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.

Class I FOMC - Restricted Controlled (FR)

October 27, 2005

Monetary Policy Alternatives

Prepared for the Federal Open Market Committee
by the Staff of the Board of Governors of the Federal Reserve System

Class I FOMC - Restricted Controlled (FR) **October 27, 2005**

MONETARY POLICY ALTERNATIVES

Recent Developments

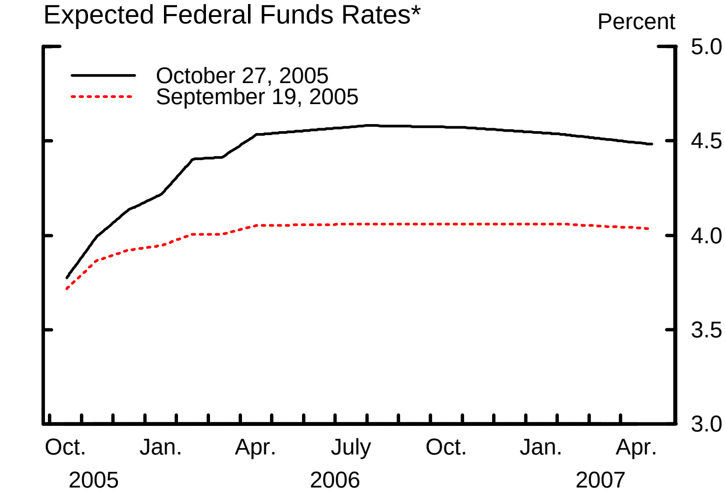
(1) With investors putting only small odds on a pause in the tightening cycle following Hurricane Katrina, there was little market reaction to the FOMC's decision at the September meeting to raise the target federal funds rate 25 basis points to 3¾ percent, to maintain its assessment that the risks to price stability and sustainable growth were balanced, and to retain the "measured pace" language.[1] The expected path for monetary policy shifted up in subsequent weeks though, as incoming data indicated that output had been expanding briskly prior to the hurricane and that the disruptions to economic activity from Hurricane Katrina and Rita were likely to be less severe than initially feared. This upward pressure on interest rates may have been amplified by comments from a number of Federal Reserve officials that were read as stressing inflation concerns. By the time of the release of the FOMC minutes, investors had reportedly anticipated their somewhat hawkish tone, and the market response to their publication was minimal. Current readings on futures contracts indicate that the federal funds rate expected after the December meeting has increased about 25 basis points over the intermeeting period to nearly 4¼ percent, consistent with investors placing high odds on a quarter-point rate hike at each of the next two meetings (Chart 1).[2] The level of the funds rate expected to prevail by June 2006 rose

[1] Over the intermeeting period, the effective federal funds rate was close to the target. The Desk purchased $4.2 billion of Treasury coupon securities and $2.7 billion of Treasury bills, $1.5 billion of which were from foreign customers. The volume of outstanding long-term RPs decreased $7 billion, to $11 billion.

[2] Today is the first day of the maintenance period that includes the upcoming FOMC meeting. Judging from the October federal funds futures contract, market participants expect the funds rate to average about 17 basis points above the target, on average, over the

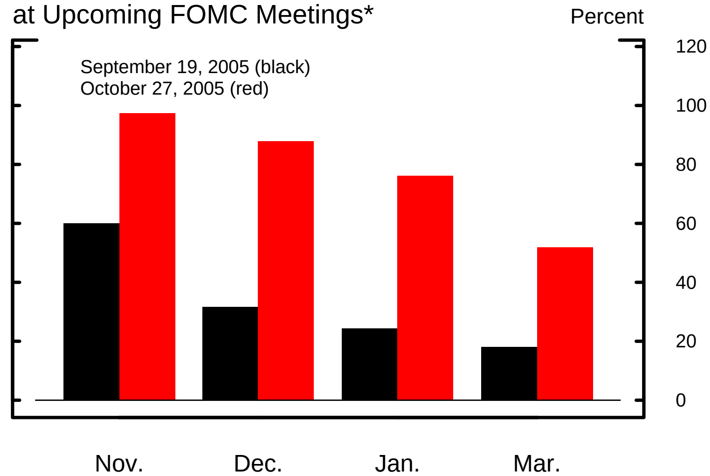
Chart 1
Interest Rate Developments

Expected Federal Funds Rates*



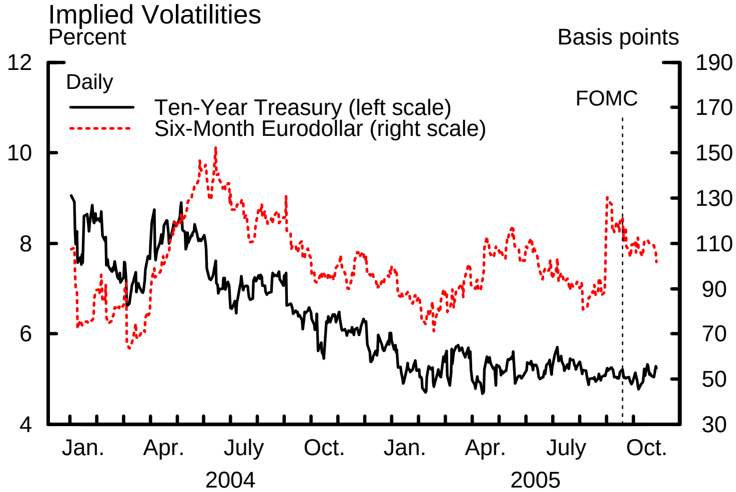
*Estimates from federal funds and eurodollar futures, with an allowance for term premia and other adjustments.

Probability of a 25 b.p. Tightening at Upcoming FOMC Meetings*

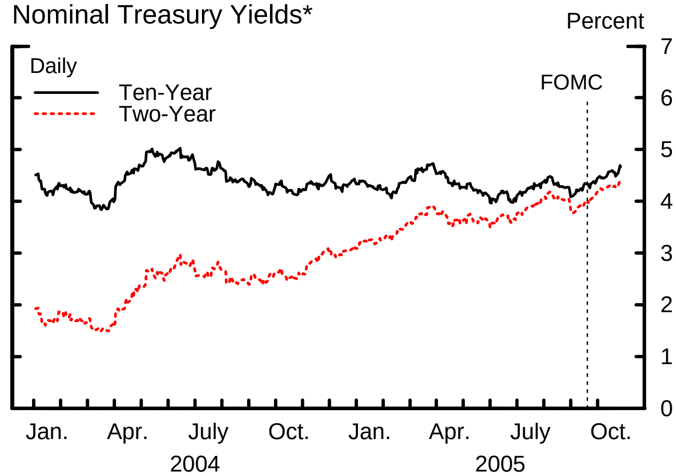


*Estimated from federal funds futures.

Implied Volatilities

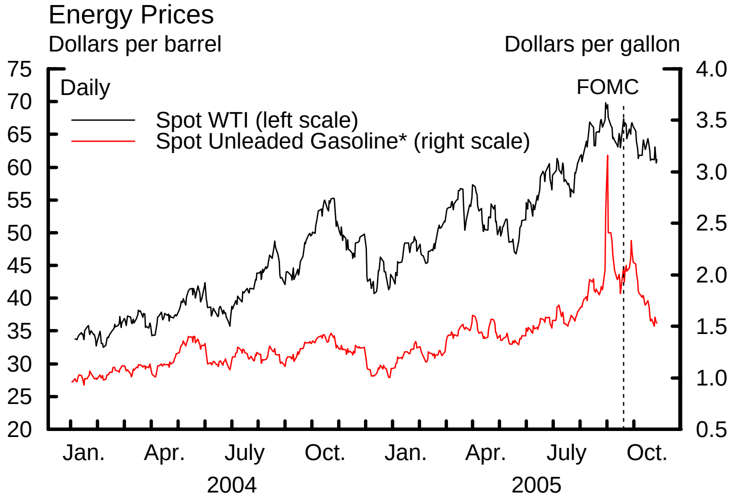


Nominal Treasury Yields*



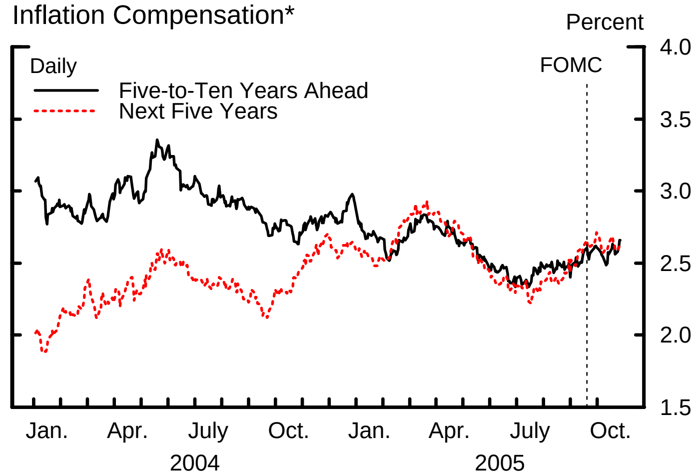
*Par yields from a smoothed nominal off-the-run Treasury yield curve.

Energy Prices



*Spot wholesale price of gasoline

Inflation Compensation*



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

Note: Vertical lines indicate September 19, 2005. Last daily observations are for October 27, 2005.

50 basis points, to a peak just above 4½ percent. Respondents to the Desk's latest dealer survey have similarly come to expect more policy tightening, with the majority now anticipating rate increases at the November, December, and January meetings. Most of the respondents expect little change in the measured pace and accommodative language, and six of twenty-two respondents indicated that recent statements by Federal Reserve officials had influenced their interest rate forecasts. Uncertainty about the expected path for policy over the coming six months, as measured by implied volatility read from eurodollar options, has decreased some since the September meeting, although it remains above its pre-Katrina levels.

(2) Nominal Treasury yields rose 25 to 50 basis points on net, with most of the advance accounted for by increases in near-term forward rates.[3, 4] In addition to stronger-than-expected economic data, declines in some energy prices likely contributed to a more positive economic outlook, helping to push yields higher. Increases at the longer end of the term structure, especially late in the period, may have been due in part to increased mortgage hedging flows, as suggested by anecdotal reports. Despite a higher-than-expected reading on the overall consumer price index for September, TIPS-based measures of inflation compensation were about unchanged over the intermeeting period, although they remain 15 to 20 basis points above the levels seen prior to Hurricane Katrina.

(3) Partly in response to the rise in interest rates, major stock price indexes fell 3 to 4¼ percent over the period (Chart 2). Although reported earnings for the third quarter appear to have largely met or exceeded expectations, investors may also have

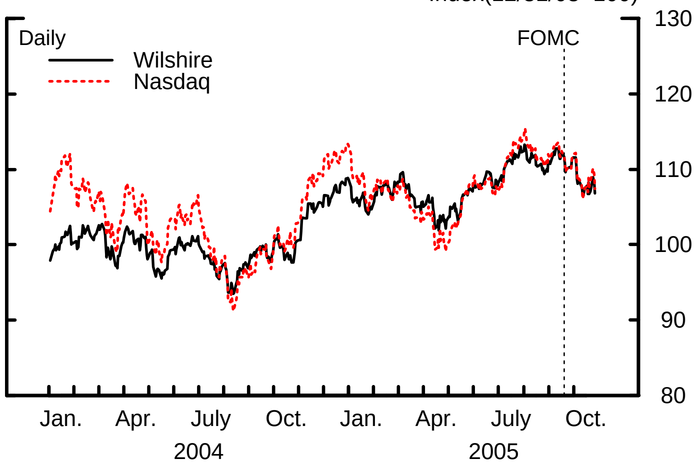
remaining days prior to the meeting. Federal funds futures contracts for December and January are currently pricing in minimal year-end pressures in the federal funds market.

[3] President Bush's announcement on October 24 that he was nominating Ben S. Bernanke to succeed Chairman Greenspan was accompanied by an increase of a few basis points in Treasury yields and a modest rally in equity markets.

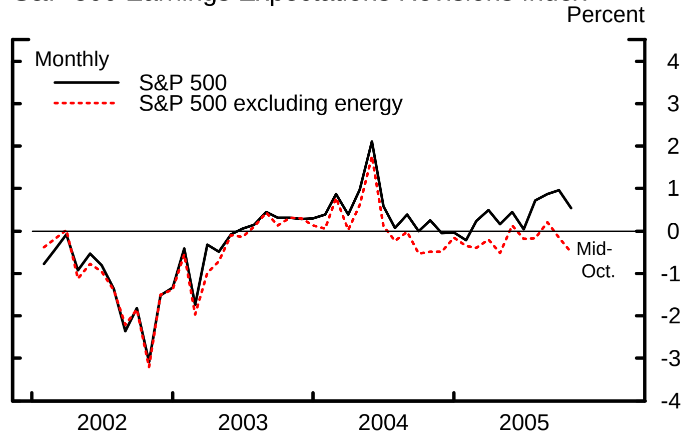
[4] Open interest in the September ten-year Treasury futures contract remained elevated through its final days of trading. Nonetheless, all the deliveries were met using the August 2012 note, which was the cheapest-to-deliver security.

Chart 2
Asset Market Developments

Stock Prices

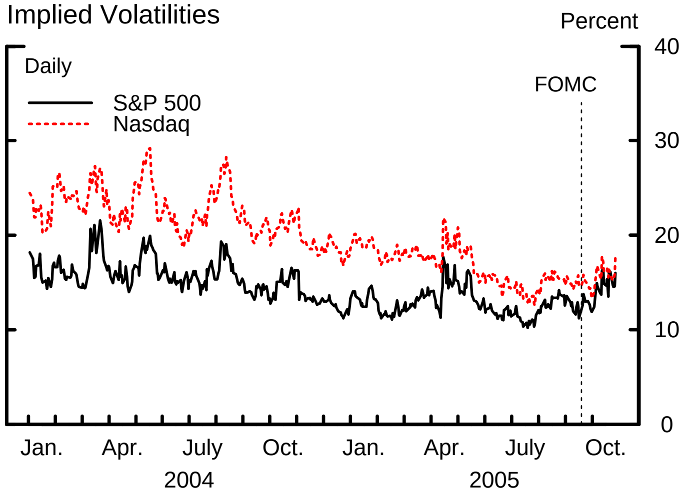


S&P 500 Earnings Expectations Revisions Index

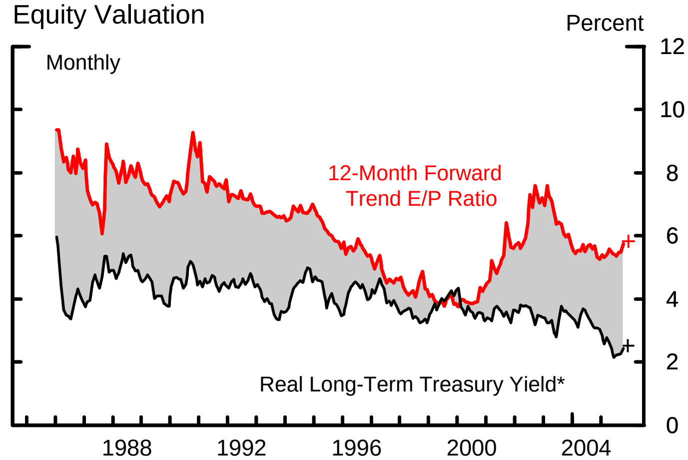


Note. Index is a weighted average of the percent change in the consensus forecasts of current-year and following-year EPS for constant sample.

Implied Volatilities

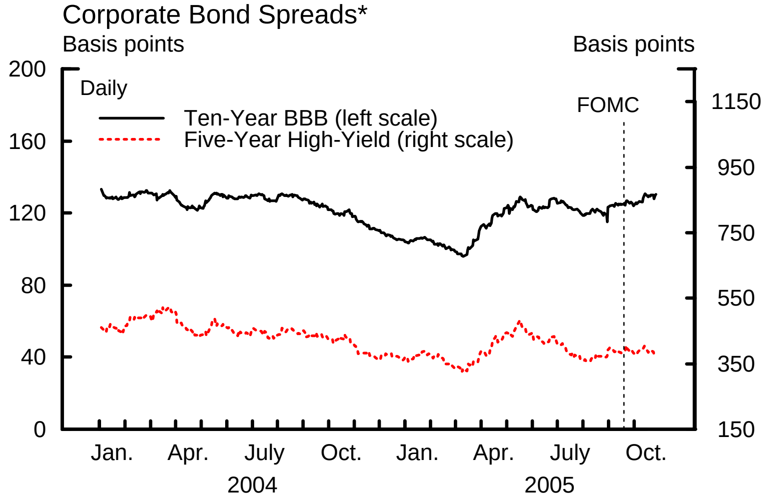


Equity Valuation



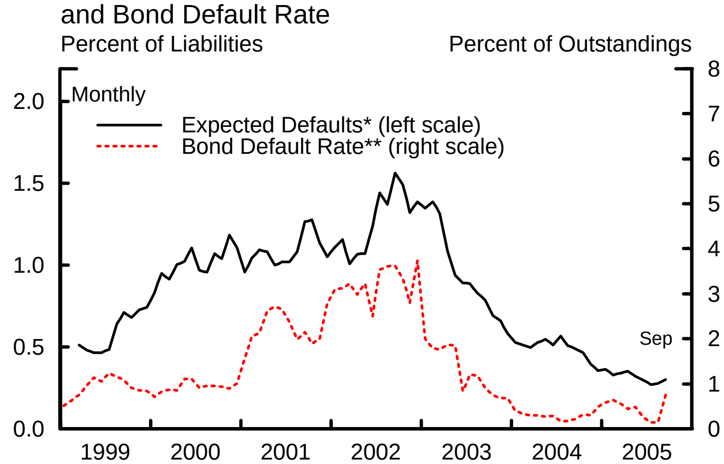
*Perpetuity Treasury yield minus Philadelphia Fed 10-year expected inflation.
Note. + Denotes the latest observation using daily interest rates and stock prices and latest earnings data from I/B/E/S.

Corporate Bond Spreads*



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

Expected Defaults of Nonfinancial Companies and Bond Default Rate



*Firm-level estimates of year-ahead defaults from KMV corporation, weighted by firm liabilities as a percent of total liabilities, excluding defaulted firms.
**Six-month moving average, from Moody's Investors Service

Note: Vertical lines indicate September 19, 2005. Last daily observations are for October 27, 2005.

been concerned about the cautious tone to corporate guidance about future earnings growth. Implied volatilities from equity options remained low but edged up a bit over the period in response to several announcements of corporate distress, including the sudden collapse of Refco, the bankruptcy filings by Delphi, Delta Airlines, and Northwest Airlines, and the announcement of an SEC investigation into the pension practices of General Motors (more details about the bankruptcies are provided in the box "Credit Market Developments"). The timing of some of the bankruptcy filings may have been related to the implementation of new bankruptcy rules in October. As a result of the problems at these firms, the number of downgrades of corporate bonds increased, as did the aggregate bond default rate. However, corporate quality outside of the automobile and airline sectors remained solid. Broad indexes of investment- and speculative-grade corporate bond yields moved largely in line with Treasury yields over the period, leaving spreads little changed.

(4) The dollar's foreign exchange value against major currencies rose about ¾ percent on balance over the intermeeting period (Chart 3).[5] Somewhat stronger-than-expected U.S. economic data and the expressed resolve of U.S. officials to combat inflationary pressures reportedly supported the dollar. A number of foreign central bankers conveyed similar determination, heightening expectations of monetary policy tightening abroad. In Canada, the Bank of Canada raised its policy rate another 25 basis points in mid-October, citing inflation concerns. In most major industrial economies, yields on foreign long-term government securities rose a bit less than in the United States. The dollar was little changed against the Canadian dollar and the euro, but gained 1¼ percent against sterling and almost 3¼ percent against the yen. Although recent Japanese data have been somewhat softer than during the first half of the year, that economy apparently advanced further. Bank of Japan officials have

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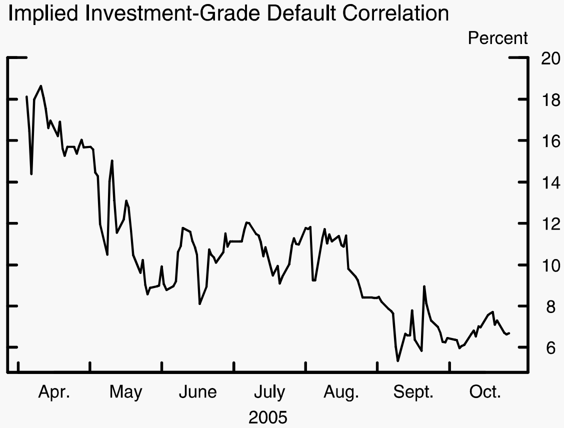
Credit Market Developments

Four high-profile companies—Refco, Delphi, and Delta and Northwest Airlines—filed for Chapter 11 bankruptcy protection in the last six weeks; corporate bonds with par value totaling slightly more than $8 billion were affected by these filings. Refco, a large derivatives broker, collapsed when clients deserted the firm following the revelation of accounting irregularities just two months after its initial public offering. Delphi, the largest U.S. automobile parts manufacturer, cited its inability to reach cost-cutting agreements with unions and with General Motors—from which it spun off in 1999—as reasons for its filing. Competition from low-cost carriers and soaring fuel prices were instrumental in the airlines' defaults. Some of these firms may have filed for bankruptcy more quickly than they otherwise would have in order to avoid the corporate provisions of the new bankruptcy law, which took effect on October 17.

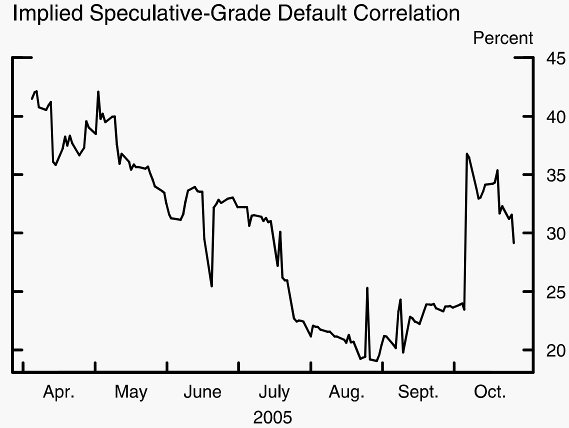
Delphi's bankruptcy filing rekindled investors' concerns about credit quality in the automobile sector—where spreads on several firms, including Ford and General Motors, initially rose sharply and have since remained volatile. The airlines' defaults, however, elicited little reaction, as they were largely expected. Refco's collapse had no discernible effect on financial market functioning, as its wind-down was orderly and its accounting troubles were seen as isolated. Overall, the impact of the bankruptcies on the broad credit market appears to have been limited. In a sign that investors expect little spillover from the recent defaults, a measure of the likelihood that future defaults in the investment-grade sector will be clustered—the so-called implied default correlation obtained from CDS index tranches—has remained extremely low. The equivalent measure for the speculative-grade sector has picked up, but that increase reflects in part the considerable presence of automobile-sector firms in the high-yield CDS index. Even with the recent increase, investors apparently still judge the likelihood of correlated defaults among speculative-grade firms to be lower than it was last spring.

Implied Investment-Grade Default Correlation



Source: JP Morgan.

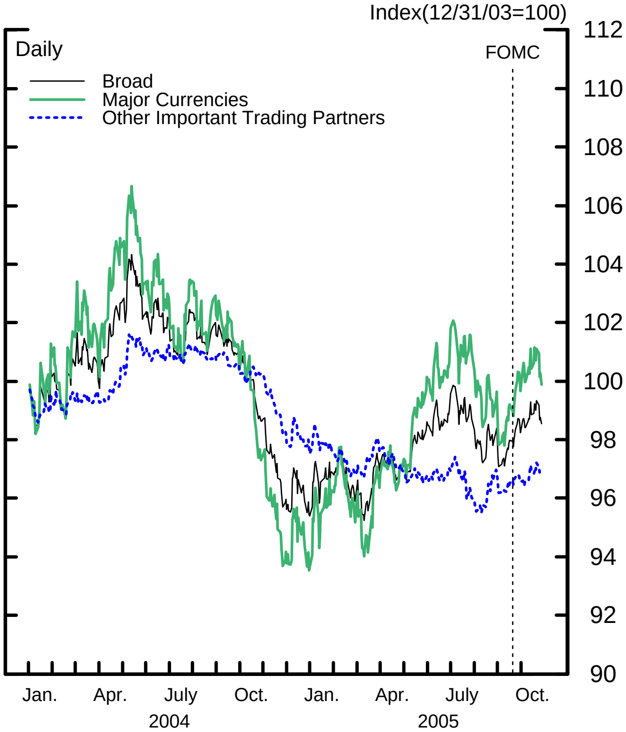
Implied Speculative-Grade Default Correlation



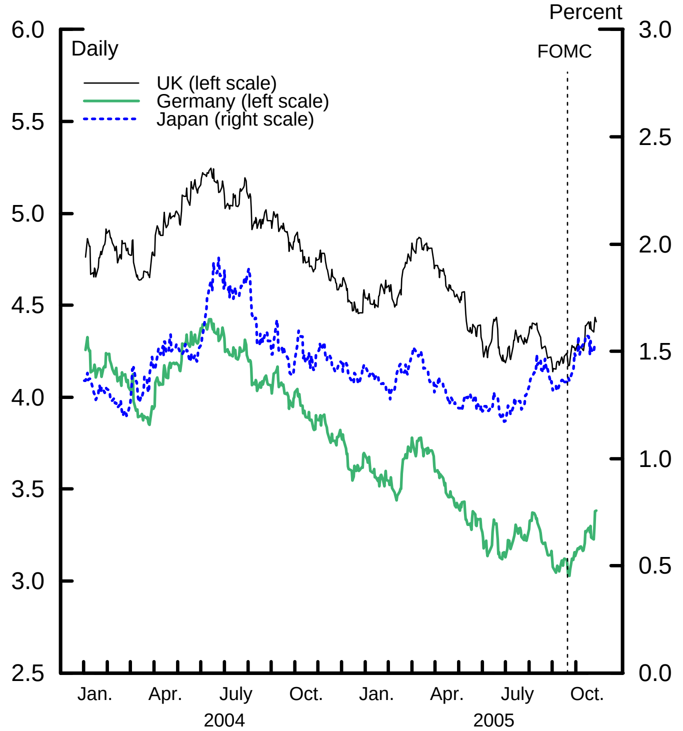
Source: JP Morgan.

Chart 3
International Financial Indicators

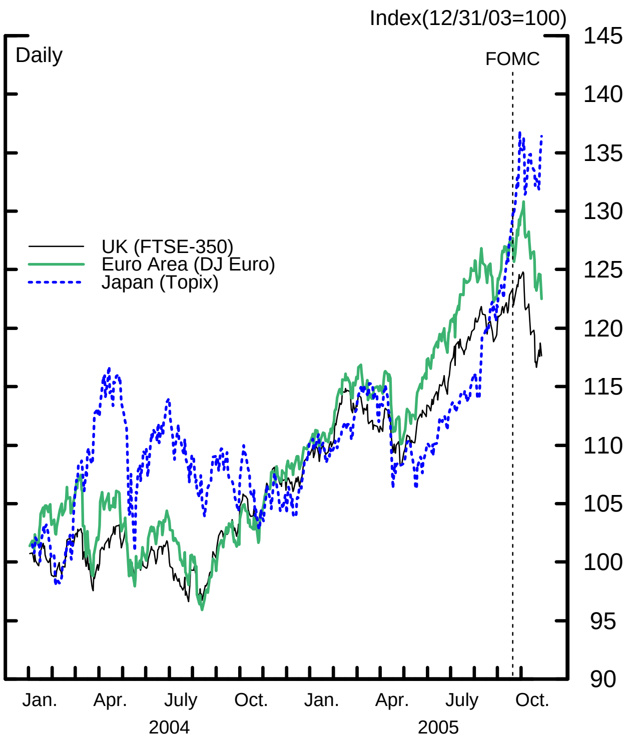
Nominal Trade-Weighted Dollar Indexes



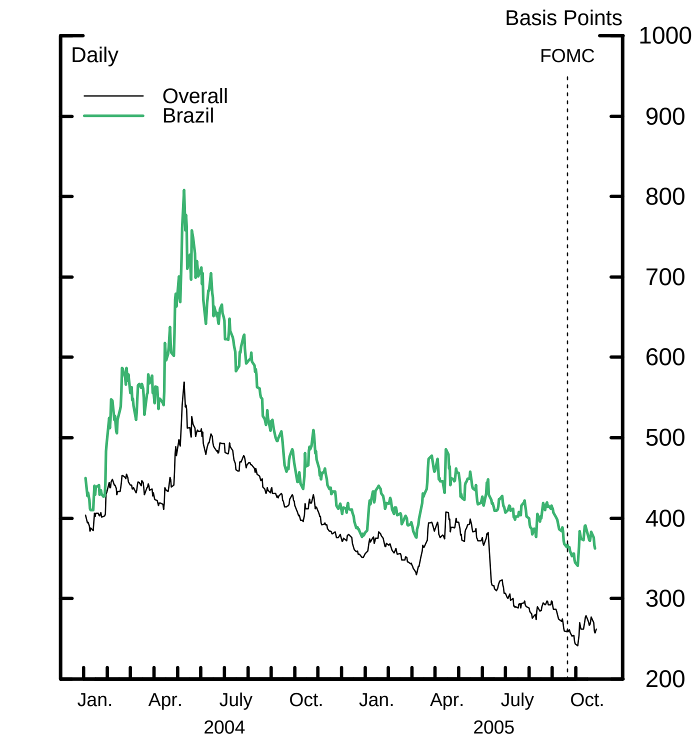
Ten-Year Government Bond Yields



Stock Price Indexes



EMBI+ Index



Note: Vertical lines indicate September 20, 2005. Last daily observations are for October 27, 2005.

continued to hint that, given their economic outlook, the quantitative easing regime will likely end during the first half of next year. Share prices in Japan made solid gains during the intermeeting period, led by banking and other financial-sector stocks that reacted positively to passage of the postal reform bill. Stock prices in other foreign industrial countries recorded declines of 2 to 7 percent, broadly similar to those in U.S. markets.

(5) The dollar recorded a small gain against an index of currencies of our other important trading partners over the intermeeting period. The dollar moved up ¾ percent against the peso, as the Bank of Mexico eased its overnight lending rate 25 basis points for the second time in recent months. The dollar continued on its downward trend against the Brazilian *real*, and the Brazilian central bank surprised markets with a 50 basis point easing of its policy rate to counter weakening domestic demand. Equity prices in many emerging market countries dropped fairly sharply, as investor demand for riskier assets appeared to abate with increases in U.S. interest rates.

(6) Domestic nonfinancial debt is estimated to have advanced briskly in the third quarter, rising 8¼ percent on net (Chart 4). Growth in household debt appears to have edged down in the third quarter owing to a slowing in mortgage debt growth, although the forecast of the latter remains at an elevated level. Household bankruptcies surged in the weeks immediately before bankruptcy reforms went into effect on October 17. The debt of nonfinancial businesses appears to have risen in the third quarter at a rate comparable to increases seen in the first half of the year. In October, bond issuance has slowed as higher yields may have discouraged new longer-term issues. Commercial paper, which ran off at quarter-end, bounced back in early October. Bank loans to businesses continued to advance briskly, and the results of the most recent Senior Loan Officer Opinion Survey show some further easing of lending terms and standards for such loans.

Chart 4
Debt and Money

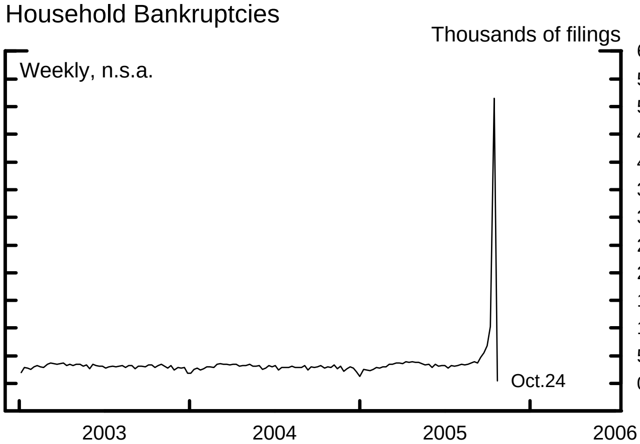
Growth of Nonfinancial Debt

Percent, s.a.a.r.

		Total	Nonfederal
2003		8.1	7.6
2004	Q1	9.3	8.6
	Q2	7.2	6.8
	Q3	8.5	9.0
	Q4	8.1	8.4
2005	Q1	9.7	8.7
	Q2	7.3	9.0
	Q3 p	8.2	8.9

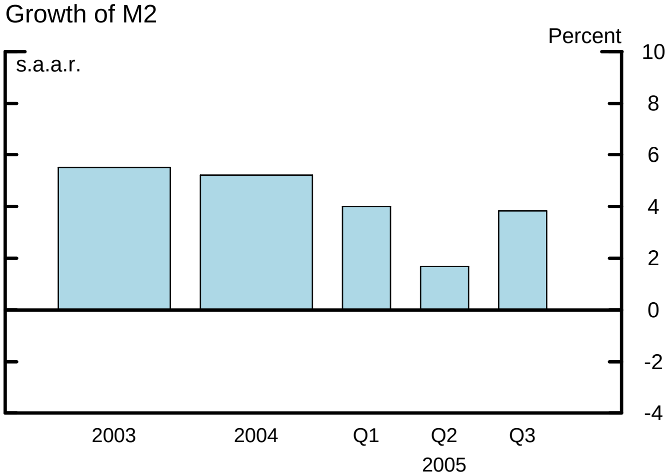
p Projected.

Household Bankruptcies

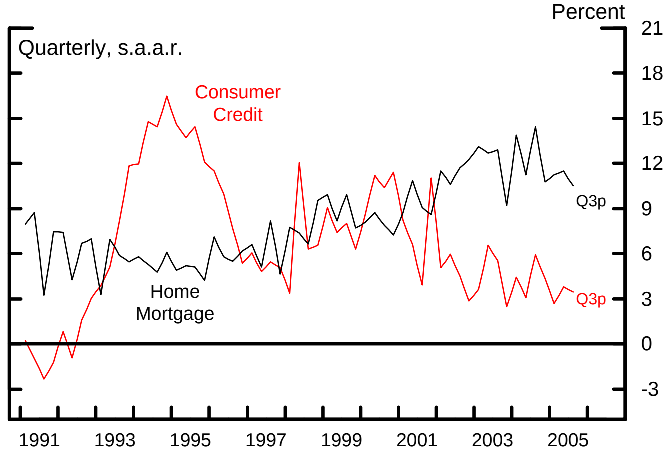


*Source. Visa Bankruptcy Notification Service.

Growth of M2

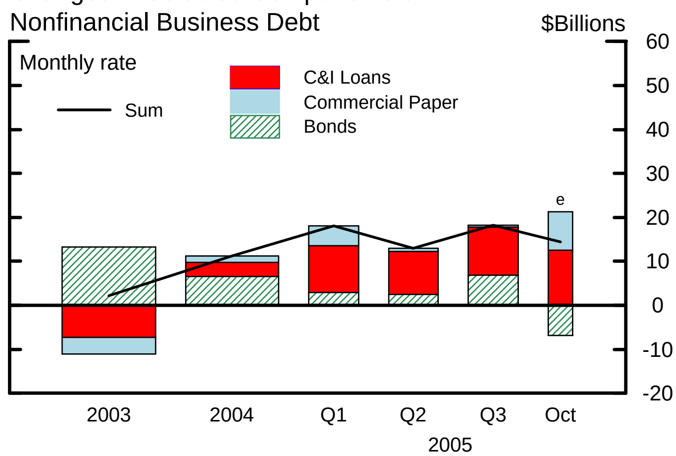


Growth of Household Debt



p Projected.

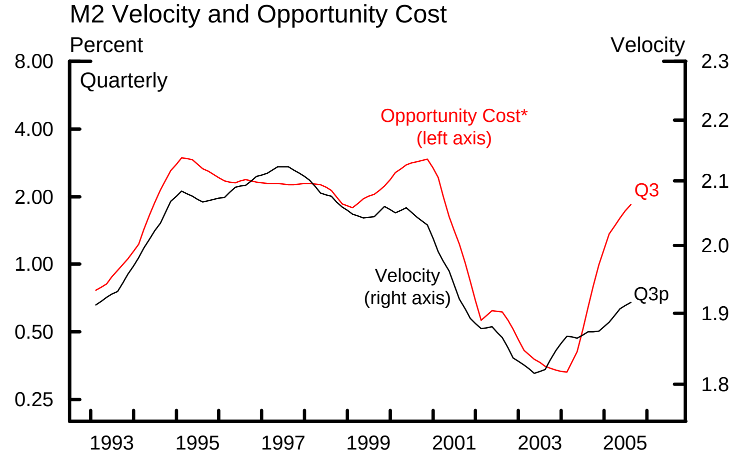
Changes in Selected Components of Nonfinancial Business Debt



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

e Estimated.

M2 Velocity and Opportunity Cost



*Two-quarter moving average.

p Projected.

(7) M2 expanded at an annual rate of 6 percent in September, bringing third-quarter growth to 4 percent. The increase in September was in part attributable to a surge in retail money market funds and to a boost to currency and liquid deposits resulting from Hurricane Katrina.[6] Growth in nominal output in the third quarter likely exceeded that of M2, implying a further rise in velocity.

[6] Through September, the Federal Emergency Management Agency had paid out about $2 billion in the Gulf region, and insurance transfers are estimated to have been about $1 billion, a portion of which will likely rest in liquid deposits for a time. The staff assumes that by year-end, FEMA will have paid out about $6.5 billion and insurance companies will have delivered nearly $9.5 billion as a result of the hurricanes.

Economic Outlook

(8) The staff has revised down slightly its projection for real GDP growth since the September Greenbook, as the rise in longer-term yields, drop in equity values, and appreciation of the exchange value of the dollar over the intermeeting period established a launching-off point for the forecast consistent with more financial restraint than in the previous projection. The outlook is predicated on the same cumulative amount of policy tightening, which brings the federal funds rate to 4¼ percent, but is now based on an assumption that the process of firming will be completed this year, rather than in the middle of next year. At the time of the September meeting, market participants had foreseen a little less tightening than the staff; now they foresee somewhat more. As a result, bond yields are forecast to decline slightly as investors' expectations for policy gradually come into line with the lower path in the staff outlook. As in previous forecasts, the stock market generates risk-adjusted returns similar to those on fixed-income investments, while the foreign exchange value of the dollar depreciates modestly. In the context of these financial conditions and the impetus to spending from a burst of rebuilding in the Gulf region, GDP grows a little faster than the 3 percent expansion of potential output next year and a little slower than that pace in 2007. The unemployment rate in 2007 edges slightly above the estimated NAIRU of 5 percent and the output gap widens a bit to almost ½ percent. Core PCE inflation picks up to 2¼ percent next year, in light of some pass-through to inflation expectations of recently elevated headline inflation. However, falling energy prices help bring overall PCE inflation down from 3¼ percent this year to 2 percent in 2006 and 1¾ percent in 2007 and, along with a little economic slack, pull core inflation below 2 percent in 2007.

Policy Alternatives

(9) This Bluebook presents three policy alternatives for the Committee's consideration, summarized by the draft statements in Table 1. Under Alternative A, the Committee would leave its target for the federal funds rate unchanged at 3¾ percent at this meeting; the statement emphasizes uncertainties surrounding the economic dislocations of the hurricanes and associated effects on consumer and business confidence, but still signals that remaining monetary policy accommodation could likely be removed at a measured pace. Under Alternatives B and C, the Committee would raise the target federal funds rate 25 basis points. Alternative B retains much of the statement the Committee issued after its September meeting, including the characterization that policy remains accommodative. Alternative C takes a somewhat more aggressive tone and eliminates the balance-of-risks, accommodative, and measured pace language.[7]

(10) Although core inflation readings have been favorable in recent months, Committee members may be concerned that, in light of some signs of sharply higher near-term inflation expectations and reports of greater pricing power, elevated energy and other costs threaten to pass through significantly to core price inflation. If the Committee believes that a continued measured pace of policy firming will prove sufficient to contain these inflationary pressures, it might be inclined to raise the target funds rate another 25 basis points at this meeting and choose language as in **Alternative B**. As seen in Chart 5, a 25 basis point increase in the target funds rate would move the real funds rate into the range of rates estimated by the staff to be broadly consistent with closing the output gap over the next few years. However, the

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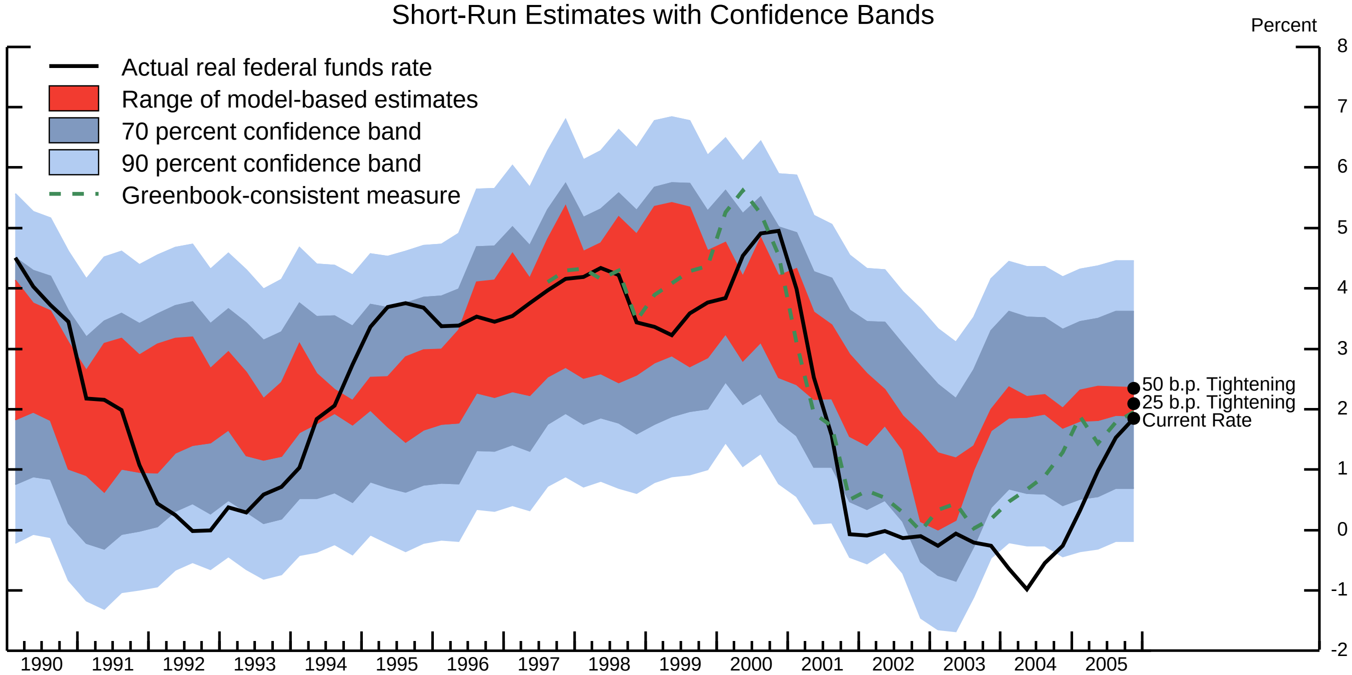
[7] The box "Other Language Alternatives" at the end of this section considers other possible modifications to the language. Given the wholesale changes proposed in the third row of Table 1, we have not followed the usual practice of striking out deletions and bolding insertions relative to the prior statement.

Table 1: Alternative Language for the November FOMC Announcement

	September 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 3¾ percent.	The Federal Open Market Committee decided today to leave its target for the federal funds rate unchanged.	The Federal Open Market Committee decided today to raise its target for the federal funds rate by 25 basis points to 4 percent.	The Federal Open Market Committee decided today to raise its target for the federal funds rate by 25 basis points to 4 percent.
Rationale	2. Output appeared poised to continue growing at a good pace before the tragic toll of Hurricane Katrina. The widespread devastation in the Gulf region, the associated dislocation of economic activity, and the boost to energy prices imply that spending, production, and employment will be set back in the near term. In addition to elevating premiums for some energy products, the disruption to the production and refining infrastructure may add to energy price volatility. While these unfortunate developments have increased uncertainty about near-term economic performance, it is the Committee's view that they do not pose a more persistent threat. Rather, monetary policy accommodation, coupled with robust underlying growth in productivity, is providing ongoing support to economic activity.	Elevated energy prices and hurricane-related disruptions in economic activity seem to have slowed the growth of spending, set back employment, and weakened consumer and business confidence. The persistence of such effects is uncertain, but robust underlying growth of productivity and monetary policy accommodation are providing support to economic activity.	Elevated energy prices and hurricane-related disruptions in economic activity seem to have temporarily slowed the growth of spending and set back employment. However, monetary policy accommodation, coupled with robust underlying growth in productivity, is providing ongoing support to economic activity. Spending will also be boosted by rebuilding efforts in hurricane-affected areas.	The disruptive effects of recent hurricanes seem likely to be temporary, especially in light of increased spending associated with rebuilding efforts. Economic growth continues to be supported by robust underlying growth in productivity.
	3. Higher energy and other costs have the potential to add to inflation pressures. However, core inflation has been relatively low in recent months, and longer-term inflation expectations remain contained.	High energy and other costs have added to inflation pressures. However, core inflation has been relatively low in recent months, and longer-term inflation expectations remain contained.	The cumulative rise in energy and other costs has added to inflation pressures. However, core inflation has been relatively low in recent months, and longer-term inflation expectations remain contained.	Core inflation and longer-term inflation expectations remain contained. However, high energy and other costs have boosted near-term inflation expectations and price pressures, likely making further policy firming necessary.
Assessment of Risk	4. 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]
	5. 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]

Chart 5
Equilibrium Real Federal Funds Rate

Short-Run Estimates with Confidence Bands



Notes: The actual real federal funds rate is constructed as the difference between the quarterly average of the observed 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		
Single-equation model	1.9	*1.9*
Small structural model	2.4	*2.3*
Large model (FRB/US)	2.3	*1.9*
Confidence intervals for three model-based estimates		
70 percent confidence interval	0.7 - 3.6	
90 percent confidence interval	-0.2 - 4.5	
Greenbook-consistent measure	2.0	*1.9*
Medium-Run Measures		
Single-equation model	2.1	*2.2*
Small structural model	2.4	*2.3*
Confidence intervals for two model-based estimates		
70 percent confidence interval	1.4 - 3.2	
90 percent confidence interval	0.7 - 3.7	
TIPS-based factor model	2.1	*2.0*
Memo		
Actual real federal funds rate	1.85	*1.59*

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-consistent measure and the actual real funds rate are the values published in the previous Bluebook.

Equilibrium Real Rate Chart: Explanatory Notes

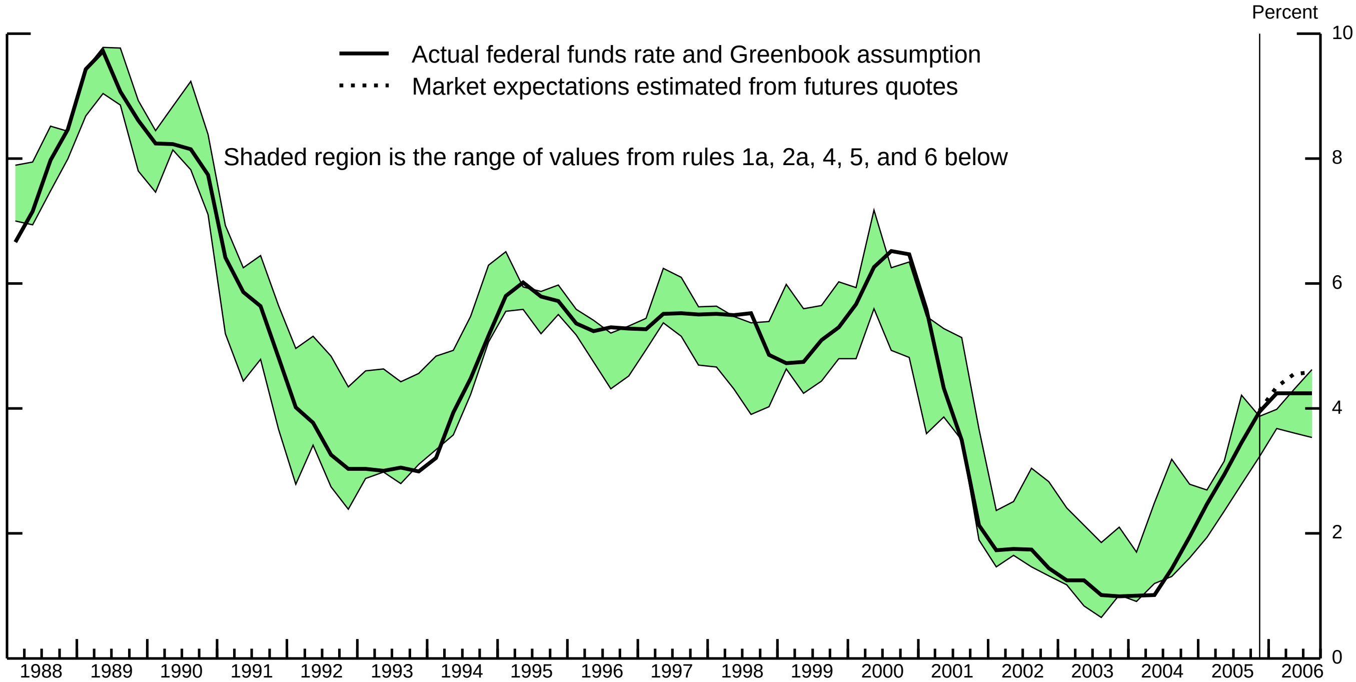
The equilibrium real rate is the real federal funds rate that, if maintained, would be projected to return output to its potential level over time. For the first three measures listed below, the short-run equilibrium rate is defined as the rate that would close the output gap in twelve quarters given the corresponding model's projection of the economy. For the first two measures, 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 TIPS-based factor model measure provides an estimate of market expectations for the real federal funds rate seven years ahead. The actual real federal funds rate shown in the chart 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.

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-based Factor Model	Yields on TIPS (Treasury Inflation-Protected Securities) reflect investors' expectations of the future path of real interest rates, but also include term and liquidity premiums. The TIPS-based measure of the equilibrium real rate is constructed using the seven-year-ahead instantaneous real forward rate derived from TIPS yields as of the Bluebook publication date. This forward rate is adjusted to remove estimates of the term and liquidity premiums based on a three-factor arbitrage-free term-structure model applied to TIPS yields, nominal yields, and inflation. Because TIPS indexation is based on the total CPI, this measure is also adjusted for the medium-term difference—projected at 40 basis points—between total CPI inflation and core PCE inflation.

Committee may believe that higher real interest rates and a bit more resource slack will be required to contain inflation, making it appropriate to issue a statement suggesting that more tightening is likely in store. Such a policy course might also be favored if the Committee viewed the current rate of core inflation to be at or above the upper limit of a range consistent with price stability. With most measures of labor compensation posting moderate gains and some reversal of the runup in energy prices in prospect, members may believe that remaining firming can be done gradually, consistent with the measured pace language of Alternative B. While a policy hike at this meeting would place the funds rate at the high end of the prescriptions of several policy rules that are based on a 1½ percent objective for core PCE inflation, that is only a matter of timing because those rules indicate a need for an even higher funds rate by mid-2006 (Chart 6).

(11) The Committee may wish to begin the rationale portion of the statement for Alternative B by reaffirming the view that adverse effects of the hurricanes will probably slow the pace of the expansion only temporarily. Robust underlying growth in productivity may still be seen as a support for economic activity. The statement could also note the boost to aggregate demand from increased private and public spending associated with rebuilding efforts in hurricane-affected areas. While a 25 basis point move would place the funds rate at about the midpoint of the staff's range of estimated equilibrium rates, the Committee may still prefer to characterize policy as accommodative in light of the underlying strength of demand and upward pressures on inflation. As for inflation, the Committee could cite indications, evident in some producer prices and in surveys of near-term inflation expectations, that "The cumulative rise in energy and other costs has added to inflation pressures," while still noting that "core inflation has been relatively low in recent months." The observation that "longer-term inflation expectations remain contained" may be seen as appropriate to convey a balanced view of the inflation outlook.

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		
	Q3	Q4	Q1	Q2	Q3
Rules with Imposed Coefficients					
1. Baseline Taylor Rule: a) π^*=1.5	4.22	3.88	3.99	4.30	4.62
b) π^*=2	3.97	3.63	3.74	4.05	4.37
2. Aggressive Taylor Rule: a) π^*=1.5	4.07	3.63	3.85	4.23	4.53
b) π^*=2	3.82	3.38	3.60	3.98	4.28
3. First-difference Rule: a) π^*=1.5	3.48	4.08	4.59	4.92	5.10
b) π^*=2	3.23	3.83	4.09	4.17	4.10
Rules with Estimated Coefficients					
4. Outcome-based Rule	3.43	3.65	3.79	4.02	4.25
5. Greenbook Forecast-based Rule	3.38	3.78	3.91	3.92	3.85
6. FOMC Forecast-based Rule	2.79	3.24	3.68	3.61	3.54
7. TIPS-based Rule	3.29	3.92			
Memo					
Expected federal funds rate derived from futures		3.97	4.35	4.55	4.58
Actual federal funds rate and Greenbook assumption	3.46	3.95	4.25	4.25	4.25

Note: Rule prescriptions for 2005Q4 through 2006Q3 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 2006Q1 through 2006Q3. It is assumed that there is no feedback from the rule prescriptions to the Greenbook projections through 2006Q3. 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	
		1988:1-2005:3	2001:1-2005:3
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]	1.04[a]
2. Aggressive Taylor Rule	$i_t = 2 + \pi_t + (y_t - y_t^*) + 0.5(\pi_t - \pi^*)$	.67[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]	.40[a]
Rules with Estimated Coefficients			
4. Estimated Outcome-based Rule Rule includes both lagged interest rate and serial correlation in residual.	$i_t = .51 i_{t-1} + 0.49\,[1.29 + 0.95(y_t - y_t^*) + 1.45\pi_t] + 0.53\varepsilon_{t-1}$	.23	.25
5. Estimated Greenbook Forecast-based Rule Rule includes both lagged interest rate and serial correlation in residual.	$i_t = .71 i_{t-1} + 0.29\,[0.75 + 1.03(y_{t+3\|t} - y_{t+3\|t}^*) + 1.59\pi_{t+3\|t}] + 0.38\varepsilon_{t-1}$	.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.	$i_t = 0.48 i_{t-2} + 0.52\,[0.43 - 2.09(u_{t+3\|t} - u_{t+3\|t}^*) + 1.56\pi_{t+3\|t}]$	.47	.64
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.	$i_t = 0.97 i_{t-1} + [-1.27 + 0.70\pi_{comp5\|t}]$	.40[b]	.41

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

[b] RMSE for TIPS-based rule is calculated for 1999:1-2005:3.

(12) Futures market quotes suggest that investors are virtually certain of a 25 basis point firming of policy at this meeting, and surveys reveal that primary dealers expect little change in the nature of the statement. Therefore, market prices would likely be essentially unaffected by a 25 basis point increase in the funds rate and the statement language as under Alternative B.

(13) If the Committee wished to convey greater concern about upside risks to inflation, it might prefer to combine a 25 basis point increase in the target funds rate with the language included under **Alternative C**. The Committee may especially favor this alternative if increases in energy and other costs were viewed as beginning to unmoor inflation expectations, potentially starting an upward shift in inflation dynamics that would be hard to reverse later. Even if inflation expectations remain well anchored for a time, a sharper rebound in spending growth as rebuilding in the hurricane-affected areas picks up steam may put excessive strains on resources. The proposed statement drops the characterization of policy as accommodative, but it indicates in the comments on inflation (row 3) that further policy firming likely is necessary on the thought that the Committee might soon envision moving the real funds rate past its neutral level—that is, to impose policy restraint. The sentence on the balance of risks is also eliminated; the Committee might see that formula as redundant or possibly misleading about the extent of upside inflation risks at present. The final paragraph on the measured pace language is also dropped, allowing greater flexibility for possible future adjustments of policy. The Committee may see this more forceful tone as warranted in light of the backup in market interest rates, increase in inflation compensation, and depreciation of the dollar in recent days, which might be viewed as signs of the emergence of inflation jitters in financial markets. Indeed, the Committee may prefer to raise the target funds rate 50 basis points at this meeting in association with language similar to that under Alternative C to underscore its determination to resist an increase in inflation.

(14) Market participants would be surprised by the removal of the measured pace and policy accommodation language and, perhaps, by the explicit indication that additional firming was likely to be necessary. With a 25 basis point move and the language proposed under Alternative C, short-term interest rates and the exchange value of the dollar would likely rise, while stock prices would fall. If markets revised down their outlook for longer-term inflation as a result of the statement, however, longer-term interest rates might increase only a little. With a 50 basis point firming, market participants would likely raise their sense of inflation risks and the near-term path of expected monetary policy substantially; short- and intermediate-term market interest rates would jump, the dollar would rally, and the stock market could sell off sharply.

(15) Committee members may wish to consider **Alternative A** if they think that the recent moderate rates of core inflation are likely to continue and if they see the outlook for the economy as especially uncertain because of the effects of the hurricanes and elevated energy prices. Particularly if the Committee, like the staff, views the real federal funds rate as in the vicinity of its equilibrium level, a pause in policy firming might be seen as desirable, partly to await further readings on consumer and business sentiment and spending. Such a pause may also be chosen if members believe that the real estate market is in the process of softening, which heretofore has been an important spur to household spending. Under this alternative, the Committee might refer to "remaining" policy accommodation in the final risk assessment paragraph. Markets would be surprised at the decision to leave the target funds rate unchanged. Short-term interest rates would probably decline considerably as markets lowered the probability of near-term tightening moves. Longer-term interest rates might be little changed or even back up if investors saw the FOMC as more tolerant than they expected of an increase in inflation. The foreign exchange value of the dollar would likely fall, especially if inflation expectations deteriorated.

Other Language Alternatives

Committee members have recognized for some time that certain features of its policy statement would not prove durable, not the least being its characterization of policy as accommodative and its prediction that this accommodation can be removed at a pace that is likely to be measured. The assessment that policy is accommodative becomes increasingly problematic as the real federal funds rate enters the range of plausible estimates of its equilibrium level. Moreover, the Committee may feel it necessary to move the real funds rate beyond its neutral level to unwind inflationary pressures or to roll back some of the rise in inflation over the past couple of years. In doing so, the Committee might be reluctant to switch its characterization of policy from accommodative to contractionary. Two alternatives might be considered.

For one, if it is important to convey the sense that policy action will remain gradual, the statement could replace the description of the stance of policy with words describing the direction of its likely future action. In particular, the key portion of row 5 could read: ". . . the Committee believes that policy firming can continue at a pace that is likely to be measured."

For another, the Committee could drop rows 4 and 5 in favor of a formula for its risk assessment. One such formula, for example, was proposed in a box in the September Bluebook. In that structure, the Committee would provide separate assessments of the risks to its two goals under the explicit assumption that the stance of policy remains unchanged for the next few quarters.

Money and Debt Forecasts

(17) Under the staff forecast, M2 is expected to expand 3¾ percent this year, almost 2½ percentage points slower than nominal GDP, owing to rising opportunity costs (Table 2). With short-term market rates assumed to be unchanged in 2006 and 2007, deposit rates should gradually catch up, partially unwinding the recent sharp increases in the opportunity cost of money holding. As a consequence, M2 is projected to accelerate to a 4½ percent pace next year and 5 percent in 2007, a little below and above the growth rates of nominal GDP, respectively. Domestic

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

		No Change	M2 25 bp Increase	50 bp Increase	M2 Greenbook Path
Monthly Growth Rates					
	Sep-05	6.1	6.1	6.1	6.1
	Oct-05	6.9	6.9	6.9	6.9
	Nov-05	3.2	3.0	2.8	3.0
	Dec-05	4.0	3.4	2.8	3.2
	Jan-06	4.9	4.1	3.3	3.5
	Feb-06	6.1	5.3	4.5	4.5
	Mar-06	6.0	5.4	4.8	4.7
	2005 Q1	4.0	4.0	4.0	4.0
	2005 Q2	1.7	1.7	1.7	1.7
	2005 Q3	3.9	3.9	3.9	3.9
	2005 Q4	5.4	5.3	5.2	5.3
	2006 Q1	4.9	4.3	3.6	3.7
	2005	3.8	3.8	3.7	3.8
	2006	5.3	4.9	4.5	4.5
Growth From	To				
2004 Q4	Sep-05	3.5	3.5	3.5	3.5
2004 Q4	Oct-05	3.8	3.8	3.8	3.8
Dec-04	Oct-05	3.6	3.6	3.6	3.6
Oct-05	Mar-06	4.9	4.3	3.7	3.8

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

nonfinancial sector debt is expected to grow around 8¼ percent this year and then decelerate to a 6½ percent pace in 2007. Less rapid home price appreciation tempers mortgage borrowing by households, and business debt growth slows with the deceleration of economic activity.

Directive and Balance-of-Risks Statement

(18) 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 ____________ ~~3¾~~ percent.

Risk Assessments

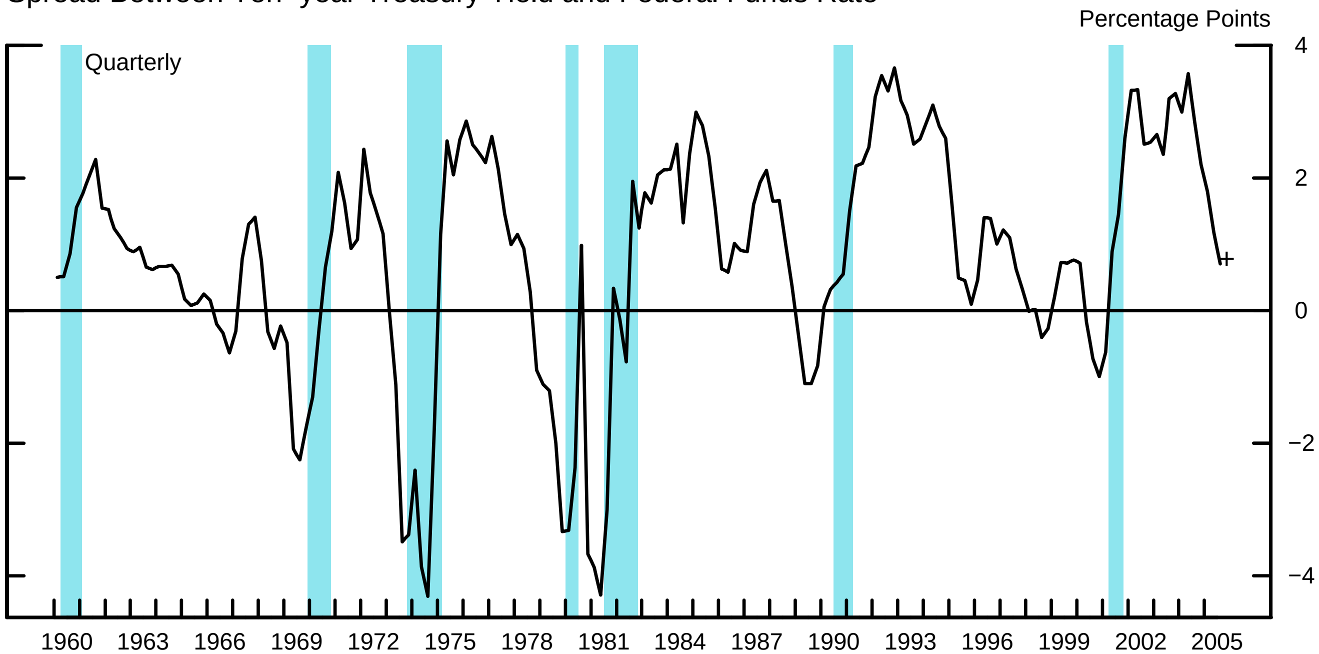
A. The Committee perceives that, with appropriate monetary policy action, the upside and downside risks to the attainment of both sustainable growth and price stability should be kept roughly equal. With underlying inflation expected to be contained, the Committee believes that remaining policy accommodation 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.

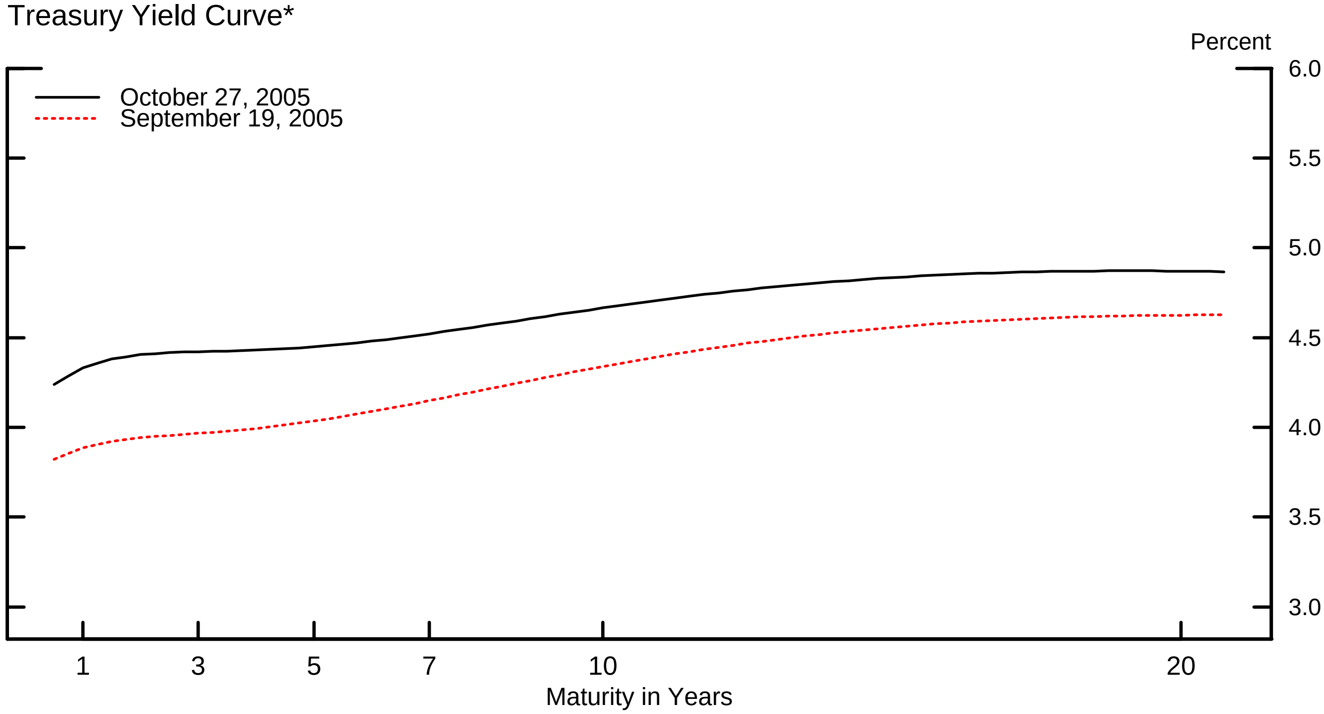
Treasury Yield Curve

Spread Between Ten−year Treasury Yield and Federal Funds Rate



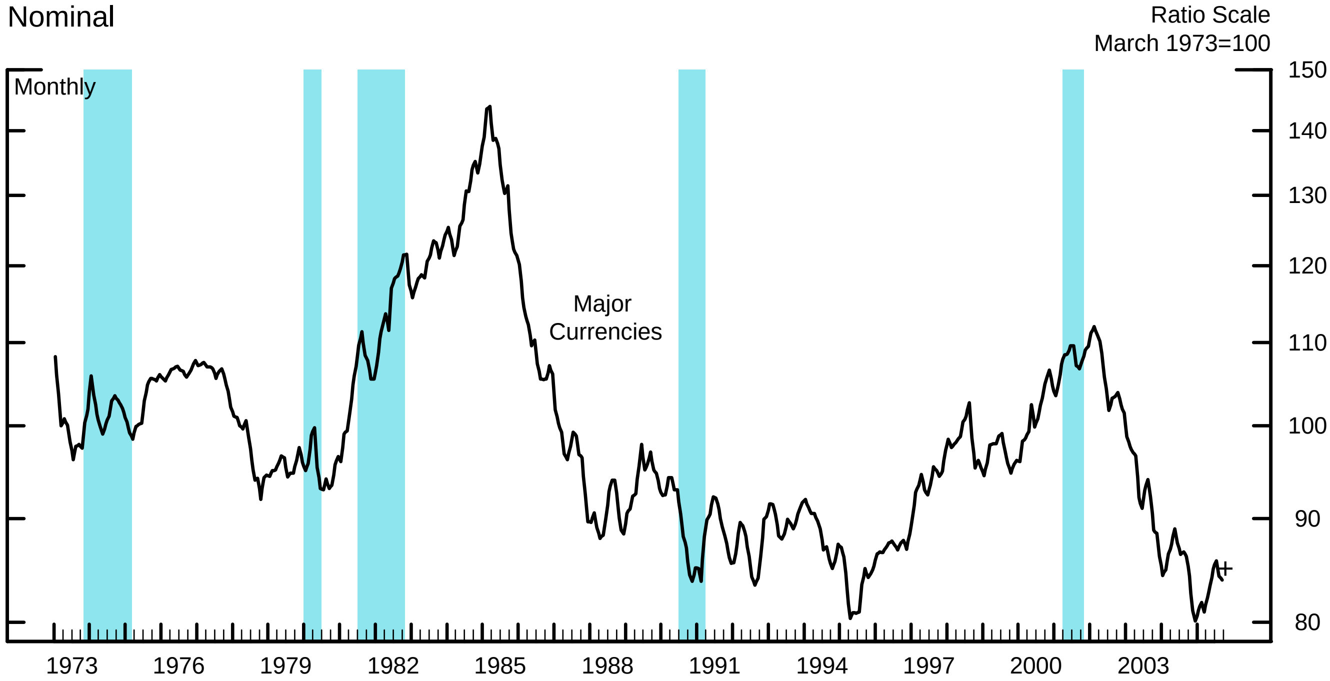
+ Denotes most recent weekly value.
Note. Blue shaded regions denote NBER−dated recessions.

Treasury Yield Curve*

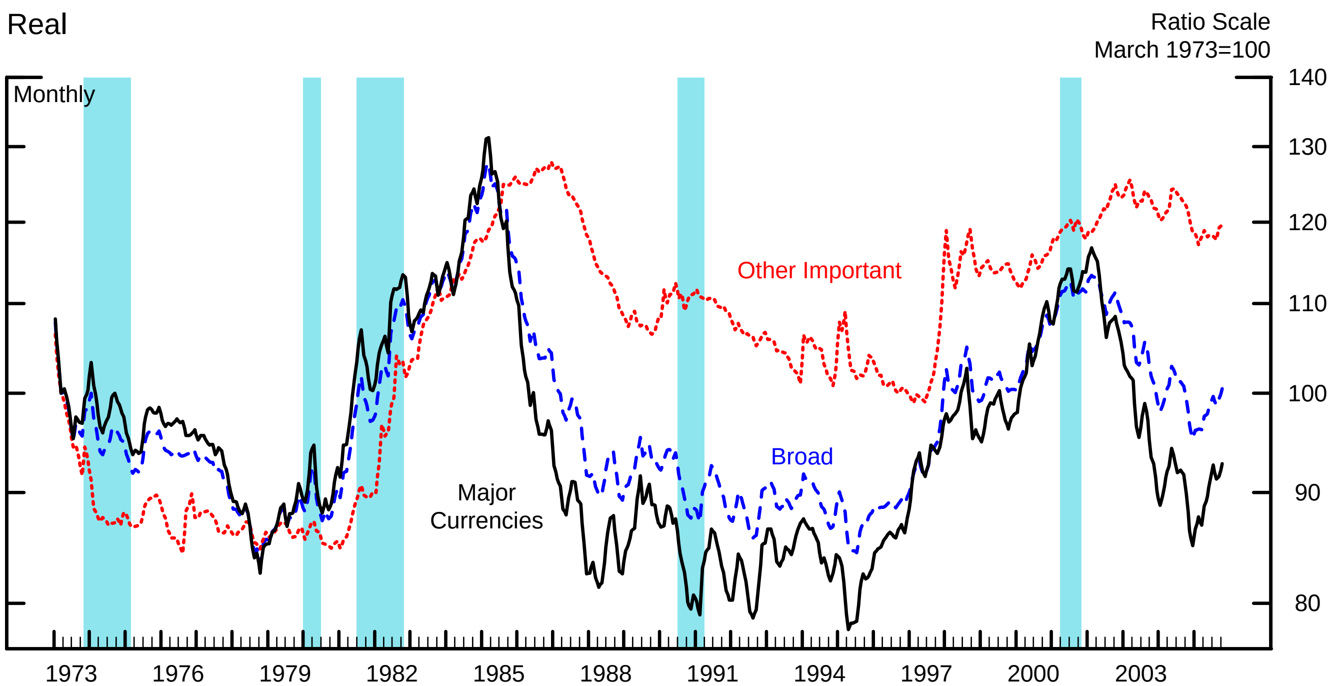


*Smoothed yield curve estimated from off−the−run Treasury coupon securities. Yields shown are those on notional par Treasury securities with semi−annual coupons.

Dollar Exchange Rate Indexes



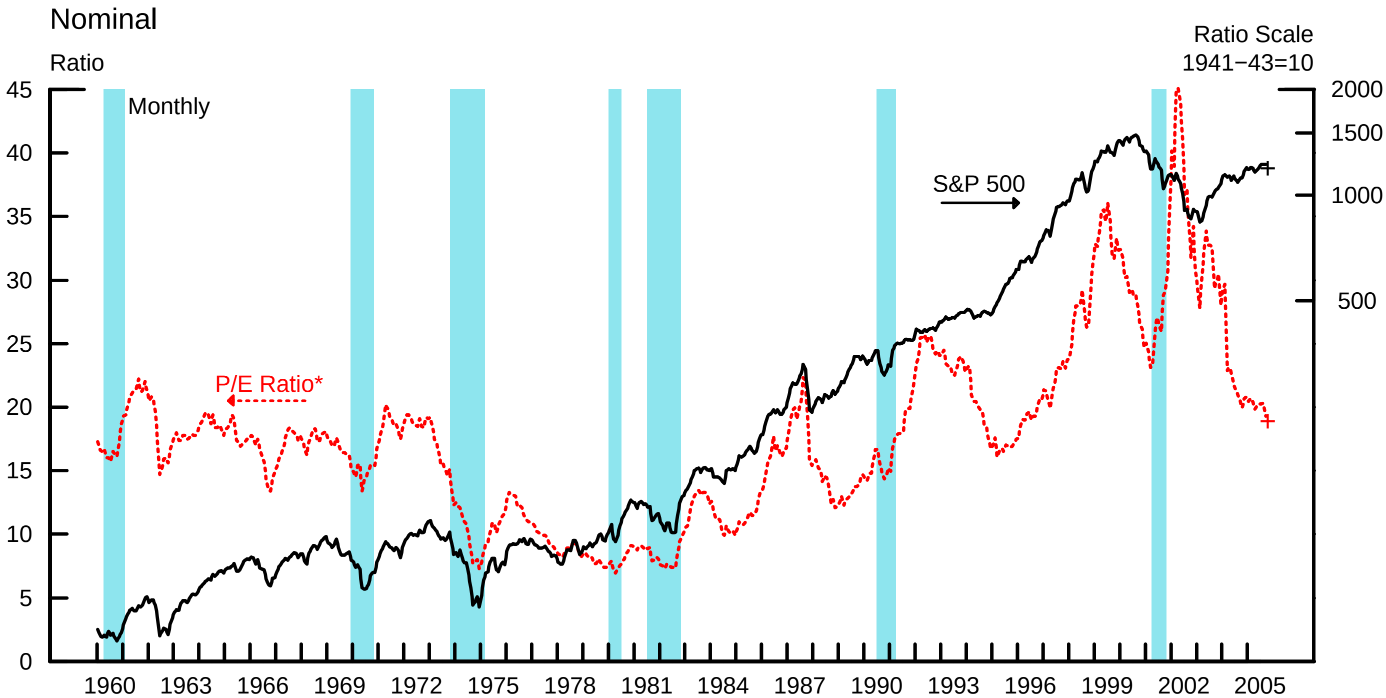
+ Denotes most recent weekly value.



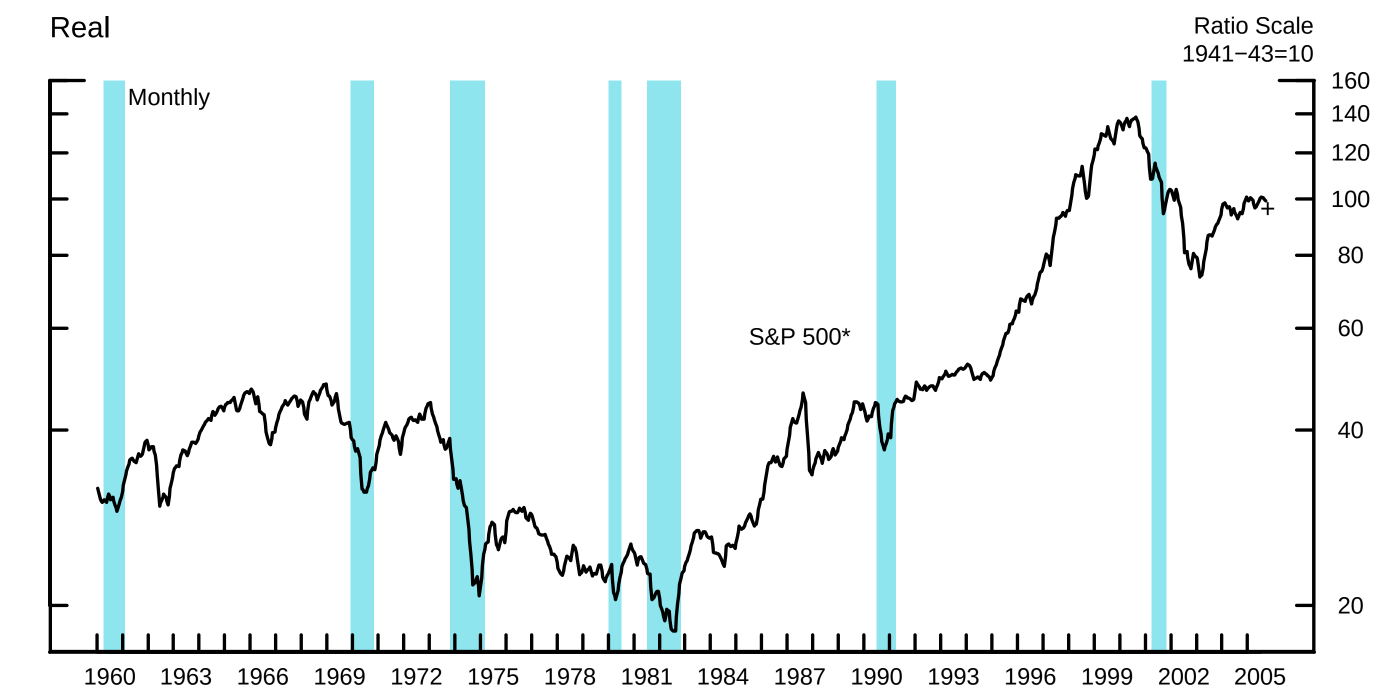
Note. The major currencies index is the trade−weighted average of currencies of the Euro area, Canada, Japan, the U.K., Switzerland, Australia, and Sweden. The other important trading partners index is the trade−weighted average of currencies of 19 other important trading partners. The Broad index is 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



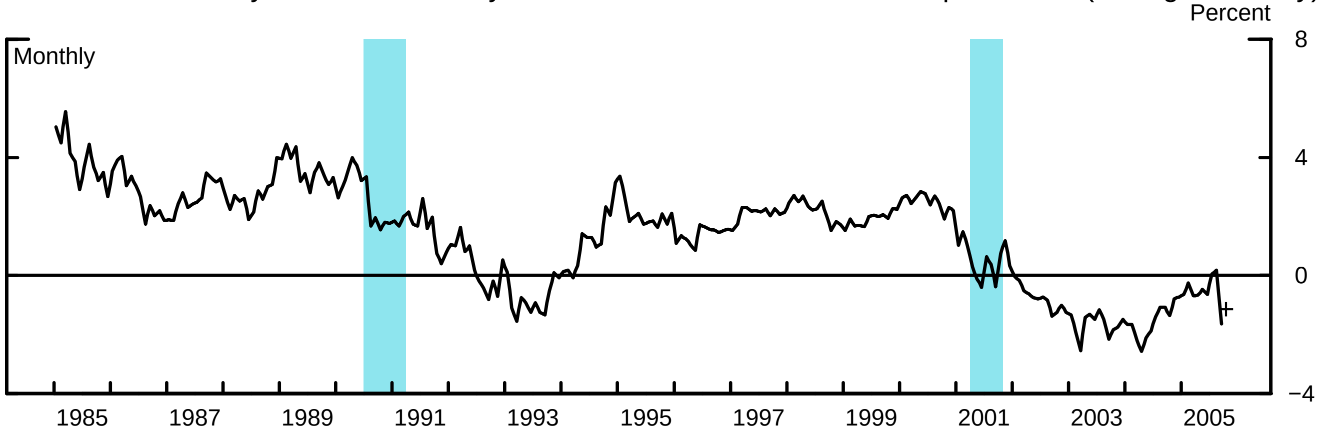
* Based on trailing four−quarter earnings.
+ Denotes most recent weekly value.



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

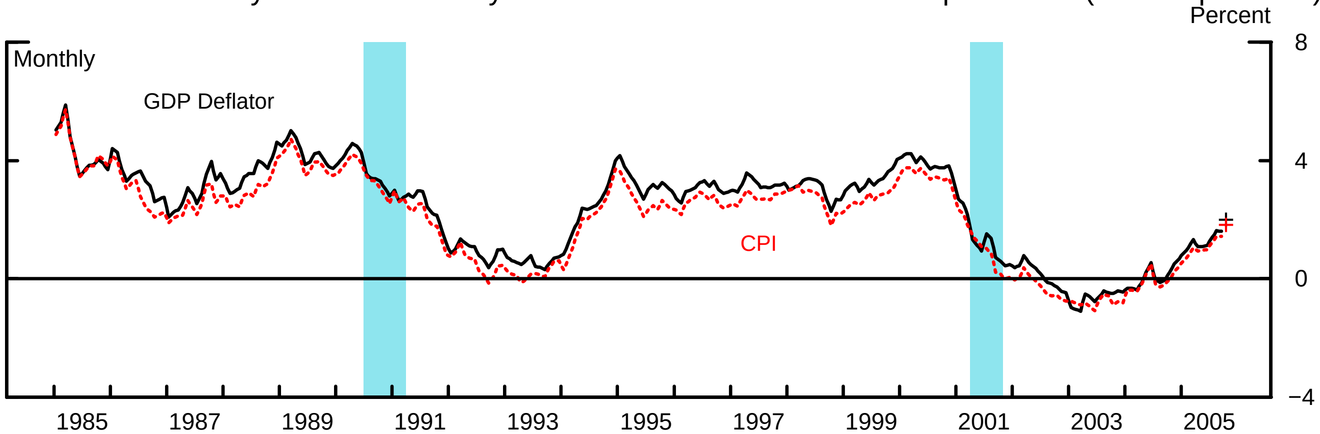
One−Year Real Interest Rates

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



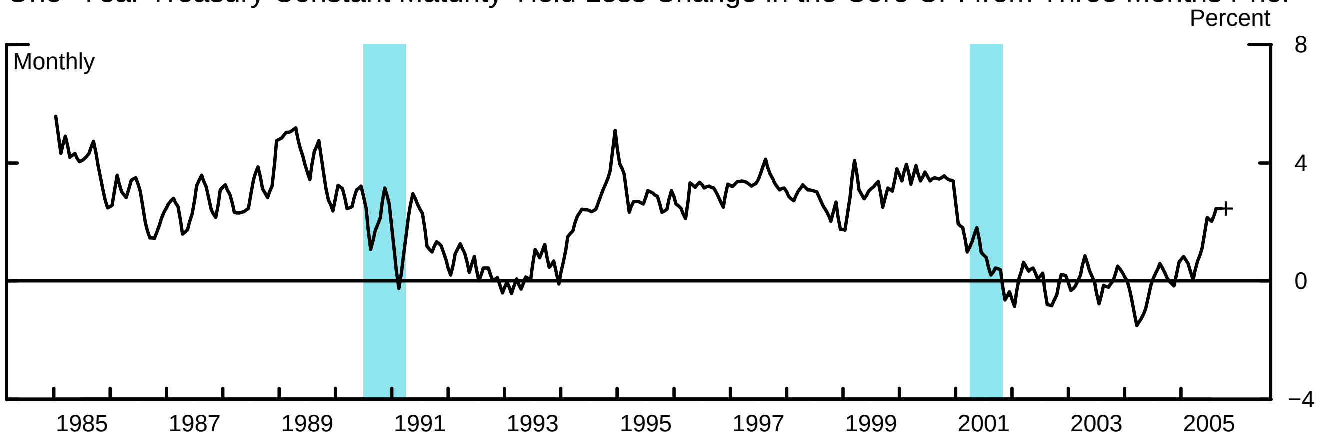
* Mean value of respondents.

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.

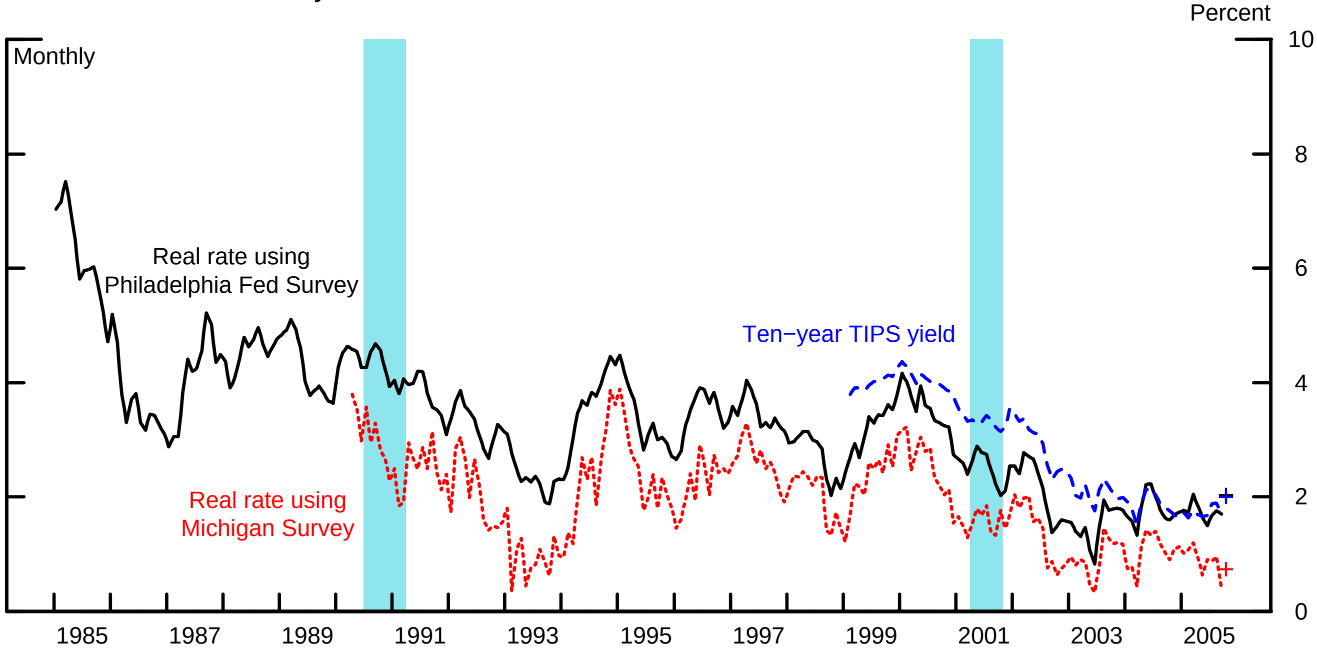
One−Year Treasury Constant Maturity Yield Less Change in the Core CPI from Three Months Prior



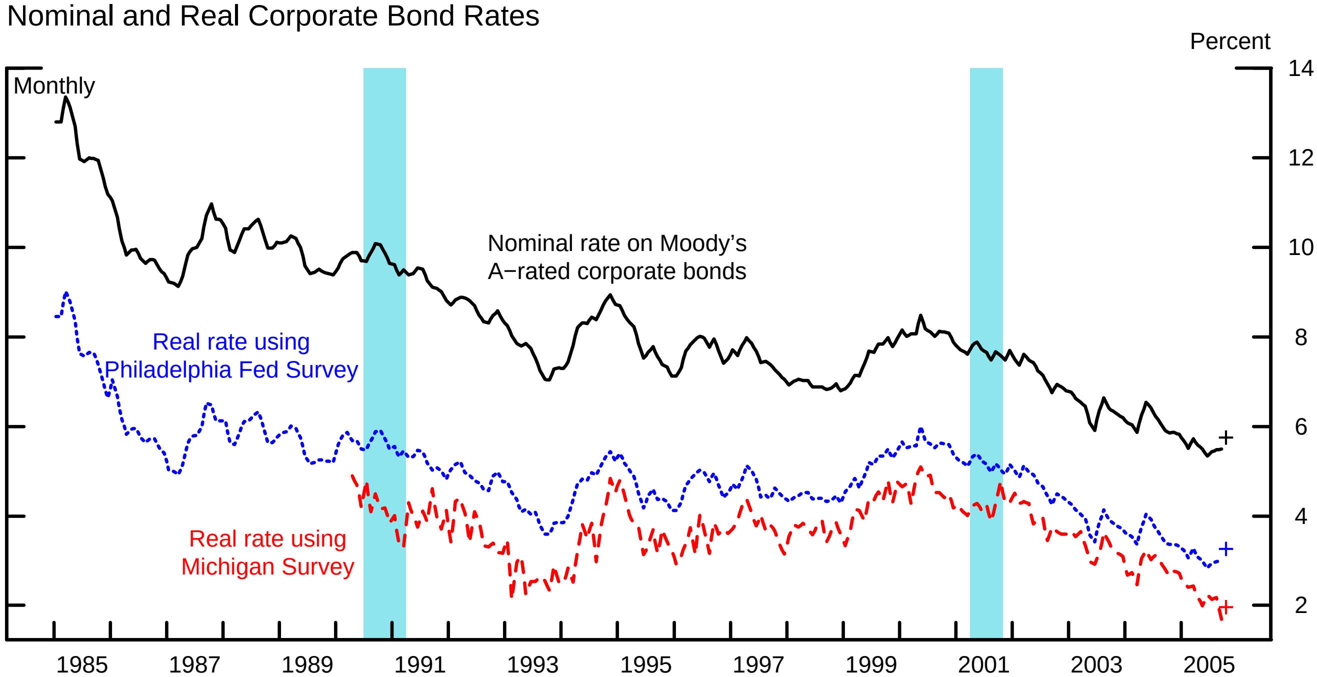
+ Denotes most recent weekly Treasury constant maturity yield less most recent inflation expectation.
Note. Blue shaded regions denote NBER−dated recessions.

Long−Term Real Interest Rates*

Real Ten−Year Treasury Yields



Nominal and Real Corporate Bond Rates



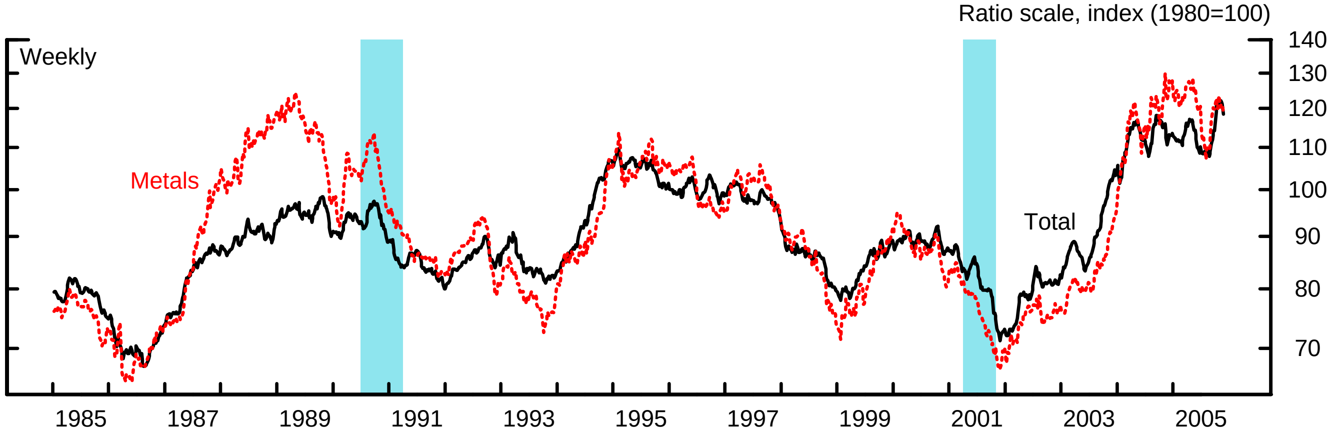
* For real rates, measures using the Philadelphia Fed Survey employ the ten−year inflation expectations from the Blue Chip Survey until April 1991 and the Philadelphia Federal Reserve Bank Survey of Professional Forecasters thereafter (median value of respondents). Measures using the Michigan Survey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

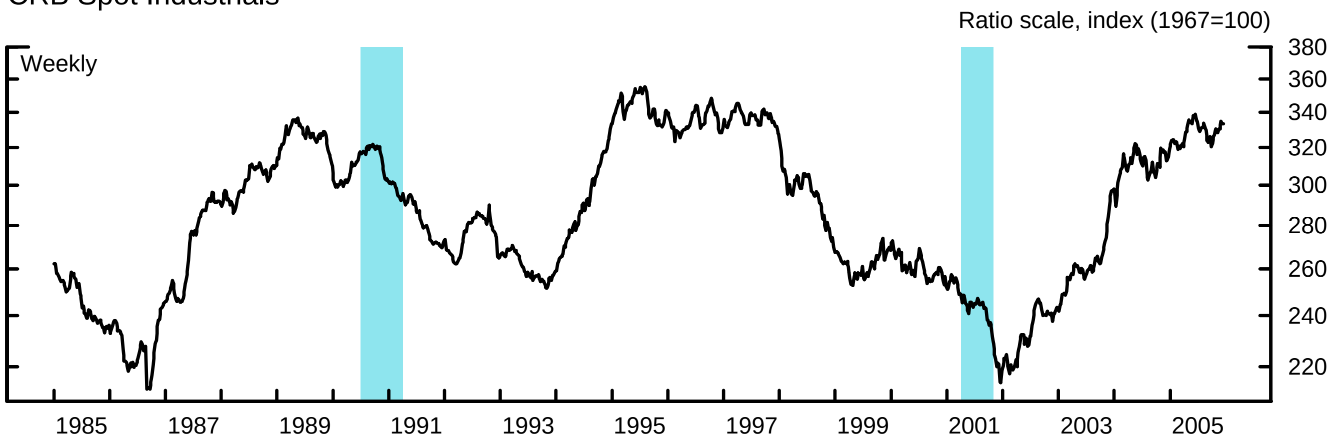
Note. Blue shaded regions denote NBER−dated recessions.

Commodity Price Measures

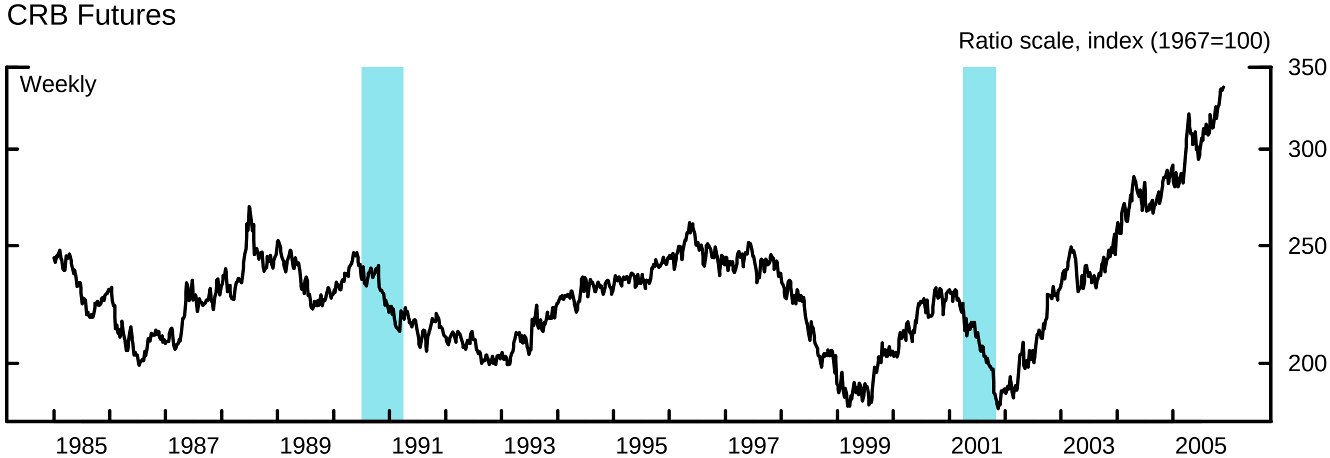
Journal of Commerce Index



CRB Spot Industrials

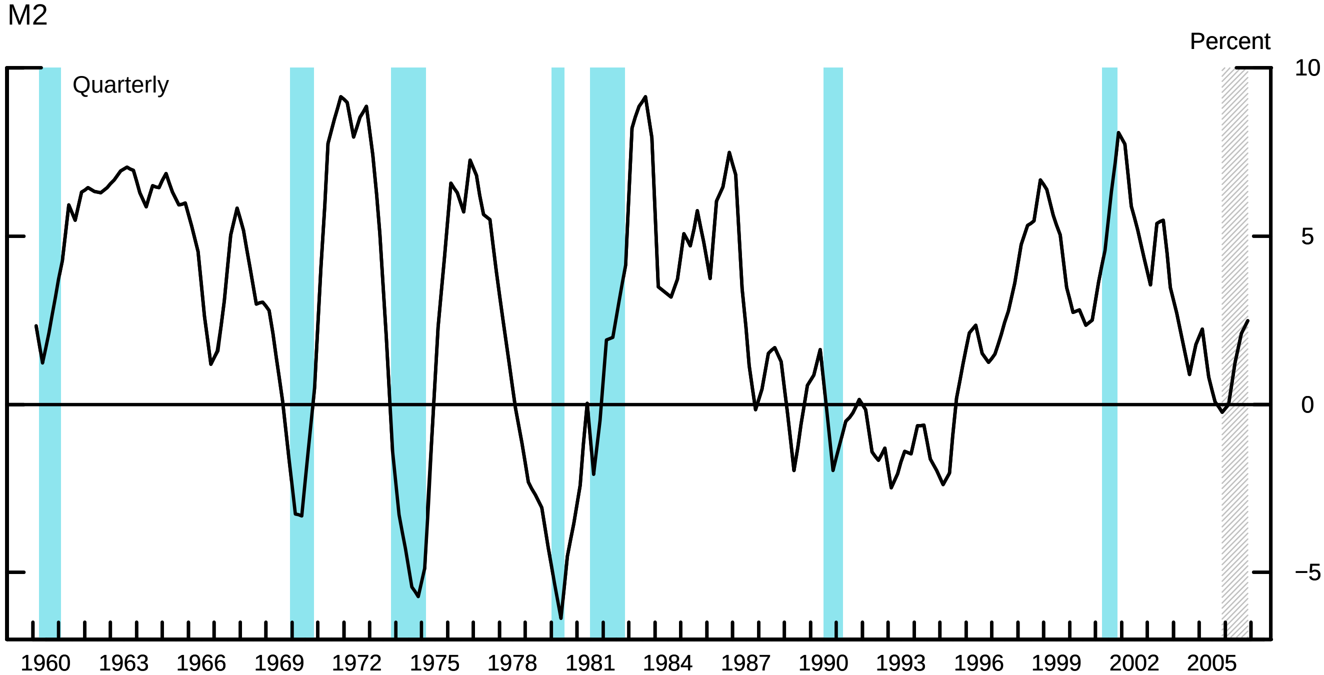


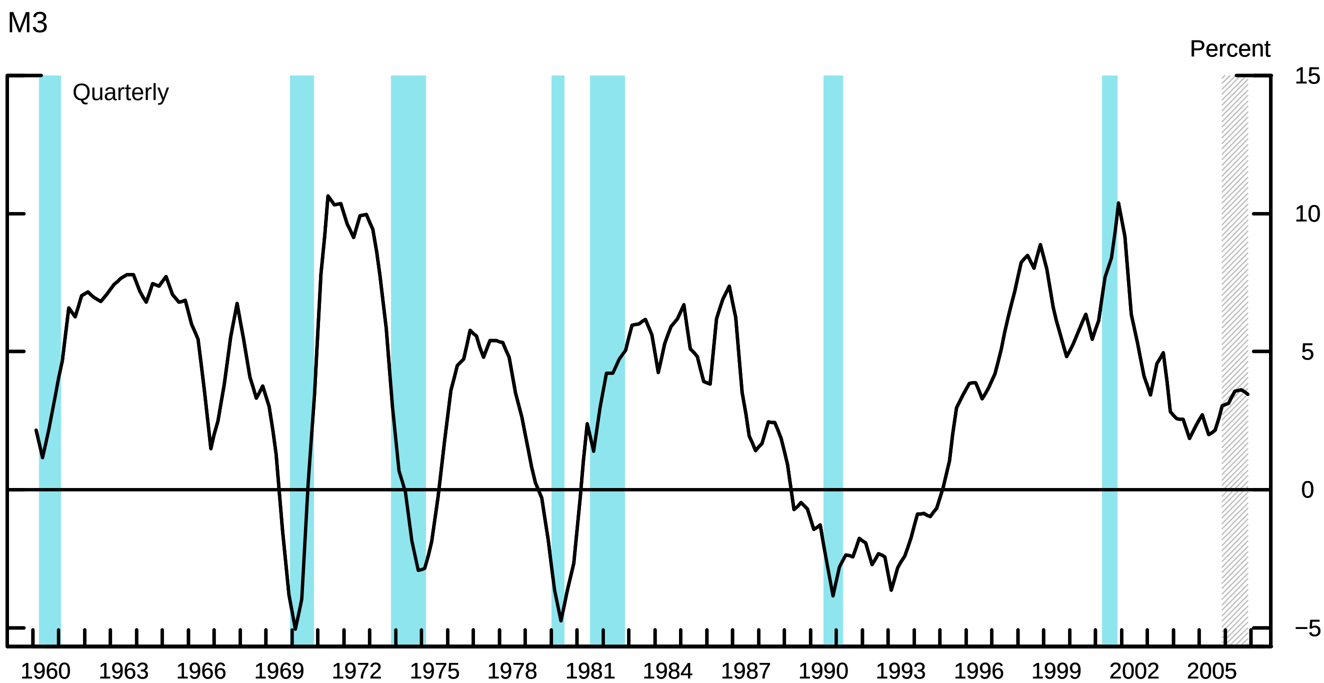
CRB Futures



Note. Blue shaded regions denote NBER−dated recessions.

Growth of Real M2 and M3

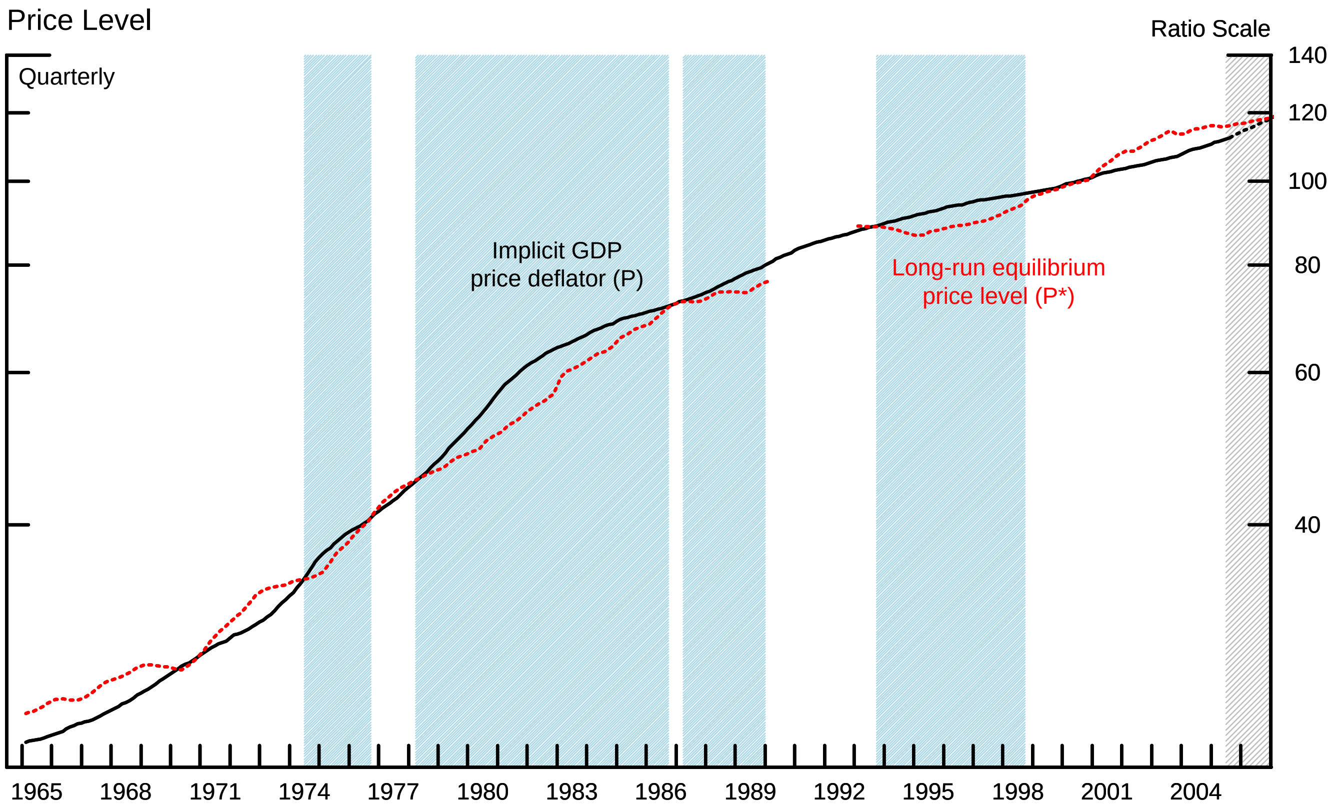


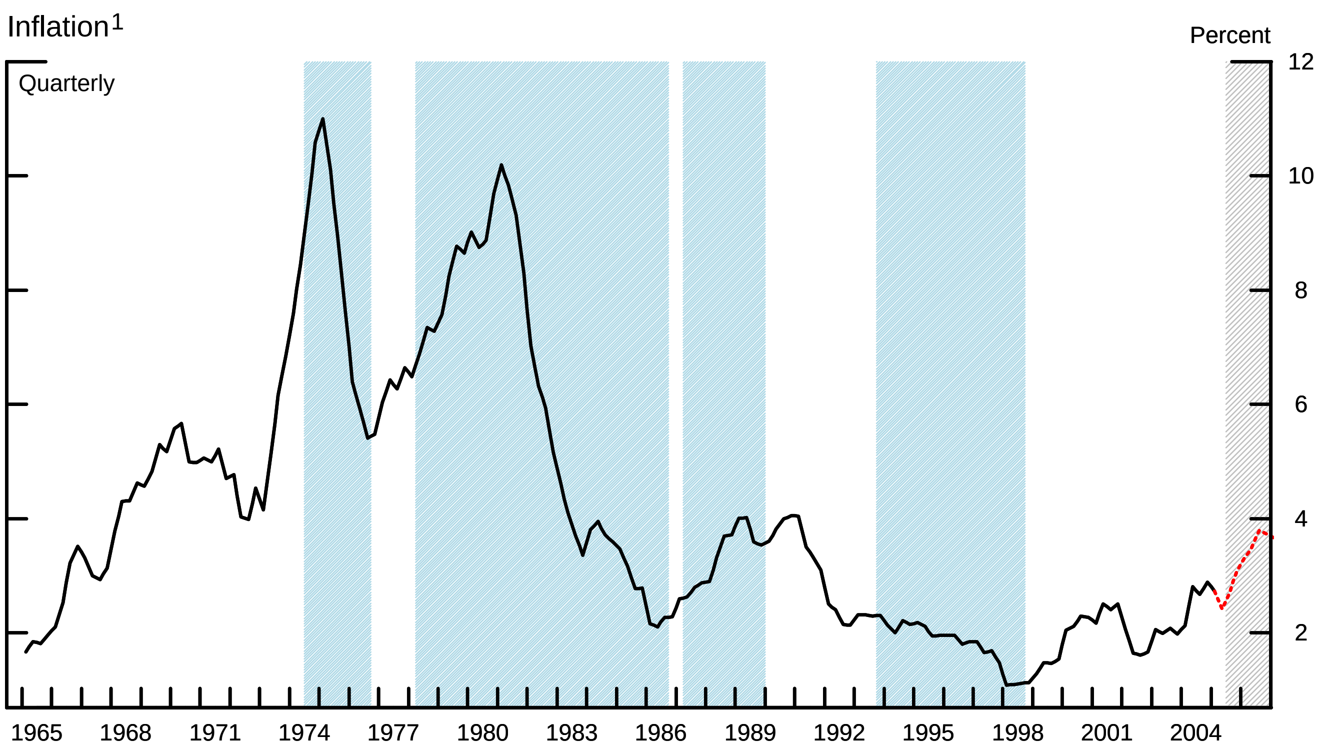


Note. Four−quarter moving average deflated by the CPI. Blue shaded regions denote NBER−dated recessions. Gray areas denote projection period.

Appendix Chart 8

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	3.93	3.71	3.93	4.21	4.20	3.98	4.43	4.48	4.73	5.04	1.85	2.05	6.44	5.13	6.15	4.91
-- 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																
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
Aug 05	3.50	3.33	3.52	3.78	3.77	3.47	4.06	4.12	4.34	4.56	1.69	1.89	5.96	4.90	5.82	4.55
Sep 05	3.62	3.21	3.50	3.80	3.87	3.64	3.96	4.01	4.28	4.55	1.40	1.70	6.03	4.94	5.77	4.51
Weekly																
Aug 26 05	3.52	3.33	3.54	3.81	3.81	3.52	4.04	4.06	4.28	4.50	1.63	1.82	5.91	4.87	5.77	4.56
Sep 2 05	3.55	3.39	3.51	3.72	3.81	3.54	3.89	3.93	4.16	4.40	1.42	1.68	5.84	4.83	5.71	4.48
Sep 9 05	3.50	3.33	3.50	3.72	3.77	3.55	3.87	3.92	4.20	4.48	1.38	1.68	5.96	4.87	5.71	4.45
Sep 16 05	3.54	3.26	3.48	3.78	3.84	3.61	3.92	3.99	4.27	4.55	1.38	1.70	6.03	4.96	5.74	4.46
Sep 23 05	3.68	3.10	3.52	3.84	3.91	3.70	3.98	4.04	4.31	4.58	1.39	1.71	6.06	4.98	5.80	4.48
Sep 30 05	3.80	3.12	3.52	3.89	3.99	3.72	4.13	4.15	4.39	4.62	1.47	1.75	6.12	5.04	5.91	4.68
Oct 7 05	3.82	3.30	3.61	4.01	4.05	3.74	4.24	4.24	4.46	4.67	1.60	1.86	6.19	5.06	5.98	4.77
Oct 14 05	3.68	3.45	3.74	4.09	4.10	3.79	4.28	4.32	4.54	4.75	1.68	1.96	6.29	5.11	6.03	4.85
Oct 21 05	3.76	3.50	3.86	4.16	4.14	3.84	4.30	4.34	4.56	4.78	1.66	1.92	6.31	5.13	6.10	4.89
Oct 28 05	--	3.64	3.91	4.21	4.19	3.93	4.38	4.42	4.64	4.84	1.79	2.01	--	--	6.15	4.91
Daily																
Oct 11 05	3.72	3.36	3.74	4.10	4.08	3.83	4.26	4.27	4.48	4.68	1.65	1.92	6.19	--	--	--
Oct 12 05	3.36	3.49	3.70	4.10	4.09	3.74	4.28	4.31	4.53	4.74	1.70	1.98	6.28	--	--	--
Oct 13 05	3.75	3.49	3.75	4.09	4.11	3.77	4.29	4.33	4.57	4.79	1.70	1.96	6.34	--	--	--
Oct 14 05	3.77	3.47	3.77	4.08	4.11	3.82	4.30	4.35	4.58	4.79	1.69	1.97	6.35	--	--	--
Oct 17 05	3.82	3.49	3.87	4.17	4.13	3.82	4.32	4.37	4.59	4.80	1.66	1.94	6.34	--	--	--
Oct 18 05	3.71	3.57	3.86	4.15	4.13	3.83	4.30	4.36	4.58	4.80	1.65	1.92	6.33	--	--	--
Oct 19 05	3.71	3.56	3.86	4.15	4.15	3.82	4.29	4.33	4.56	4.79	1.66	1.92	6.33	--	--	--
Oct 20 05	3.77	3.44	3.85	4.16	4.15	3.88	4.30	4.34	4.56	4.78	1.68	1.92	6.32	--	--	--
Oct 21 05	3.76	3.44	3.86	4.16	4.16	3.85	4.26	4.28	4.48	4.71	1.66	1.90	6.24	--	--	--
Oct 24 05	3.76	3.45	3.93	4.20	4.17	3.90	4.30	4.33	4.55	4.76	1.72	1.95	6.30	--	--	--
Oct 25 05	3.74	3.71	3.93	4.21	4.18	3.92	4.38	4.42	4.63	4.83	1.79	2.01	6.35	--	--	--
Oct 26 05	3.75	3.70	3.90	4.21	4.19	3.98	4.43	4.48	4.70	4.90	1.84	2.05	6.44	--	--	--
Oct 27 05	3.81 p	3.71	3.88	4.20	4.20	--	4.41	4.45	4.67	4.87	1.81	2.02	--	--	--	--

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 in M2	nontransactions components in M3 only	M3
	1	2	3	4	5
Annual growth rates (%):					
Annually (Q4 to Q4)					
2002	3.2	6.7	7.7	6.0	6.5
2003	7.4	5.5	5.0	3.4	4.8
2004	5.4	5.2	5.2	7.0	5.8
Quarterly (average)					
2004-Q4	5.7	5.8	5.8	0.4	4.0
2005-Q1	0.5	4.0	4.9	8.8	5.5
Q2	-0.6	1.7	2.3	14.7	5.9
Q3	-2.0	3.9	5.4	17.3	8.3
Monthly					
2004-Oct.	1.0	5.3	6.5	-6.7	1.4
Nov.	13.8	7.0	5.2	-2.4	4.0
Dec.	-2.0	4.5	6.3	10.0	6.3
2005-Jan.	-8.0	3.4	6.6	13.5	6.7
Feb.	6.4	2.8	1.8	8.3	4.6
Mar.	6.0	3.7	3.1	3.8	3.8
Apr.	-15.2	-0.6	3.4	21.3	6.5
May	10.9	0.2	-2.6	15.6	5.3
June	0.8	6.1	7.5	19.8	10.6
July	-17.5	1.7	6.9	7.1	3.5
Aug.	14.8	5.4	2.9	26.9	12.5
Sep.	-6.7	6.1	9.5	23.2	11.9
Oct. e	-2.0	6.9	9.3	14.2	9.4
Levels ($billions):					
Monthly					
2005-May	1373.4	6482.8	5109.4	3180.0	9662.8
June	1374.3	6515.6	5141.3	3232.5	9748.2
July	1354.3	6525.1	5170.8	3251.6	9776.7
Aug.	1371.0	6554.4	5183.4	3324.4	9878.7
Sep.	1363.4	6587.9	5224.5	3388.8	9976.7
Weekly					
2005-Sep. 5	1364.7	6569.2	5204.5	3383.9	9953.1
12	1340.0	6564.0	5224.1	3386.7	9950.8
19	1358.3	6599.8	5241.5	3372.6	9972.4
26	1373.7	6598.5	5224.8	3395.1	9993.6
Oct. 3	1396.8	6622.3	5225.5	3412.4	10034.7
10p	1356.7	6610.8	5254.2	3416.5	10027.3
17p	1347.6	6635.5	5287.8	3432.4	10067.9

p preliminary
e estimated

Appendix Table 3
Changes in System Holdings of Securities [1]
(Millions of dollars, not seasonally adjusted)

October 27, 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 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
QIII	4,743	---	4,743	1,298	5,025	1,118	90	757	6,774	---	11,517	964	1,538	2,502
2005 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
Aug	2,751	---	2,751	1,298	1,390	988	---	757	2,919	---	5,670	136	-581	-445
Sep	1,992	---	1,992	---	3,635	130	90	---	3,855	---	5,847	283	-599	-316
2005 Aug 3	---	---	---	---	---	---	---	---	---	---	---	8,355	-1,000	7,355
Aug 10	---	---	---	---	---	---	---	---	---	---	---	-7,150	2,000	-5,150
Aug 17	1,244	---	1,244	---	1,390	---	---	---	1,390	---	2,634	-3,366	2,000	-1,366
Aug 24	1,249	---	1,249	---	---	988	---	---	988	---	2,237	1,583	-2,000	-417
Aug 31	258	---	258	1,298	---	---	---	757	541	---	799	3,673	-1,000	2,673
Sep 7	14	---	14	---	---	---	---	---	---	---	14	-1,709	3,000	1,291
Sep 14	47	---	47	---	2,531	130	90	---	2,751	---	2,798	-3,235	1,000	-2,235
Sep 21	96	---	96	---	---	---	---	---	---	---	96	4,279	-4,000	279
Sep 28	1,565	---	1,565	---	1,104	---	---	---	1,104	---	2,669	1,009	-4,000	-2,991
Oct 5	291	---	291	---	1,193	---	---	---	1,193	---	1,484	-2,432	---	-2,432
Oct 12	54	---	54	---	---	---	---	---	---	---	54	-1,615	---	-1,615
Oct 19	317	---	317	---	---	---	---	---	---	---	317	-874	---	-874
Oct 26	500	---	500	120	880	---	---	---	1,000	---	1,500	1,685	-2,000	-315
2005 Oct 27	1	---	1	---	---	---	902	---	902	---	903	1,693	-1,000	693
Intermeeting Period														
Sep 20-Oct 27	2,728	---	2,728	120	3,177	---	902	---	4,199	---	6,927	2,367	-7,000	-4,633
Memo: LEVEL (bil. $)														
Oct 27			270.6	128.5	210.6	52.6	78.1		469.8	---	740.4	-12.2	11.0	-1.2

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