## 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. First weekly average available after the FOMC meeting.

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; and Bloomberg Financial Information Services.

The federal funds rate gets attention, not because everyone borrows or lends at that rate (only banks do), but because its movement affects other rates at which people do borrow and lend. A good overview of how these other rates have changed is provided by the yield curve, which plots interest rates on Treasury securities against their maturity. The latter half of 2004 has seen a gradual flattening of the yield curve. Since last month, three-month rates have increased
from $2.08 \%$ to $2.21 \%$ as 10 -year rates fell from $4.22 \%$ to $4.15 \%$. This merely continued an earlier trend: In June, the three-month rate stood at 1.32\% and the long rate at $4.75 \%$.

Despite this flattening, the yield curve remains steep by historical standards. Although it dropped from 378 basis points (bp) in May to its current level of 195 bp , the benchmark 10-year, three-month spread remains well above its historical average of 120 bp .

The slope of the yield curve is often watched as an indicator of future economic growth. A steep yield curve heralds strong growth, and an inverted yield curve (short rates above long rates, a negative spread) signals a recession. Though not always right, the spread has an enviable record, as a plot of the 10-year, three-month spread against year-ahead future GDP growth shows. This relation indicates robust growth for 2005.

## Money and Financial Markets (cont.)




Percent, weekly


a. All yields are from constant-maturity series.
b. Merrill Lynch BBB index minus the yield on the 10-year Treasury note.
c. Yield spread: three-month eurodollar deposit minus the three-month, constant-maturity Treasury bill.

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

Important as Treasuries are, other interest rates are more directly relevant to most people. Homeowners look to mortgage rates; businesses look to their bond rates. These have generally come down along with Treasury rates, but the differences are revealing. Since May, mortgage rates have in fact fallen faster than (10-year) Treasuries, dropping 66 bp to the Treasuries' 46 bp. Other risk spreads (so called because they track the difference between safe Treasury and
risky private rates) have increased lately. At the longer end, the spread between 10 -year, BBB-rated corporate debt and 10-year Treasuries has increased 9 bp since May (and 20 bp since January). At the shorter end, the spread between commercial paper and three-month T-bills has moved up 17 bp . Neither change, however, seems particularly worrisome because both the absolute level and the change remain low by historical standards.

Another closely watched risk spread is that between three-month eurodollar deposits and the threemonth T-bill rate-the TED spread. Because it shows the difference between two interest rates denominated in dollars but based in different countries, it measures international financial risk while avoiding exchange rate uncertainty. Although it has shown slight increases lately, it remains low, despite wars and rumors of war.

## Money and Financial Markets (cont.)





a. Growth rates are calculated on a fourth-quarter over fourth-quarter basis. Data are seasonally adjusted.
b. Treasury inflation-protected securities.
c. 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: Board of Governors of the Federal Reserve System, "Money Stock Measures," Federal Reserve Statistical Releases, H.6; Bloomberg Financial Information Services; and Wall Street Journal.

Money in circulation grew at a $5 \%$ pace in 2004. In itself, this tells little about inflation because the economy is growing too, but financial markets also embody expectations of inflation. The recent rise in gold has kindled some fears of inflation, but the link between gold and consumer prices is often tenuous because of both shifting industrial demand and central banks' sales of the metal.

Another measure comes from the yield on Treasury inflation-protected
securities (TIPS). The difference between that real rate and a corresponding nominal rate provides a measure of expected inflation. Although real rates have fallen since May, expected inflation has increased 33 bp since September. Of potentially greater concern, however, is the increase of nearly 120 bp since October 2002. Some of this increase probably derives from changes in the liquidity of TIPS, however, and does not reflect price-level expectations.

Combining financial data with survey measures gives a complementary view of real rates and expected inflation. The Pennacchi model, which combines survey forecasts with T-bill rates, shows a real rate that is negative though increasing, with inflation creeping up half a percentage point since March. It thus appears to confirm other measures that show rising concerns about inflation.

