language and the assessment that the risks to sustainable growth and to price stability should remain balanced with appropriate policy action. Thus, the market reaction to an announcement along the lines of Alternative B should be relatively modest, although rates could back up a little in response to the changes in the wording suggesting that the FOMC was focusing on the strength in spending and inflation pressures. Barring significant downside surprises in economic data over coming weeks, investors would likely come to boost further the already substantial odds placed on additional policy moves later this year, particularly should public statements by policymakers point to a continuation of firming.

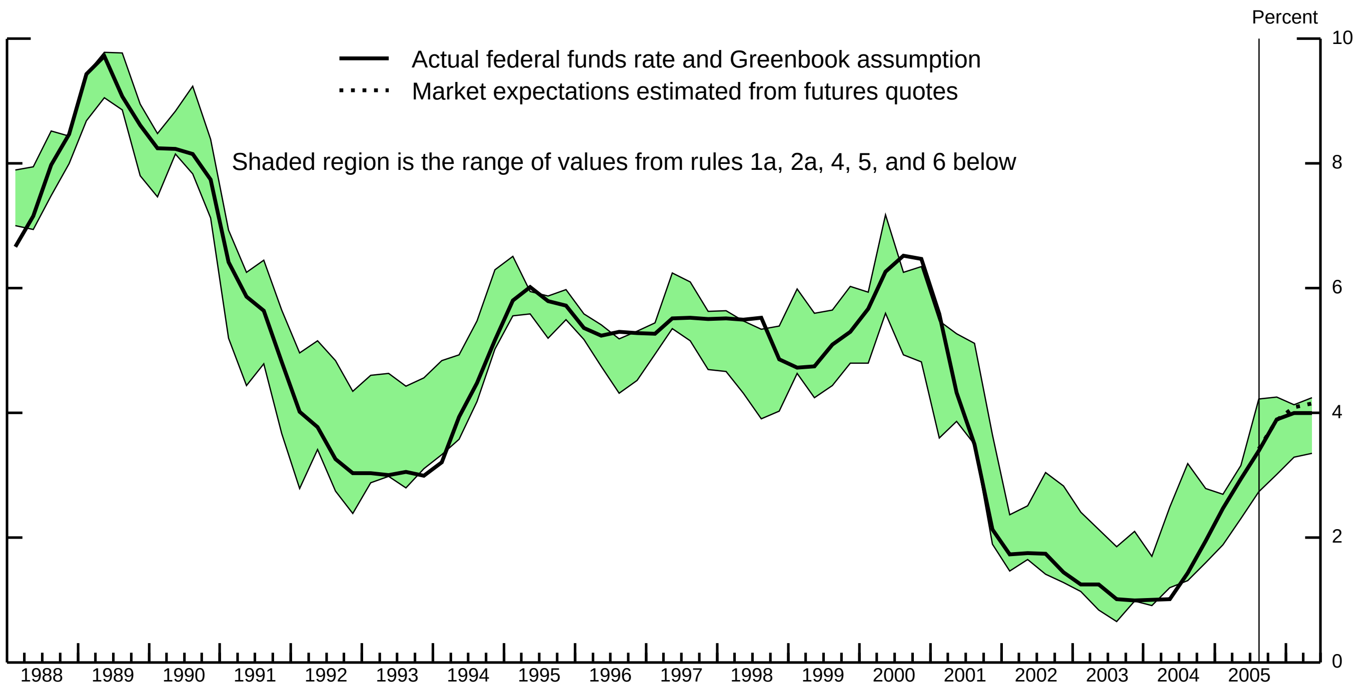
(13) Recognizing that the cumulative tightening put in place over the past year has substantially reduced the degree of monetary policy accommodation, the Committee may believe that the real federal funds rate is now nearing its equilibrium level. In view of such an assessment as well as the subdued readings on core inflation in recent months, the FOMC might opt for **Alternative A's** combination of a 25-basis-point hike in the funds rate at this meeting and a statement that hints that the Committee could soon slow the pace of policy firming. This alternative would seem particularly attractive if members thought that slack in labor markets was greater than in the staff assessment, implying less need to tighten policy than in the Greenbook. Even if the Committee believed that it would probably need to tighten policy somewhat further following a quarter-point step on Tuesday, a near-term pause might be viewed as prudent to allow more time to evaluate the effects of its cumulative policy action to date. A funds rate path incorporating a quarter-point tightening at

this meeting followed by a shallower trajectory of tightening would be consistent with the prescriptions from several policy rules (Chart 6).

(14) The draft statement associated with Alternative A could indicate that "The Committee believes that the degree of monetary policy accommodation has been substantially reduced," while again acknowledging that the expansion remains firm and that labor market conditions continue to improve gradually. Particularly if the Committee were concerned about a possible slackening in the pace of trend productivity growth, it might wish to eliminate the previous language pointing to robust underlying productivity growth as a factor supporting the expansion. With regard to prices, the statement could indicate that "Core inflation has been relatively low in recent months, and longer-term inflation expectations remain well contained," dropping the reference to inflation pressures. In the penultimate sentence, the FOMC could indicate that "remaining" policy accommodation can likely be removed at a measured pace. Alternatively, if the Committee judged that the real federal funds rate now was in the neighborhood of its equilibrium level, it might choose to drop the "measured pace" sentence entirely, thus suggesting that further firming could prove to be unnecessary.

(15) Market participants expect that the path of the intended federal funds rate will begin to flatten out around year-end, but market commentary and survey evidence indicate that investors do not anticipate that the FOMC will signal any such development next week. Accordingly, a statement employing the draft wording shown in Alternative A would likely produce a noticeable downward shift in interest rates implied by money market futures quotes, as investors priced in a slower pace of policy action and probably also revised down the likely extent of cumulative tightening. That change in policy outlook would likely prompt a rally in bond and equity markets and some depreciation in the foreign exchange value of the dollar. If

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

	2005			2006	
	Q2	Q3	Q4	Q1	Q2
Rules with Imposed Coefficients					
1. Baseline Taylor Rule: a) π*=1.5	3.16	4.23	4.26	4.14	4.25
b) π*=2	2.91	3.98	4.01	3.89	4.00
2. Aggressive Taylor Rule: a) π*=1.5	2.55	4.07	4.23	4.09	4.20
b) π*=2	2.30	3.82	3.98	3.84	3.95
3. First-difference Rule: a) π*=1.5	2.80	3.48	3.87	4.14	4.40
b) π*=2	2.55	3.23	3.37	3.39	3.40
Rules with Estimated Coefficients					
4. Outcome-based Rule	2.67	3.43	3.77	3.89	4.01
5. Greenbook Forecast-based Rule	2.65	3.37	3.60	3.71	3.76
6. FOMC Forecast-based Rule	2.31	2.74	3.01	3.29	3.35
7. TIPS-based Rule	2.90	3.20			
Memo					
Expected federal funds rate derived from futures		3.43	3.88	4.09	4.16
Actual federal funds rate and Greenbook assumption	2.94	3.40	3.90	4.00	4.00

Note: Rule prescriptions for 2005Q3 through 2006Q2 are calculated using current Greenbook projections for inflation and the output gap (or unemployment gap). For rules that contain the lagged funds rate, the rule's previous prescription for the funds rate is used to compute prescriptions for 2005Q4 through 2006Q2. It is assumed that there is no feedback from the rule prescriptions to the Greenbook projections through 2006Q2. The TIPS-based rule is computed using average TIPS and nominal Treasury yields to date.

Policy 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, π^* policymakers' long-run objective for inflation, 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	
		1988:1-2005:2	2001:1-2005:2
Rules with Imposed Coefficients			
1. Baseline Taylor Rule	$i_t = 2 + \pi_t + 0.5(y_t-y_t^*) + 0.5(\pi_t-\pi^*)$	.96[a]	1.05[a]
2. Aggressive Taylor Rule	$i_t = 2 + \pi_t + (y_t-y_t^*) + 0.5(\pi_t-\pi^*)$	.68[a]	.62[a]
3. First-difference Rule	$i_t = i_{t-1} + 0.5(\Delta y_{t+3\|t}-\Delta y_{t+3\|t}^*) + 0.5(\pi_{t+3\|t}-\pi^*)$	.96[a]	.42[a]
Rules with Estimated Coefficients			
4. Estimated Outcome-based Rule Rule includes both lagged interest rate and serial correlation in residual.	$i_t = .51i_{t-1} + 0.49\,[1.29 + 0.95(y_t-y_t^*) + 1.45\pi_t] + 0.52\varepsilon_{t-1}$	.24	.26
5. Estimated Greenbook Forecast-based Rule Rule includes both lagged interest rate and serial correlation in residual.	$i_t = .71i_{t-1} + 0.29\,[0.73 + 1.04(y_{t+3\|t}-y_{t+3\|t}^*) + 1.59\pi_{t+3\|t}] + 0.37\varepsilon_{t-1}$	.25	.27
6. Estimated FOMC Forecast-based Rule 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.	$i_t = 0.49i_{t-2} + 0.51\,[0.29 - 2.11(u_{t+3\|t}-u_{t+3\|t}^*) + 1.59\pi_{t+3\|t}]$	.46	.63
7. Estimated TIPS-based Rule $\pi_{comp5\|t}$ denotes the time-t difference between 5-yr nominal Treasury yields and TIPS. Sample begins in 1999 due to TIPS volatility in 1997-8.	$i_t = 0.97i_{t-1} + [-1.24 + 0.69\pi_{comp5\|t}]$	.40[b]	.42

[a] RMSE for rules with imposed coefficients is calculated setting π^*=1.5.

[b] RMSE for TIPS-based rule is calculated for 1999:1-2005:2.

the "measured pace" sentence were included, the extent of the rally might be limited by a recognition that some further policy tightening could still be in the cards.

(16) If the Committee has become significantly more concerned about inflation pressures of late, it may favor the 50-basis-point increase in the federal funds rate of **Alternative C**. Greater worries about inflation prospects could have been prompted by the brisk growth in aggregate demand apparently in train in the current quarter, which could be read as suggesting that asset prices are not exerting sufficient restraint on spending to keep actual output from overshooting its potential before long. Moreover, members may see the potential for an intensification of cost pressures stemming from a variety of sources. The further rise in far-dated oil futures prices over the intermeeting period, for example, suggests that business energy costs will ratchet up somewhat further in coming months. Also, members may be concerned about the potential for further acceleration in unit labor costs if their assessment of the NAIRU is noticeably higher than the staff's estimate of 5 percent or if they judge that structural productivity growth could be slowing more sharply than estimated by the staff. Indeed, the slower growth of productivity in recent quarters as well as the lower estimates of productivity implied by the annual revisions to the national income and product accounts might incline policymakers to trim their views of structural productivity even more than has the staff. And, even if they had a baseline outlook for the economy and prices similar to that in the Greenbook forecast, members may prefer lower inflation than the 2 percent core PCE rate projected by the staff for late 2006.

(17) The Committee could consider a number of modifications to its statement in conjunction with the selection of Alternative C. For instance, the FOMC might wish to delete the reference to "robust underlying growth in productivity." Although the staff continues to forecast solid growth of structural productivity, the Committee's confidence on this score may be diminishing and hence it might not wish to

characterize the pace of underlying productivity growth so explicitly. The statement could highlight the strength of the economy by stating that "Aggregate spending appears to be expanding briskly despite high energy prices." It could acknowledge recent price developments while registering some concern about inflation prospects by noting that "Core inflation has been relatively low in recent months and longer-term inflation expectations seem well contained, but pressures on business costs and inflation appear to be increasing." As discussed in the June Bluebook, the Committee might also take this opportunity to eliminate the forward-looking language from the statement, dropping both the risk assessment and the last two sentences referring to the measured pace of tightening and to the Committee's commitment to respond to economic developments as needed to maintain price stability.

(18) Market participants would no doubt be taken aback by the combination of a 50-basis-point increase in the funds rate at this meeting and the announcement suggested for Alternative C. Investors might infer that policy firming in the current cycle would likely bring the funds rate appreciably above 4¼ percent, the peak funds rate that seems to be currently incorporated in market prices. Moreover, with the elimination of the measured-pace language, market participants might come to believe that at least some of that rate gap could be covered in additional 50-basis-point strides. With the expected policy path pushed sharply upward and little forward-looking guidance provided by the FOMC, investors' uncertainty regarding the future path of policy would likely increase. In all likelihood, the upward revision to policy expectations would trigger a sell-off in fixed-income and equity markets and a rise in the foreign-exchange value of the dollar, although the increase in long-term yields and appreciation of the dollar could be limited if the drop in share prices were especially sharp. If the FOMC were particularly concerned about inflation pressures but was not prepared to hike rates 50 basis points at this meeting, it could couple a quarter-point move with some of the changes in the statement suggested for Alternative C.

Such a pairing would temper the surprise to market participants, but it would probably still lead them to mark up significantly their expectations of policy firming.

Money and Debt Forecasts

(19) Under the Greenbook forecast, M2 growth this year and next is projected at only about 2¼ percent and 3½ percent, respectively (Table 2). M2 velocity is expected to increase modestly further over the forecast period. However, the projected flat yield curve should support the demand for M2 assets, and thus velocity is likely to remain below the level suggested by historical relationships among money, nominal income, and short-run opportunity costs. The growth of domestic nonfinancial sector debt is forecast to step down somewhat this year and to slow further in 2006. Borrowing by households is expected to drop off considerably, largely reflecting a deceleration in mortgage debt as the pace of home price appreciation slows and activity in the housing market flattens out. Federal borrowing is also likely to slow a little as the budget deficit narrows a bit. Despite rising capital expenditures, business borrowing is projected to remain moderate this year and next, as some firms meet their funding needs by drawing on their large stockpiles of liquid assets and on repatriations of retained income from abroad. Overall, domestic nonfinancial sector debt is expected to expand 7½ percent in 2005 and 6 percent in 2006, down from about 8½ percent in 2004.

Table 2
Alternative Growth Rates for M2
(percent, annual rate)

		Raise 25 bp*	Raise 50 bp**	Greenbook***
Monthly Growth Rates				
	Jan-05	2.7	2.7	2.7
	Feb-05	2.8	2.8	2.8
	Mar-05	3.9	3.9	3.9
	Apr-05	-0.6	-0.6	-0.6
	May-05	0.2	0.2	0.2
	Jun-05	6.0	6.0	6.0
	Jul-05	1.3	1.3	1.3
	Aug-05	1.3	1.1	1.3
	Sep-05	1.5	1.0	1.3
	Oct-05	1.9	1.1	1.3
	Nov-05	2.4	1.6	1.2
	Dec-05	2.7	2.1	1.2
Quarterly Growth Rates				
	2004 Q4	5.7	5.7	5.7
	2005 Q1	3.7	3.7	3.7
	2005 Q2	1.7	1.7	1.7
	2005 Q3	2.3	2.1	2.2
	2005 Q4	2.0	1.3	1.3
Annual Growth Rates				
	2004	5.2	5.2	5.2
	2005	2.4	2.2	2.3
	2006	4.0	3.8	3.4
Growth From	To			
2004 Q4	Jul-05	2.7	2.7	2.7
2004 Q4	Sep-05	2.5	2.4	2.4
Dec-05	Jun-05	1.8	1.4	1.3
Jul-05	Dec-05	2.0	1.4	1.3

* Increase of 25 basis points in the target federal funds rate at this meeting and no change thereafter.
** Increase of 50 basis points in the target federal funds rate at this meeting and no change thereafter.
*** This forecast is consistent with norminal GDP and interest rates in the Greenbook forecast.

Directive and Balance of Risks Statement

(20) Draft language for the directive and draft risk assessments identical to those presented in Table 1 are provided below.

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 ____________ ~~3¼~~ percent.

Risk Assessments

A. The Committee perceives that, with appropriate monetary policy action, the upside and downside risks to the attainment of both sustainable growth and price stability should be kept roughly equal. With underlying inflation expected to be contained, the Committee believes that remaining policy accommodation can be removed at a pace that is likely to be measured. Nonetheless, the Committee will respond to changes in economic prospects as needed to fulfill its obligation to maintain price stability.

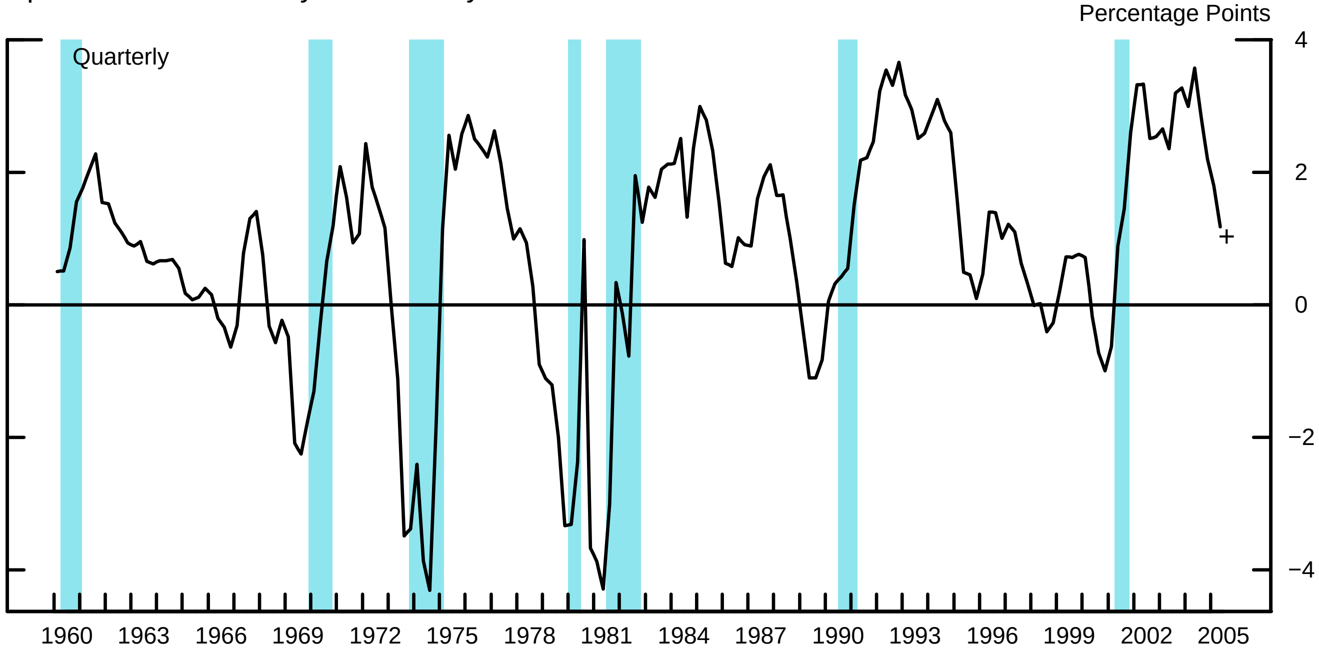
B. The Committee perceives that, with appropriate monetary policy action, the upside and downside risks to the attainment of both sustainable growth and price stability should be kept roughly equal. With underlying inflation expected to be contained, the Committee believes that policy accommodation can be removed at a pace that is likely to be measured. Nonetheless, the Committee will respond to changes in economic prospects as needed to fulfill its obligation to maintain price stability.

C. None.

Appendix Chart 1

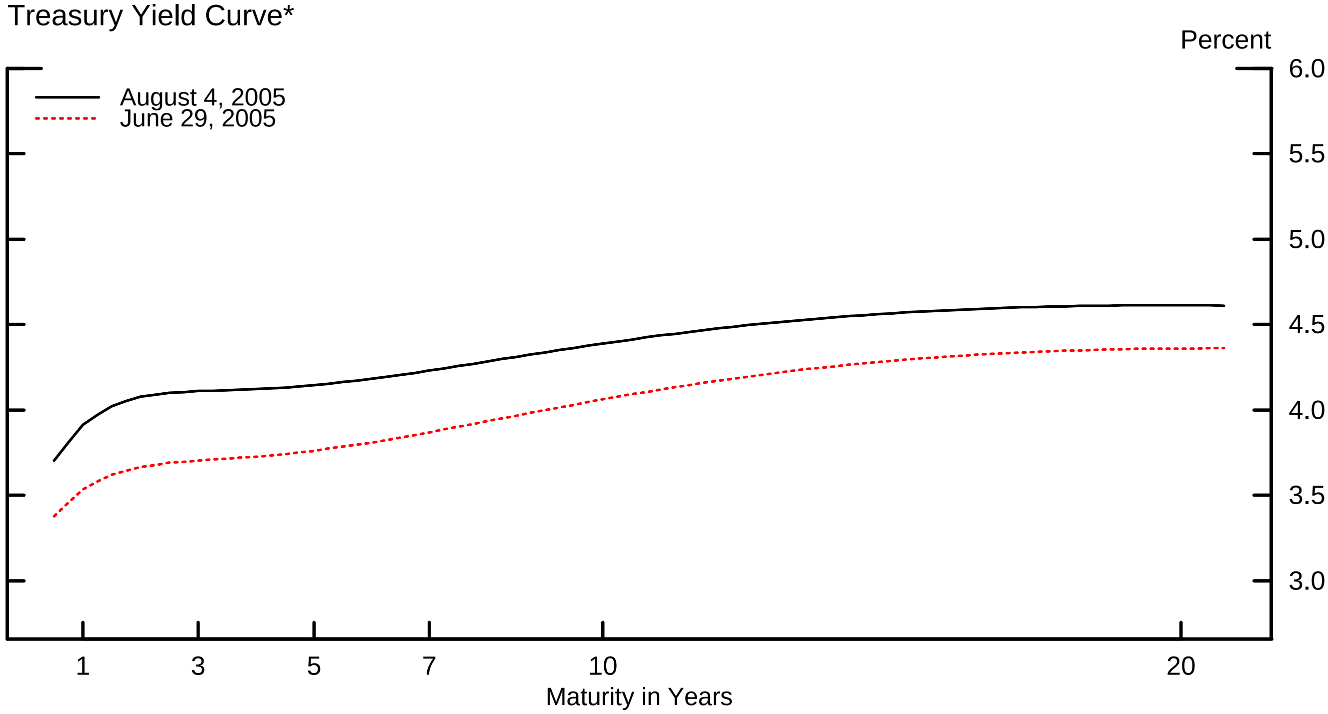
Treasury Yield Curve

Spread Between Ten−year Treasury Yield and Federal Funds Rate



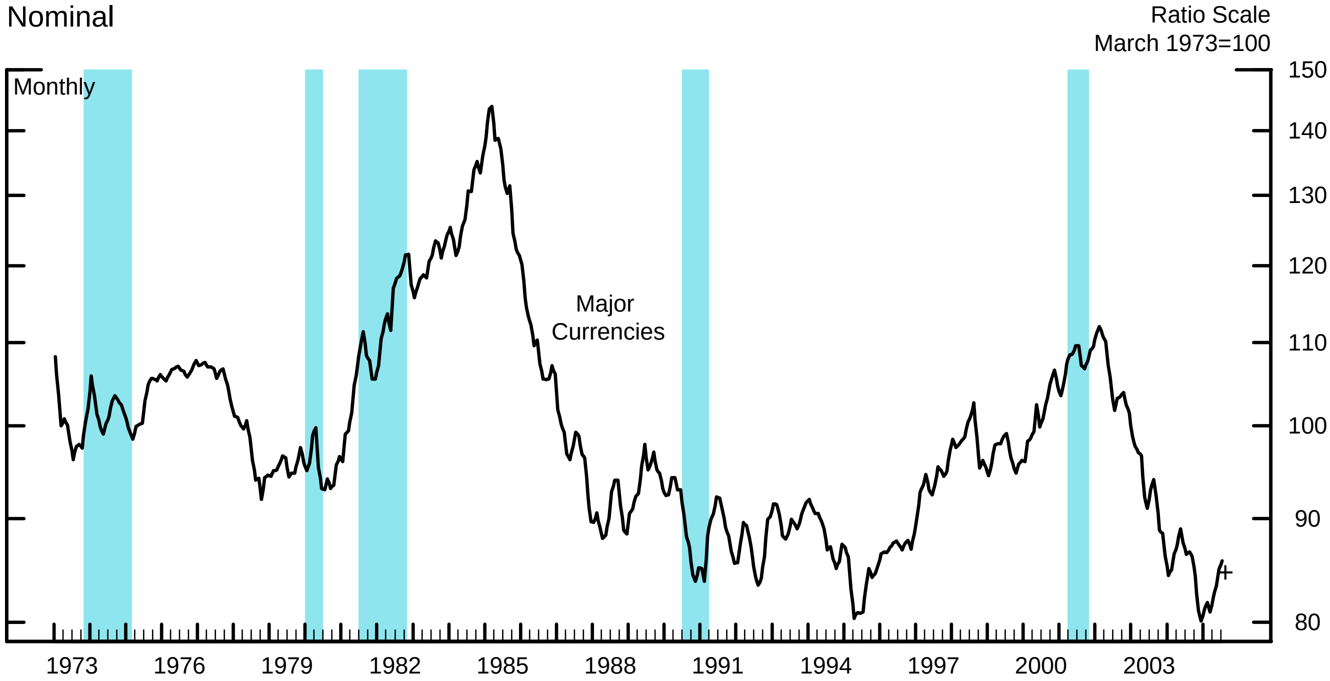
+ Denotes most recent weekly value.
Note. Blue shaded regions denote NBER−dated recessions.

Treasury Yield Curve*

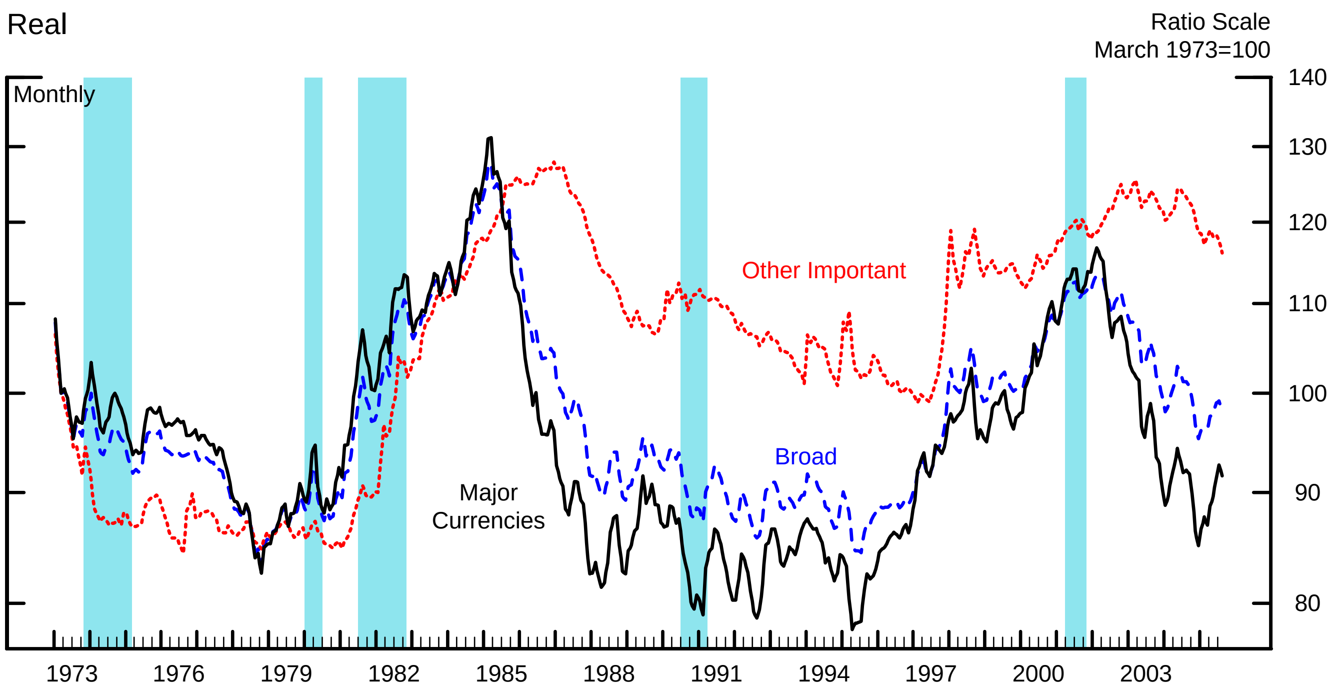


*Smoothed yield curve estimated from off−the−run Treasury coupon securities. Yields shown are those on notional par Treasury securities with semi−annual coupons.

Dollar Exchange Rate Indexes



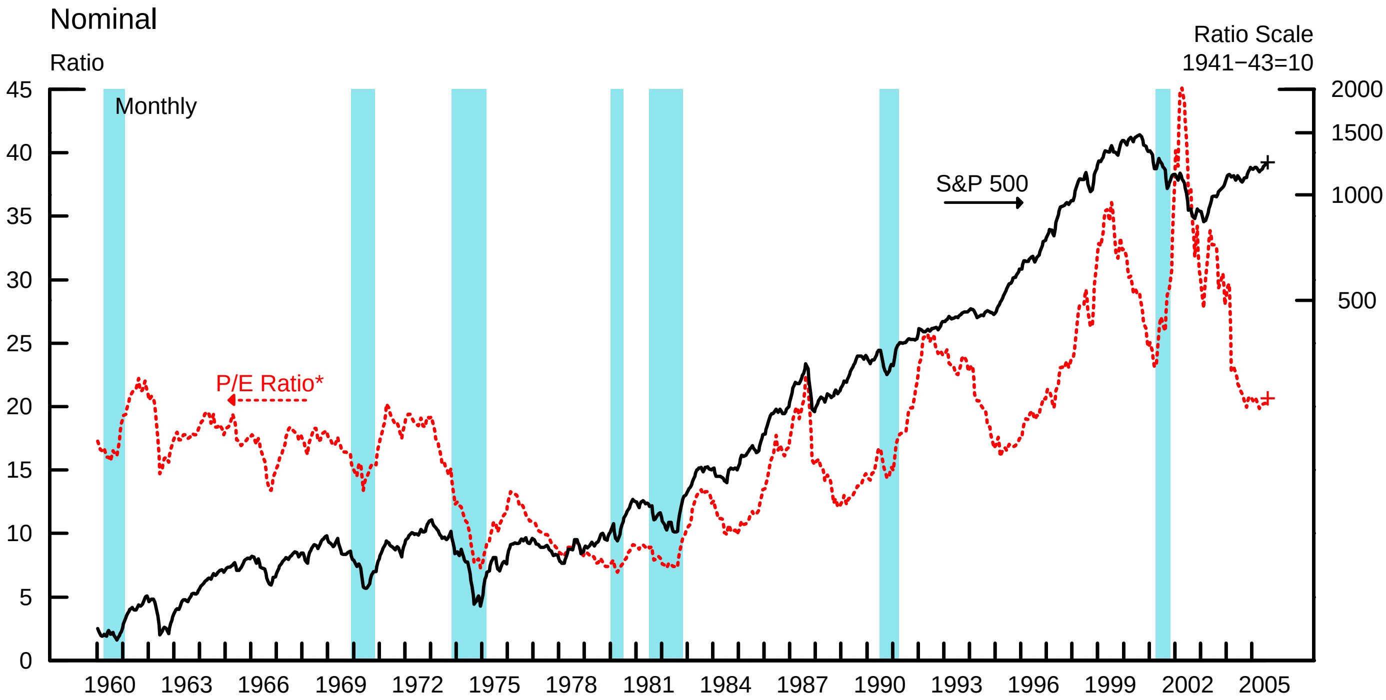
+ Denotes most recent weekly value.



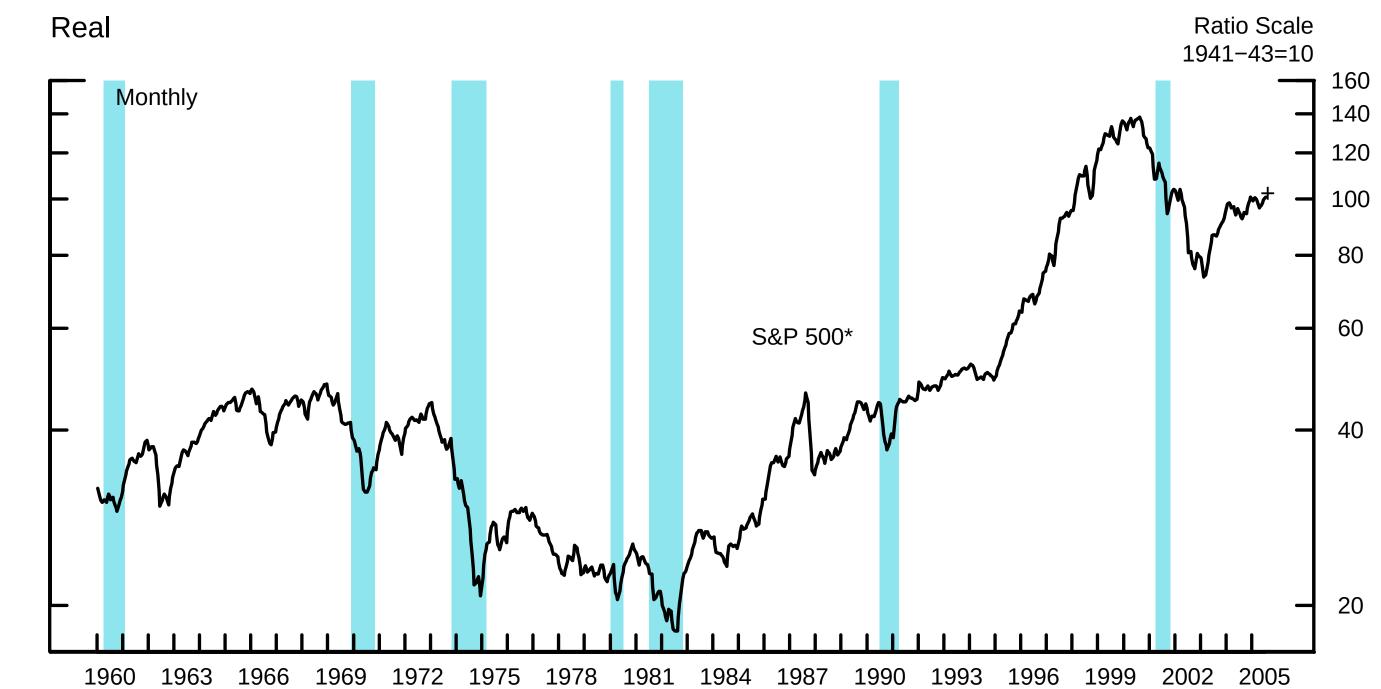
Note. The major currencies index is the trade−weighted average of currencies of the Euro area, Canada, Japan, the U.K., Switzerland, Australia, and Sweden. The other important trading partners index is the trade−weighted average of currencies of 19 other important trading partners. The Broad index is the trade−weighted average of currencies of all important trading partners. Real indexes have been adjusted for relative changes in U.S. and foreign consumer prices. Blue shaded regions denote NBER−dated recessions.

Appendix Chart 3

Stock Indexes



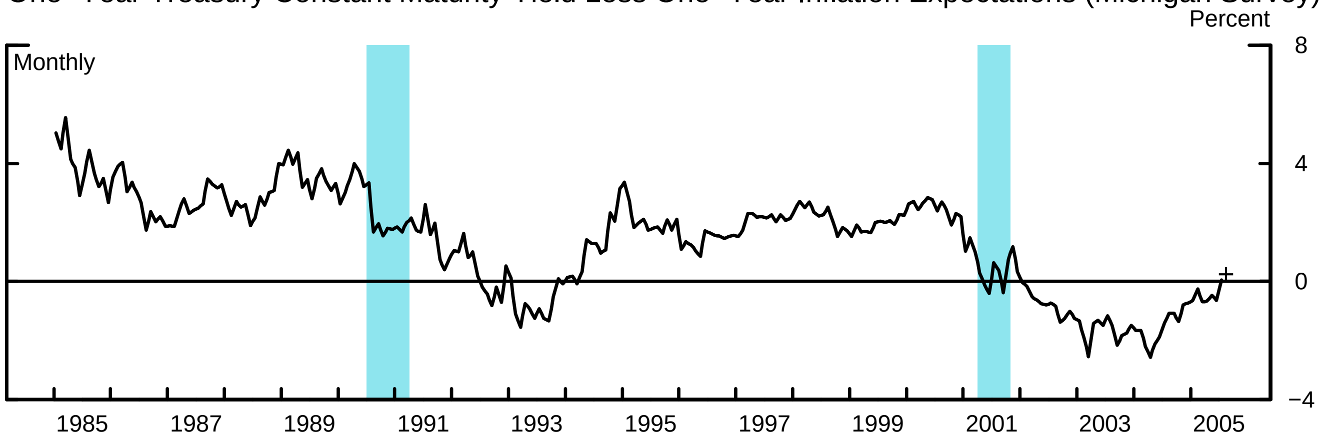
* Based on trailing four−quarter earnings.
\+ Denotes most recent weekly value.



* Deflated by the CPI.
\+ Denotes most recent weekly value.
Note. Blue shaded regions denote NBER−dated recessions.

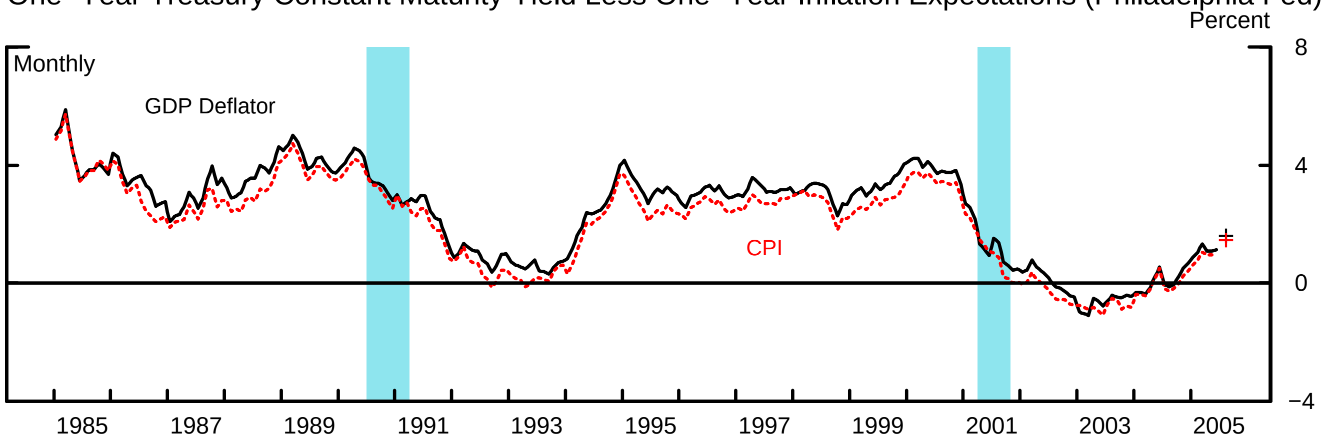
One−Year Real Interest Rates

One−Year Treasury Constant Maturity Yield Less One−Year Inflation Expectations (Michigan Survey)*



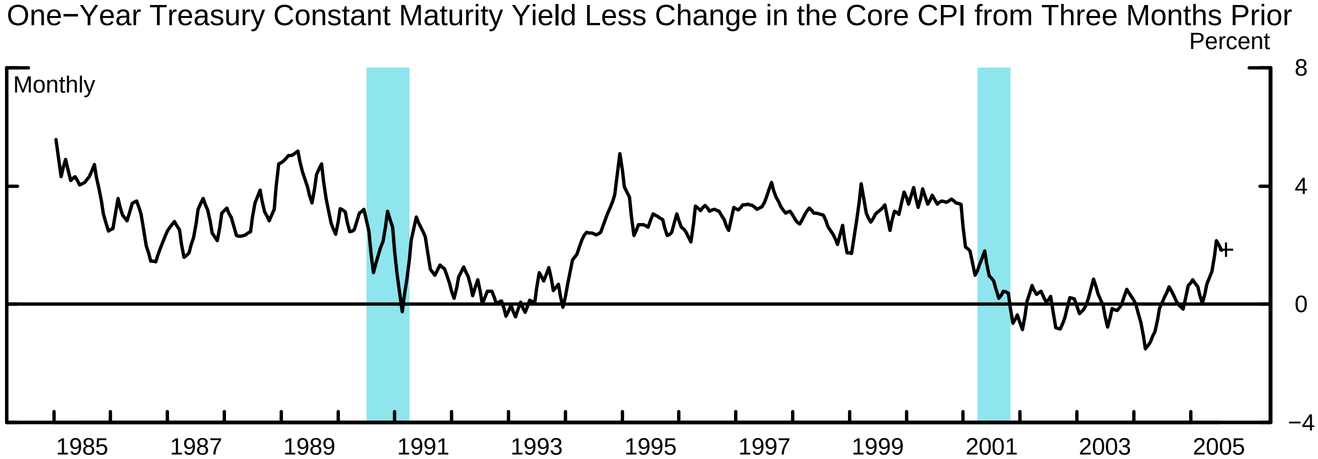
* Mean value of respondents.

One−Year Treasury Constant Maturity Yield Less One−Year Inflation Expectations (Philadelphia Fed)*



* ASA/NBER quarterly survey until 1990:Q1; Philadelphia Federal Reserve Bank Survey of Professional Forecasters thereafter. Median value of respondents.

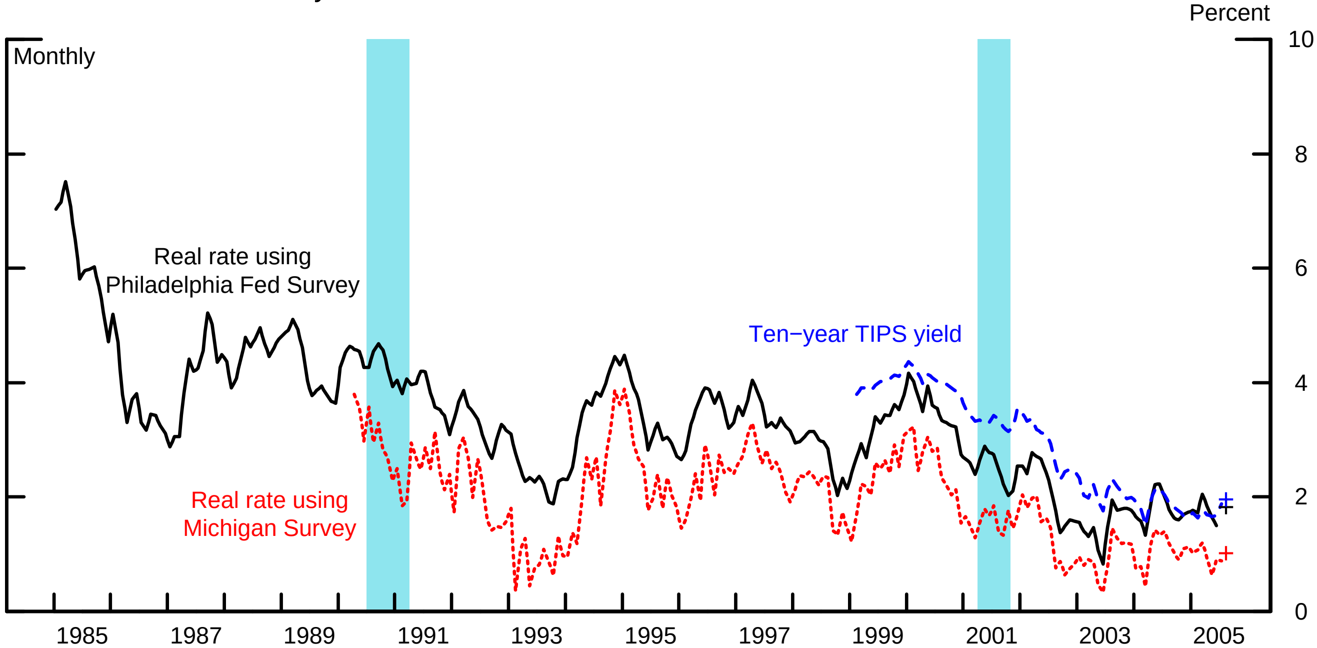
One−Year Treasury Constant Maturity Yield Less Change in the Core CPI from Three Months Prior



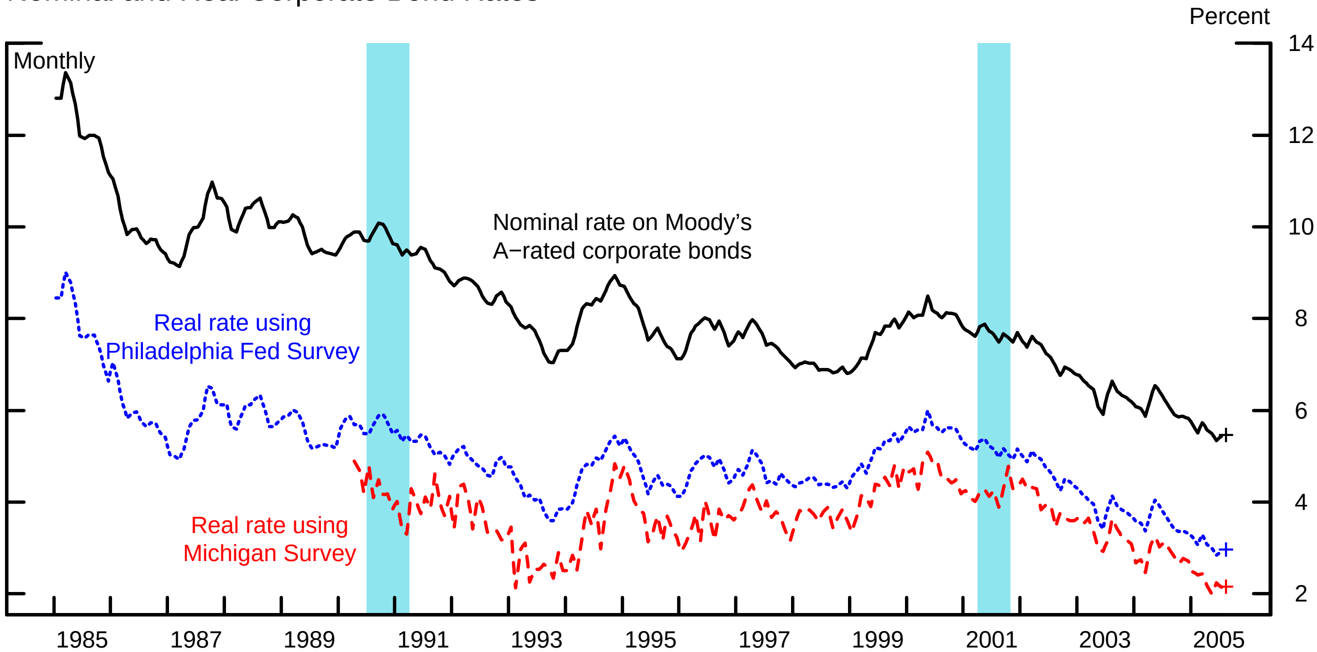
\+ Denotes most recent weekly Treasury constant maturity yield less most recent inflation expectation.
Note. Blue shaded regions denote NBER−dated recessions.

Long−Term Real Interest Rates*

Real Ten−Year Treasury Yields



Nominal and Real Corporate Bond Rates

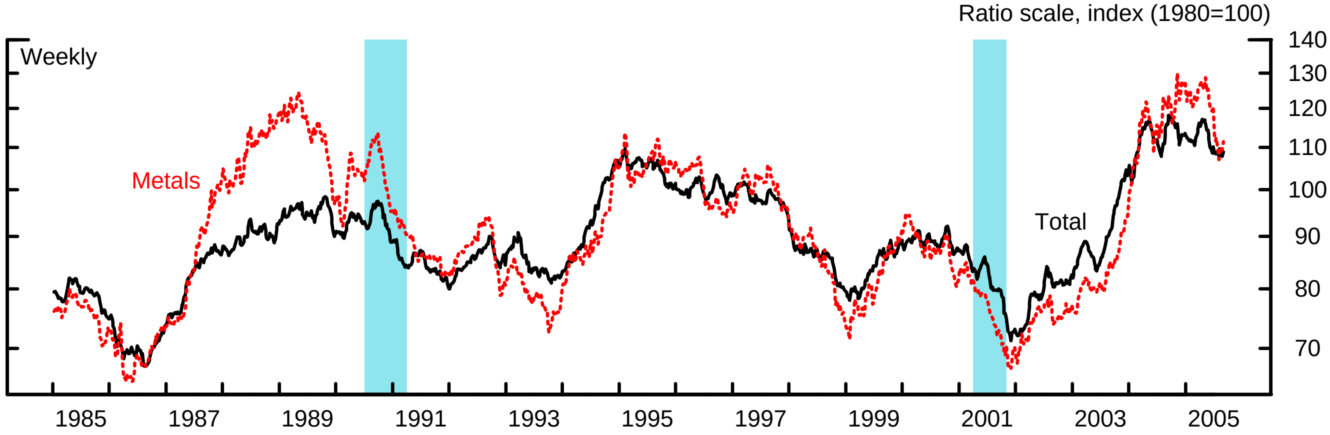


* For real rates, measures using the Philadelphia Fed Survey employ the ten−year inflation expectations from the Blue Chip Survey until April 1991 and the Philadelphia Federal Reserve Bank Survey of Professional Forecasters thereafter (median value of respondents). Measures using the Michigan Survey employ the five− to ten−year inflation expectations from that survey (mean value of respondents).

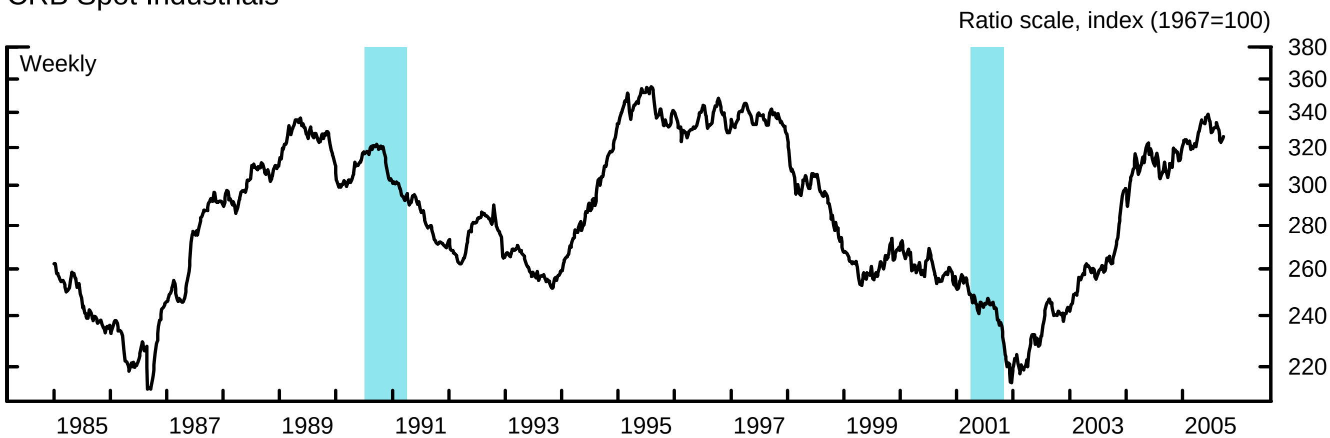
+ For TIPS and nominal corporate rate, denotes the most recent weekly value. For other real rate series, denotes the most recent weekly nominal yield less the most recent inflation expectation.
Note. Blue shaded regions denote NBER−dated recessions.

Commodity Price Measures

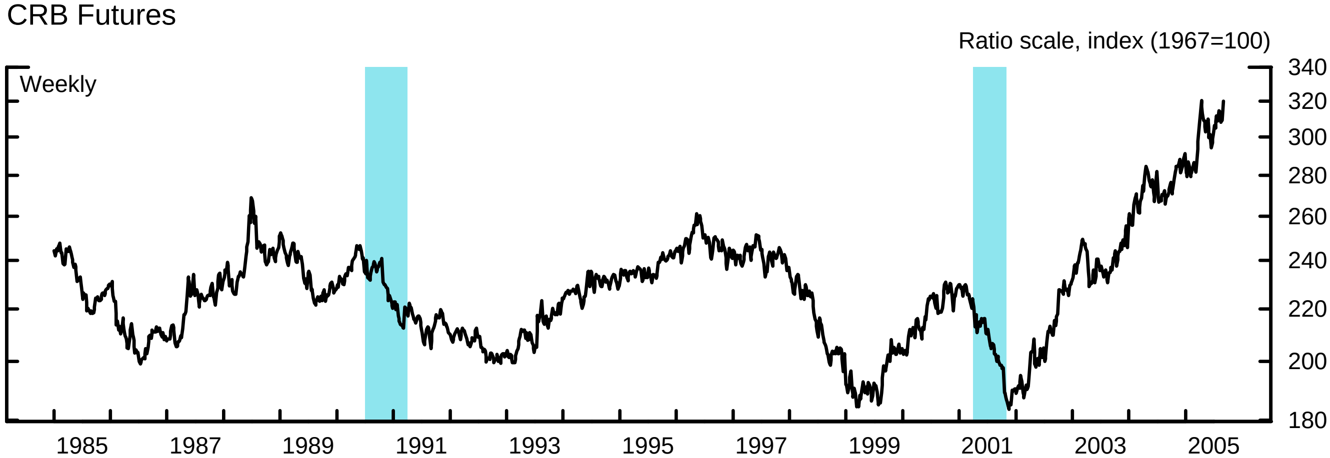
Journal of Commerce Index



CRB Spot Industrials

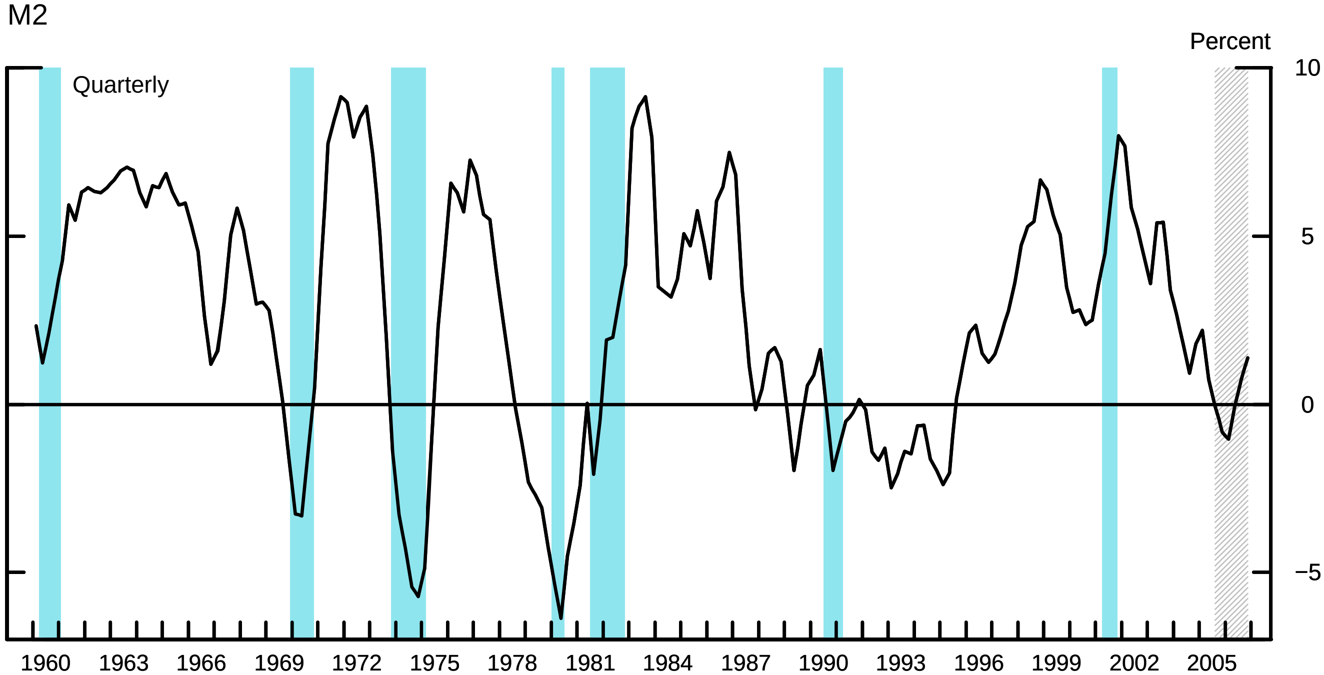


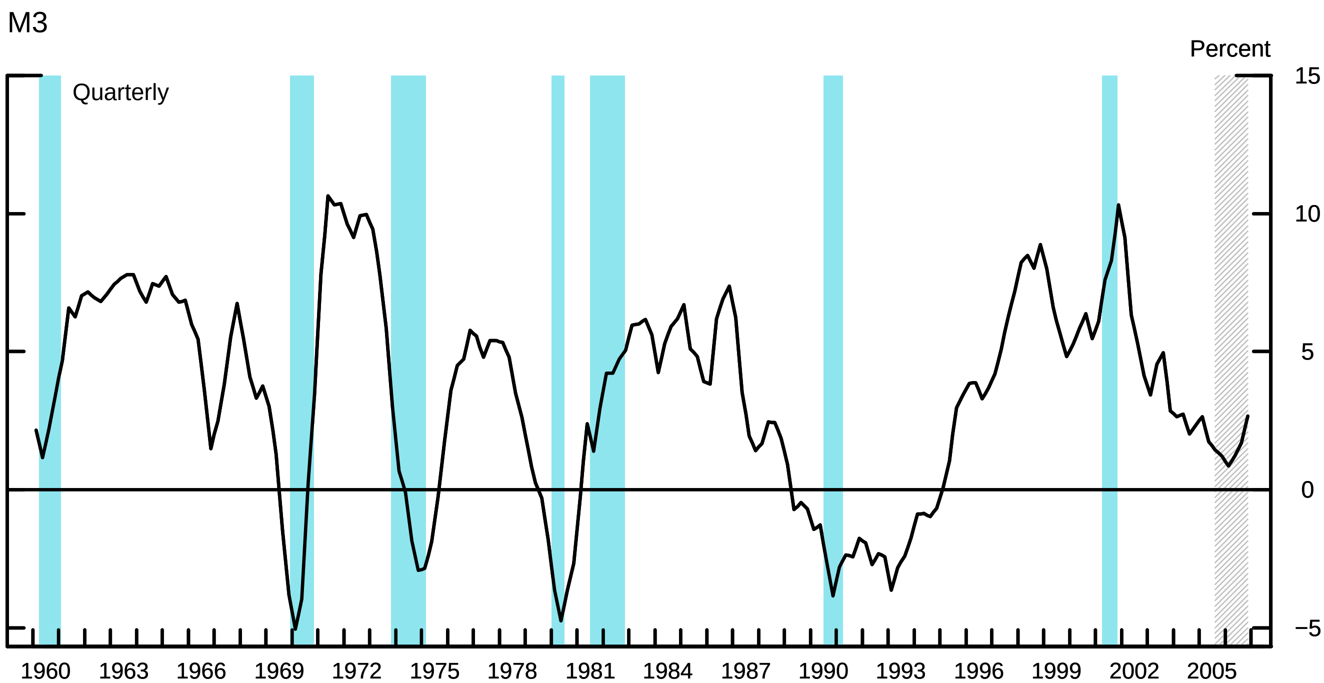
CRB Futures



Note. Blue shaded regions denote NBER−dated recessions.

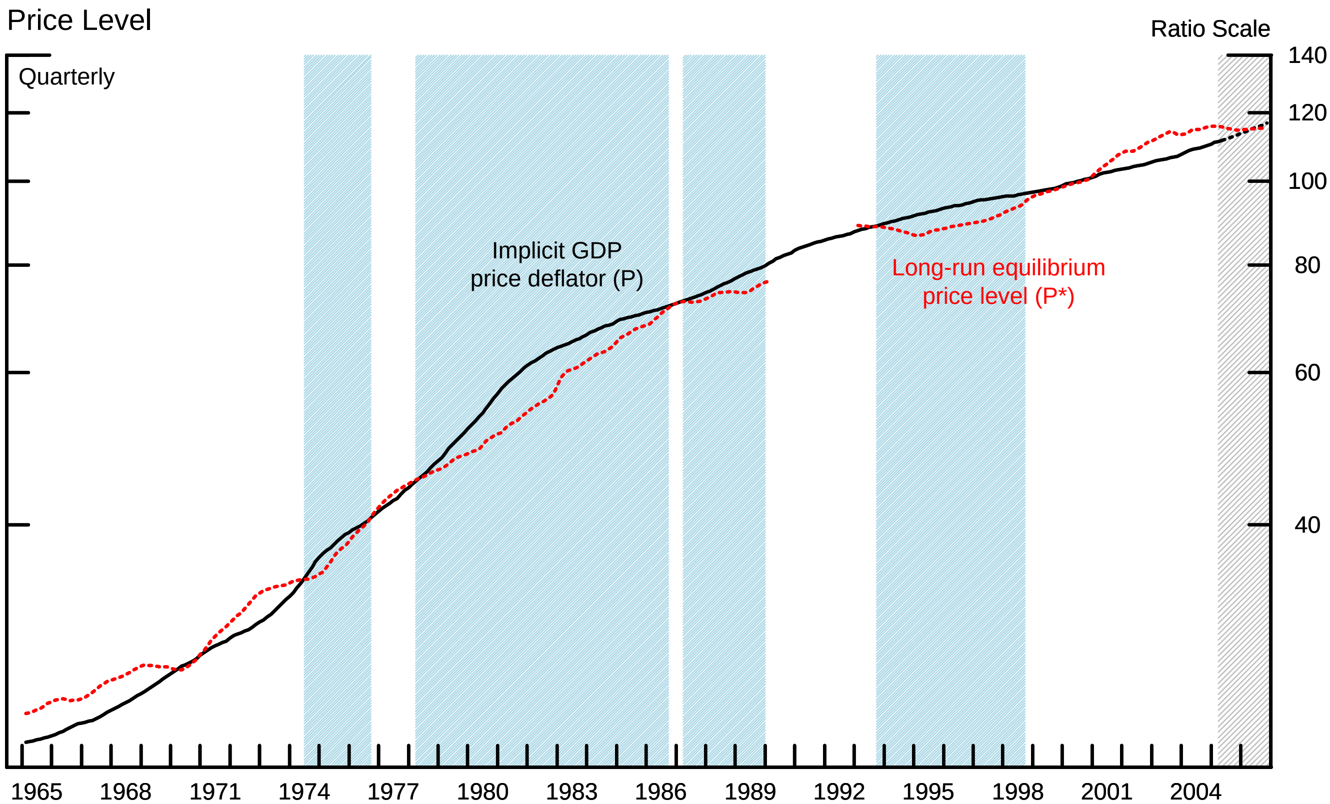
Growth of Real M2 and M3

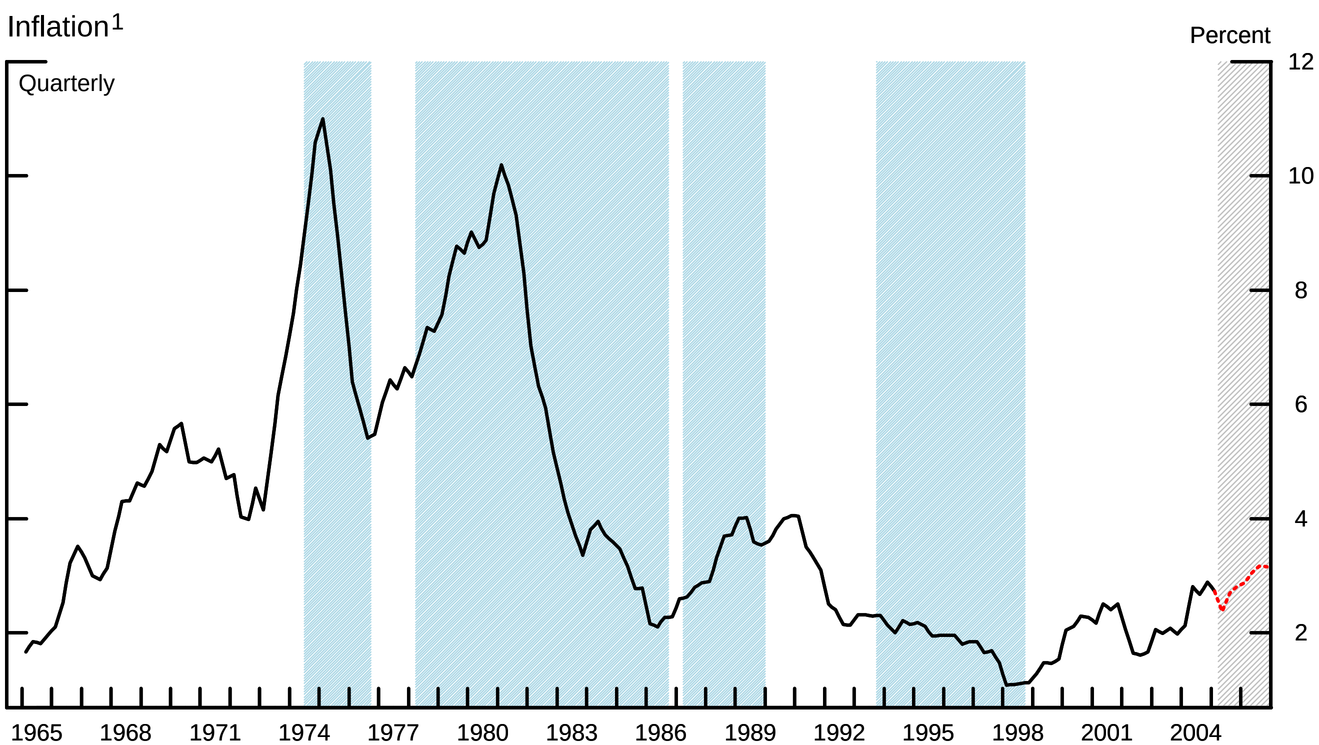




Note. Four−quarter moving average deflated by the CPI. Blue shaded regions denote NBER−dated recessions. Dashed areas denote projection period.

Inflation Indicator Based on M2





1. Change in the implicit GDP price deflator over the previous four quarters.

Note: P* is defined to equal M2 times V* divided by potential GDP. V*, or long-run velocity, is estimated using average velocity over the 1959:Q1-to-1989:Q4 period and then, after a break, over the interval from 1993:Q1 to the present. For the forecast period, P* is based on the staff M2 forecast and P is simulated using a short-run dynamic model relating P to P*. Blue areas indicate periods in which P* is notably less than P. Gray areas denote the projection period.

Appendix Table 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	20-year	5-year	10-year			Fixed-rate	ARM
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
04 -- High	2.34	2.08	2.28	2.63	2.51	2.29	3.13	4.10	5.03	5.64	1.57	2.28	6.90	5.45	6.34	4.27
-- Low	0.92	0.73	0.87	0.96	1.04	0.97	1.49	2.65	3.84	4.68	0.40	1.38	6.00	4.73	5.38	3.36
05 -- High	3.38	3.34	3.49	3.73	3.72	3.40	4.09	4.32	4.73	5.04	1.78	2.00	6.22	5.04	6.04	4.47
-- Low	2.19	1.86	2.31	2.63	2.50	2.24	3.11	3.58	3.97	4.28	0.98	1.50	5.64	4.72	5.53	4.10
Monthly																
Aug 04	1.43	1.37	1.51	1.76	1.68	1.48	2.50	3.49	4.43	5.12	1.15	1.88	6.46	5.18	5.87	4.06
Sep 04	1.61	1.54	1.68	1.91	1.86	1.67	2.51	3.35	4.26	4.96	1.12	1.82	6.27	5.04	5.75	3.99
Oct 04	1.76	1.62	1.79	2.05	2.04	1.79	2.57	3.35	4.24	4.92	1.00	1.76	6.21	4.99	5.72	4.02
Nov 04	1.93	1.91	2.11	2.33	2.26	2.01	2.86	3.52	4.32	4.95	0.93	1.68	6.20	5.06	5.73	4.15
Dec 04	2.16	1.95	2.23	2.50	2.45	2.22	3.02	3.59	4.34	4.94	0.97	1.65	6.15	5.03	5.75	4.18
Jan 05	2.28	2.02	2.38	2.68	2.61	2.33	3.23	3.70	4.32	4.82	1.15	1.72	6.02	4.92	5.71	4.12
Feb 05	2.50	2.36	2.59	2.85	2.77	2.49	3.39	3.76	4.25	4.65	1.10	1.63	5.82	4.87	5.63	4.16
Mar 05	2.63	2.64	2.80	3.09	2.97	2.67	3.74	4.15	4.59	4.92	1.27	1.77	6.06	5.01	5.93	4.23
Apr 05	2.79	2.63	2.84	3.14	3.09	2.84	3.67	3.99	4.42	4.78	1.21	1.69	6.05	4.93	5.86	4.25
May 05	3.00	2.62	2.90	3.17	3.22	2.97	3.65	3.84	4.22	4.59	1.25	1.65	6.01	4.83	5.72	4.23
Jun 05	3.04	2.82	3.03	3.22	3.38	3.11	3.65	3.76	4.07	4.38	1.37	1.67	5.86	4.77	5.58	4.24
Jul 05	3.26	3.09	3.29	3.53	3.57	3.27	3.90	3.98	4.25	4.50	1.64	1.88	5.95	4.85	5.70	4.40
Weekly																
Jun 3 05	3.02	2.79	2.98	3.14	3.29	3.00	3.55	3.68	4.02	4.37	1.24	1.58	5.83	4.72	5.62	4.26
Jun 10 05	2.99	2.81	3.01	3.14	3.33	3.03	3.62	3.73	4.04	4.35	1.34	1.64	5.80	4.75	5.56	4.21
Jun 17 05	3.02	2.77	3.00	3.22	3.37	3.11	3.73	3.86	4.18	4.49	1.47	1.76	5.96	4.83	5.63	4.25
Jun 24 05	3.00	2.80	3.04	3.27	3.42	3.17	3.65	3.76	4.07	4.38	1.40	1.70	5.87	4.76	5.57	4.23
Jul 1 05	3.20	2.95	3.15	3.35	3.46	3.22	3.67	3.75	4.04	4.34	1.40	1.69	5.84	4.77	5.53	4.24
Jul 8 05	3.25	3.01	3.18	3.40	3.52	3.22	3.79	3.87	4.16	4.43	1.52	1.80	5.93	4.82	5.62	4.33
Jul 15 05	3.26	3.01	3.22	3.47	3.55	3.25	3.87	3.95	4.23	4.48	1.62	1.89	5.95	4.84	5.66	4.39
Jul 22 05	3.25	3.10	3.32	3.57	3.59	3.28	3.93	4.02	4.29	4.54	1.72	1.94	5.99	4.87	5.73	4.42
Jul 29 05	3.27	3.22	3.42	3.67	3.63	3.33	4.00	4.08	4.31	4.55	1.73	1.92	5.95	4.86	5.77	4.46
Aug 5 05	--	3.32	3.48	3.73	3.70	3.39	4.07	4.15	4.39	4.62	1.76	1.96	--	--	5.82	4.47
Daily																
Jul 19 05	3.13	3.13	3.31	3.54	3.59	3.25	3.90	3.99	4.27	4.52	1.71	1.93	5.98	--	--	--
Jul 20 05	3.25	3.10	3.30	3.54	3.58	3.30	3.91	3.98	4.24	4.49	1.70	1.90	5.94	--	--	--
Jul 21 05	3.27	3.12	3.34	3.60	3.59	3.29	3.98	4.09	4.35	4.60	1.74	1.95	6.04	--	--	--
Jul 22 05	3.25	3.14	3.37	3.61	3.61	3.28	3.94	4.04	4.30	4.54	1.69	1.90	5.98	--	--	--
Jul 25 05	3.28	3.17	3.45	3.68	3.61	3.31	3.97	4.06	4.31	4.56	1.73	1.94	5.97	--	--	--
Jul 26 05	3.25	3.24	3.44	3.67	3.62	3.31	3.98	4.06	4.31	4.55	1.73	1.93	5.96	--	--	--
Jul 27 05	3.27	3.22	3.40	3.67	3.63	3.34	4.01	4.10	4.33	4.57	1.74	1.93	5.98	--	--	--
Jul 28 05	3.27	3.24	3.40	3.65	3.65	3.34	3.98	4.04	4.26	4.50	1.70	1.88	5.88	--	--	--
Jul 29 05	3.31	3.24	3.41	3.68	3.66	3.37	4.05	4.12	4.35	4.58	1.73	1.91	5.95	--	--	--
Aug 1 05	3.30	3.28	3.49	3.73	3.68	3.37	4.07	4.15	4.39	4.61	1.76	1.96	5.99	--	--	--
Aug 2 05	3.20	3.34	3.49	3.73	3.69	3.40	4.09	4.16	4.41	4.64	1.78	1.99	6.02	--	--	--
Aug 3 05	3.35	3.33	3.46	3.72	3.70	3.39	4.06	4.13	4.37	4.60	1.73	1.94	6.00	--	--	--
Aug 4 05	3.38 p	3.33	3.47	3.72	3.72	--	4.08	4.15	4.39	4.61	1.74	1.94	--	--	--	--

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

MFMA

Appendix Table 2

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)					
2002	3.3	6.8	7.7	5.9	6.5
2003	7.1	5.4	5.0	3.6	4.8
2004	5.4	5.2	5.2	7.1	5.8
Quarterly (average)					
2004-Q3	3.6	3.5	3.5	5.7	4.2
Q4	5.5	5.7	5.7	-0.3	3.8
2005-Q1	0.7	3.7	4.6	8.4	5.2
Q2	-0.7	1.7	2.3	13.3	5.4
Monthly					
2004-July	-6.6	0.3	2.2	0.8	0.5
Aug.	16.2	4.1	0.8	4.6	4.2
Sep.	3.9	6.6	7.4	5.3	6.2
Oct.	0.1	5.1	6.4	-7.1	1.1
Nov.	13.2	6.9	5.2	-2.8	3.8
Dec.	-1.1	4.5	6.1	9.2	6.0
2005-Jan.	-8.2	2.7	5.6	13.4	6.1
Feb.	6.8	2.8	1.7	7.7	4.4
Mar.	6.5	3.9	3.1	3.7	3.8
Apr.	-15.2	-0.6	3.3	20.3	6.2
May	10.4	0.2	-2.4	12.6	4.3
June	-0.5	6.0	7.7	17.5	9.8
July e	-15.9	1.3	5.9	4.3	2.3
Levels ($billions):					
Monthly					
2005-Feb.	1364.0	6451.6	5087.6	3081.2	9532.9
Mar.	1371.4	6472.3	5100.9	3090.7	9562.9
Apr.	1354.0	6469.1	5115.0	3142.9	9612.0
May	1365.7	6470.3	5104.7	3176.0	9646.3
June	1365.1	6502.7	5137.6	3222.2	9724.9
Weekly					
2005-June 6	1356.7	6491.7	5135.0	3201.9	9693.5
13	1341.0	6474.1	5133.1	3233.5	9707.6
20	1370.5	6508.9	5138.5	3206.6	9715.5
27	1376.8	6513.7	5136.9	3237.7	9751.5
July 4	1370.6	6515.2	5144.6	3228.5	9743.7
11	1331.7	6493.4	5161.8	3225.4	9718.8
18p	1331.8	6518.1	5186.3	3230.8	9748.9
25p	1357.8	6518.1	5160.3	3243.1	9761.2

p preliminary
e estimated

Appendix Table 3

Changes in System Holdings of Securities [1]

(Millions of dollars, not seasonally adjusted)

August 4, 2005

	Treasury Bills			Treasury Coupons						Federal Agency	Net change total	Net RPs [5]		
	Net Purchases [2]	Redemptions (-)	Net Change	Net Purchases [3] < 1	Net Purchases [3] 1-5	Net Purchases [3] 5-10	Net Purchases [3] Over 10	Redemptions (-)	Net Change	Redemptions (-)	outright holdings [4]	Short-Term [6]	Long-Term [7]	Net Change
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
2004	18,138	---	18,138	7,994	17,249	5,763	1,364	---	32,370	---	50,507	-2,522	-331	-2,853
2004 QII	7,756	---	7,756	1,693	2,543	988	84	---	5,307	---	13,063	1,133	418	1,550
QIII	4,508	---	4,508	1,898	4,406	1,507	434	---	8,244	---	12,753	-1,787	782	-1,005
QIV	4,167	---	4,167	3,092	7,453	2,018	571	---	13,134	---	17,301	-5,956	1,728	-4,227
2005 QI	35	---	35	---	---	---	---	544	-544	---	-509	1,653	-3,454	-1,801
QII	2,010	---	2,010	---	3,495	1,708	1,015	1,305	4,914	---	6,923	1,082	1,361	2,443
2004 Dec	512	---	512	1,499	2,404	340	85	---	4,328	---	4,840	-1,492	812	-680
2005 Jan	---	---	---	---	---	---	---	---	---	---	---	1,100	-3,387	-2,287
Feb	35	---	35	---	---	---	---	333	-333	---	-298	2,163	-2,187	-24
Mar	---	---	---	---	---	---	---	211	-211	---	-211	1,746	896	2,642
Apr	---	---	---	---	1,200	470	230	---	1,900	---	1,900	385	1,499	1,884
May	1,760	---	1,760	---	2,295	898	---	---	3,193	---	4,953	-2,453	340	-2,113
Jun	250	---	250	---	---	340	785	1,305	-180	---	70	1,371	-606	764
Jul	---	---	---	---	---	---	---	---	---	---	---	671	2,413	3,084
2005 May 11	1,257	---	1,257	---	125	773	---	---	898	---	2,155	-1,901	-2,000	-3,901
May 18	26	---	26	---	---	---	---	---	---	---	26	1,631	1,000	2,631
May 25	227	---	227	---	1,048	50	---	---	1,098	---	1,325	-2,940	5,000	2,060
Jun 1	500	---	500	---	1,122	75	700	---	1,897	---	2,397	5,012	-1,000	4,012
Jun 8	---	---	---	---	---	---	---	---	---	---	---	-3,432	---	-3,432
Jun 15	---	---	---	---	---	---	---	---	---	---	---	1,866	-3,000	-1,134
Jun 22	---	---	---	---	---	340	85	---	425	---	425	1,845	-3,000	-1,155
Jun 29	---	---	---	---	---	---	---	---	---	---	---	-3,072	3,000	-72
Jul 6	---	---	---	---	---	---	---	1,305	-1,305	---	-1,305	2,508	3,000	5,508
Jul 13	---	---	---	---	---	---	---	---	---	---	---	-3,828	1,000	-2,828
Jul 20	---	---	---	---	---	---	---	---	---	---	---	3,535	---	3,535
Jul 27	---	---	---	---	---	---	---	---	---	---	---	-1,363	-3,000	-4,363
Aug 3	---	---	---	---	---	---	---	---	---	---	---	8,355	-1,000	7,355
2005 Aug 4	---	---	---	---	---	---	---	---	---	---	---	-5,566	2,000	-3,566
Intermeeting Period														
Jun 30-Aug 4	---	---	---	---	---	---	---	1,305	-1,305	---	-1,305	2,096	2,000	4,096
Memo: LEVEL (bil. $)														
Aug 4			265.0	121.1	207.6	52.9	78.1		459.7	---	724.7	-13.1	19.0	5.9

1. Change from end-of-period to end-of-period. Excludes changes in compensation for the effects of inflation on the principal of inflation-indexed securities.
2. Outright purchases less outright sales (in market and with foreign accounts).
3. Outright purchases less outright sales (in market and with foreign accounts). Includes short-term notes acquired in exchange for maturing bills. Excludes maturity shifts and rollovers of maturing issues, except the rollover of inflation compensation.
4. Includes redemptions (-) of Treasury and agency securities.
5. RPs outstanding less reverse RPs.
6. Original maturity of 13 days or less.
7. Original maturity of 14 to 90 days.

MRA:BEW