## Money and Financial Markets



Percent, weekly

a. All yields are from constant-maturity series.
b. Average for the week ending on the date shown. c. One day after the FOMC meeting.
d. Merrill Lynch BBB index minus the yield on the 10-year Treasury note.

SOURCES: Board of Governors of the Federal Reserve System, "Selected Interest Rates," Federal Reserve Statistical Releases, H.15; and Bloomberg Financial Information Services.

Although the Federal Reserve sets the federal funds rate and the discount rate, the ultimate impact on the economy depends on what happens to other interest rates, which policy may influence but not control. The yield curve shows what has happened across the spectrum of longand short-term rates. The most notable change has been the flattening of the yield curve since last year: Short rates have risen, but long rates have fallen. This has brought the spread between the 10 -year and three-month Treasuries down from historical highs approaching $4 \%$ to
the vicinity of $1 \%$, slightly below the historical average. This spread has achieved some notoriety as a recession predictor, and, despite its steep fall, its current level suggests positive growth in the upcoming year.

As long-term Treasury rates have fallen, so have other long rates, with mortgages and state and local bonds following almost in lockstep. The spread between mortgages and 10 year Treasuries has been virtually unchanged, moving from 156 basis points (bp) to 153 bp over the past year. Not all rates have moved so tightly, however. The spread between

90-day commercial paper and 30-day Treasury bills has more than doubled since late 2004; a longer-term spread, between corporate bonds and 10-year Treasuries, moved up in the spring, although it has since retreated to 123 bp. Both spreads remain low by historical standards, suggesting low levels of risk.

Another closely watched risk spread is that between the three-month Treasury bill rate and the rate on threemonth eurodollar deposits (the TED spread). As the difference between two dollar-denominated interest (continued on next page)

## Money and Financial Markets (cont.)




Percent, daily


a. Yield spread: three-month Eurodollar deposit minus the three-month, constant-maturity Treasury bill.
b. Conference Board's coincident and leading indicators ratio. Monthly data.
c. Treasury inflation-protected securities.
d. 10-year TIPS-derived expected inflation adjusted for the liquidity premium on the market for 10-year Treasuries.
e. The estimated expected inflation rate and the estimated real interest rate are calculated using the Pennacchi model of inflation estimation and the median forecast for the GDP implicit price deflator from the Survey of Professional Forecasters. Monthly data.
SOURCES: U.S. Department of Commerce, Bureau of Economic Analysis; Board of Governors of the Federal Reserve System, "Selected Interest Rates," Federal Reserve Statistical Releases, H.15; Wall Street Journal; and Bloomberg Financial Information Services.
rates based in different countries, it measures international financial risk while avoiding exchange rate uncertainty. Although it started at a low level, the TED spread has tripled since March, moving up to 36 bp , a level not seen since April 2001. This suggests that the market is becoming more uneasy about international conditions.

One sign that the financial markets watch is the Conference Board's Index of Leading Economic Indicators. Another, the Index of Coincident Indicators, gets less press, even though the
ratio of the two indexes has an intriguing, though inverse, correlation with economic growth. But this ratio, which is signaling slower growth ahead, should be taken with a grain of salt.

Spreads can also help uncover inflation expectations. The difference between the yield on Treasury infla-tion-protected securities (TIPS), a real rate, and the corresponding nominal rate on bonds not so protected, provides a measure of expected inflation. By this measure, 10-year inflation ex-
pectations have dropped fully $0.5 \%$ since March, from $2^{3 / 4} \%$ to $2^{1 / 4} \%$. Of course, tax and liquidity differences between the bonds make this spread a less pure inflation measure than it seems. An estimate of shorter-term inflationary expectations can be found by combining 30-day Treasury bill rates with a survey measure of inflation. This one-month measure, originally developed by George Pennacchi, has risen recently, although it has stayed in a band between $2 \%$ and $3 \%$ since 1998.

