Page 11: **Implied One-Year Forward Rates** are calculated by this Bank from Treasury constant maturity yields. Yields to maturity, $R(m)$, for securities with $m = 1,..., 10$ years to maturity are obtained by linear interpolation between reported yields. These yields are smoothed by fitting the regression suggested by Nelson and Siegel (1987),

$$R(m) = a_0 + (a_1 + a_2)(1 - e^{-m/50})/(m/50) - a_2 \times e^{-m/50},$$

and forward rates are calculated from these smoothed yields using equation (a) in table 13.1 of Shiller (1990),

$$f(m) = [D(m)R(m) - D(m-1)] / [D(m) - D(m-1)],$$

where duration is approximated as $D(m) = (1 - e^{-R(m) \times m})/R(m)$. These rates are linear approximations to the true instantaneous forward rates; see Shiller (1990). For a discussion of the use of forward rates as indicators of inflation expectations, see Sharpe (1997). **Rates on 3-Month Eurodollar Futures** and **Rates on Selected Federal Funds Futures Contracts** trace through time the yield on three specific contracts. **Rates on Federal Funds Futures on Selected Dates** displays a single day's snapshot of yields for contracts expiring in the months shown on the horizontal axis. **Inflation-Indexed Treasury Securities and Yield Spreads** are those plotted on page 3. **Inflation-Indexed 10-Year Government Notes** shows the yield of an inflation-indexed note that is scheduled to mature in approximately (but not greater than) 10 years. The current French note has a maturity date of 7/25/2015, the current U.K. note has a maturity date of 8/16/2013, and the current U.S. note has a maturity date of 1/15/2016. **Inflation-Indexed Treasury Yield Spreads** and **Inflation-Indexed 10-Year Government Yield Spreads** equal the difference between the yields on the most recently issued inflation-indexed securities and the unadjusted security yields of similar maturity.

Page 12: **Velocity** (for MZM and M2) equals the ratio of GDP, measured in current dollars, to the level of the monetary aggregate. **MZM** and **M2 Own Rates** are weighted averages of the rates received by households and firms on the assets included in the aggregates. Prior to 1982, the 3-month T-bill rates are secondary market yields. From 1982 forward, rates are 3-month constant maturity yields.

Page 13: **Real Gross Domestic Product** is GDP as measured in chained 2000 dollars. The **Gross Domestic Product Price Index** is the implicit price deflator for GDP, which is defined by the Bureau of Economic Analysis, U.S. Department of Commerce, as the ratio of GDP measured in current dollars to GDP measured in chained 2000 dollars.

Page 14: **Investment Securities** are all securities held by commercial banks in both investment and trading accounts.

Page 15: **Inflation Rate Differentials** are the differences between the foreign consumer price inflation rates and year-over-year changes in the U.S. all-items Consumer Price Index.

Page 17: **Treasury Yields** are Treasury constant maturities as reported in the Board of Governors of the Federal Reserve System's H.15 release.

Sources

Agence France Trésor: French note yields.

Bank of Canada: Canadian note yields.

Bank of England: U.K. note yields.

Board of Governors of the Federal Reserve System: Monetary aggregates and components: H.6 release. Bank credit and components: H.8 release. Consumer credit: G.19 release. Required reserves, excess reserves, clearing balance contracts, and discount window borrowing: H.4.1 and H.3 releases. Interest rates: H.15 release. Nonfinancial commercial paper: Board of Governors website. Nonfinancial debt: Z.1 release. M2 own rate.

Bureau of Economic Analysis: GDP.

Bureau of Labor Statistics: CPI.

Chicago Board of Trade: Federal funds futures contract.

Chicago Mercantile Exchange: Eurodollar futures.

Congressional Budget Office: Potential real GDP.

Federal Reserve Bank of Philadelphia: Survey of Professional Forecasters inflation expectations.

Federal Reserve Bank of St. Louis: Adjusted monetary base and adjusted reserves, monetary services index, MZM own rate, one-year forward rates.

Organization for Economic Cooperation and Development: International interest and inflation rates.

Standard & Poor's: Stock price-earnings ratio, stock price composite index.

University of Michigan Survey Research Center: Median expected price change.

U.S. Department of the Treasury: U.S. security yields.

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Taylor, John B. (1993). "Discretion versus Policy Rules in Practice," *Carnegie-Rochester Conference Series on Public Policy*, vol. 39, pp. 195-214.

Note: *Available on the Internet at research.stlouisfed.org/publications/review/.

Monetary Trends

June 2006

Gas-Price Inflation

During April 2006 the retail price of gasoline increased from $2.73 to $2.97 per gallon.[1] Analysts sometimes play down consumers' concerns about the high prices of gas by noting that in real terms, i.e., relative to other goods and services, gas is still relatively cheap compared with prices in the late 1970s and early 1980s. However, the recent increases in the prices of oil and gas undermine this argument.

The consumer price index (CPI) for all items provides a measure of prices of all goods and services. The Bureau of Labor Statistics also publishes consumer price indices for expenditure categories, including one for gasoline. The green line in the chart tracks the real price of gasoline since 1967, i.e., the ratio of the CPI for gasoline to the CPI for all items. Even disregarding the September 2005 spike due to Hurricane Katrina, it is clear that gas has become more and more expensive with respect to other goods since 2003. The real gas price has not yet reached record high levels, but it is above the long-run average and comparable to mid-1980s levels.

Gasoline price inflation tracks closely the growth rate of the price of oil, and the price of oil in the week of April 21 crossed the $70 per barrel threshold.[2] The high oil price is the result of sustained world demand, at a time when several factors restrain the supply of oil. The world demand for oil is fueled by sustained growth in oil-hungry China and India, sustained demand from the United States, and Japan's recovery. On the supply side, the oil industry does not have much spare capacity. Any disruption, due for example to the war in Iraq, rising tensions with Iran, civil unrest in Nigeria, risk of expropriation of foreign oil companies in Venezuela or Bolivia, would be reflected immediately in higher spot oil prices. Futures prices suggest that the prices of oil and gasoline are likely to remain high in the medium term.

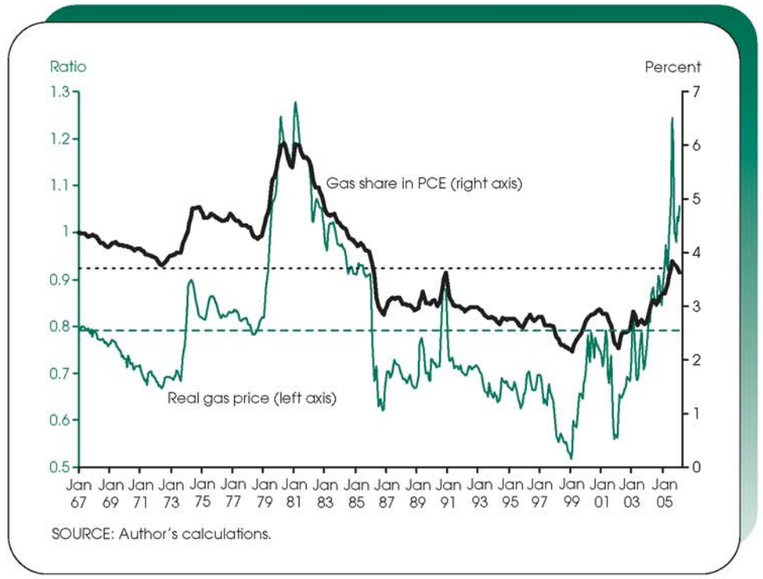
Even if the real price of gasoline is high by historical standards, and trending toward record levels, the trend will have to be sustained for quite some time before U.S. consumers trade in their existing stock of vehicles for smaller and more fuel-efficient cars. The fraction of personal consumption expenditures spent on gasoline (as shown by the black line in the chart) is on the rise, but close to its historical average (3.7 percent) and much lower than the 6 percent peak in the early 1980s.[3]

—Riccardo DiCecio

[1] Weekly data for gasoline prices (all grades) from the Energy Information Administration: http://tonto.eia.doe.gov/dnav/pet/pet_pri_gnd_dcus_nus_w.htm.

[2] Domestic spot market price: light sweet crude oil, WTI, Cushing. Source: *Wall Street Journal*/Haver Analytics.

[3] See also Cashin, David and McGranahan, Leslie. "Household Energy Expenditures, 1982-2005." *Chicago Fed Letter*, June 2006, (227).



SOURCE: Author's calculations.

Views expressed do not necessarily reflect official positions of the Federal Reserve System.

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Conventions used in this publication:

1. Unless otherwise indicated, data are monthly.
2. Shaded areas indicate recessions, as determined by the National Bureau of Economic Research.
3. *Percent change at an annual rate* is the simple, not compounded, monthly percent change multiplied by 12. For example, using consecutive months, the percent change at an annual rate in x between month $t-1$ and the current month t is: $[(x_t/x_{t-1})-1]\times 1200$. Note that this differs from *National Economic Trends.* In that publication, monthly percent changes are compounded and expressed as annual growth rates.
4. The *percent change from year ago* refers to the percent change from the same period in the previous year. For example, the percent change from year ago in x between month $t-12$ and the current month t is: $[(x_t/x_{t-12})-1]\times 100$.

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On March 23, 2006, the Board of Governors of the Federal Reserve System ceased the publication of the M3 monetary aggregate. It also ceased publishing the following components: large-denomination time deposits, RPs, and eurodollars.

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Definitions

M1: The sum of currency held outside the vaults of depository institutions, Federal Reserve Banks, and the U.S. Treasury; travelers checks; and demand and other checkable deposits issued by financial institutions (except demand deposits due to the Treasury and depository institutions), minus cash items in process of collection and Federal Reserve float.

MZM (money, zero maturity): M2 minus small-denomination time deposits, plus institutional money market mutual funds (that is, those included in M3 but excluded from M2). The label MZM was coined by William Poole (1991); the aggregate itself was proposed earlier by Motley (1988).

M2: M1 plus savings deposits (including money market deposit accounts) and small-denomination (under $100,000) time deposits issued by financial institutions; and shares in retail money market mutual funds (funds with initial investments under $50,000), net of retirement accounts.

M3: M2 plus large-denomination ($100,000 or more) time deposits; repurchase agreements issued by depository institutions; Eurodollar deposits, specifically, dollar-denominated deposits due to nonbank U.S. addresses held at foreign offices of U.S. banks worldwide and all banking offices in Canada and the United Kingdom; and institutional money market mutual funds (funds with initial investments of $50,000 or more).

Bank Credit: All loans, leases, and securities held by commercial banks.

Domestic Nonfinancial Debt: Total credit market liabilities of the U.S. Treasury, federally sponsored agencies, state and local governments, households, and nonfinancial firms. End-of-period basis.

Adjusted Monetary Base: The sum of currency in circulation outside Federal Reserve Banks and the U.S. Treasury, deposits of depository financial institutions at Federal Reserve Banks, and an adjustment for the effects of changes in statutory reserve requirements on the quantity of base money held by depositories. This series is a spliced chain index; see Anderson and Rasche (1996a,b, 2001, 2003).

Adjusted Reserves: The sum of vault cash and Federal Reserve Bank deposits held by depository institutions and an adjustment for the effects of changes in statutory reserve requirements on the quantity of base money held by depositories. This spliced chain index is numerically larger than the Board of Governors' measure, which excludes vault cash not used to satisfy statutory reserve requirements and Federal Reserve Bank deposits used to satisfy required clearing balance contracts; see Anderson and Rasche (1996a, 2001, 2003).

Monetary Services Index: An index that measures the flow of monetary services received by households and firms from their holdings of liquid assets; see Anderson, Jones, and Nesmith (1997). Indexes are shown for the assets included in M2, with additional data at research.stlouisfed.org/msi/index.html.

Note: M1, M2, M3, Bank Credit, and Domestic Nonfinancial Debt are constructed and published by the Board of Governors of the Federal Reserve System. For details, see *Statistical Supplement to the Federal Reserve Bulletin*, tables 1.21 and 1.26. MZM, Adjusted Monetary Base, Adjusted Reserves, and Monetary Services Index are constructed and published by the Research Division of the Federal Reserve Bank of St. Louis.

Notes

Page 3: Readers are cautioned that, since early 1994, the level and growth of M1 have been depressed by retail sweep programs that reclassify transactions deposits (demand deposits and other checkable deposits) as savings deposits overnight, thereby reducing banks' required reserves; see Anderson and Rasche (2001) and research.stlouisfed.org/aggreg/swdata.html. **Primary Credit Rate**, **Discount Rate,** and **Intended Federal Funds Rate** shown in the chart **Reserve Market Rates** are plotted as of the date of the change, while the **Effective Federal Funds Rate** is plotted as of the end of the month. Interest rates in the table are monthly averages from the Board of Governors H.15 Statistical Release. The **Treasury Yield Curve** and **Real Treasury Yield Curve** show constant maturity yields calculated by the U.S. Treasury for securities 5, 7, 10, and 20 years to maturity. **Inflation-Indexed Treasury Yield Spreads** are a measure of inflation compensation at those horizons, and it is simply the nominal constant maturity yield less the real constant maturity yield. Daily data and descriptions are available at research.stlouisfed.org/fred2/. See also *Statistical Supplement to the Federal Reserve Bulletin*, table 1.35. The 30-year constant maturity series was discontinued by the Treasury as of February 18, 2002.

Page 5: **Checkable Deposits** is the sum of demand and other checkable deposits. **Savings Deposits** is the sum of money market deposit accounts and passbook and statement savings. **Time Deposits** have a minimum initial maturity of 7 days. **Large Time Deposits** are deposits of $100,000 or more. **Retail** and **Institutional Money Market Mutual Funds** are as included in M2 and the non-M2 component of M3, respectively.

Page 7: **Excess Reserves plus RCB (Required Clearing Balance) Contracts** equals the amount of deposits at Federal Reserve Banks held by depository institutions but not applied to satisfy statutory reserve requirements. (This measure excludes the vault cash held by depository institutions that is not applied to satisfy statutory reserve requirements.) **Consumer Credit** includes most short- and intermediate-term credit extended to individuals. See *Statistical Supplement to the Federal Reserve Bulletin*, table 1.55.

Page 8: **Inflation Expectations** measures include the quarterly Federal Reserve Bank of Philadelphia *Survey of Professional Forecasters*, the monthly University of Michigan Survey Research Center's *Surveys of Consumers*, and the annual Federal Open Market Committee (FOMC) range as reported to the Congress in the February testimony that accompanies the Monetary Policy Report to the Congress. Beginning February 2000, the FOMC began using the personal consumption expenditures (PCE) price index to report its inflation range; the FOMC then switched to the PCE chain-type price index excluding food and energy prices ("core") beginning July 2004. Accordingly, neither are shown on this graph. **CPI Inflation** is the percentage change from a year ago in the consumer price index for all urban consumers. **Real Interest Rates** are ex post measures, equal to nominal rates minus CPI inflation.

Page 9: **FOMC Intended Federal Funds Rate** is the level (or midpoint of the range, if applicable) of the federal funds rate that the staff of the FOMC expected to be consistent with the desired degree of pressure on bank reserve positions. In recent years, the FOMC has set an explicit target for the federal funds rate.

Page 10: **Federal Funds Rate and Inflation Targets** shows the observed federal funds rate, quarterly, and the level of the funds rate implied by applying Taylor's (1993) equation

$$f_t^* = 2.5 + \pi_{t-1} + (\pi_{t-1} - \pi^*)/2 + 100 \times (y_{t-1} - y_{t-1}{}^P)/2$$

to five alternative target inflation rates, $\pi^* = 0, 1, 2, 3, 4$ percent, where f_t^* is the implied federal funds rate, π_{t-1} is the previous period's inflation rate (PCE) measured on a year-over-year basis, y_{t-1} is the log of the previous period's level of real gross domestic product (GDP), and $y_{t-1}{}^P$ is the log of an estimate of the previous period's level of potential output. **Potential Real GDP** is as estimated by the Congressional Budget Office.

Monetary Base Growth and Inflation Targets shows the quarterly growth of the adjusted monetary base (modified to include an estimate of the effect of sweep programs) implied by applying McCallum's (1988, 1993) equation

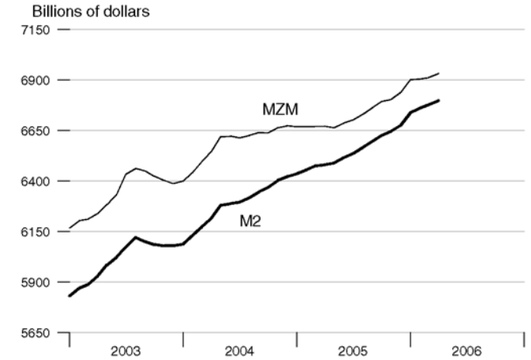
$$\Delta MB_t^* = \pi^* + (\text{10-year moving average growth of real GDP}) - (\text{4-year moving average of base velocity growth})$$

to five alternative target inflation rates, $\pi^* = 0, 1, 2, 3, 4$ percent, where ΔMB_t^* is the implied growth rate of the adjusted monetary base. The 10-year moving average growth of real GDP for a quarter t is calculated as the average quarterly growth during the previous 40 quarters, at an annual rate, by the formula $((y_t - y_{t-40})/40) \times 400$, where y_t is the log of real GDP. The 4-year moving average of base velocity growth is calculated similarly. To adjust the monetary base for the effect of retail-deposit sweep programs, we add to the monetary base an amount equal to 10 percent of the total amount swept, as estimated by the Federal Reserve Board staff. These estimates are imprecise, at best. Sweep program data are found at research.stlouisfed.org/aggreg/swdata.html.

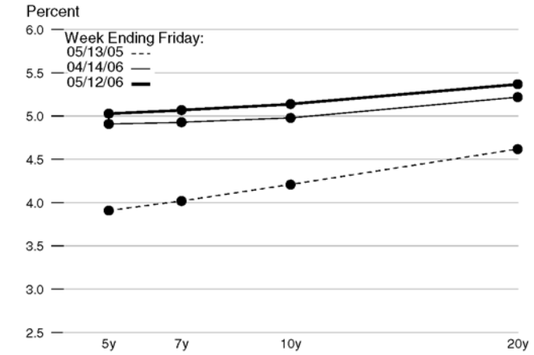
		M1	MZM	M2	M3*
Percent change at an annual rate					
2001		3.33	15.88	8.81	11.49
2002		4.91	12.86	7.52	7.98
2003		6.49	7.42	6.97	6.40
2004		5.58	3.93	4.54	5.09
2005		1.78	2.13	4.21	5.97
2004	1	5.89	2.61	3.26	5.43
	2	6.24	9.28	8.53	9.74
	3	4.09	1.88	3.69	4.04
	4	4.83	1.93	4.98	3.42
2005	1	0.24	0.65	3.58	5.63
	2	-0.32	0.26	2.48	5.98
	3	-0.55	3.48	4.36	7.81
	4	0.77	4.79	5.08	9.29
2006	1	3.58	5.52	6.59	
2004	Apr	8.81	9.40	8.49	9.11
	May	-2.60	13.37	12.29	12.35
	Jun	4.28	0.66	1.56	4.15
	Jul	2.00	-1.54	1.26	0.90
	Aug	9.55	2.17	4.17	4.10
	Sep	5.64	2.60	5.64	4.83
	Oct	0.28	-0.30	4.23	0.96
	Nov	11.74	4.57	6.54	4.58
	Dec	-1.73	1.76	3.38	4.84
2005	Jan	-4.46	-0.69	2.67	6.90
	Feb	2.14	-0.22	3.59	5.61
	Mar	3.09	0.30	3.62	4.25
	Apr	-6.27	0.06	1.13	6.97
	May	4.36	-1.21	1.58	5.50
	Jun	-1.06	4.16	4.89	7.48
	Jul	-6.17	2.75	3.70	4.58
	Aug	6.97	4.99	5.55	12.56
	Sep	-2.53	5.91	5.54	10.48
	Oct	1.65	5.44	5.31	9.79
	Nov	0.68	1.97	3.96	5.57
	Dec	-1.25	5.87	5.09	8.99
2006	Jan	12.49	11.06	11.18	10.49
	Feb	-5.37	0.69	4.15	6.55
	Mar	7.36	1.28	3.05	
	Apr	5.02	3.32	3.52	

*See table of contents for changes to the series.

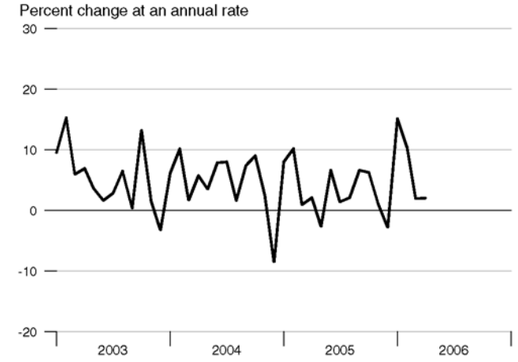
M2 and MZM



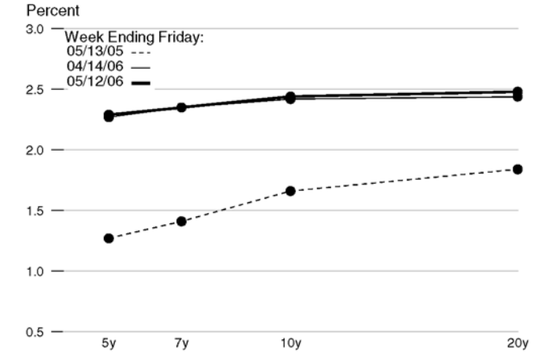
Treasury Yield Curve



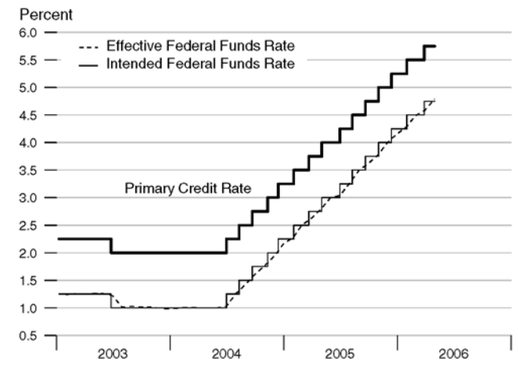
Adjusted Monetary Base



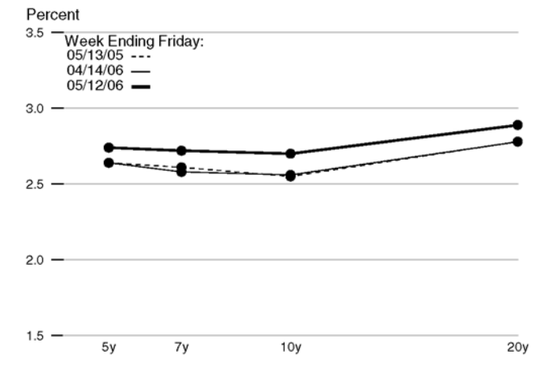
Real Treasury Yield Curve



Reserve Market Rates

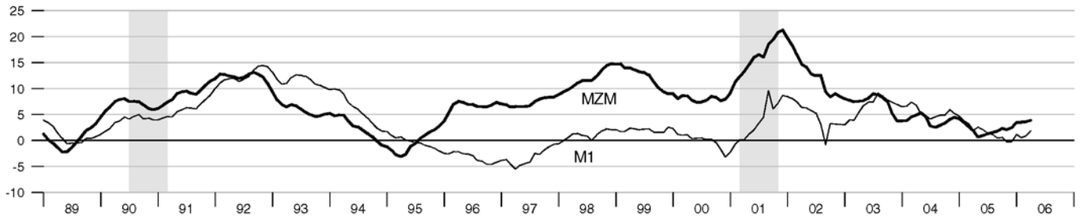


Inflation-Indexed Treasury Yield Spreads



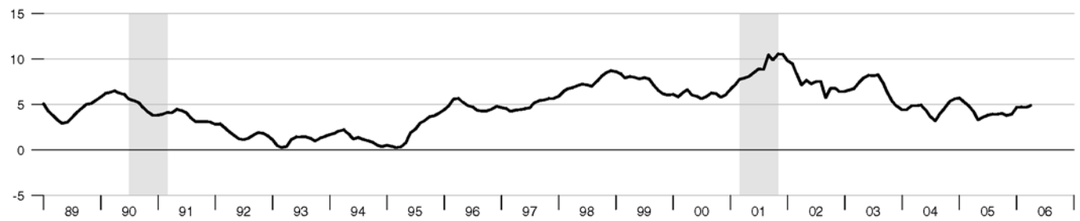
MZM and M1

Percent change from year ago



M2

Percent change from year ago



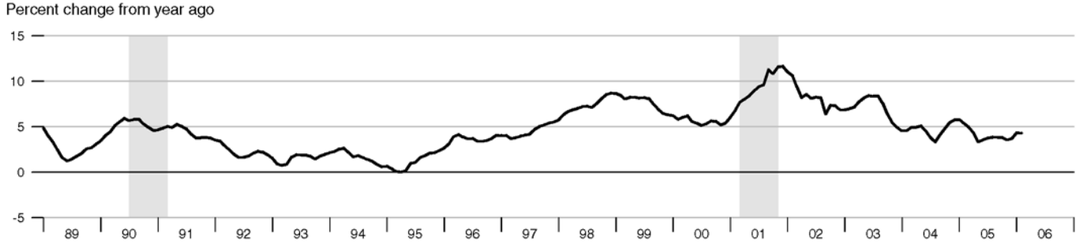
M3*

Percent change from year ago

*See table of contents for changes to the series.

Monetary Services Index - M2**

Percent change from year ago



**We will not update the MSI series until we revise the code to accomodate the discontinuation of M3.

		Federal Funds	Primary Credit Rate	Prime Rate	3-mo CDs	Treasury Yields 3-mo	3-yr	10-yr	Corporate Aaa Bonds	S & L Aaa Bonds	Conventional Mortgage
2001		3.89		6.92	3.69	3.47	4.08	5.02	7.08	5.01	6.97
2002		1.67		4.68	1.73	1.63	3.10	4.61	6.49	4.87	6.54
2003		1.13	2.11	4.12	1.15	1.03	2.11	4.02	5.67	4.52	5.82
2004		1.35	2.34	4.34	1.56	1.40	2.78	4.27	5.63	4.50	5.84
2005		3.21	4.19	6.19	3.51	3.21	3.93	4.29	5.23	4.28	5.86
2004	1	1.00	2.00	4.00	1.05	0.93	2.17	4.02	5.45	4.26	5.61
	2	1.01	2.00	4.00	1.25	1.10	2.98	4.60	5.93	4.82	6.13
	3	1.43	2.42	4.42	1.70	1.51	2.92	4.30	5.64	4.54	5.89
	4	1.95	2.94	4.94	2.25	2.04	3.05	4.17	5.48	4.39	5.73
2005	1	2.47	3.44	5.44	2.78	2.58	3.61	4.30	5.32	4.23	5.76
	2	2.94	3.91	5.91	3.23	2.93	3.73	4.16	5.15	4.15	5.72
	3	3.46	4.43	6.43	3.74	3.43	3.98	4.21	5.09	4.28	5.76
	4	3.98	4.97	6.97	4.30	3.91	4.37	4.49	5.38	4.45	6.22
2006	1	4.46	5.43	7.43	4.72	4.50	4.58	4.57	5.39	4.29	6.24
2004	Apr	1.00	2.00	4.00	1.08	0.96	2.57	4.35	5.73	4.69	5.83
	May	1.00	2.00	4.00	1.20	1.04	3.10	4.72	6.04	4.93	6.27
	Jun	1.03	2.01	4.01	1.46	1.29	3.26	4.73	6.01	4.85	6.29
	Jul	1.26	2.25	4.25	1.57	1.36	3.05	4.50	5.82	4.71	6.06
	Aug	1.43	2.43	4.43	1.68	1.50	2.88	4.28	5.65	4.52	5.87
	Sep	1.61	2.58	4.58	1.86	1.68	2.83	4.13	5.46	4.40	5.75
	Oct	1.76	2.75	4.75	2.04	1.79	2.85	4.10	5.47	4.38	5.72
	Nov	1.93	2.93	4.93	2.26	2.11	3.09	4.19	5.52	4.45	5.73
	Dec	2.16	3.15	5.15	2.45	2.22	3.21	4.23	5.47	4.35	5.75
2005	Jan	2.28	3.25	5.25	2.61	2.37	3.39	4.22	5.36	4.24	5.71
	Feb	2.50	3.49	5.49	2.77	2.58	3.54	4.17	5.20	4.16	5.63
	Mar	2.63	3.58	5.58	2.97	2.80	3.91	4.50	5.40	4.29	5.93
	Apr	2.79	3.75	5.75	3.09	2.84	3.79	4.34	5.33	4.18	5.86
	May	3.00	3.98	5.98	3.22	2.90	3.72	4.14	5.15	4.20	5.72
	Jun	3.04	4.01	6.01	3.38	3.04	3.69	4.00	4.96	4.08	5.58
	Jul	3.26	4.25	6.25	3.57	3.29	3.91	4.18	5.06	4.18	5.70
	Aug	3.50	4.44	6.44	3.77	3.52	4.08	4.26	5.09	4.33	5.82
	Sep	3.62	4.59	6.59	3.87	3.49	3.96	4.20	5.13	4.34	5.77
	Oct	3.78	4.75	6.75	4.13	3.79	4.29	4.46	5.35	4.49	6.07
	Nov	4.00	5.00	7.00	4.31	3.97	4.43	4.54	5.42	4.42	6.33
	Dec	4.16	5.15	7.15	4.45	3.97	4.39	4.47	5.37	4.46	6.27
2006	Jan	4.29	5.26	7.26	4.56	4.34	4.35	4.42	5.29	4.27	6.15
	Feb	4.49	5.50	7.50	4.72	4.54	4.64	4.57	5.35	4.33	6.25
	Mar	4.59	5.53	7.53	4.88	4.63	4.74	4.72	5.53	4.29	6.32
	Apr	4.79	5.75	7.75	5.03	4.72	4.89	4.99	5.84	4.36	6.51

Note: All values are given as a percent at an annual rate.

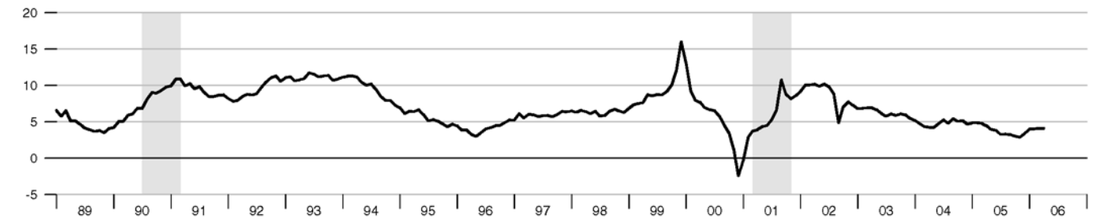
		Money Stock				Bank	Adjusted		
		M1	MZM	M2	M3*	Credit	Monetary Base	Reserves	MSI M2**
2001		1140.196	5223.809	5221.416	7648.507	5344.893	641.167	86.172	271.477
2002		1196.168	5895.588	5614.102	8259.055	5597.859	697.092	88.158	294.080
2003		1273.742	6333.008	6005.194	8787.321	6121.611	740.929	93.313	315.192
2004		1344.776	6582.026	6277.757	9234.718	6598.679	776.707	96.066	329.873
2005		1368.717	6722.124	6541.742	9786.477	7240.033	806.308	96.222	343.539
2004	1	1318.425	6446.396	6131.165	9003.705	6429.518	761.428	95.033	322.050
	2	1338.979	6595.935	6261.926	9223.054	6561.449	771.146	96.603	328.960
	3	1352.681	6626.890	6319.667	9316.285	6646.978	782.783	96.801	332.111
	4	1369.017	6658.883	6398.270	9395.830	6756.771	791.470	95.825	336.371
2005	1	1369.833	6669.722	6455.484	9528.052	6993.529	798.244	96.654	339.356
	2	1368.721	6674.005	6495.504	9670.405	7167.793	802.634	96.059	341.280
	3	1366.837	6732.078	6566.274	9859.294	7351.644	808.400	96.286	344.766
	4	1369.476	6812.692	6649.705	10088.16	7447.167	815.953	95.888	348.753
2006	1	1381.723	6906.745	6759.220		7621.175	830.481	96.481	
2004	Apr	1339.324	6546.112	6216.758	9149.627	6542.160	767.950	97.098	326.486
	May	1336.422	6619.025	6280.425	9243.802	6551.148	770.211	95.781	329.954
	Jun	1341.192	6622.667	6288.595	9275.732	6591.038	775.276	96.930	330.439
	Jul	1343.431	6614.151	6295.192	9282.651	6603.433	780.465	95.693	330.885
	Aug	1354.126	6626.092	6317.062	9314.355	6633.823	781.531	96.030	331.953
	Sep	1360.486	6640.428	6346.747	9351.849	6703.679	786.352	98.679	333.496
	Oct	1360.799	6638.774	6369.117	9359.369	6714.990	792.252	97.565	334.816
	Nov	1374.114	6664.062	6403.825	9395.128	6760.674	793.883	96.837	336.675
	Dec	1372.137	6673.812	6421.869	9432.994	6794.649	788.274	93.074	337.622
2005	Jan	1367.032	6669.990	6436.137	9487.218	6893.968	793.547	95.104	338.366
	Feb	1369.472	6668.749	6455.410	9531.592	7000.632	800.277	97.813	339.355
	Mar	1372.994	6670.428	6474.904	9565.346	7085.987	800.907	97.045	340.347
	Apr	1365.820	6670.782	6481.017	9620.909	7113.608	802.314	97.419	340.663
	May	1370.779	6664.078	6489.530	9665.013	7167.662	800.583	94.568	340.941
	Jun	1369.564	6687.156	6515.964	9725.292	7222.109	805.005	96.190	342.235
	Jul	1362.523	6702.457	6536.032	9762.435	7282.576	805.967	95.513	343.275
	Aug	1370.440	6730.302	6566.250	9864.629	7361.954	807.390	95.633	344.739
	Sep	1367.548	6763.475	6596.539	9950.818	7410.403	811.844	97.712	346.285
	Oct	1369.432	6794.154	6625.737	10031.96	7421.823	816.112	97.346	347.590
	Nov	1370.211	6805.326	6647.599	10078.49	7438.873	816.800	96.842	348.603
	Dec	1368.785	6838.596	6675.779	10154.03	7480.805	814.948	93.475	350.067
2006	Jan	1383.035	6901.630	6737.966	10242.79	7538.559	825.231	96.806	353.032
	Feb	1376.844	6905.605	6761.242	10298.68	7630.623	832.424	96.929	353.943
	Mar	1385.291	6912.999	6778.453		7694.342	833.789	95.708	
	Apr	1391.090	6932.102	6798.344		7792.565	835.218	95.663	

Note: All values are given in billions of dollars. *See table of contents for changes to the series.

**We will not update the MSI series until we revise the code to accommodate the discontinuation of M3.

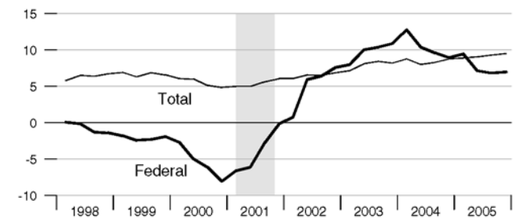
Adjusted Monetary Base

Percent change from year ago



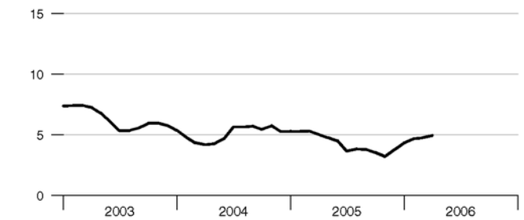
Domestic Nonfinancial Debt

Percent change from year ago



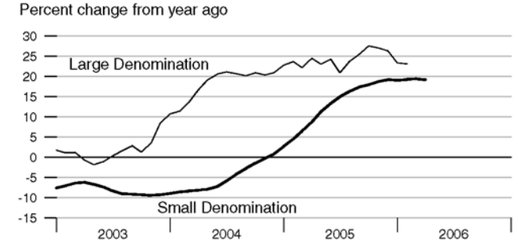
Currency Held by the Nonbank Public

Percent change from year ago



Time Deposits*

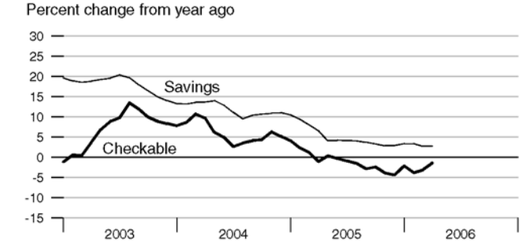
Percent change from year ago



*See table of contents for changes to the series.

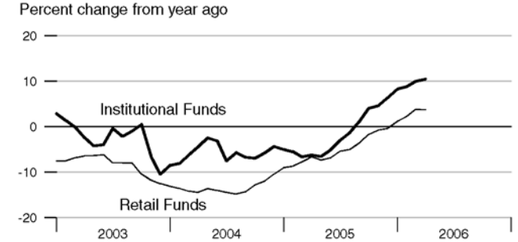
Checkable and Savings Deposits

Percent change from year ago



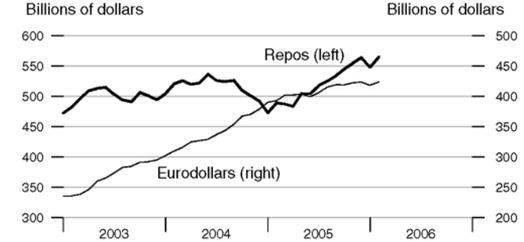
Money Market Mutual Fund Shares

Percent change from year ago



Repurchase Agreements and Eurodollars*

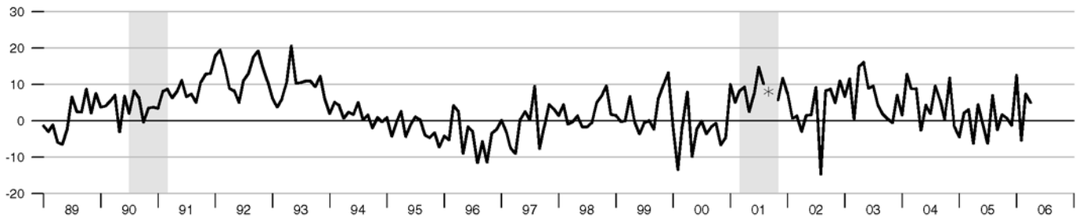
Billions of dollars | Billions of dollars



*See table of contents for changes to these series.

M1

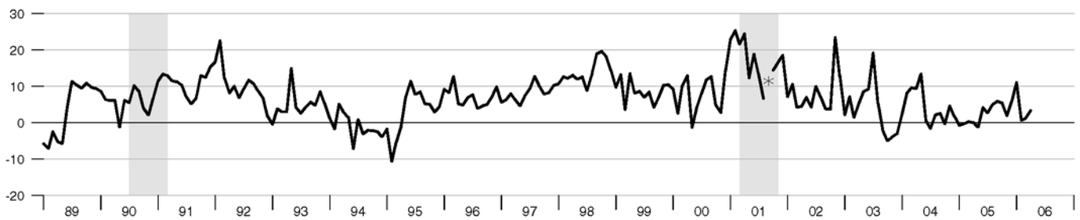
Percent change at an annual rate



*Actual values for September and October 2001 are 55.87 and -38.35 percent rate, respectively.

MZM

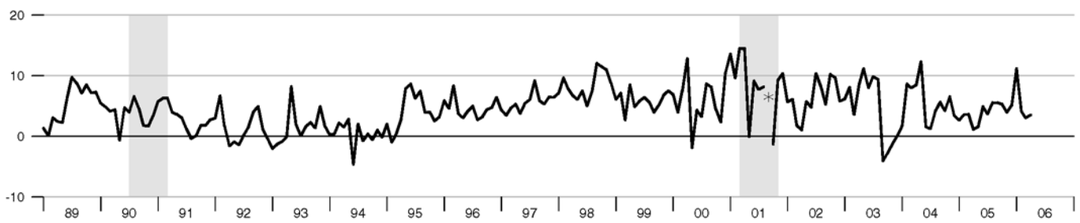
Percent change at an annual rate



*Actual value for September 2001 is 39.41 percent rate.

M2

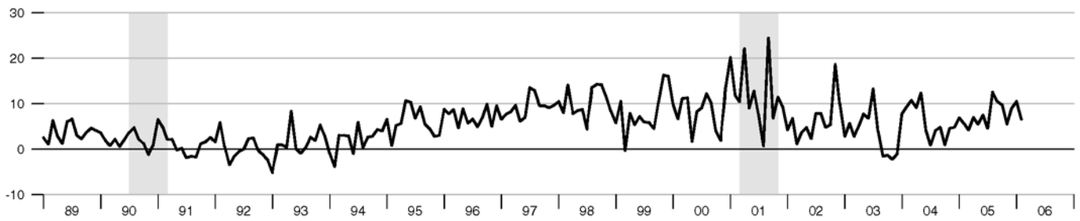
Percent change at an annual rate



*Actual value for September 2001 is 24.90 percent rate.

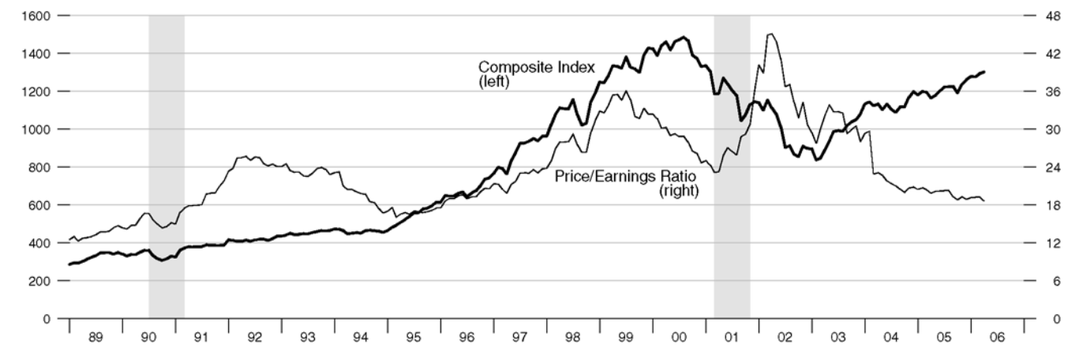
M3*

Percent change at an annual rate



*See table of contents for changes to the series.

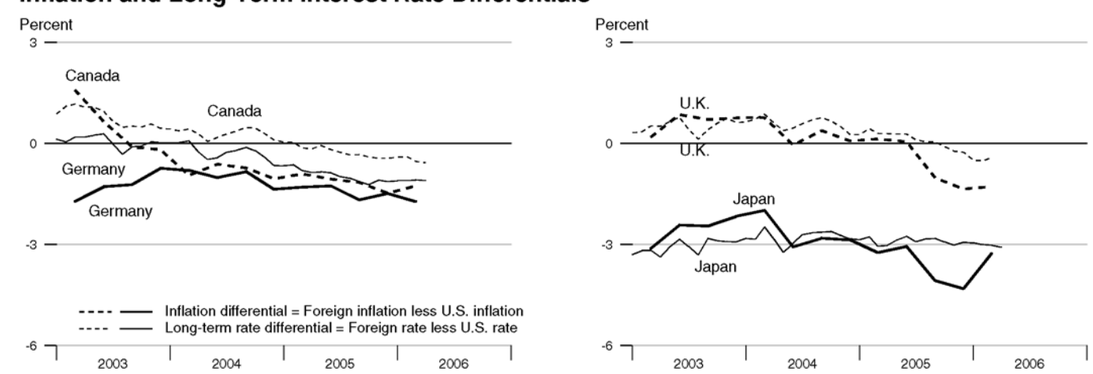
Standard & Poor's 500



Recent Inflation and Long-Term Interest Rates

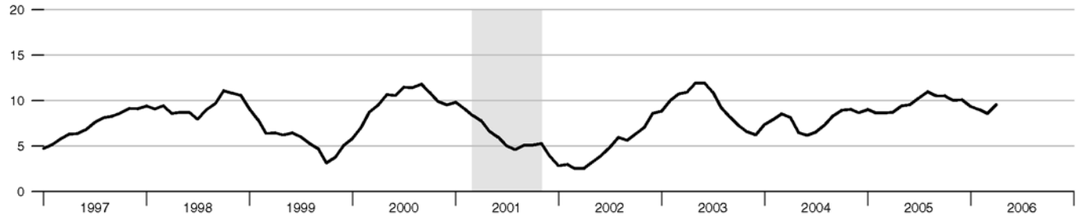
	Consumer Price Inflation Rates (Percent change from year ago)				Long-Term Government Bond Rates (Percent)			
	2005Q2	2005Q3	2005Q4	2006Q1	Jan06	Feb06	Mar06	Apr06
United States	2.95	3.80	3.73	3.68	4.42	4.57	4.72	4.99
Canada	1.90	2.64	2.26	2.41	4.01	4.18	4.19	4.42
France	1.69	1.90	1.65	1.79	3.34	3.51	3.69	.
Germany	1.70	2.13	2.25	1.96	3.32	3.47	3.64	3.89
Italy	1.84	2.03	2.15	2.14	3.54	3.70	3.92	4.22
Japan	-0.10	-0.27	-0.58	0.41	1.47	1.57	1.70	1.91
United Kingdom	3.01	2.78	2.38	2.39	3.93	4.05	4.30	.

Inflation and Long-Term Interest Rate Differentials



Bank Credit

Percent change from year ago



Investment Securities in Bank Credit at Commercial Banks

Percent change from year ago

Total Loans and Leases in Bank Credit at Commercial Banks

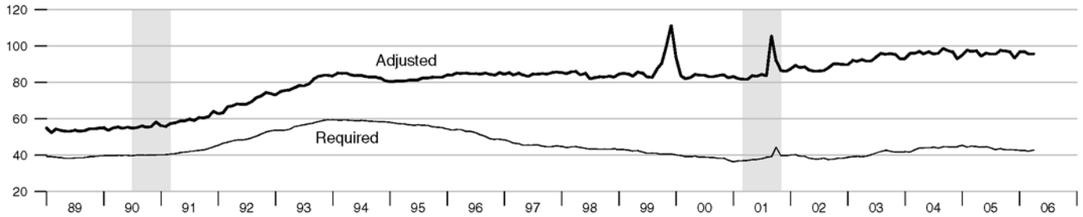
Percent change from year ago

Commercial and Industrial Loans at Commercial Banks

Percent change from year ago

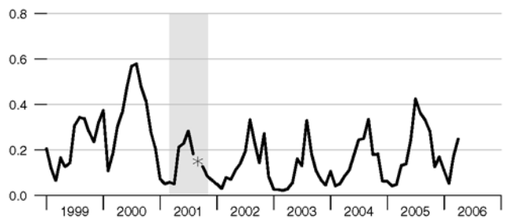
Adjusted and Required Reserves

Billions of dollars



Total Borrowings, nsa

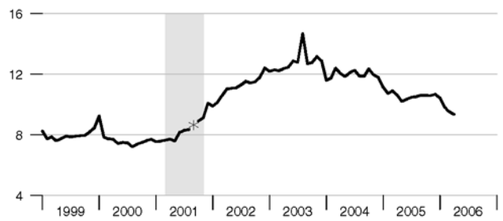
Billions of dollars



*Actual value for September 2001 is $3.4 billion.

Excess Reserves plus RCB Contracts

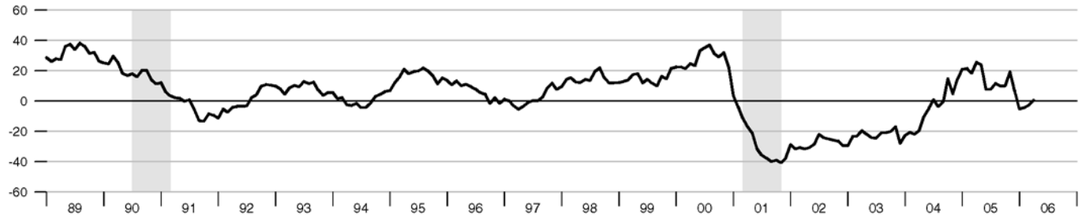
Billions of dollars



*Actual value for September 2001 is $26.43 billion.

Nonfinancial Commercial Paper

Percent change from year ago

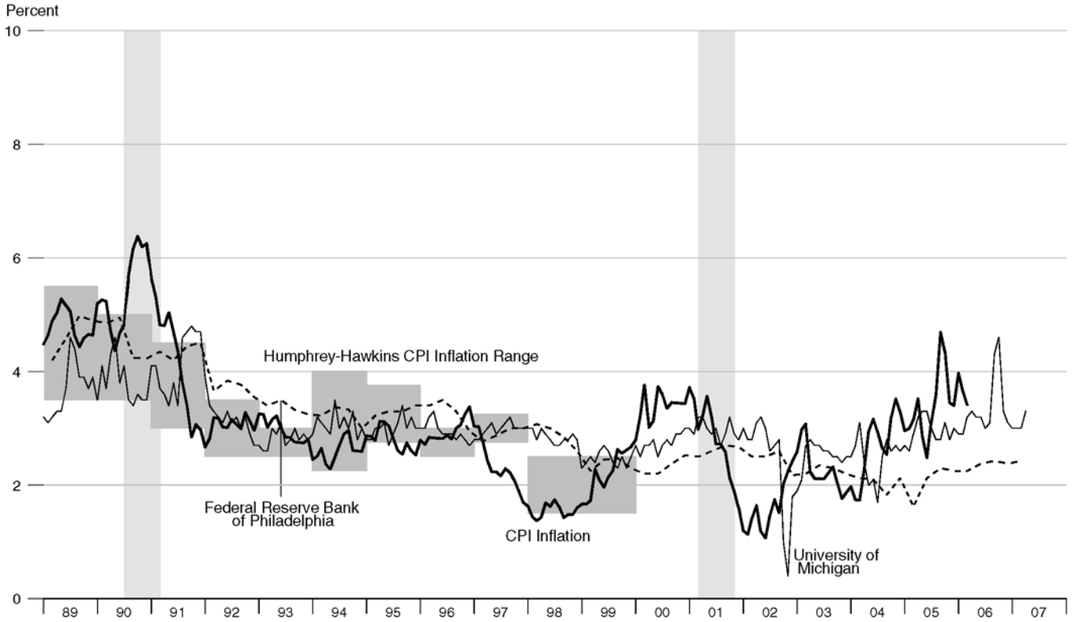


As of April 10, 2006, the Federal Reserve Board made major changes to its commercial paper calculations. For more information, please refer to http://www.federalreserve.gov/releases/cp/about.htm.

Consumer Credit

Percent change from year ago

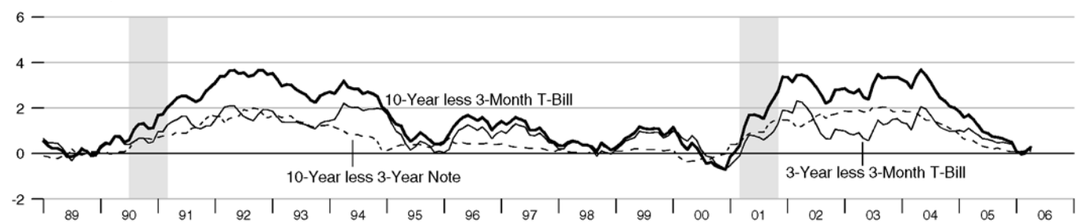
Inflation and Inflation Expectations



The shaded region shows the Humphrey-Hawkins CPI inflation range. Beginning in January 2000, the Humphrey-Hawkins inflation range was reported using the PCE price index and therefore is not shown on this graph. See notes on page 19.

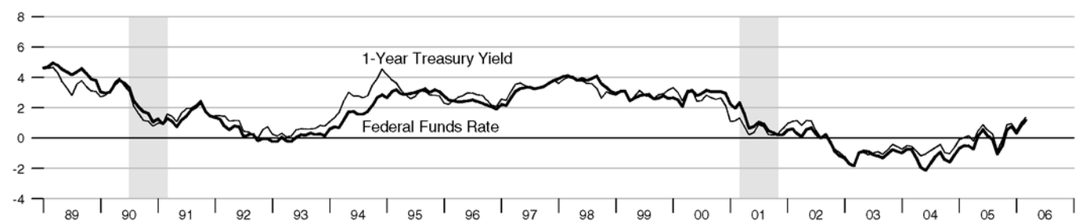
Treasury Security Yield Spreads

Yield to maturity



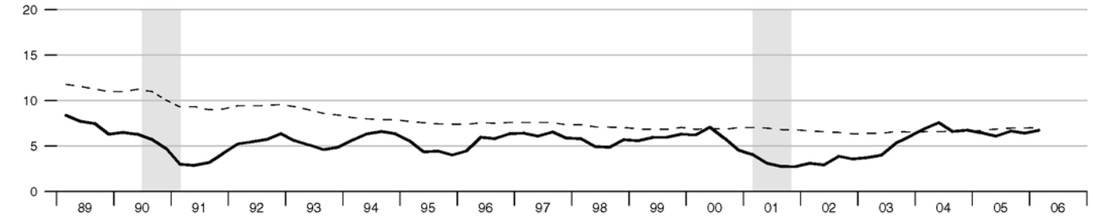
Real Interest Rates

Percent, Real rate = Nominal rate less CPI inflation



Gross Domestic Product

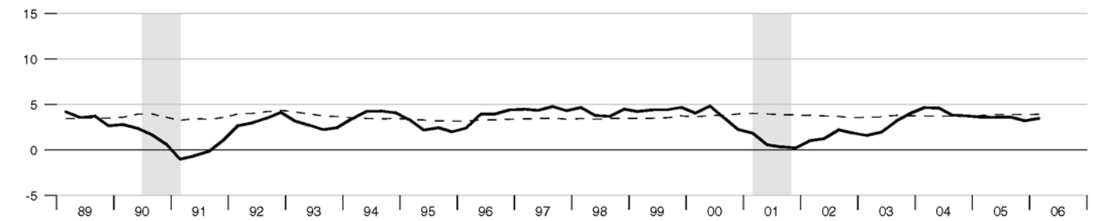
Percent change from year ago



Dashed lines indicate 10-year moving averages.

Real Gross Domestic Product

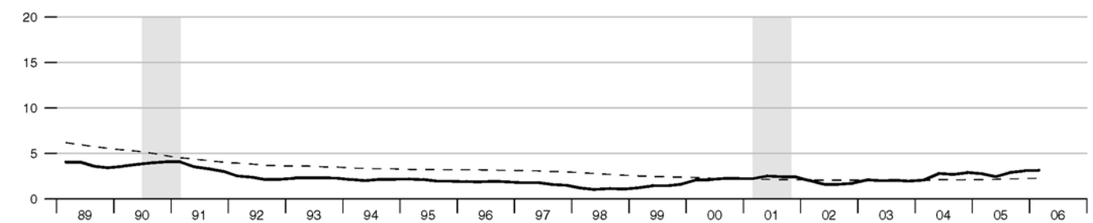
Percent change from year ago



Dashed lines indicate 10-year moving averages.

Gross Domestic Product Price Index

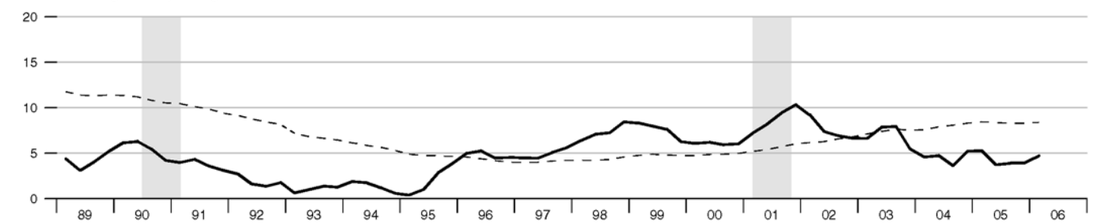
Percent change from year ago



Dashed lines indicate 10-year moving averages.

M2

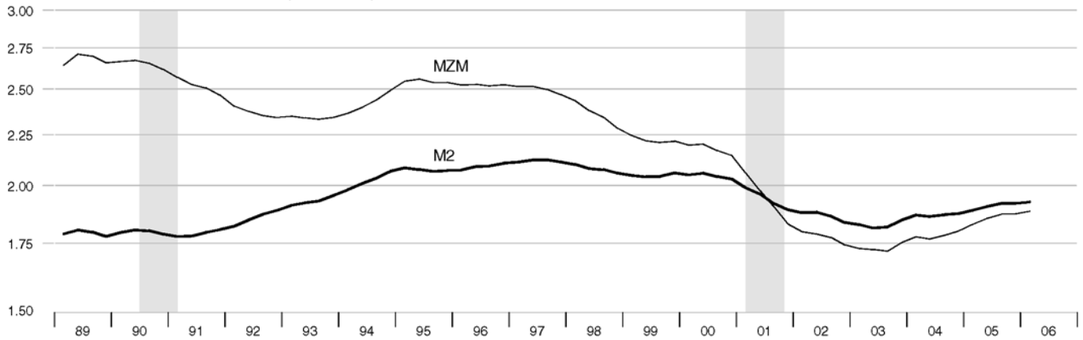
Percent change from year ago



Dashed lines indicate 10-year moving averages.

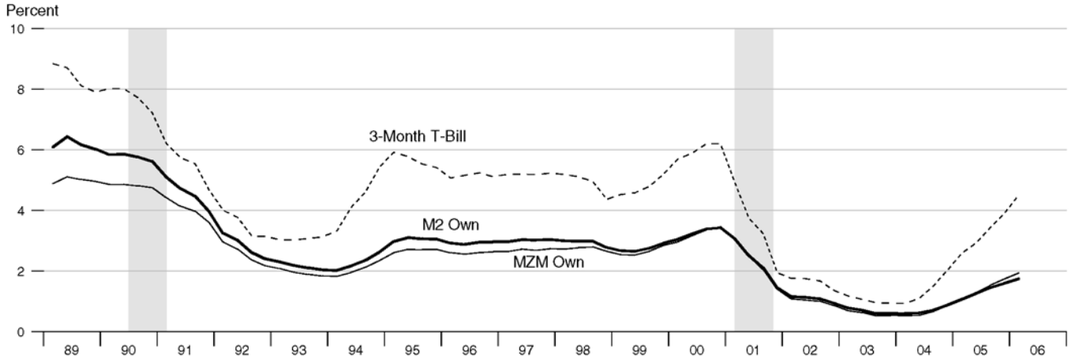
Velocity

Nominal GDP/MZM, Nominal GDP/M2 (Ratio Scale)



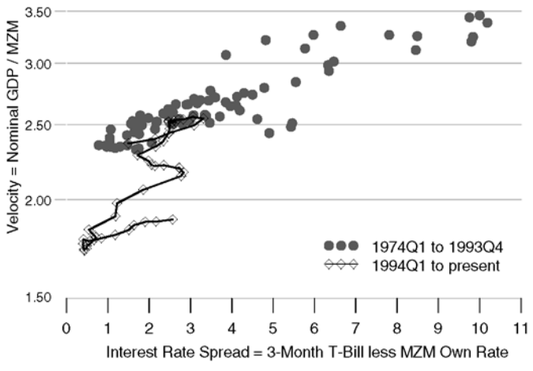
Interest Rates

Percent



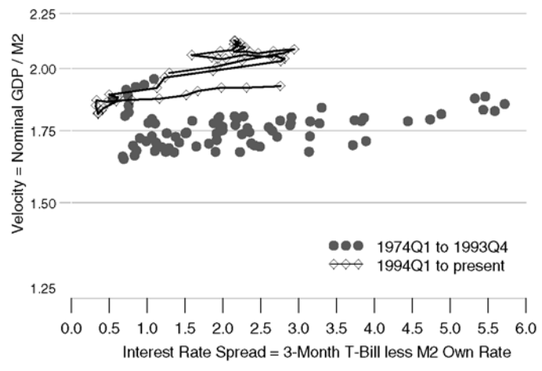
MZM Velocity and Interest Rate Spread

Ratio Scale



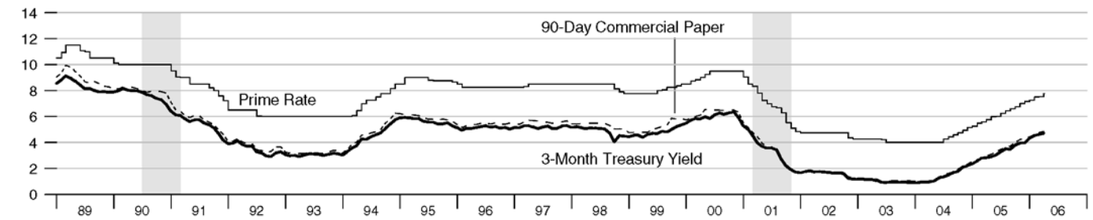
M2 Velocity and Interest Rate Spread

Ratio Scale



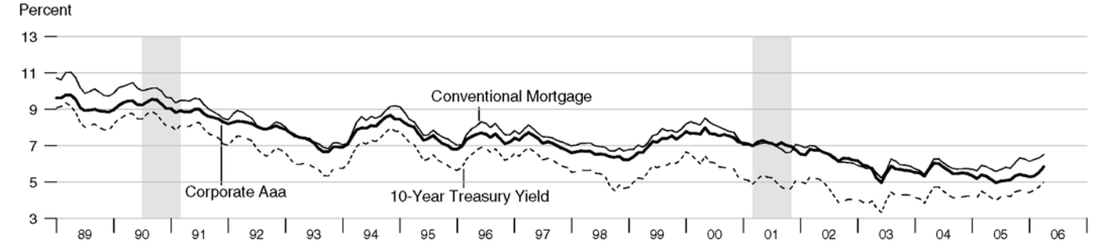
Short-Term Interest Rates

Percent



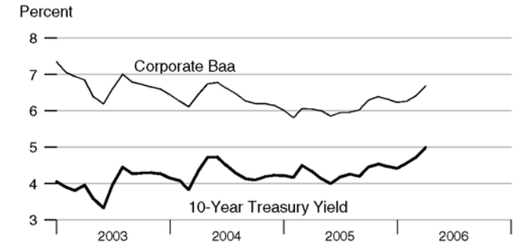
Long-Term Interest Rates

Percent



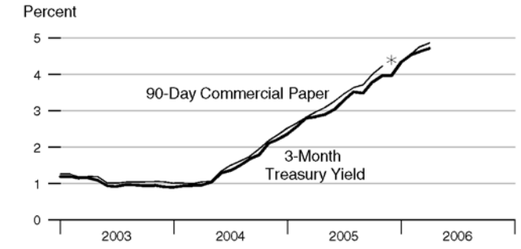
Long-Term Interest Rates

Percent



Short-Term Interest Rates

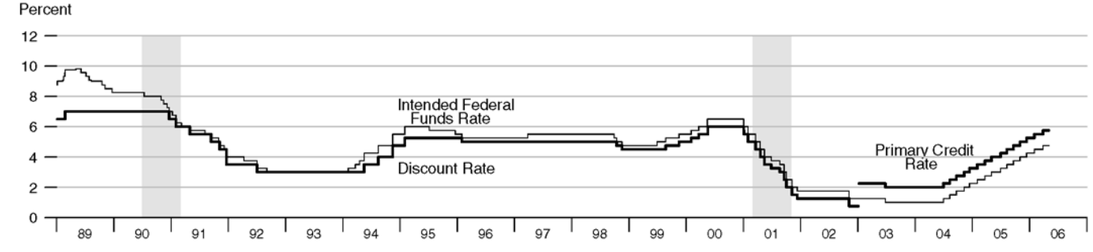
Percent



*90-Day Commercial Paper data are not available for December 2005 and January 2006.

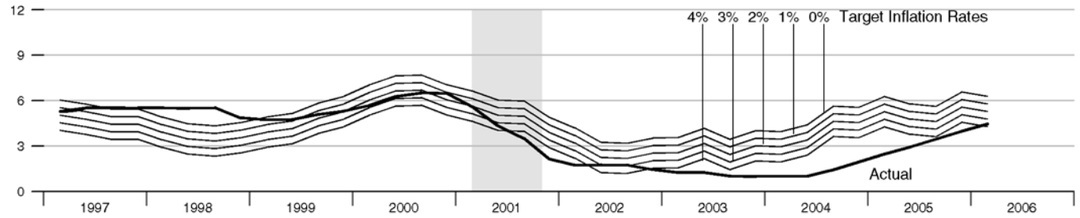
FOMC Intended Federal Funds Rate, Discount Rate, and Primary Credit Rate

Percent



Federal Funds Rate and Inflation Targets

Percent

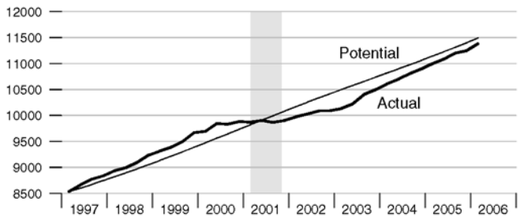


Calculated federal funds rate is based on Taylor's rule. See notes on page 19.

Components of Taylor's Rule

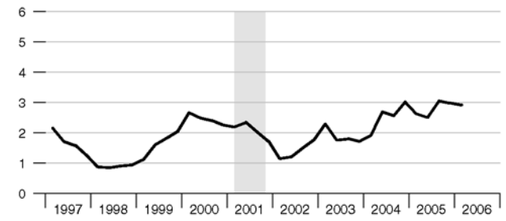
Actual and Potential Real GDP

Billions of chain-weighted 2000 dollars



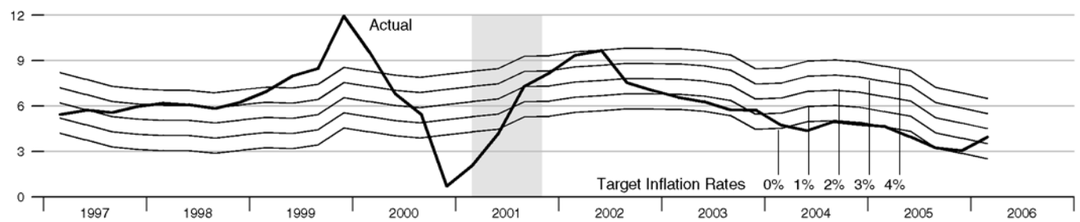
PCE Inflation

Percent change from year ago



Monetary Base Growth* and Inflation Targets

Percent

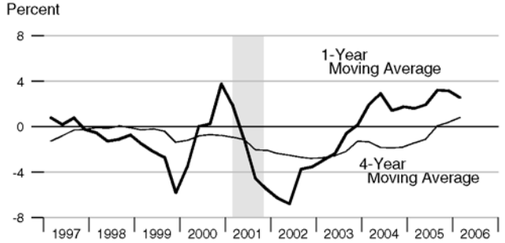


*Modified for the effects of sweeps programs on reserve demand.
Calculated base growth is based on McCallum's rule. Actual base growth is percent change from year ago. See notes on page 19.

Components of McCallum's Rule

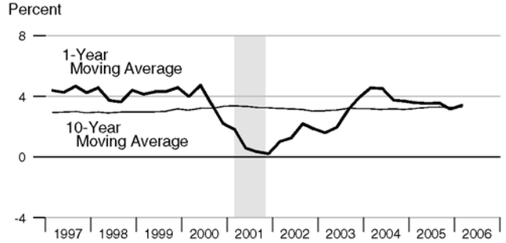
Monetary Base Velocity Growth

Percent



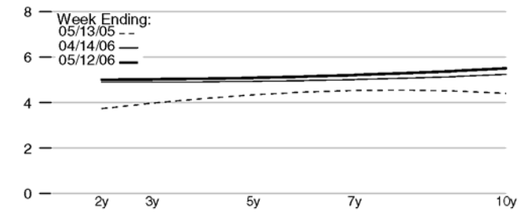
Real Output Growth

Percent



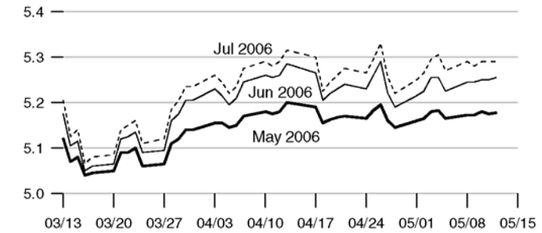
Implied One-Year Forward Rates

Percent



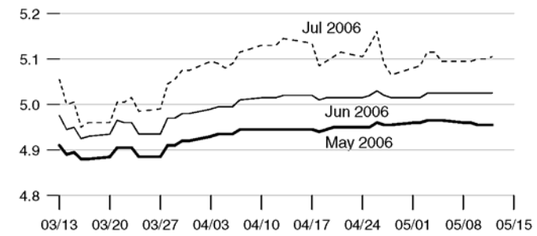
Rates on 3-Month Eurodollar Futures

Percent, daily data



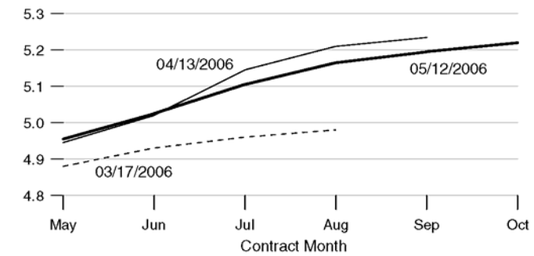
Rates on Selected Federal Funds Futures Contracts

Percent, daily data



Rates on Federal Funds Futures on Selected Dates

Percent



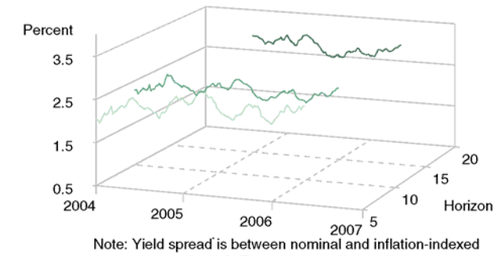
Inflation-Indexed Treasury Securities

Weekly data

Note: Yields are inflation-indexed constant maturity U.S. Treasury securities

Inflation-Indexed Treasury Yield Spreads

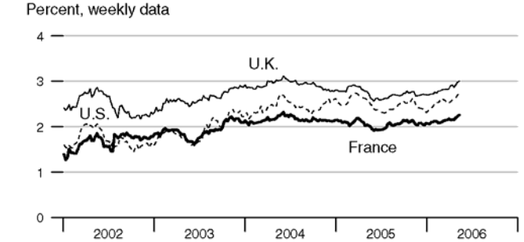
Weekly data



Note: Yield spread is between nominal and inflation-indexed constant maturity U.S. Treasury securities.

Inflation-Indexed 10-Year Government Notes

Percent, weekly data

Inflation-Indexed 10-Year Government Yield Spreads

Percent, weekly data