Prefatory Note

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Content last modified 05/27/2010.

STRICTLY CONFIDENTIAL (FR) CLASS I FOMC

SEPTEMBER 16, 2004

MONETARY POLICY ALTERNATIVES

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

Strictly Confidential (F.R.) **September 16, 2004**
Class I – FOMC

MONETARY POLICY ALTERNATIVES

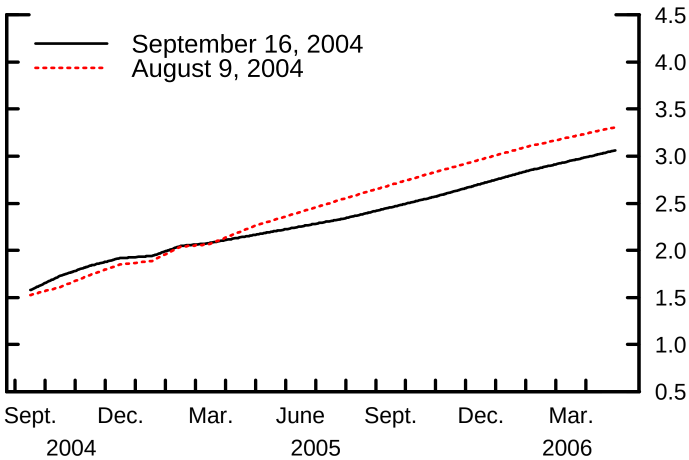
Recent Developments

(1) The Committee's decision at the August meeting to increase the target federal funds rate 25 basis points, to 1½ percent, and to retain the assessment of balanced risks with respect to sustainable economic growth and price stability was widely expected in financial markets.[1] The accompanying statement, however, was read as setting a more optimistic tone about economic prospects than had been anticipated, prompting investors to mark up their expectations for the near-term path of policy (Chart 1). That sentiment was reinforced over the remainder of the period by the comments of several Federal Reserve officials and the release of the most recent employment report, which seemed to convince market participants that the economy was emerging from its "soft patch." As a result, policy rate expectations for the next two quarters ended the intermeeting period slightly firmer. Longer-term policy expectations, however, moved noticeably lower as relatively benign readings on inflation and the Chairman's comments on the inflation outlook in testimony to the House Budget Committee apparently eased investors' concerns. According to a recent survey conducted by the Desk, dealers unanimously anticipate the upcoming

[1] Although the federal funds rate was volatile and away from target on some days following the FOMC meeting, the effective rate averaged 1.49 percent over the intermeeting period. The Desk expanded the System's outright holdings of securities by $2.7 billion, with purchases of $0.1 billion of Treasury bills from foreign official customers and $2.6 billion of Treasury coupon securities in the market. The volume of outstanding long-term RPs increased $10 billion, to $22 billion, mainly reflecting a seasonal pickup in the demand for currency.

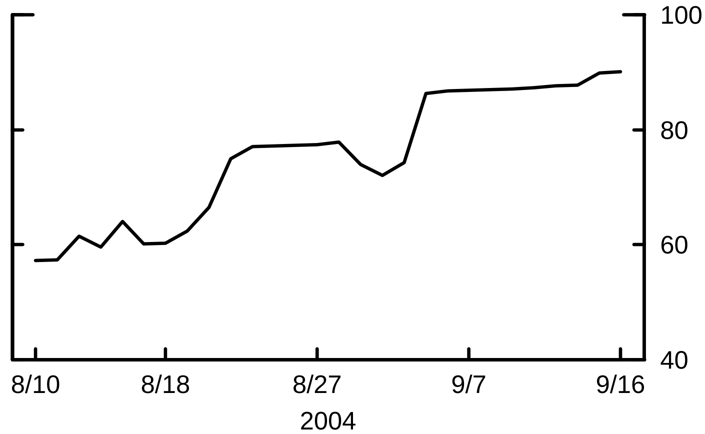
Chart 1
Interest Rate Developments

Expected Federal Funds Rates*



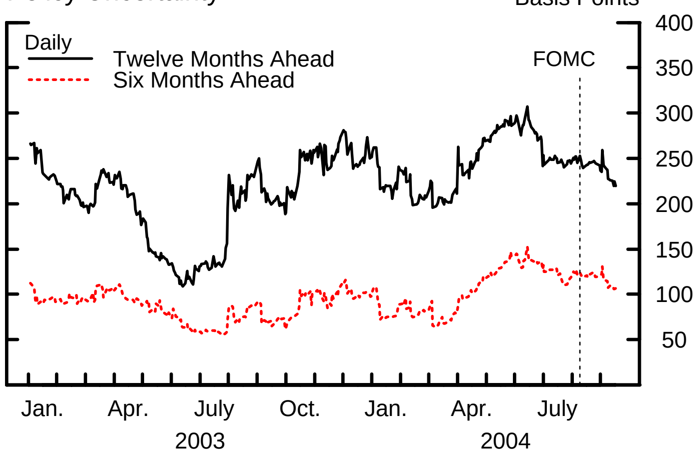
*Estimates from federal funds and eurodollar futures, with an allowance for term premia and other adjustments.

Probability of a 25 Basis Point Hike at the September FOMC Meeting*



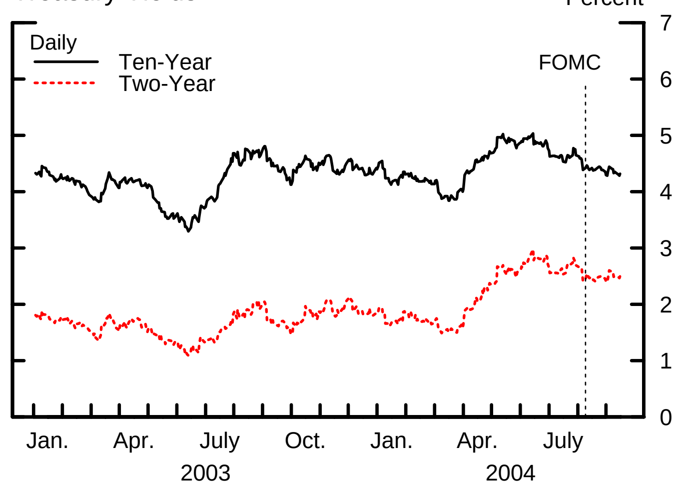
*Based on October 2004 federal funds futures contract.

Policy Uncertainty*



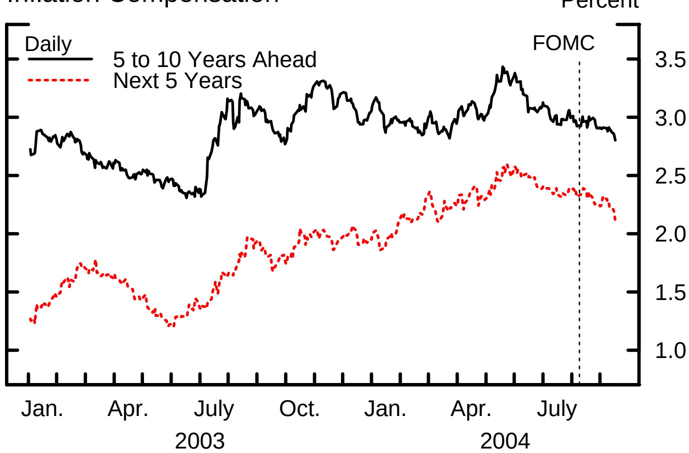
*Width of a 90 percent confidence interval for the federal funds rate computed from the term structures for both the expected federal funds rate and implied volatility.

Treasury Yields*



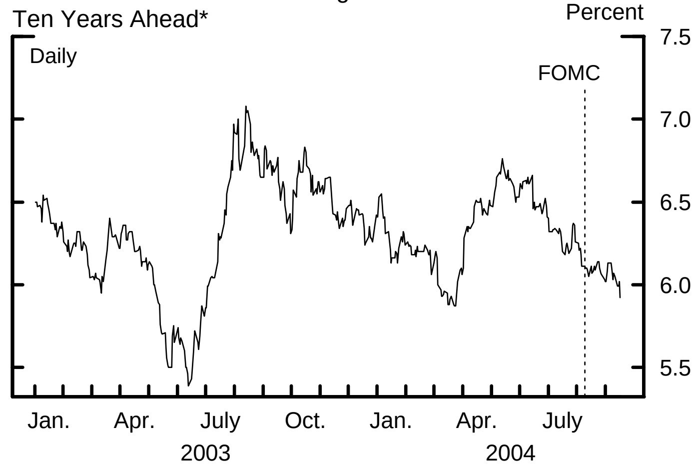
*Par yields from an estimated off-the-run Treasury yield curve.

Inflation Compensation*



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

One-Year Forward Rate Ending Ten Years Ahead*

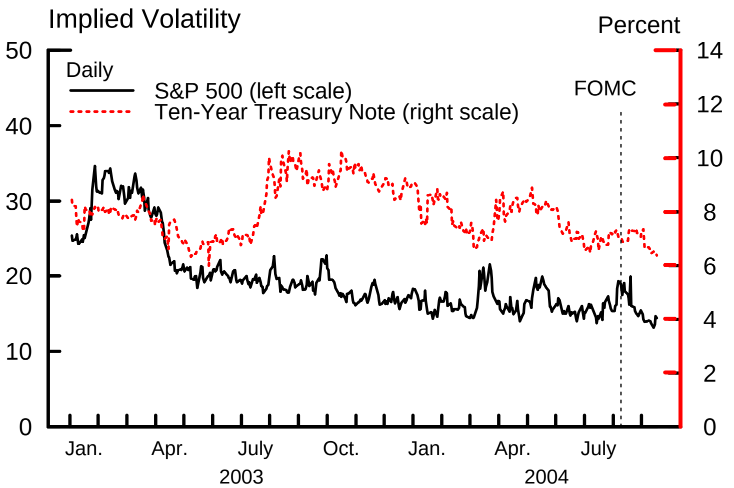


*Forward rate is the one-year rate maturing in ten years that is implied by a smoothed Treasury yield curve.

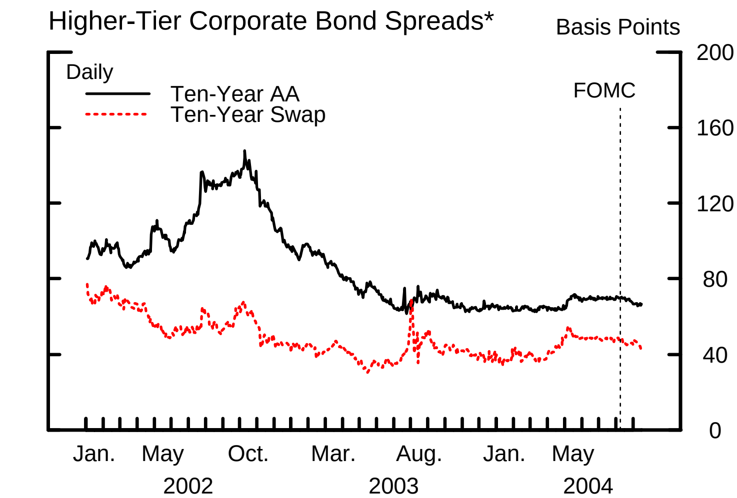
Note: Vertical lines indicate August 9, 2004. Last daily observations are for September 16, 2004 meeting to conclude with a quarter-point tightening and retention of an assessment of balanced risks with respect to both of the Committee's objectives. Judging from futures quotes, investors expect the funds rate to rise to around 2 percent by year-end—consistent with expectations of two quarter-point hikes over the three remaining FOMC meetings this year—and to reach about 2¾ percent by the end of 2005.

(2) The term structure of interest rates flattened over the intermeeting period, with the two-year Treasury yield about unchanged and the ten-year Treasury yield losing 20 basis points. In addition to the effects of the shift in policy expectations, longer-term yields may have been pulled down by a reduced assessment of risk to the interest rate outlook or a heightened willingness to take on risk. In that regard, forward-looking measures of price volatility in financial markets declined from already low levels despite a wide swing in crude oil prices. Yields on inflation-indexed Treasury issues changed little, leaving measures of inflation compensation lower. While credit spreads on investment-grade corporate bonds narrowed a bit, spreads on speculative-grade issues fell somewhat more, particularly in riskier segments, apparently reflecting greater confidence about prospects in the business sector (Chart 2). Further evidence of such confidence was visible in equity markets, where broad indexes have advanced 5½ to 7¼ percent since the market close before the August FOMC meeting.

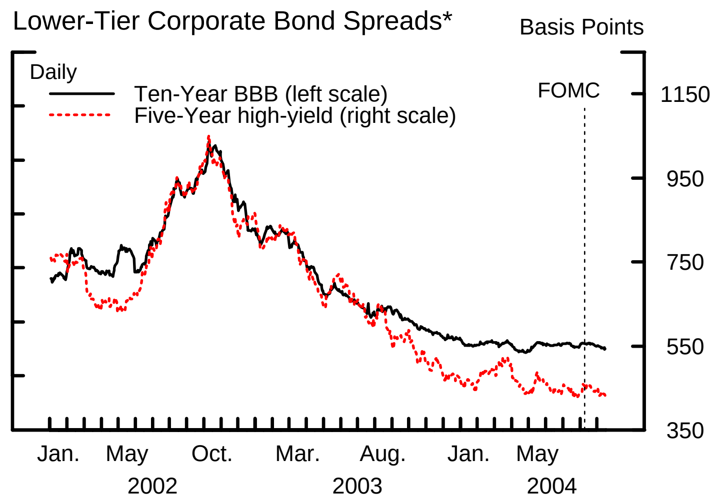
Chart 2
Capital Market Developments



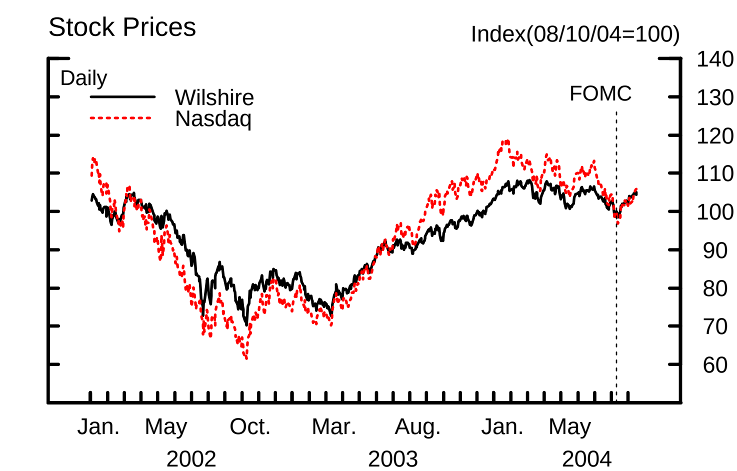
*Spot WTI price.

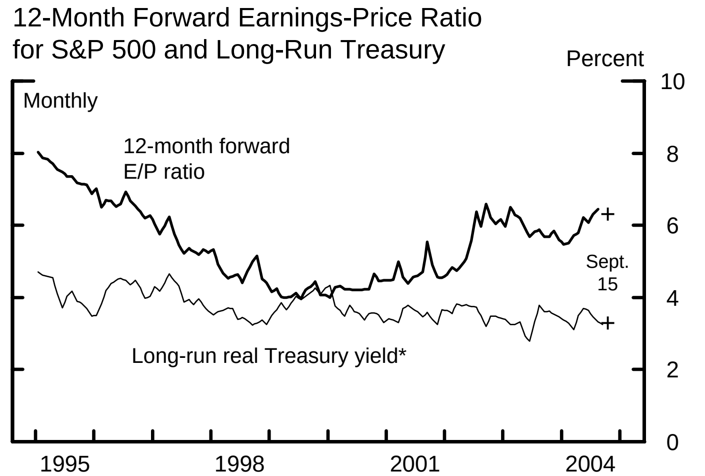


*AA spread measured relative to an estimated off-the-run Treasury yield curve. Swap spread measured relative to the on-the-run Treasury security.



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





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

Note: Vertical lines indicate August 9, 2004. Last daily observations are for September 16, 2004.

(3) The exchange value of the dollar against other major currencies was essentially unchanged on net over the intermeeting period (Chart 3).[2] The dollar rose more than 2½ percent against sterling, as the Bank of England held its policy stance unchanged and market participants grew increasingly convinced that the cycle of tightening in the United Kingdom was coming to an end. The dollar rose less, about ¾ percent, *vis-à-vis* the euro during the intermeeting period as disappointing data raised concerns about softer European growth. Against the yen, the dollar moved in a narrow range during most of the period and ended down slightly less than 1 percent. The dollar fell about 1¾ percent on net versus the Canadian dollar; the Bank of Canada raised its policy rate 25 basis points on September 8, citing concerns about inflation arising in part from higher oil prices. Yields on long-term government bonds declined about 15 basis points in Japan, but were little changed in most other foreign industrial countries. Foreign equity prices rose 2 to 5 percent over the period, somewhat less than the rise in U.S. equities. The dollar was also about unchanged over the intermeeting period against an index of currencies of our other important trading partners.

(4) Total debt of the domestic nonfinancial sector grew at a 7¾ percent annual rate in the second quarter and appears to be expanding at roughly the same pace in the current quarter. In the domestic nonfinancial business sector, debt continued to grow at a moderate pace in August. Corporate bond issuance picked up,

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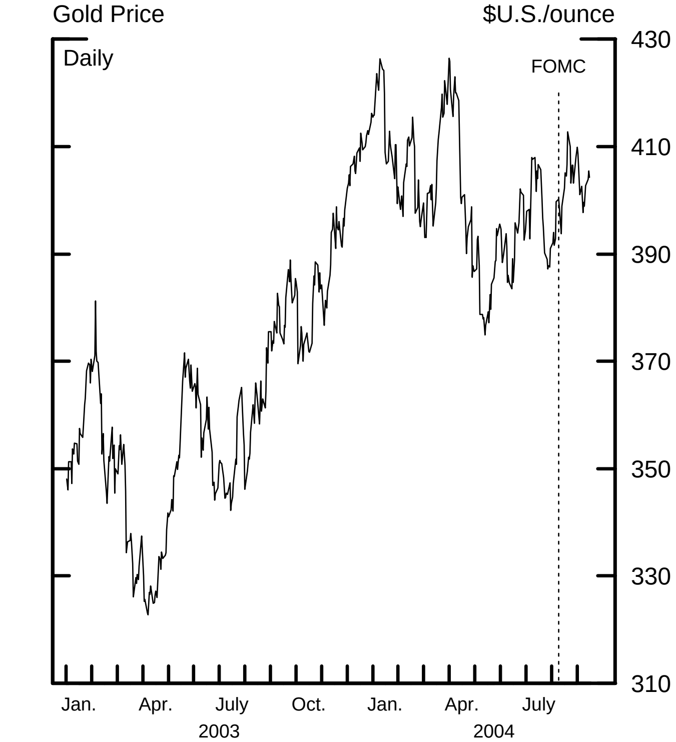
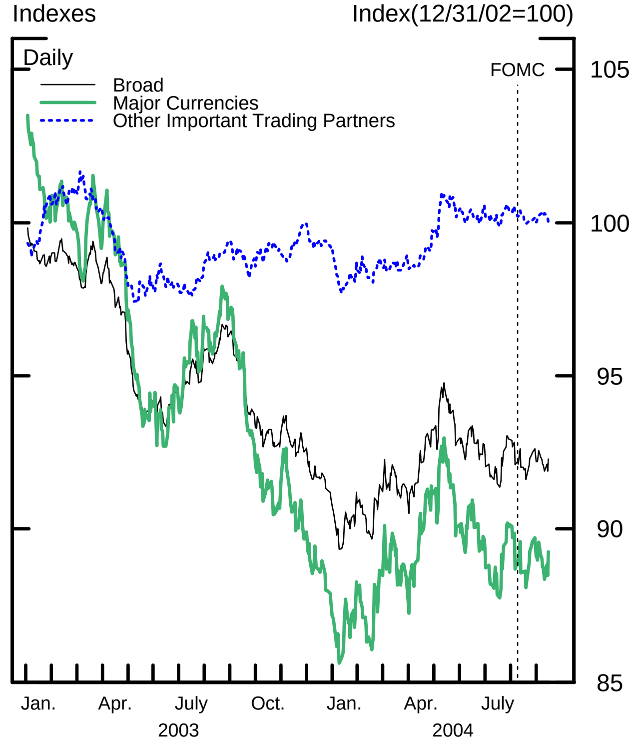
[2] .

Chart 3
International Financial Indicators

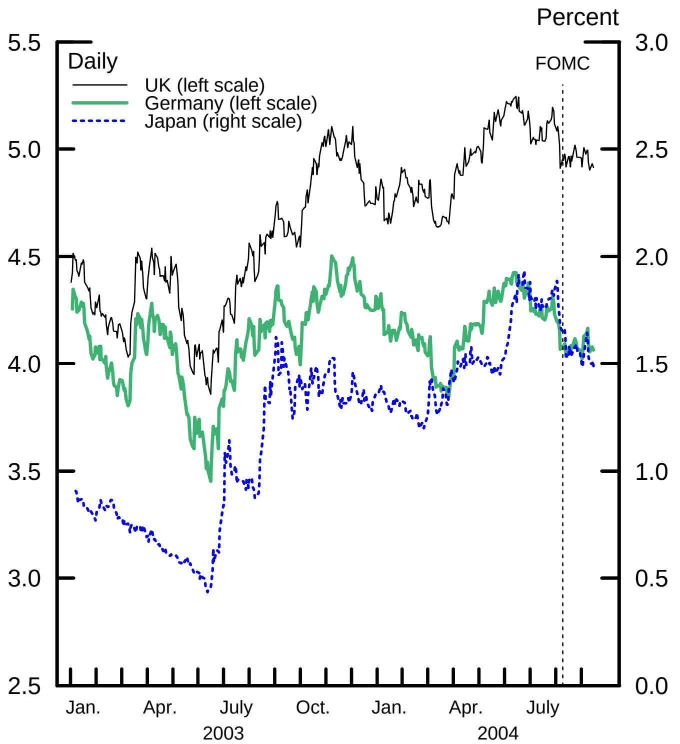
Gold Price



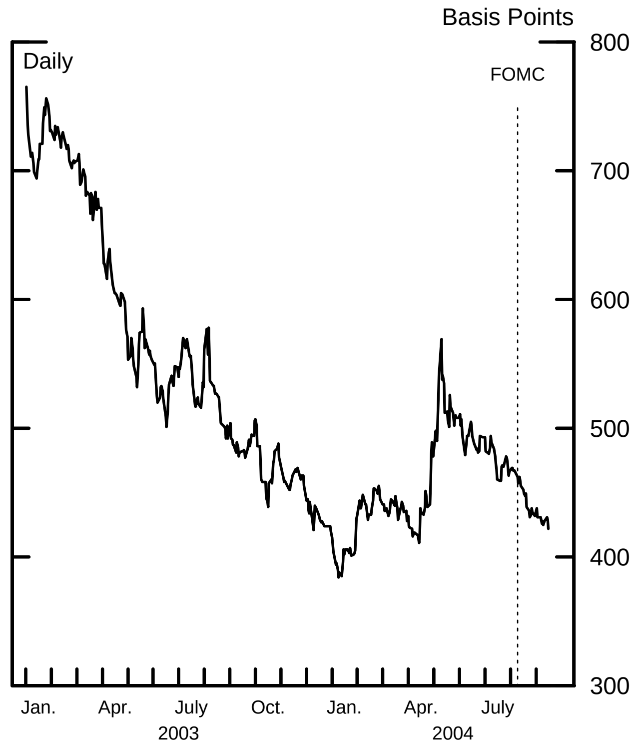
Nominal Trade-Weighted Dollar Indexes



Ten-Year Government Bond Yields



EMBI+ Index



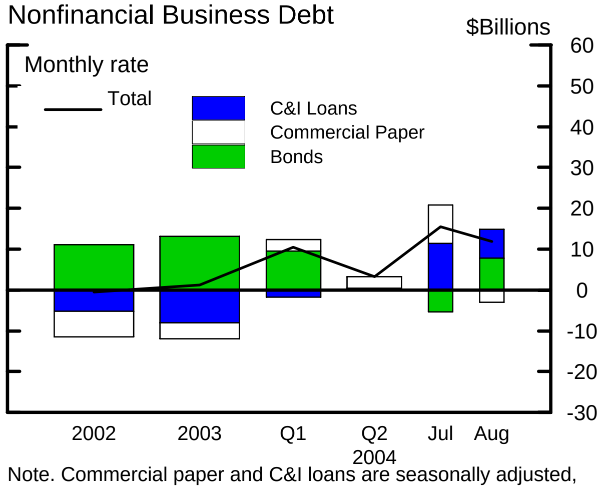
Note: Vertical lines indicate August 9, 2004. Last daily observations are for Sept 16, 2004.

likely in part reflecting opportunistic borrowing by firms taking advantage of the decline in longer-term interest rates early in the month (Chart 4). Firms paid down commercial paper modestly on net, but commercial and industrial loans at banks increased further. As best as can be gauged, household debt growth is continuing at a rapid pace in the current quarter. Mortgage debt likely is expanding briskly given attractive mortgage rates and the continued strong pace of mortgage applications and home sales. Consumer credit growth rebounded in July from its slow pace in the spring, reflecting a jump in credit card borrowing. Debt growth in the federal sector has remained robust.

(5) After contracting slightly in July, M2 expanded at a 1½ percent annual pace last month. Money growth has been damped of late by a rise in the opportunity cost of holding M2 assets. (Such a rise typically accompanies policy tightenings as increases in deposit rates lag those of short-term market rates.) In addition, the lift to M2 from mortgage refinancings that occurred during the spring was likely still unwinding over the past couple of months, depressing the growth of liquid deposits. Overall, available data suggest M2 growth has slowed substantially in the third quarter relative to the first half of the year, as the increase in opportunity costs has buoyed velocity.

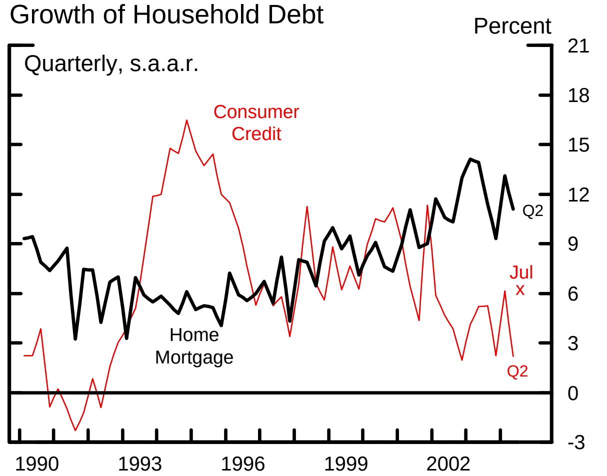
Chart 4
Debt and Money

Changes in Selected Components of Nonfinancial Business Debt

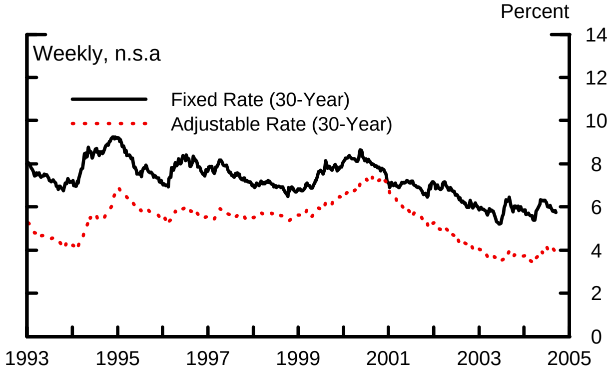


Note. Commercial paper and C&I loans are seasonally adjusted, bonds are not.

Growth of Household Debt

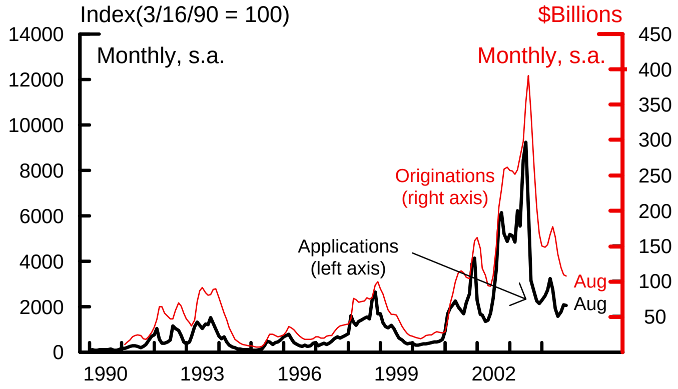


Residential Mortgage Rates



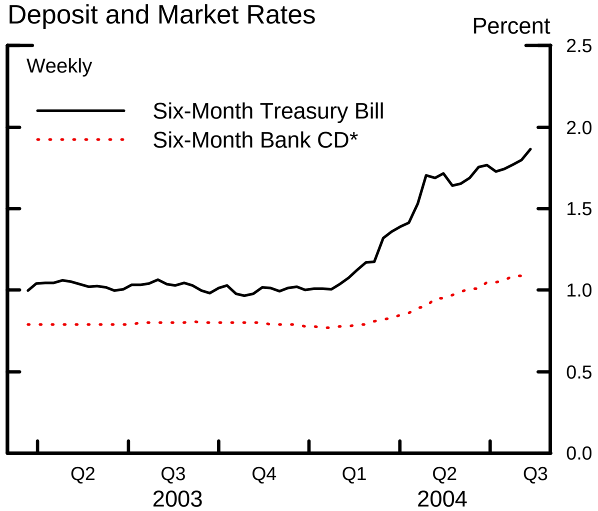
Source. Freddie Mac Primary Mortgage Market Survey.

Mortgage Refinancing Activity



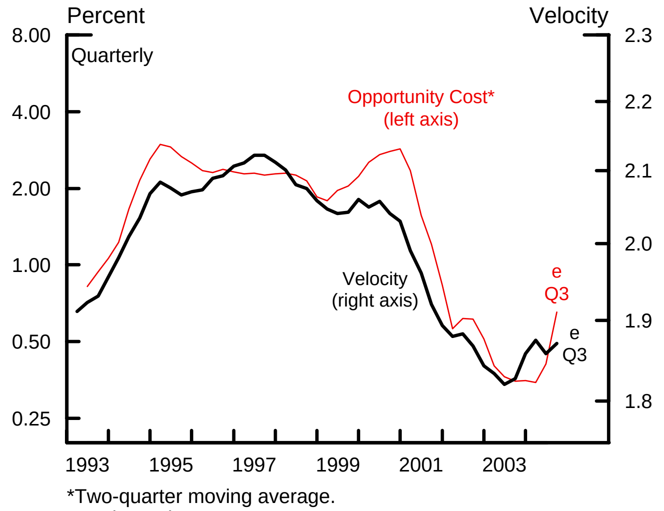
Source. Staff estimates.

Deposit and Market Rates



*Source. Bank Rate Monitor.

M2 Velocity and Opportunity Cost



*Two-quarter moving average.
e Estimated.

Policy Alternatives

(6) Over the period since the August Greenbook was put to bed, incoming information—including the employment report for July, which was released just after that Greenbook was distributed—suggested, on balance, that the prospects for economic activity in the period ahead have become less favorable. In response, the staff has marked down both its forecast for the growth of output for the next couple of quarters and its assumption for the path of monetary policy. The federal funds rate is now assumed to reach 2¼ percent by the fourth quarter of 2005 (½ percentage point less than in the August Greenbook) and 2¾ percent by the fourth quarter of 2006 (the current forecast is the first to extend to the end of 2006). Financial markets, in contrast, currently price in about ½ percentage point more cumulative tightening over the next two-and-one-quarter years. The staff assumes that investors' expectations will gradually fall into line with the Greenbook policy path, causing longer-term yields to edge lower over the balance of this year and early next year and to remain flat subsequently. Over the projection period, equity prices rise at a pace sufficient to yield risk-adjusted returns in line with those on fixed-income instruments, and the real value of the dollar in terms of a broad basket of foreign currencies is assumed to decline gradually. Under these financial conditions, real gross domestic product is forecast to expand at nearly a 4 percent pace from the third quarter of this year through the end of 2006, a little above the staff's estimate of growth in potential GDP of just under 3½ percent. As a result, the output gap more or less closes by the end of the projection period and the civilian unemployment rate drops to around the

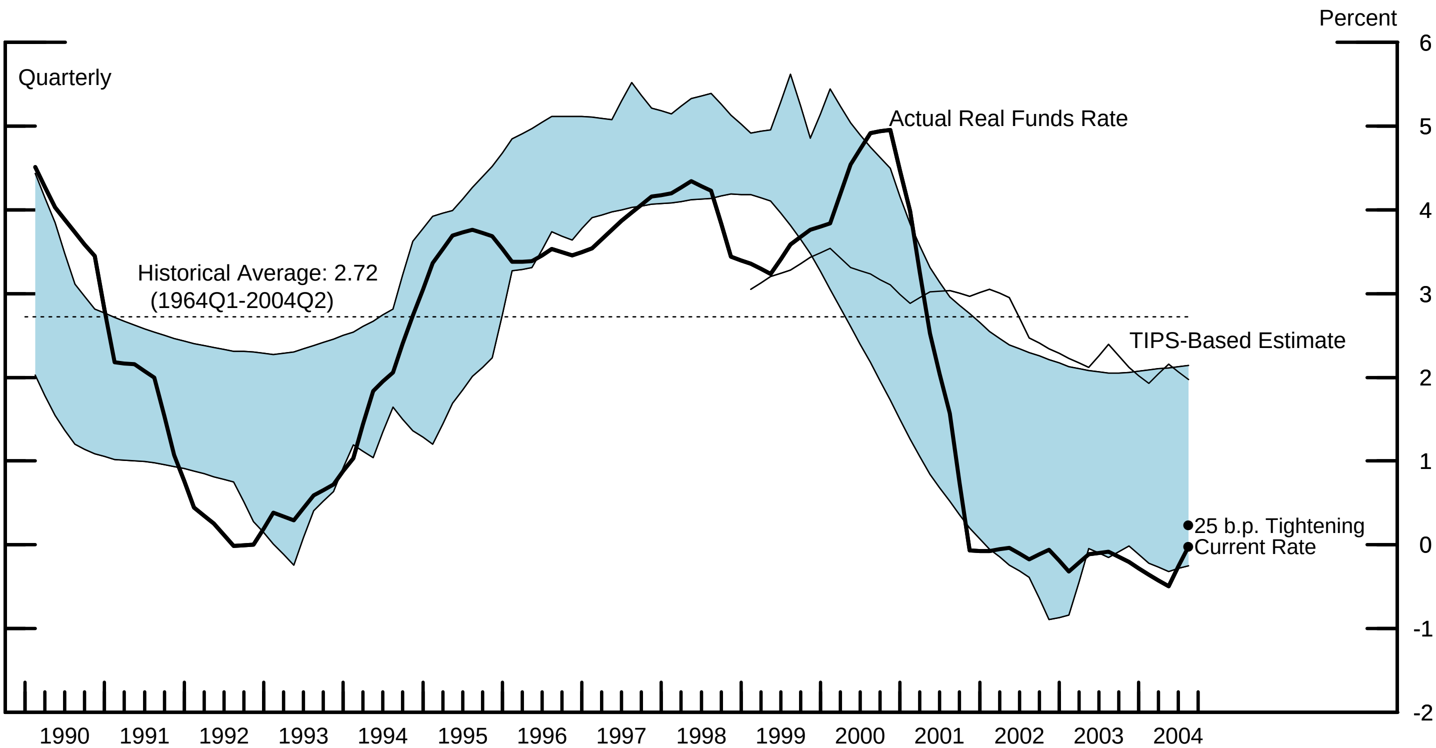
5 percent estimated NAIRU. Still, the persistence of some slack over the next two years, along with continued sizable gains in structural productivity and the pass-through effects of decelerating non-oil import prices, are expected to exert downward pressure on core inflation, with increases in the core PCE price measure slipping from 1½ percent this year to about 1¼ percent by 2006. Total PCE inflation, after running at 2¼ percent in 2004, drops to 1¼ percent in each of the next two years.

(7) Table 1 presents three alternatives for near-term policy, together with draft language for the Committee's announcement. Under Alternative A, the existing federal funds rate target would be maintained at this meeting. Alternative B would raise the target 25 basis points, to 1¾ percent. Under Alternative C, the funds rate would similarly be raised 25 basis points, but the language of the statement would be consistent with the possibility of more rapid firming than is currently built into financial prices. Under all of the alternatives, some updating of the language in the rationale paragraph would seem appropriate.

(8) The Committee, like the staff, may have read incoming data, on balance, as on the soft side, but it still may believe that the economic expansion will remain on track under current financial conditions, which incorporate market expectations of gradual policy firming. In such circumstances, the Committee might find it appropriate to validate those expectations by tightening 25 basis points at this meeting, as in **Alternative B**. Even with the two tightening steps that the Committee has taken to date, the real federal funds rate is still close to zero and near the bottom of the range of equilibrium values estimated by the staff (Chart 5). Such a low real

Table 1: Alternative Language for the September FOMC Announcement				
	August 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 1-1/2 percent.	The Federal Open Market Committee decided today to keep its target for the federal funds rate at 1-1/2 percent.	The Federal Open Market Committee decided today to raise its target for the federal funds rate by 25 basis points to 1-3/4 percent.	The Federal Open Market Committee decided today to raise its target for the federal funds rate by 25 basis points to 1-3/4 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 the accommodative stance of monetary policy, coupled with robust underlying growth in productivity, is providing ongoing support to economic activity.	[Unchanged]	[Unchanged]
	3. In recent months, output growth has moderated and the pace of improvement in labor market conditions has slowed. This softness likely owes importantly to the substantial rise in energy prices. The economy nevertheless appears poised to resume a stronger pace of expansion going forward.	Even though output appears to have regained some traction after moderating earlier this year, the pace of improvement in labor market conditions remains modest.	After moderating earlier this year partly in response to the substantial rise in energy prices, output appears to have regained some traction. The pace of improvement in labor market conditions, however, remains modest.	Output appears to be regaining traction, and labor market conditions have improved modestly.
	4. Inflation has been somewhat elevated this year, though a portion of the rise in prices seems to reflect transitory factors.	Despite the rise in energy prices, inflation and inflation expectations have eased in recent months.	Despite the rise in energy prices, inflation and inflation expectations have eased in recent months.	Inflation and inflation expectations have eased in recent months, but elevated energy prices continue to put upward pressure on costs and prices.
Assessment of Risk	5. The Committee perceives the upside and downside risks to the attainment of both sustainable growth and price stability for the next few quarters are roughly equal.	[Unchanged]	[Unchanged]	[Unchanged]
	6. With underlying inflation still expected to be relatively low, 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 still expected to be relatively low, 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 promote price stability and sustainable growth.	[Unchanged]	[None]

Chart 5
Actual Real Federal Funds Rate and
Range of Estimated Equilibrium Real Rates



Note: The shaded range represents the maximum and the minimum values each quarter of four estimates of the equilibrium real federal funds rate based on a statistical filter and the FRB/US model. Real federal funds rates employ the log difference of the core PCE price index over the previous four quarters as a proxy for inflation expectations, with the staff projection used for 2004Q3.

Equilibrium Real Funds Rate Estimates (Percent)

	2002	2003	2004H1	2004Q3
Statistical Filter				
- Two-sided:				
Based on historical data and the staff forecast	-0.2	0.0	0.1	0.3
August Bluebook	*-0.2*	*-0.1*	*0.0*	*0.0*
- One-sided:				
Based on historical data*	0.1	-0.3	-0.3	-0.2
August Bluebook	*0.1*	*-0.2*	*-0.3*	*-0.1*
FRB/US Model				
- Two-sided:				
Based on historical data and the staff forecast	2.4	2.1	2.1	2.1
August Bluebook	*2.3*	*2.0*	*1.9*	*2.0*
- One-sided:				
Based on historical data**	1.7	0.8	1.1	1.2
August Bluebook	*1.7*	*0.7*	*1.0*	*1.2*
Treasury Inflation-Protected Securities***	2.7	2.2	2.0	2.0

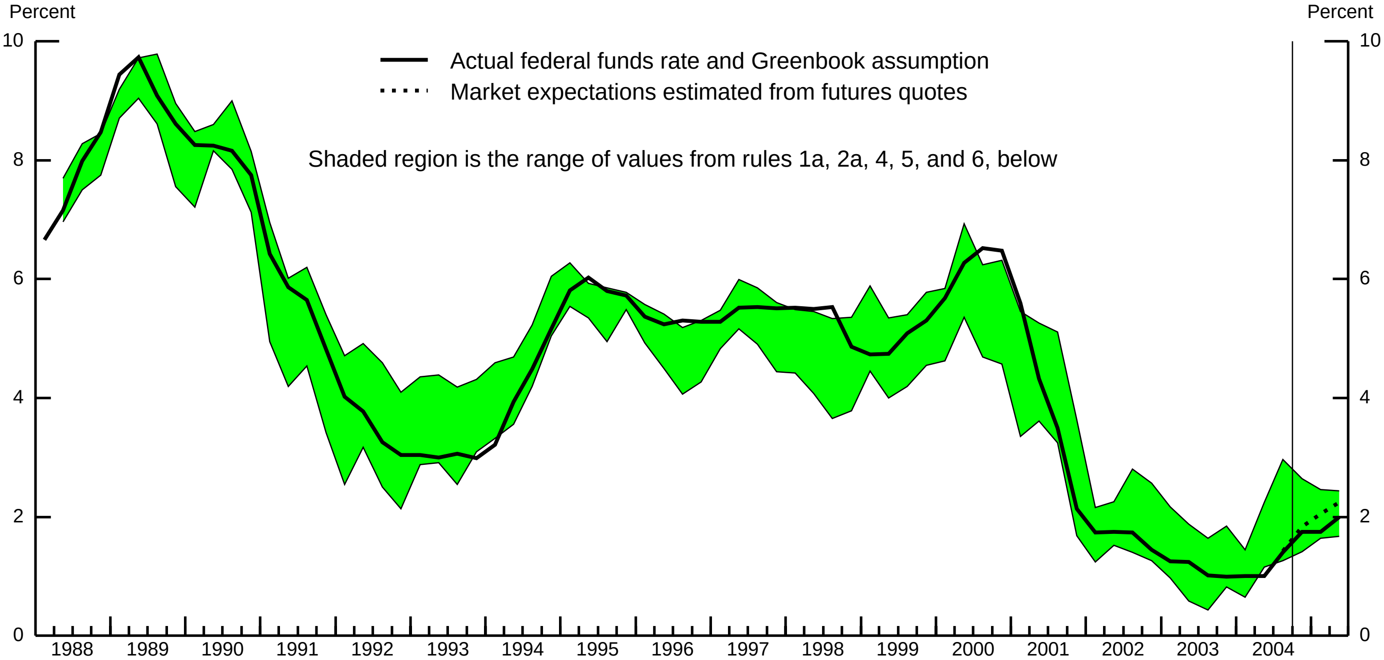
* Also employs the staff projection for the current and next quarters.
** Also employs the staff projection for the current quarter.
*** Adjusts the five-year forward, five-year real rate by an assumed term premium of 75 basis points.

federal funds rate may be viewed as appropriate in the exceptional circumstances of last year but no longer warranted today. A modest further reduction in accommodation would also be consistent with a number of monetary policy rules included in Chart 6. At the same time, though, some forces evidently are still weighing on current and prospective economic performance in a manner that may incline the Committee to be cautious about the extent and speed with which it removes policy accommodation. In particular, crude oil prices, while falling back somewhat in recent weeks, remain high and could continue to limit growth in aggregate demand. Looking forward, fiscal policy is poised to shift from stimulus to restraint at the end of this year as the investment expensing provision expires. And recent news on spending for high-tech equipment has been less upbeat.

(9) With regard to the announcement of Alternative B, the Committee could again repeat the themes that the stance of policy remains accommodative even after the policy move and that this stance, combined with strong trend productivity growth, is supporting economic activity. However, the Committee presumably will wish to modify the next few sentences of the announcement to reflect the tenor of recent data. One way of updating the key points in the discussion of real-side developments would be to hold that: *"After moderating earlier this year partly in response to the substantial rise in energy prices, output appears to have regained some traction. The pace of improvement in labor market conditions, however, remains modest."* In view of the recent string of relatively benign inflation reports, the Committee might also wish to indicate that *"Despite the rise in energy prices, inflation and inflation expectations have eased in recent months."* Incoming data

Chart 6

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



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

	2004			2005	
	Q2	Q3	Q4	Q1	Q2
Rules with Imposed Coefficients					
1. Baseline Taylor Rule: a) π*=2	2.25	2.96	2.65	2.46	2.44
b) π*=1.5	2.50	3.21	2.90	2.71	2.69
2. Aggressive Taylor Rule: a) π*=2	1.47	2.30	2.03	1.90	1.93
b) π*=1.5	1.72	2.55	2.28	2.15	2.18
3. First-difference Rule: a) π*=2	1.16	1.11	1.39	1.38	1.37
b) π*=1.5	1.41	1.36	1.64	1.88	2.12
Rules with Estimated Coefficients					
4. Outcome-based Rule	1.27	1.45	1.73	1.85	1.94
5. Greenbook Forecast-based Rule	1.16	1.27	1.56	1.71	1.84
6. FOMC Forecast-based Rule	1.26	1.40	1.42	1.64	1.67
7. TIPS-based Rule	1.33	1.27**			
Memo					
Expected federal funds rate derived from futures		1.42	1.83	2.05	2.24
Greenbook assumption		1.40	1.75	1.75	2.00

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

Note: Rule prescriptions for 2004Q3 through 2005Q2 are calculated using Greenbook projections for inflation and the output gap (or unemployment gap), except for 2004Q3 of line 6, which uses FOMC projections. For rules that contain the lagged funds rate, the rule's previous prescription for the funds rate is used for 2005Q1 and 2005Q2. It is assumed that there is no feedback from the rule prescriptions to the Greenbook projections through 2005Q2.

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, $(y_t\text{-}y_t{*})$ the staff estimate (at date t) of the output gap, $\pi{*}$ 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, $(y_{t+3|t}\text{-}y_{t+3|t}^{*})$ the staff's three-quarter-ahead forecast of the output gap, $(\Delta\, y_{t+3|t}\text{-}\Delta\, y_{t+3|t}^{*})$ 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 $(u_{t+3|t}\text{-}u_{t+3|t}^{*})$ a three-quarter-ahead forecast of the unemployment gap. Data are quarterly averages taken from the Greenbook and staff memoranda closest to the middle of each quarter, unless otherwise noted.

Rule	Specification	Root-mean-square error	
		1988:1-2004:2	2001:1-2004:2
Rules with Imposed Coefficients			
1. Baseline Taylor Rule	$i_t = 2 + \pi_t + 0.5(y_t\text{-}y_t^{*}) + 0.5(\pi_t\text{-}\pi{*})$	.94	.95
2. Aggressive Taylor Rule	$i_t = 2 + \pi_t + (y_t\text{-}y_t^{*}) + 0.5(\pi_t\text{-}\pi{*})$	.72	.73
3. First-difference Rule	$i_t = i_{t-1} + 0.5(\Delta\, y_{t+3\|t}\text{-}\Delta\, y_{t+3\|t}^{*})$ $+ 0.5(\pi_{t+3\|t}\text{-}\pi{*})$	.83	.32
Rules with Estimated Coefficients			
4. Estimated Outcome-based Rule Rule includes both lagged interest rate and serial correlation in residual.	$i_t = .53i_{t-1} + 0.47\,[1.07$ $+ 0.97(y_t\text{-}y_t^{*}) + 1.51\pi_t] + 0.48\varepsilon_{t-1}$	.24	.26
5. Estimated Greenbook Forecast-based Rule Rule includes both lagged interest rate and serial correlation in residual.	$i_t = .72i_{t-1} + 0.28\,[0.41$ $+ 1.08(y_{t+3\|t}\text{-}y_{t+3\|t}^{*}) + 1.67\pi_{t+3\|t}]$ $+ 0.33\varepsilon_{t-1}$	.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.	$i_t = 0.49i_{t-2} + 0.51\,[0.26$ $- 2.10(u_{t+3\|t}\text{-}u_{t+3\|t}^{*}) + 1.60\pi_{t+3\|t}]$	.45	.66
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.	$i_t = 0.97i_{t-1} + [-1.18 + 0.63\pi_{comp5\|t}]$	.43#	.47

RMSE calculated for 1999:1-2004:2.

would seem to support a renewed assessment that the risks to both sustainable economic growth and price stability are roughly balanced. And, as suggested above, the newly available evidence would also seem consistent with a judgment that policy accommodation can be removed at a measured pace.

(10) Investors appear to have viewed incoming data over the intermeeting period as pointing to continued moderate economic expansion and limited pressures on inflation. This interpretation of the data, together with statements by the Committee and individual policymakers, has suggested to market participants that the FOMC almost certainly will firm another 25 basis points at this meeting, will again announce that the risks to sustainable growth and price stability are balanced, and will reiterate the view that policy can be tightened at a measured pace. Accordingly, an action and an announcement along the lines of that proposed in Alternative B should have little immediate effect in financial markets. The conditional nature of the statement makes it likely that investors will remain quite sensitive to key economic readings, such as reports on payroll employment and consumer prices, in the weeks that follow. Should these data come in consistent with the staff forecast, interest rates may well edge lower on the building expectation that less cumulative policy tightening will be needed over the next few years than was previously anticipated.

(11) While the Committee may be convinced that a sustainable economic expansion is in place, it may be concerned that the pace of output growth will not be sufficiently vigorous to make satisfactory progress in reducing economic slack. In the Greenbook forecast, for instance, resource slack persists for much of the next two

years and core inflation drifts lower. If the Committee finds this to be undesirable, it may consider leaving the funds rate target unchanged at this meeting, as in **Alternative A**. The resulting easing of financial conditions would presumably better ensure satisfactory growth in aggregate demand. A relatively slow pace of firming may be warranted by concerns that aggregate demand growth could be restrained in coming quarters by a number of factors, including efforts on the part of households to raise their saving rates and the drag of the widening trade deficit, and especially so if such factors develop more quickly or forcefully than in the Greenbook outlook. In addition, in the staff forecast, persisting slack and lower energy and import prices impart a slight downtrend to core inflation that could bring it to levels that the Committee might find uncomfortably low, given the limits to conventional policy maneuvering posed by the zero bound to nominal interest rates. The "measured pace" language would not seem to be an obstacle to pausing the process of firming, in that futures rates indicate that financial market participants already anticipate inaction at one of the next three meetings—although apparently not this one. Indeed, a pause at this time might be seen as having the benefit of ensuring that market participants do not come inappropriately to view the "measured pace" language as a promise to firm policy at every meeting.

(12) In announcing Alternative A, the Committee might wish to state that *"Even though output appears to have regained some traction after moderating earlier this year, the pace of improvement in labor market conditions remains modest."* This wording is broadly similar to that proposed for Alternative B but puts more stress on the limited

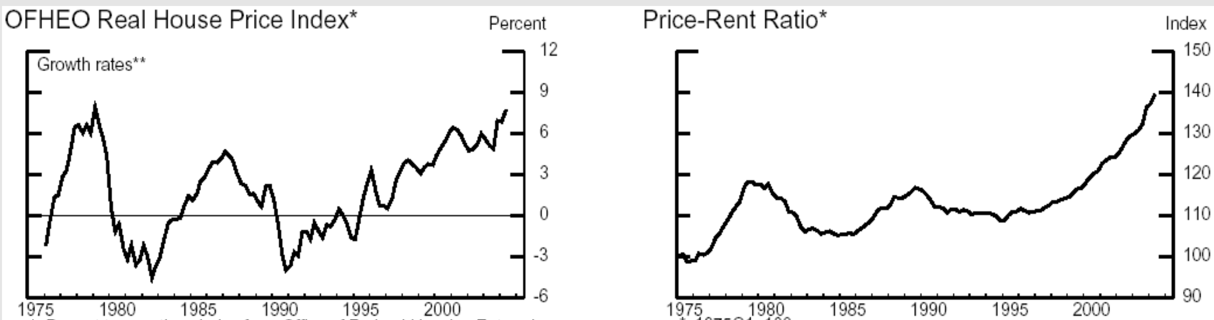
improvement in labor market conditions and less stress on energy price movements as the source of earlier economic weakness. As part of the rationale for leaving rates unchanged, the Committee could employ the language for describing inflation developments that is proposed for Alternative B, that is, *"Despite the rise in energy prices, inflation and inflation expectations have eased in recent months."* Even if the Committee found good reason to pause in its process of firming policy, it might still perceive the risks to both growth and inflation as balanced. In addition, if the Committee viewed the hiatus as consistent with an intention to move policy over time toward a more neutral stance, rather than representing a fundamental reappraisal of policy strategy, it might repeat the judgment that policy could be firmed at a measured pace. Lastly, the Committee might wish to indicate under this alternative that future policy adjustments will depend on prospects for sustainable growth as well as for price stability.

(13) An absence of policy tightening at this meeting would come as a complete surprise to market participants. Interest rates would decline appreciably across the yield curve, and the foreign exchange value of the dollar would probably decline. The effect on equity prices might depend on whether investors viewed the absence of action as suggesting a significantly weaker economic outlook than they had previously perceived, in which case equity prices might decline, or, instead, as a shift by the Federal Reserve toward a more stimulative posture, in which case a rally could ensue. At least a portion of the recent decline in the volatilities of financial prices might unwind as the outlooks for both the economy and monetary policy become less clear.

(14) The Committee may be concerned that greater-than-usual uncertainty surrounds the outlook for the economy as spending moves out of its recent soft patch. If the Committee put much weight on the possibility that growth will rebound sharply, it may believe that the scope of its future action is constrained on the upside by the "measured pace" language and may prefer to drop the last two sentences from the statement, as is considered in **Alternative C**. Monetary policy has been highly accommodative for an extended period, and as noted, the real federal funds rate is currently about zero and may well be considerably below its equilibrium level. Indeed, given the decline in longer-term yields and increases in equity prices, financial conditions likely eased further over the intermeeting period. Policymakers may be concerned that this monetary stimulus could be stoking a buildup of overall inflationary pressures or fostering misalignments of asset prices. As to the former, if the prospects for aggregate supply were described not by the Greenbook baseline but by the "Less room to grow" alternative simulation (in which the NAIRU is higher and the labor force participation rate does not rise any further to augment labor inputs), then the Committee might envision more forceful action sometime soon. As to the latter concern about asset prices, some could view the rapid rise in home values, which presumably is being fed in part by the low level of real interest rates, as a possible manifestation of misallocation of resources and a potential threat to financial stability (see box). Removing the "measured pace" language would capture market attention and result in a tightening of financial market conditions that would provide some restraint on asset prices and inflation.

Housing Prices and Monetary Policy

Over the last several years, real home prices in the United States have increased sharply (left panel). Moreover, house prices have risen well above gains in rents, indicating either an expectation of future significant increases in rents, a lowered risk premium, or a decline in the risk-free rate of discount. In any case, and as shown in the right panel, the price-rent ratio has moved well above its typical range, potentially raising some of the same challenges for monetary policy posed by the stock market boom in the late 1990s. With the value of homes accounting for about a quarter of household assets, changes in their prices could well have an appreciable effect on spending. In addition, a significant misalignment of housing prices could prompt



* Repeat transactions index from Office of Federal Housing Enterprise Oversight, deflated by the core PCE price index.
** Percent change from four quarters earlier.

* 1975Q1=100.

resource misallocations. Housing prices, however, are much less volatile than equity prices, suggesting that these developments would tend to unfold slowly, if at all.

Such concerns have led some observers to argue that the FOMC take more explicit account of perceived deviations of house prices from fundamentals in formulating monetary policy. In particular, advocates of such an approach generally argue that it may be desirable to tighten more aggressively at present than would otherwise be the case so as to contain or even reverse the perceived asset price misalignment and thereby avoid an especially sharp and painful asset price correction at some future date.

An alternative view is that monetary policy should respond to perceived asset price misalignments only to the extent that they contain information about the outlook for inflation and output. Moreover, the available empirical evidence demonstrates only that asset (house) prices are high compared with predicted values from models based on historical behavior. Models, however, are imperfect, and consequently it remains a judgment call whether this deviation really represents a departure from fundamentals or is a manifestation of changed fundamentals not fully accounted for by the model.

Even if house prices were known with certainty to be overvalued, the appropriate policy response is not obvious. More aggressive policy tightening might reduce the demand for real estate and gradually bring home prices in line with fundamentals, although the appropriate degree of tightening would be difficult to calibrate. If the misalignment, however, were viewed as likely to correct itself in short order, it might well be appropriate to ease policy (or tighten less aggressively) to cushion the expected fall in demand. Given such uncertainties, the standard prescription is that monetary policy should be driven primarily by economic fundamentals–the outlook for output and inflation–even when home prices or other asset prices may not be.

(15) In the description of economic developments in the statement, the Committee could relate that *"Output appears to be regaining traction"* and, reflecting the slightly better employment report for August and the relatively low level of initial claims for unemployment, assert that *"labor market conditions have improved modestly."* Regarding price developments, the announcement could indicate, as in Alternatives A and B, that *"Inflation and inflation expectations have eased in recent months"* but add that *"elevated energy prices continue to put upward pressure on costs and prices."* The appropriate risk assessment under Alternative C poses a difficult issue. If an assessment of balanced risks were retained, the deletion of the final two sentences of the statement would remove any explicit sense that policy firming would continue, leaving the earlier indication that "the stance of monetary policy remains accommodative" as the only hint of the future direction of policy. This concern could conceivably be remedied if the Committee chose, as discussed at the August meeting, to condition its risk assessment explicitly on an unchanged federal funds rate and judge that the risks to growth and inflation under that assumption were tilted to the upside. However, members might be concerned that such an approach would lead to a sharp upward revision in market participants' expectations for the path of policy.

(16) Adoption of Alternative C would surprise market participants and, given the precedent of the marked reaction when the "considerable period" sentence was modified in January, could prompt significant swings in financial prices. The path expected for the funds rate would rotate up, and market participants probably would become somewhat more chary about risk-taking. Equity prices, in all likelihood,

would decline. Interest rates would jump, although the rise in bond yields could be damped should equity prices fall steeply.

Money and Debt Forecasts

(17) Under the staff forecast, M2 is expected to expand slowly for the remainder of this year and begin to accelerate next year, with growth averaging about 1¾ percent from August to December. The gradual pace of policy moves assumed in the staff forecast slows the increase in the opportunity cost of holding M2 over the next two quarters. Annual growth from the fourth quarter of last year to the fourth quarter of this year is projected to come in near 4¼ percent.

(18) The growth of domestic nonfinancial sector debt is forecast to moderate to 7½ percent in the second half of 2004 and then slow a bit further next year. Household debt decelerates as mortgage borrowing falls off in response to a less-rapid pace of home price appreciation. Federal debt advances at a somewhat slower rate in 2005 than in the current year, reflecting some improvement in the federal budget deficit.[3] Business sector borrowing, however, strengthens as capital spending picks up relative to the generation of internal funds.

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[3] This forecast implies that the debt ceiling will be reached in the middle of October 2004. There are enough tricks in the bag of already-relied-upon accounting devices to suggest that the government's finances can continue uninterrupted until after the election. Those accounting devices, however, would likely prove insufficient to the task by the end of November.

M2 Growth Under Alternative Policy Actions

		No change	Tighten 25 bp*
Monthly Growth Rates			
	Aug-04	1.4	1.4
	Sep-04	2.2	2.2
	Oct-04	1.9	1.5
	Nov-04	2.6	1.8
	Dec-04	2.6	1.8
	Jan-05	2.5	1.8
	Feb-05	2.4	1.9
	Mar-05	2.6	2.2
Quarterly Growth Rates			
	2004 Q2	9.7	9.7
	2004 Q3	2.0	2.0
	2004 Q4	2.2	1.7
	2005 Q1	2.5	1.9
Annual Growth Rates			
	2003	5.3	5.3
	2004	4.4	4.3
Growth From	To		
Aug-04	Dec-04	2.3	1.8
Aug-04	Mar-05	2.4	1.9
Dec-04	Mar-05	2.5	2.0

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

Directive and Balance-of-Risks Language

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

(1) Directive Wording

The Federal Open Market Committee seeks monetary and financial conditions that will foster price stability and promote sustainable growth in output. To further its long-run objectives, the Committee in the immediate future seeks conditions in reserve markets consistent with MAINTAINING/increasing/REDUCING the federal funds rate AT/to an average of around _______ ~~1½~~ percent.

(2) Risk Assessments

A. The Committee perceives the upside and downside risks to the attainment of both sustainable growth and price stability for the next few quarters to be roughly equal. With underlying inflation still expected to be relatively low, 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 promote price stability and sustainable growth.

B. The Committee perceives the upside and downside risks to the attainment of both sustainable growth and price stability for the next few quarters to be roughly equal. With underlying inflation still expected to be relatively low, 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.

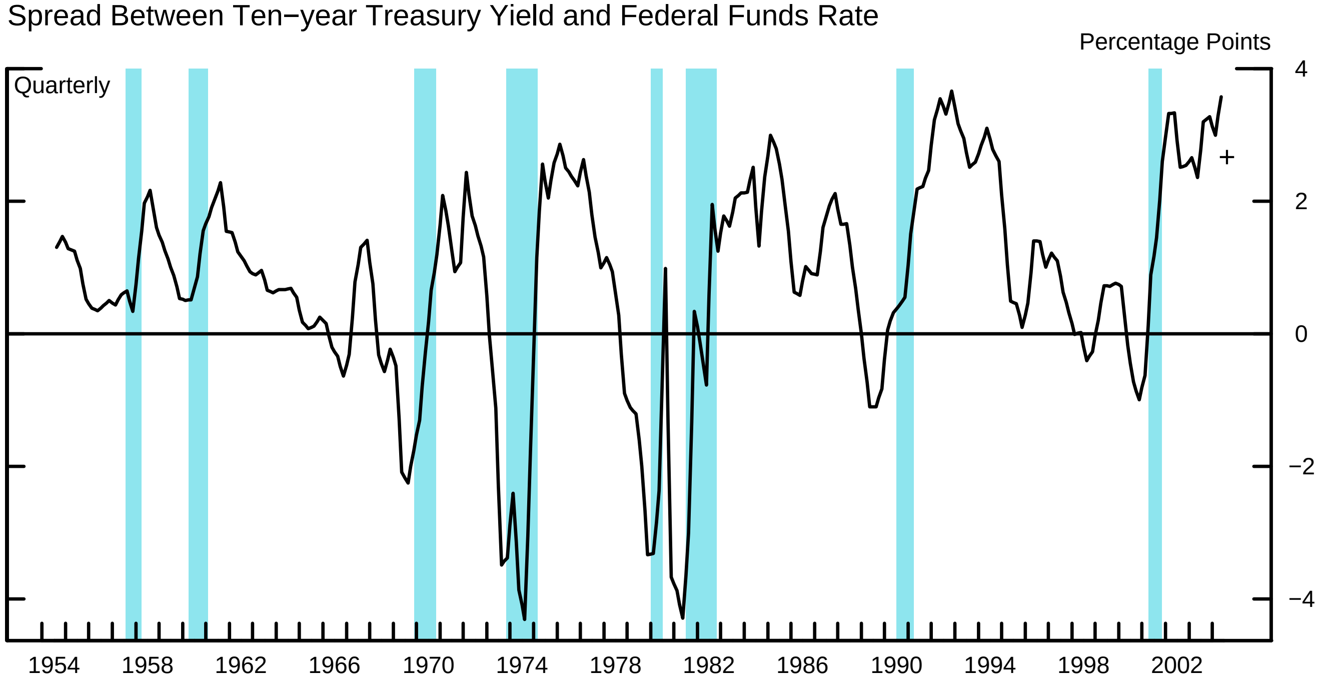
C. The Committee perceives the upside and downside risks to the attainment of both sustainable growth and price stability for the next few quarters to be roughly equal.

Appendix Chart 1

The Yield Curve

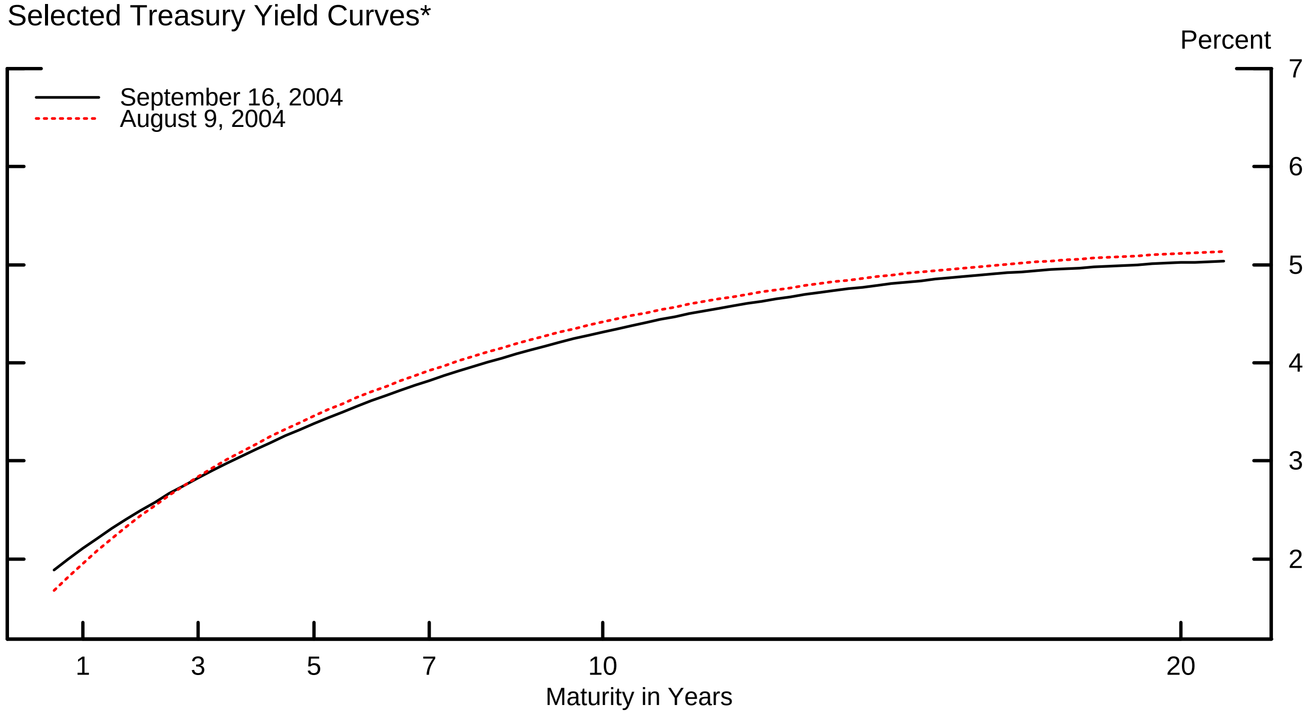
09/16/04

Spread Between Ten−year Treasury Yield and Federal Funds Rate



+ Denotes most recent weekly value.

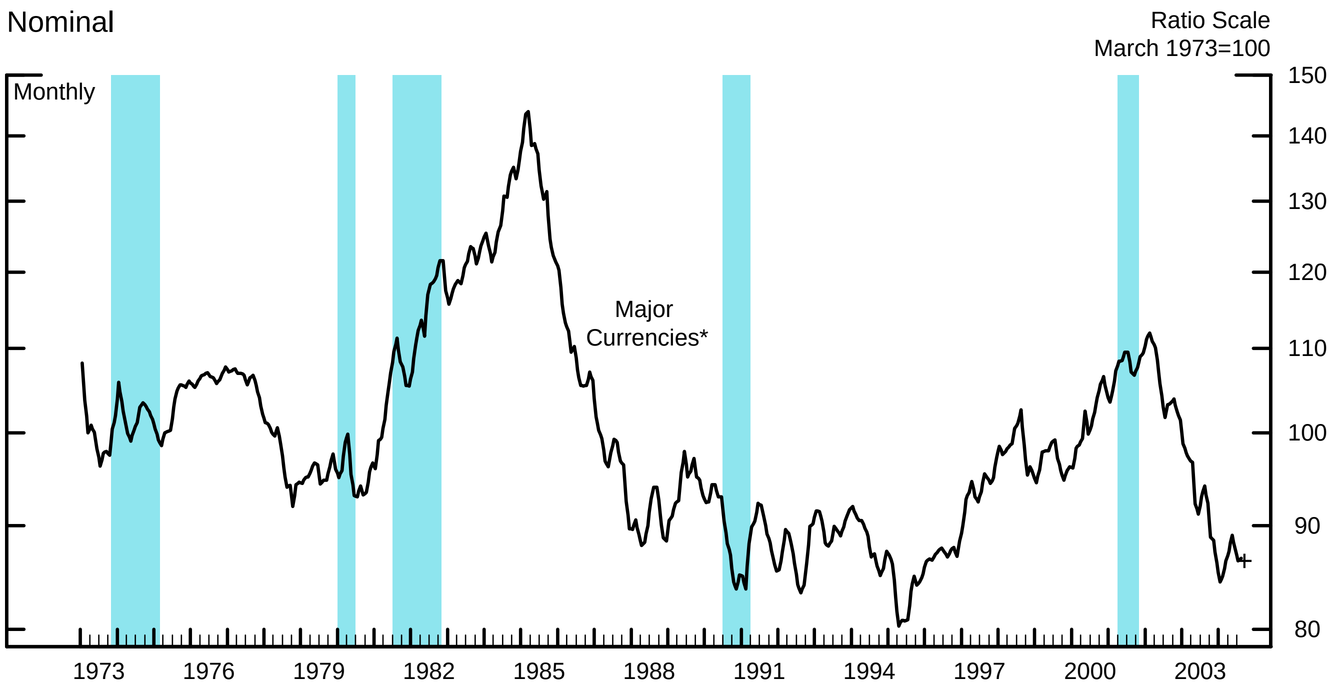
Selected Treasury Yield Curves*



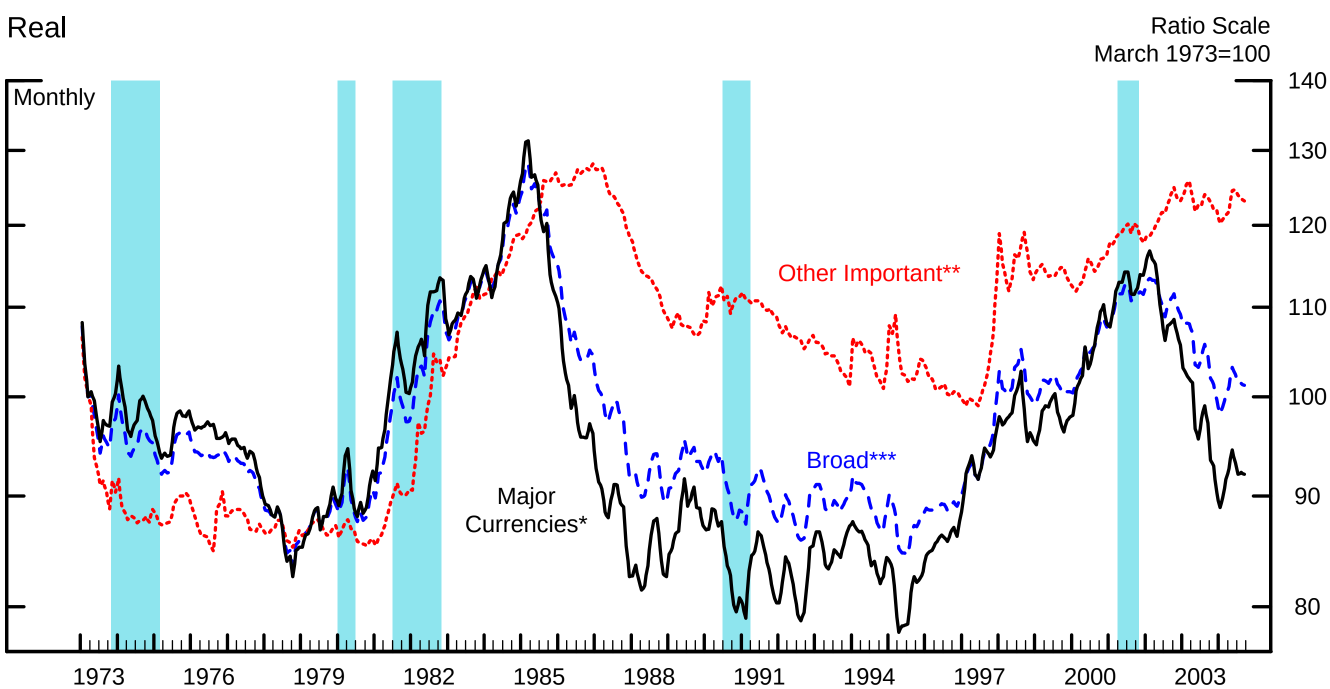
*Smoothed yield curve estimated from off−the−run Treasury coupon securities. Yields shown are those on notional par Treasury securities with semi−annual coupons.

Appendix Chart 2

Dollar Exchange Rate Indexes



+ Denotes most recent weekly value.



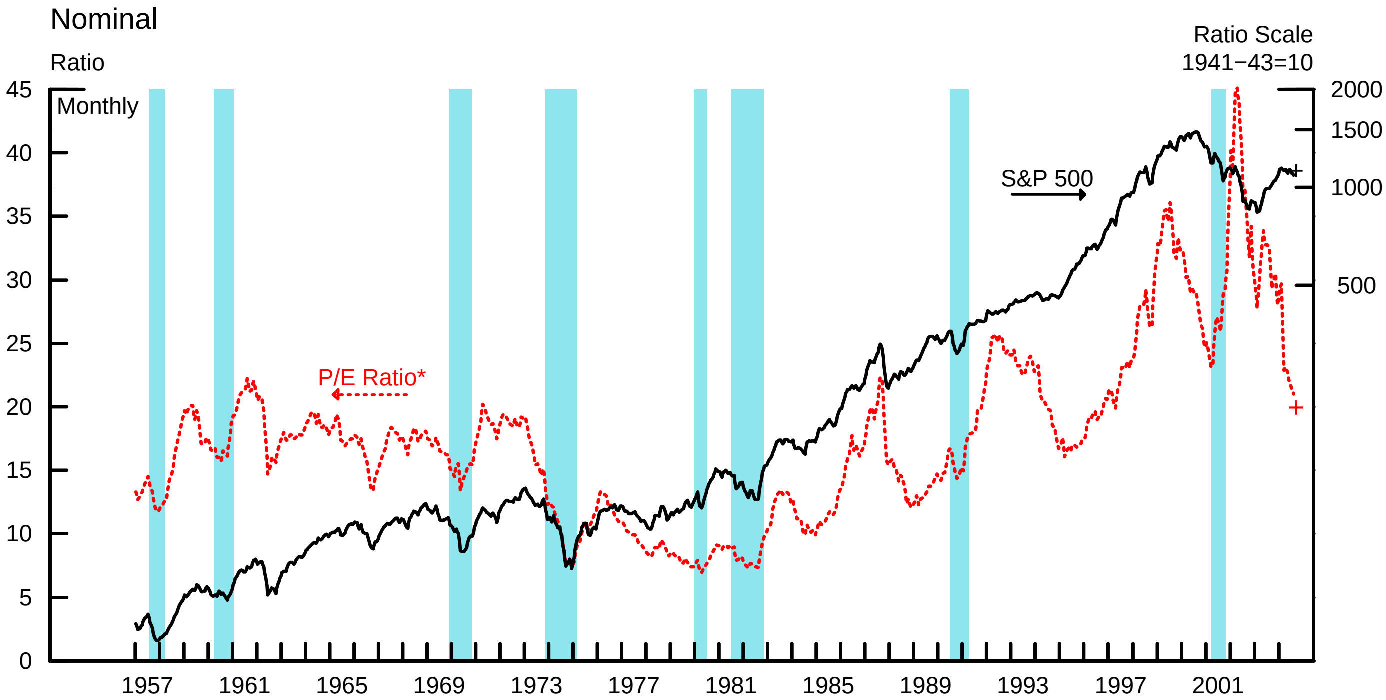
* Trade−weighted average of currencies of the Euro area, Canada, Japan, U.K., Switzerland, Australia, and Sweden.

** Trade−weighted average of currencies of 19 other important trading partners.

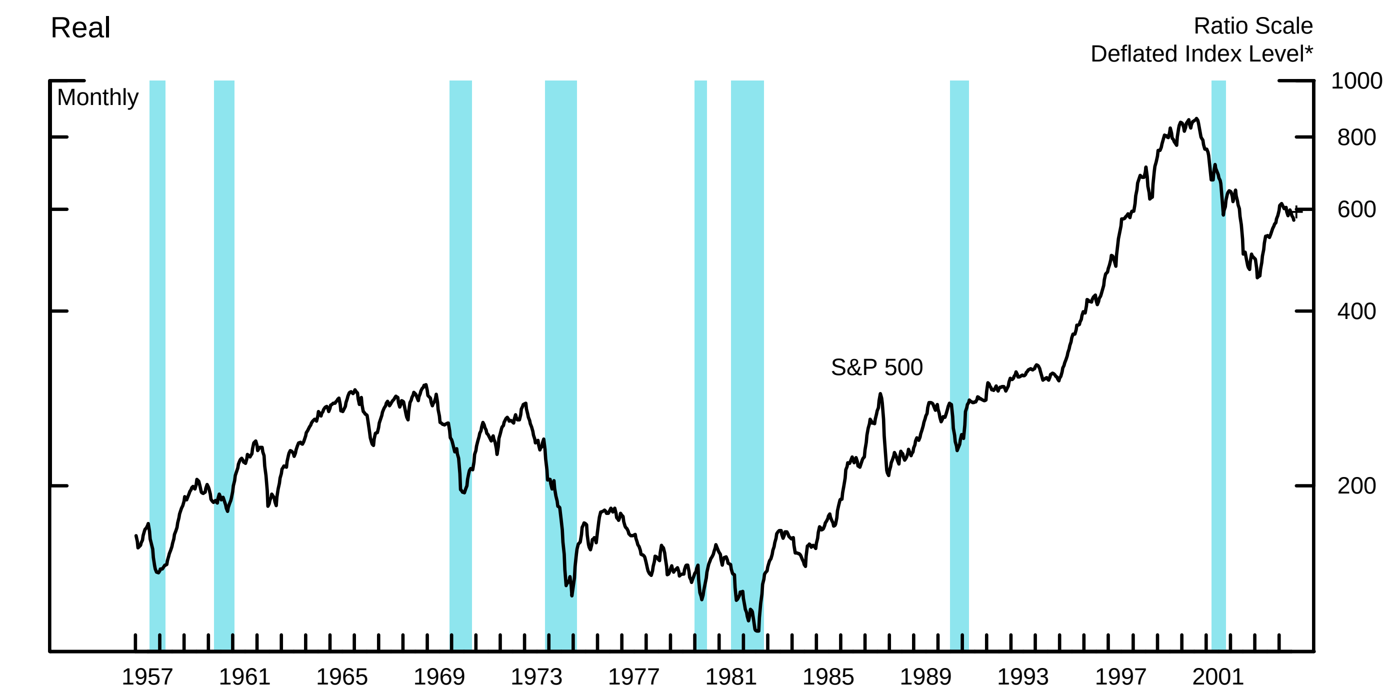
*** Trade−weighted average of currencies of all important trading partners.

Appendix Chart 3

Stock Indexes



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

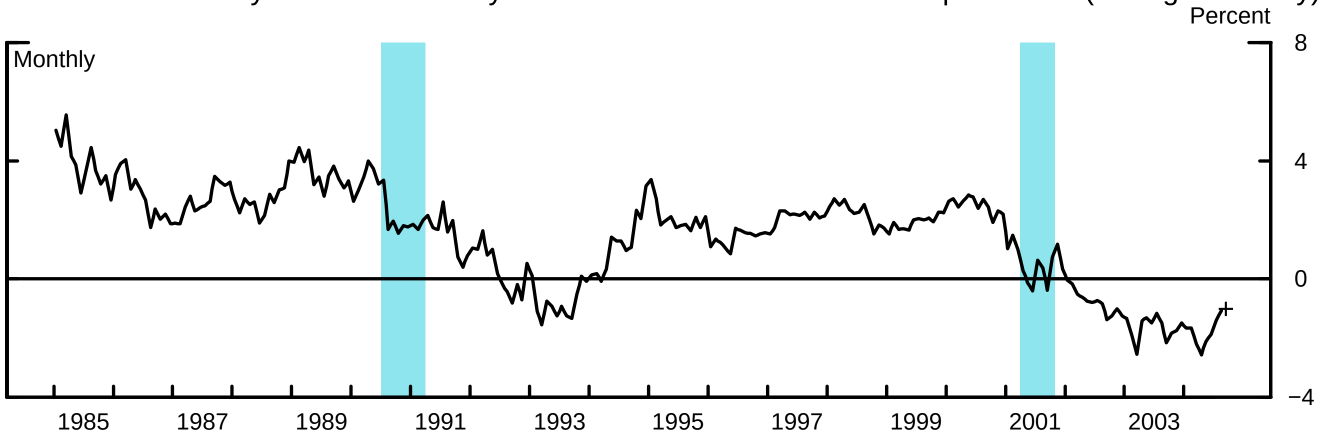


* Deflated by the CPI.
+ Denotes most recent weekly value.

Appendix Chart 4

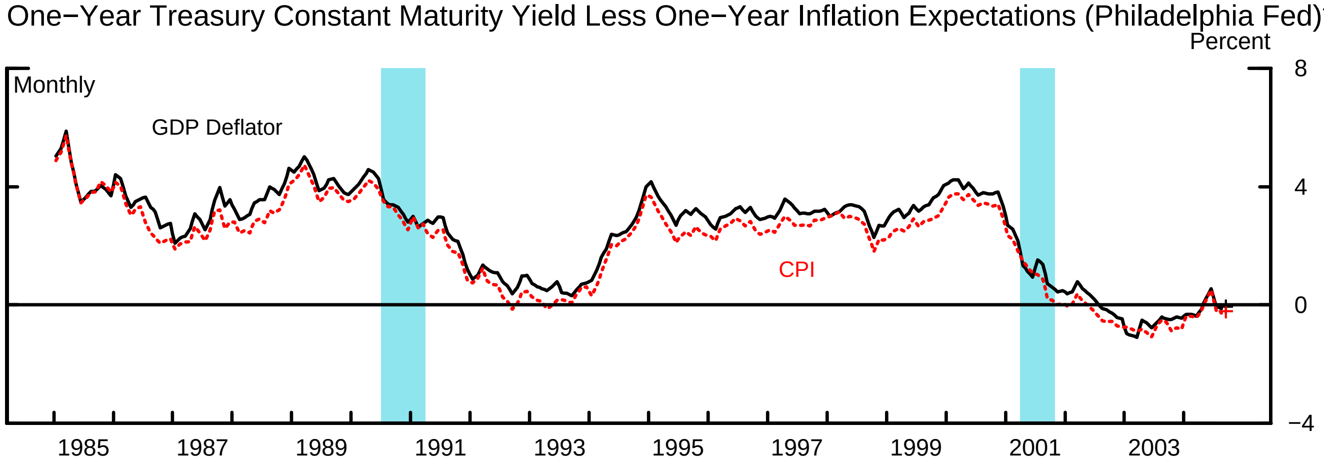
One−Year Real Interest Rates

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



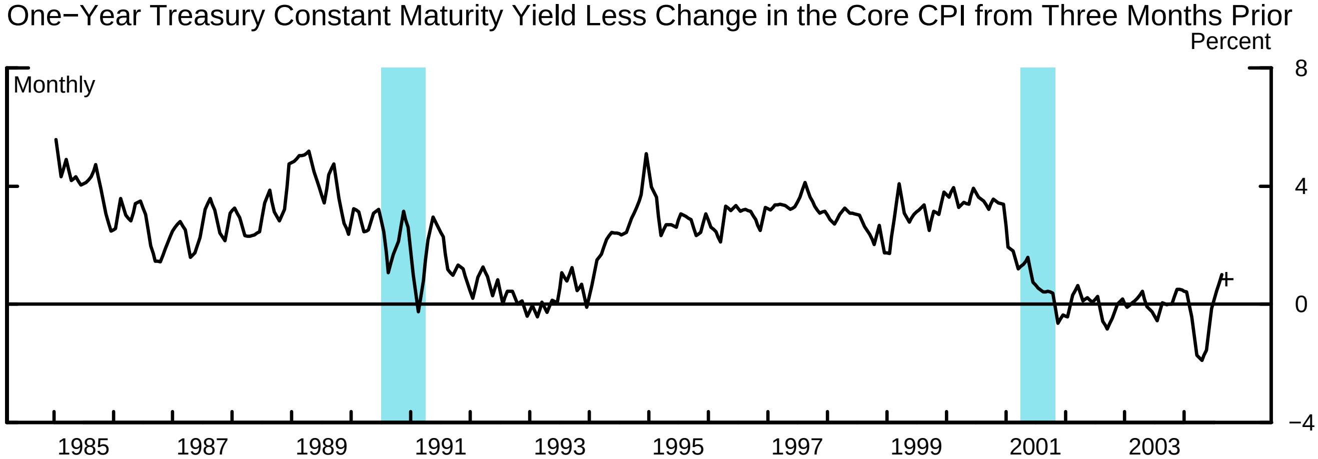
* Mean value of respondents.

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).

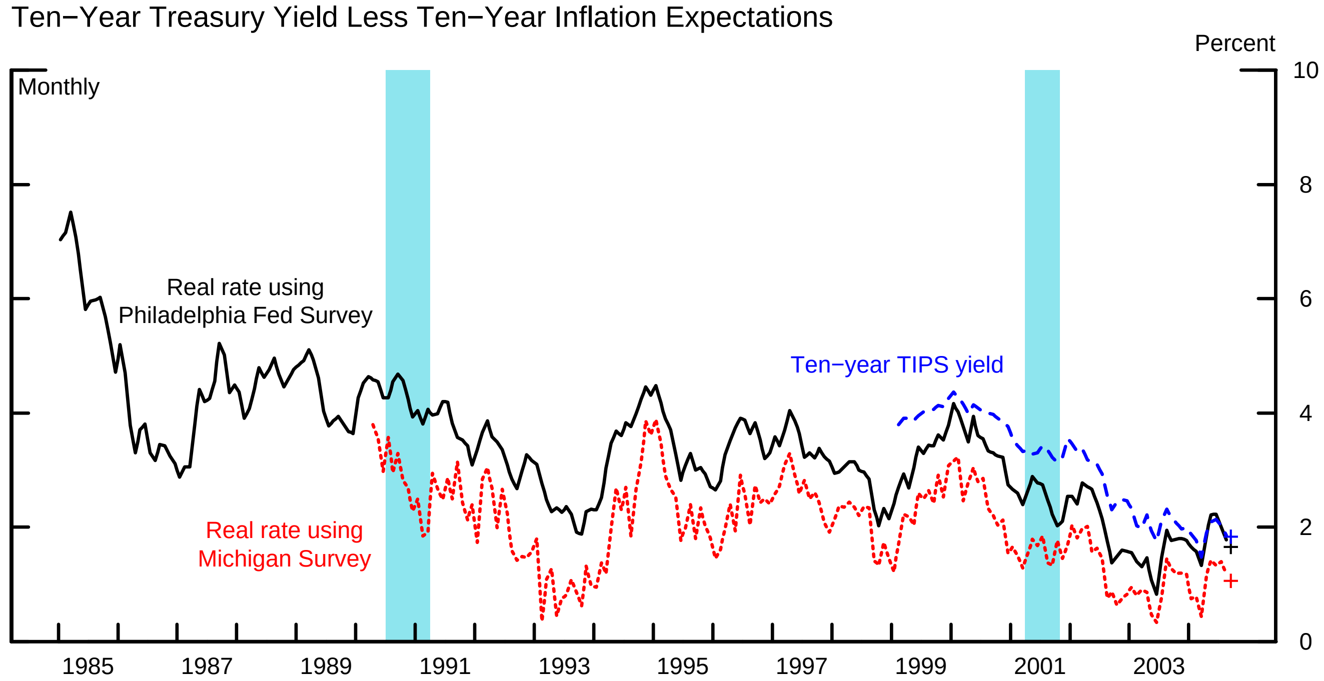
One−Year Treasury Constant Maturity Yield Less Change in the Core CPI from Three Months Prior

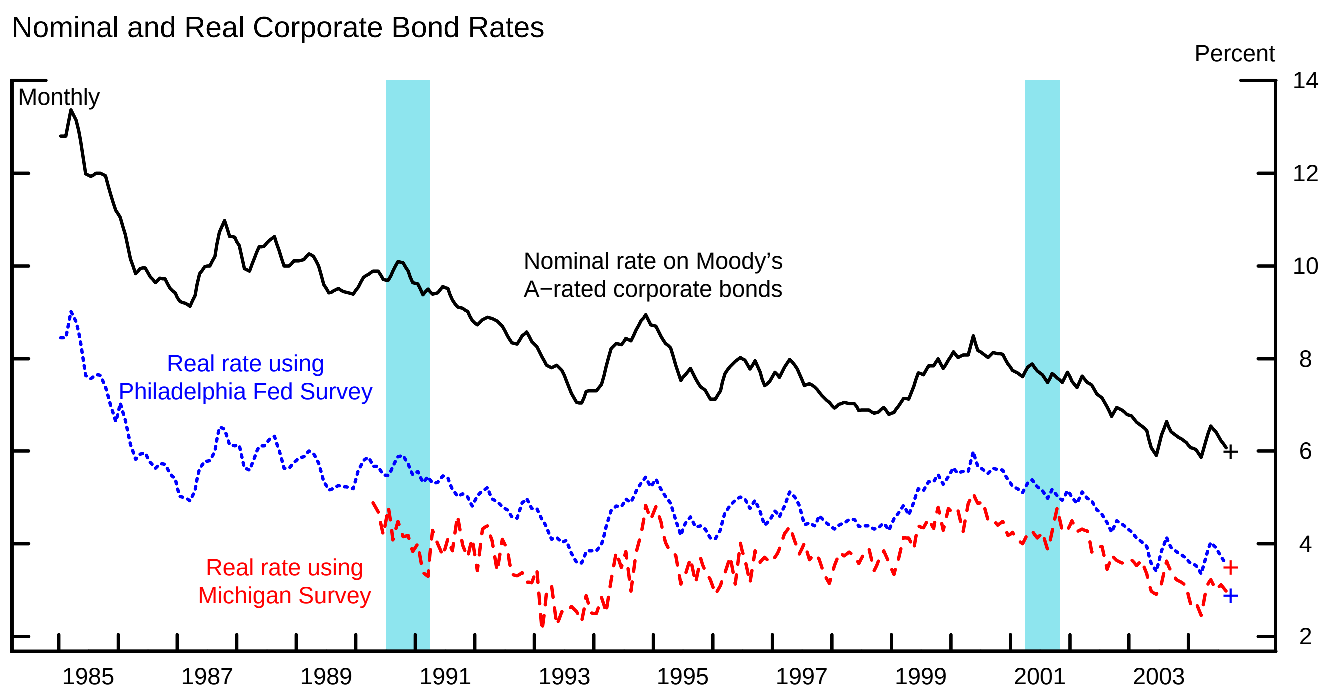


Note: + Denotes most recent weekly Treasury constant maturity yield less most recent inflation expectation.

Appendix Chart 5

Long−Term Real Interest Rates*





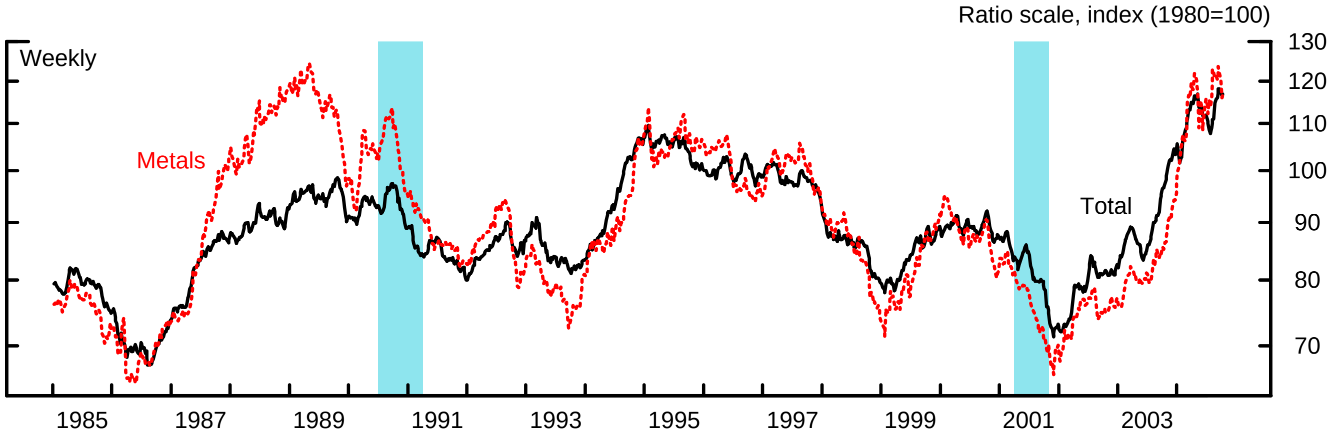
* For real rates, measures using the Philadelphia Fed Survey employ the ten−year inflation expectations from the Blue Chip Survey until April 1991 and the Philadelphia Federal Reserve Bank Survey of Professional Forecasters thereafter (median value of respondents). Measures using the Michigan Survey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

+ Denotes most recent weekly value.

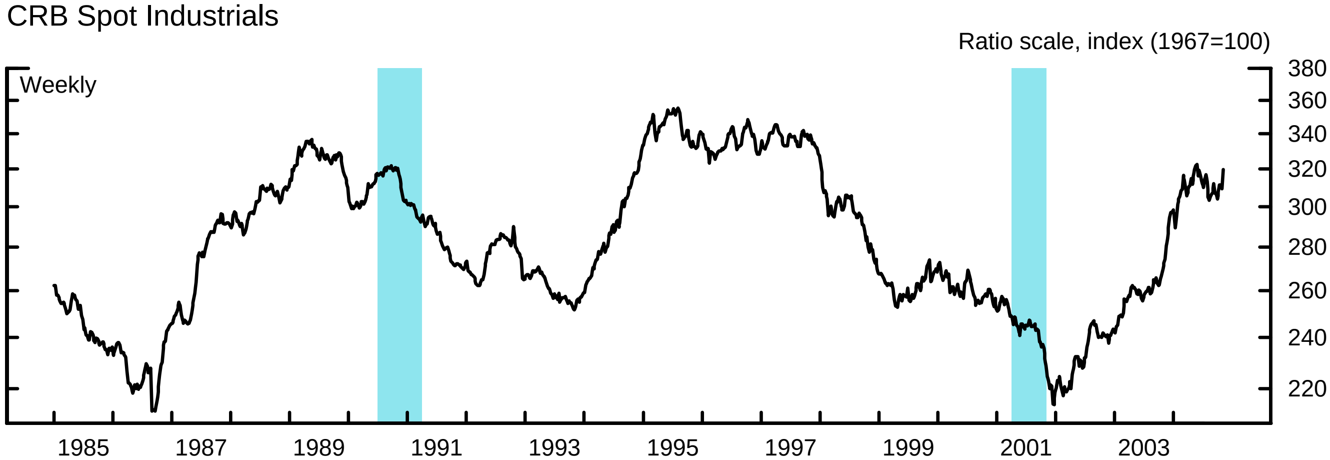
Appendix Chart 6

Commodity Price Measures

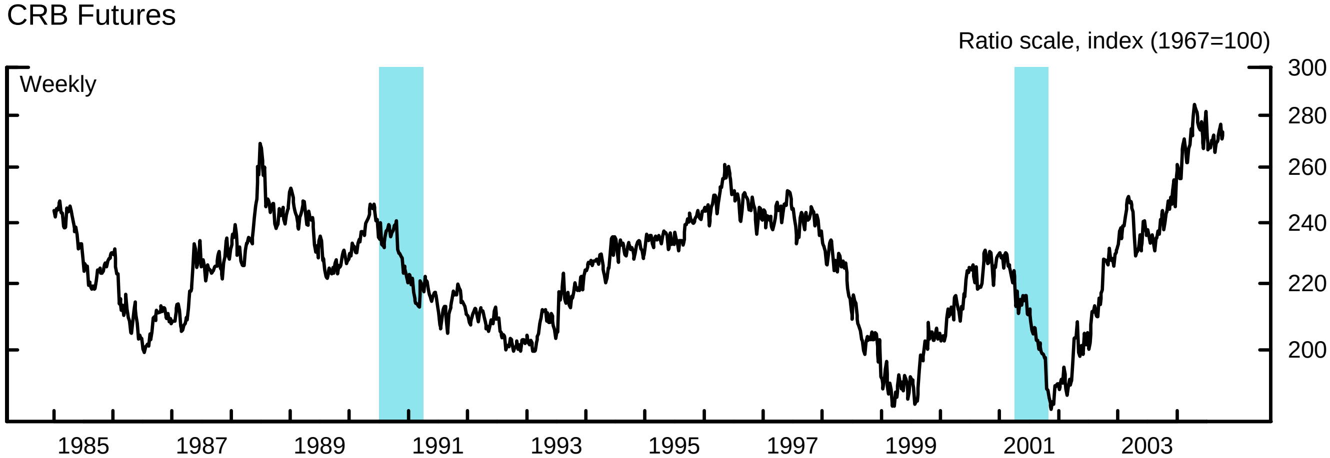
Journal of Commerce Index



CRB Spot Industrials

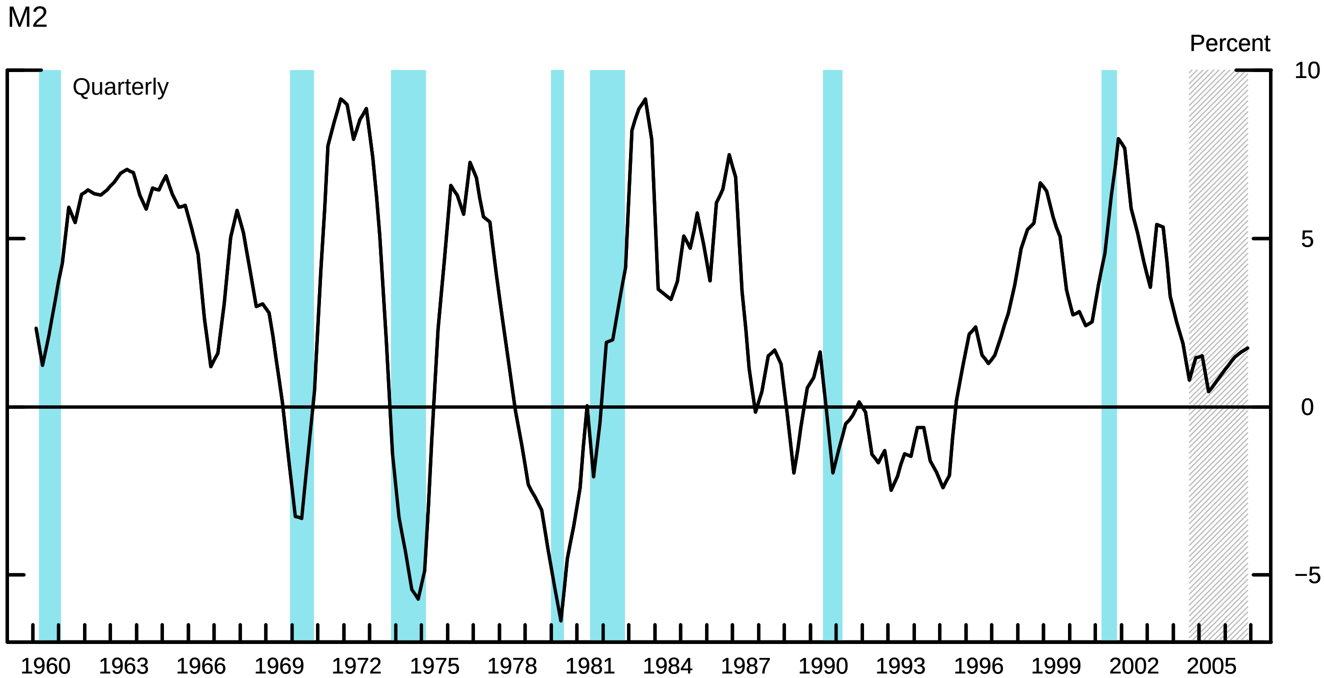


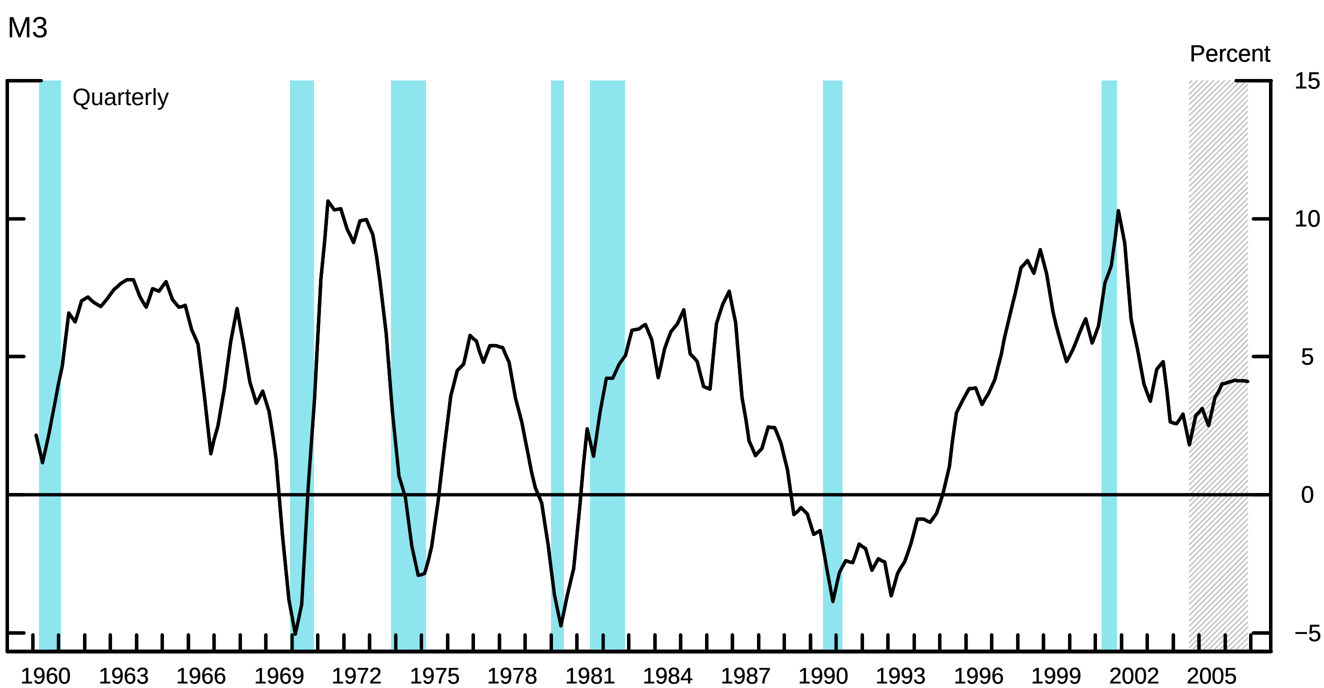
CRB Futures



Appendix Chart 7

Growth of Real M2 and M3

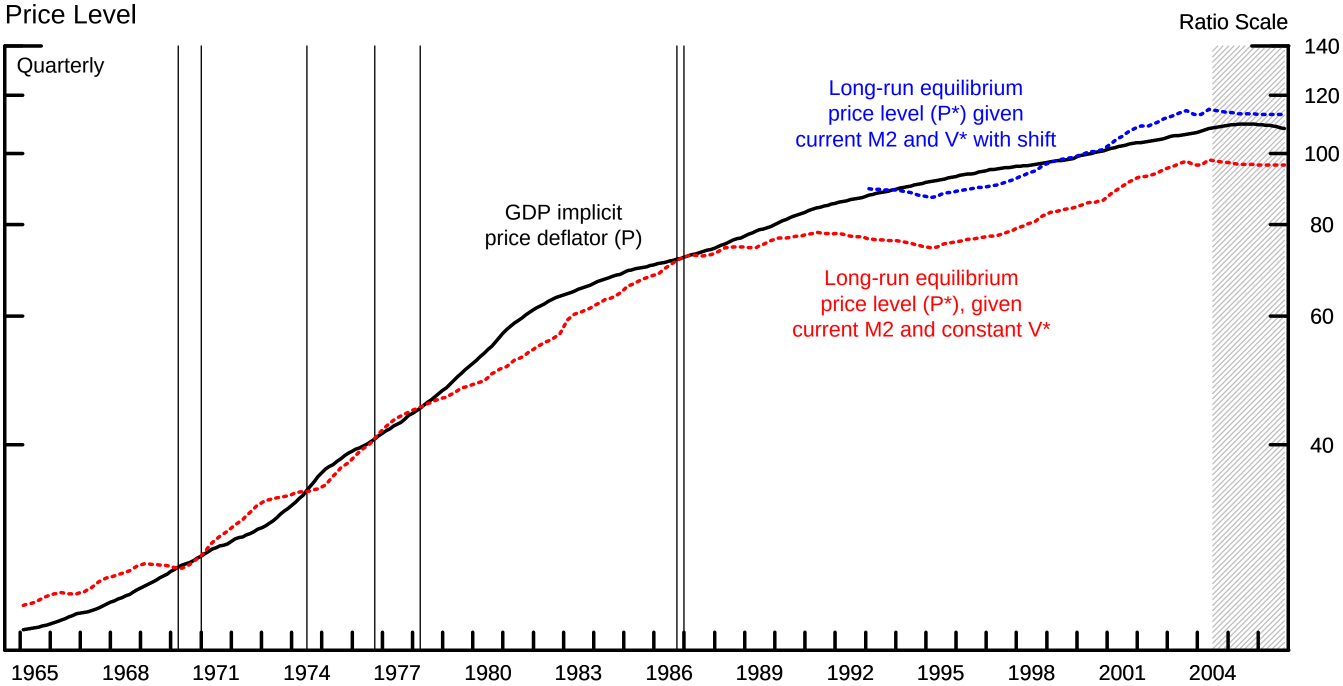


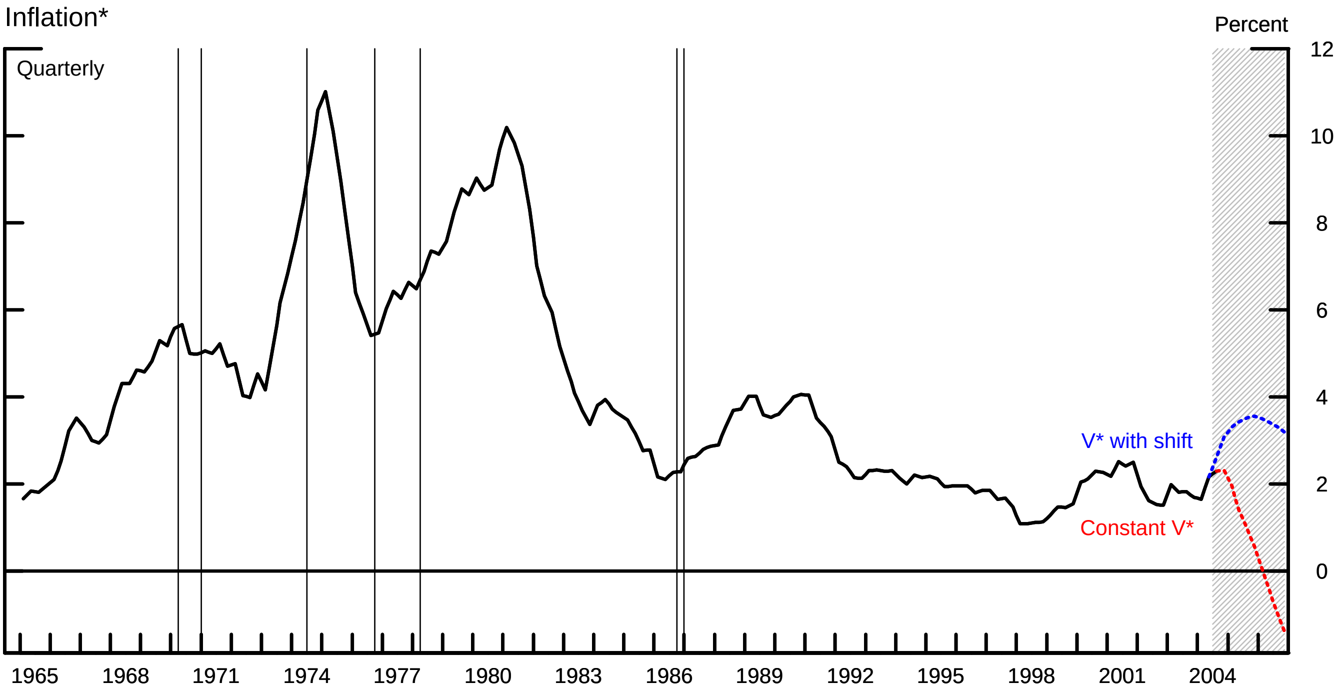


Note: Four−quarter moving average deflated by the CPI. Shaded areas denote projection period.

Appendix Chart 8

Inflation Indicator Based on M2 and Two Estimates of V*





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

Notes: P* is defined to equal M2 times V* divided by potential GDP.
Long-run velocity (V*) is estimated from 1959:Q1 to 1989:Q4. V* after 1992 is estimated from 1993:Q1 to present.
For the forecast period, P* is based on staff M2 forecast and P is simulated using a short-run dynamic model relating P to P*.
Vertical lines mark crossing of P and P*. Shaded areas denote 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	30-year	5-year	10-year			Fixed-rate	ARM
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
03 -- High	1.45	1.26	1.22	1.28	1.32	1.28	2.11	3.60	4.80	5.61	1.84	2.48	7.48	5.50	6.44	4.06
-- Low	0.86	0.75	0.81	0.82	0.93	0.91	1.09	2.06	3.29	4.37	0.77	1.56	6.01	4.78	5.21	3.45
04 -- High	1.57	1.60	1.67	1.91	1.86	1.66	2.97	4.10	5.03	5.68	1.57	2.25	6.90	5.45	6.34	4.19
-- Low	0.92	0.73	0.87	0.96	1.04	0.97	1.49	2.65	3.84	4.77	0.42	1.35	6.03	4.73	5.38	3.36
Monthly																
Sep 03	1.01	0.91	0.96	1.03	1.08	1.02	1.70	3.16	4.45	5.30	1.34	2.19	6.79	5.30	6.15	3.86
Oct 03	1.01	0.91	0.94	1.02	1.10	1.02	1.75	3.17	4.45	5.30	1.24	2.07	6.73	5.27	5.95	3.74
Nov 03	1.00	0.94	0.95	1.04	1.11	1.02	1.92	3.27	4.45	5.27	1.29	1.97	6.66	5.15	5.93	3.75
Dec 03	0.98	0.89	0.92	1.01	1.10	1.03	1.90	3.25	4.41	5.22	1.26	1.99	6.60	5.11	5.88	3.76
Jan 04	1.00	0.84	0.90	0.99	1.06	0.99	1.75	3.10	4.28	5.13	1.11	1.88	6.44	4.99	5.74	3.65
Feb 04	1.01	0.92	0.95	1.01	1.05	0.99	1.73	3.05	4.22	5.06	0.88	1.77	6.27	4.86	5.64	3.55
Mar 04	1.00	0.96	0.95	1.01	1.05	0.99	1.57	2.78	3.96	4.87	0.55	1.48	6.11	4.78	5.45	3.41
Apr 04	1.00	0.90	0.96	1.11	1.08	1.00	2.09	3.38	4.50	5.28	1.05	1.90	6.46	5.13	5.83	3.65
May 04	1.00	0.90	1.04	1.33	1.20	1.00	2.56	3.86	4.88	5.56	1.37	2.09	6.75	5.39	6.27	3.88
Jun 04	1.03	1.04	1.29	1.64	1.46	1.13	2.78	3.93	4.88	5.54	1.43	2.14	6.78	5.40	6.29	4.10
Jul 04	1.26	1.18	1.35	1.69	1.57	1.29	2.64	3.70	4.64	5.36	1.32	2.02	6.62	5.29	6.06	4.11
Aug 04	1.43	1.37	1.51	1.76	1.68	1.48	2.50	3.49	4.43	5.21	1.15	1.86	6.46	5.18	5.87	4.06
Weekly																
Jul 16 04	1.25	1.16	1.34	1.67	1.55	1.26	2.58	3.65	4.61	5.33	1.27	2.01	6.60	5.27	6.00	4.02
Jul 23 04	1.25	1.20	1.36	1.70	1.59	1.31	2.67	3.68	4.60	5.32	1.33	2.02	6.58	5.26	5.98	4.12
Jul 30 04	1.27	1.30	1.45	1.78	1.63	1.34	2.76	3.80	4.71	5.42	1.41	2.08	6.66	5.31	6.08	4.17
Aug 6 04	1.28	1.33	1.48	1.75	1.65	1.43	2.61	3.62	4.55	5.30	1.24	1.95	6.56	5.24	5.99	4.08
Aug 13 04	1.42	1.37	1.47	1.73	1.65	1.47	2.49	3.48	4.43	5.21	1.11	1.84	6.46	5.15	5.85	4.08
Aug 20 04	1.43	1.35	1.49	1.75	1.67	1.49	2.44	3.43	4.39	5.18	1.08	1.81	6.43	5.19	5.81	4.01
Aug 27 04	1.52	1.38	1.55	1.80	1.73	1.50	2.49	3.46	4.41	5.20	1.18	1.87	6.44	5.13	5.82	4.05
Sep 3 04	1.52	1.45	1.61	1.82	1.77	1.53	2.46	3.39	4.34	5.09	1.11	1.82	6.37	5.09	5.77	3.97
Sep 10 04	1.49	1.56	1.66	1.89	1.80	1.61	2.52	3.41	4.35	5.07	1.14	1.84	6.36	5.07	5.83	4.00
Sep 17 04	--	1.56	1.67	1.88	1.84	1.65	2.47	3.34	4.28	5.03	1.15	1.83	--	--	5.75	4.03
Daily																
Aug 31 04	1.55	1.45	1.60	1.79	1.76	1.53	2.40	3.33	4.29	5.03	1.08	1.78	6.32	--	--	--
Sep 1 04	1.53	1.43	1.58	1.79	1.76	1.53	2.39	3.32	4.28	5.03	1.07	1.78	6.33	--	--	--
Sep 2 04	1.51	1.45	1.60	1.80	1.76	1.54	2.45	3.39	4.35	5.08	1.10	1.83	6.37	--	--	--
Sep 3 04	1.48	1.48	1.65	1.87	1.80	1.54	2.60	3.51	4.44	5.15	1.18	1.89	6.45	--	--	--
Sep 6 04	1.48	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sep 7 04	1.54	1.51	1.67	1.91	1.78	1.59	2.57	3.47	4.40	5.11	1.16	1.86	6.39	--	--	--
Sep 8 04	1.51	1.57	1.65	1.88	1.81	1.61	2.49	3.39	4.32	5.05	1.12	1.82	6.33	--	--	--
Sep 9 04	1.49	1.57	1.64	1.88	1.82	1.62	2.50	3.40	4.35	5.08	1.13	1.83	6.37	--	--	--
Sep 10 04	1.48	1.60	1.66	1.87	1.79	1.61	2.50	3.39	4.33	5.07	1.16	1.84	6.35	--	--	--
Sep 13 04	1.51	1.58	1.67	1.89	1.83	1.64	2.49	3.37	4.30	5.04	1.14	1.82	6.31	--	--	--
Sep 14 04	1.40	1.57	1.67	1.88	1.84	1.66	2.46	3.34	4.28	5.04	1.12	1.81	6.30	--	--	--
Sep 15 04	1.57	1.56	1.67	1.88	1.83	1.65	2.50	3.38	4.32	5.06	1.18	1.86	6.32	--	--	--
Sep 16 04	--	1.54	1.67	1.87	1.86	--	2.42	3.29	4.22	4.97	1.16	1.83	--	--	--	--

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.

Appendix Table 2

Money Aggregates
(Seasonally adjusted)

Period	M1	M2	nontransactions components		M3
			In M2	In M3 only	
	1	2	3	4	5
<u>Annual growth rates(%):</u>					
Annually (Q4 to Q4)					
2001	7.0	10.2	11.1	18.5	12.7
2002	3.3	6.7	7.6	5.8	6.4
2003	6.6	5.3	4.9	3.1	4.6
Quarterly(average)					
2003-Q3	6.5	6.9	7.1	6.6	6.8
Q4	2.6	-1.3	-2.3	-0.5	-1.1
2004-Q1	6.2	3.5	2.8	11.7	6.1
Q2	6.2	9.7	10.7	12.9	10.7
Monthly					
2003-Aug.	7.6	8.0	8.1	-0.3	5.4
Sep.	-0.1	-4.5	-5.6	5.9	-1.2
Oct.	2.5	-2.9	-4.4	-3.4	-3.1
Nov.	-0.7	-0.7	-0.7	-4.0	-1.7
Dec.	9.4	-0.7	-3.3	1.9	0.2
2004-Jan.	-5.6	1.5	3.4	22.5	8.1
Feb.	18.2	9.9	7.7	9.5	9.8
Mar.	17.8	9.3	7.1	18.1	12.1
Apr.	-2.5	9.5	12.8	12.7	10.5
May	-0.8	14.0	18.1	11.5	13.2
June	12.1	1.8	-1.0	8.3	3.9
July	-10.6	-1.5	0.9	-5.7	-2.9
Aug. p	15.6	1.4	-2.3	5.9	2.9
<u>Levels ($billions):</u>					
Monthly					
2004-Apr.	1323.5	6216.9	4893.4	2931.3	9148.1
May	1322.6	6289.6	4967.1	2959.4	9249.0
June	1335.9	6299.0	4963.1	2979.9	9278.9
July	1324.1	6290.9	4966.7	2965.8	9256.6
Aug. p	1341.3	6298.5	4957.3	2980.3	9278.9
Weekly					
2004-Aug. 2	1337.2	6290.0	4952.8	2976.9	9266.9
9	1317.9	6280.5	4962.6	2968.4	9248.9
16	1336.6	6300.8	4964.2	2959.4	9260.2
23	1356.2	6315.4	4959.2	2981.5	9296.9
30p	1357.8	6296.1	4938.2	2990.1	9286.1
Sep. 6p	1328.7	6300.6	4971.9	2977.6	9278.2

p preliminary

Appendix Table 3

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

Strictly Confidential
Class II FOMC

September 16, 2004

	Treasury Bills			Treasury Coupons						Federal Agency Redemptions (-)	Net change total outright holdings [4]	Net RPs [5]		
	Net Purchases [2]	Redemptions (-)	Net Change	Net Purchases [3] < 1	1-5	5-10	Over 10	Redemptions (-)	Net Change			Short-Term [6]	Long-Term [7]	Net Change
2001	15,503	10,095	5,408	15,663	22,814	6,003	8,531	16,802	36,208	120	41,496	3,492	636	4,128
2002	21,421	---	21,421	12,720	12,748	5,074	2,280	---	32,822	---	54,242	-5,366	517	-4,850
2003	18,150	---	18,150	6,565	7,814	4,107	220	---	18,706	10	36,846	2,223	1,036	3,259
2003 QII	6,259	---	6,259	2,209	1,790	234	---	---	4,232	---	10,491	-2,578	1,056	-1,522
QIII	2,568	---	2,568	---	---	1,232	150	---	1,382	---	3,950	1,712	-554	1,158
QIV	3,299	---	3,299	2,561	3,188	1,350	20	---	7,118	10	10,407	-561	2,750	2,189
2004 QI	1,707	---	1,707	1,311	2,848	1,251	275	---	5,685	---	7,391	-772	-3,515	-4,286
QII	7,756	---	7,756	1,693	2,543	988	84	---	5,307	---	13,063	1,133	418	1,550
2004 Jan	619	---	619	---	---	---	---	---	---	---	619	-424	-5,097	-5,520
Feb	747	---	747	1,311	1,555	510	235	---	3,611	---	4,358	-568	-2,423	-2,991
Mar	341	---	341	---	1,293	741	40	---	2,074	---	2,414	1,949	-1,803	146
Apr	3,516	---	3,516	---	---	---	---	---	---	---	3,516	1,041	1,355	2,396
May	409	---	409	1,693	783	713	84	---	3,272	---	3,681	-637	710	73
Jun	3,831	---	3,831	---	1,760	275	---	---	2,035	---	5,866	-1,738	1,824	86
Jul	952	---	952	1,898	3,078	244	29	---	5,249	---	6,202	1,120	-2,372	-1,252
Aug	83	---	83	---	428	568	---	---	996	---	1,078	-750	-1,323	-2,072
2004 Jun 23	172	---	172	---	---	---	---	---	---	---	172	6,762	-4,000	2,762
Jun 30	2,202	---	2,202	---	---	---	---	---	---	---	2,202	-2,772	4,000	1,228
Jul 7	480	---	480	---	---	---	---	---	---	---	480	1,465	-1,000	465
Jul 14	403	---	403	---	1,682	244	29	---	1,955	---	2,358	-738	-1,000	-1,738
Jul 21	69	---	69	1,898	---	---	---	---	1,898	---	1,968	-1,831	---	-1,831
Jul 28	---	---	---	---	1,396	---	---	---	1,396	---	1,396	-2,004	-3,000	-5,004
Aug 4	---	---	---	---	---	---	---	---	---	---	---	4,693	-1,000	3,693
Aug 11	---	---	---	---	---	---	---	---	---	---	---	-1,727	-1,000	-2,727
Aug 18	7	---	7	---	428	568	---	---	996	---	1,003	-1,806	1,000	-806
Aug 25	68	---	68	---	---	---	---	---	---	---	68	-990	4,000	3,010
Sep 1	8	---	8	---	---	---	---	---	---	---	8	4,740	2,000	6,740
Sep 8	18	---	18	---	---	---	---	---	---	---	18	-5,150	4,000	-1,150
Sep 15	41	---	41	---	799	---	---	---	799	---	840	385	1,000	1,385
2004 Sep 16	---	---	---	---	---	400	400	---	800	---	800	-34	-2,000	-2,034
Intermeeting Period														
Aug 10-Sep 16	141	---	141	---	1,227	968	400	---	2,595	---	2,736	-1,245	10,000	8,755
Memo: LEVEL (bil. $)														
Sep 16			255.4	115.1	199.5	50.2	76.3		441.1	---	696.5	-12.9	22.0	9.1

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

MRA:SCL