## Money and Financial Markets



Percent, weekly


Percent, monthly


a. Yields from constant-maturity series.
b. Treasury inflation-protected securities.
c. 10-year TIPS-derived expected inflation adjusted for the liquidity premium on the market for 10-year Treasuries. d. The Berk rate is calculated as the 30-year National Mortgage Association yield plus the 10-year TIPS yield minus the 10-year Treasury yield. SOURCES: Board of Governors of the Federal Reserve System, "Selected Interest Rates," Federal Reserve Statistical Releases, H.15; and Bloomberg Financial Information Services.

The inversion of the yield curve observed earlier this year has nearly disappeared. The curve remains mildly inverted only for maturities in the range of six months through two years. The two-year Treasury rate currently is just 2.6 bp below the sixmonth rate. Short-term rates have moved in step with federal funds rate increases. Since the current round of policy tightening began in June 2004, Treasury rates have moved up more than 330 bp at the short end of the maturity spectrum. Long-term Treasury yields increased more than 30 bp from the beginning of April,
resulting in a noticeable steepening at the long end of the yield curve. The 20-year Treasury rate rose to $5.37 \%$ (the highest level in almost two years), while the 10 -year rate reached $5.14 \%$ (the highest in almost four years.)

Inflation expectations continue to be contained, as indicated by the difference between the yield on 10-year Treasury bonds and the yield on Treasury inflation-protected securities (TIPS) of the same maturity. This difference, adjusted for the liquidity premium on the TIPS market versus the ordinary Treasuries market, was close to $2.5 \%$ in May, about in line
with its level for the past 18 months and thus consistent with the FOMC's statement that "inflation expectations remain contained."

The real rate, as measured by TIPS, was about 32 bp higher than at the end of 2005. An alternative measure of the real rate, the Berk rate, which adjusts for the firm's ability to delay investment, showed a similar pattern; it was about 40 bp higher than it was at the end of 2005.

Whereas the real and expected inflation rates derived from TIPS are used to estimate long-term rates,

## Money and Financial Markets (cont.)



Percent, daily



a. 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.
b. Merrill Lynch AA and BBB indexes, each minus the yield on the 10-year Treasury note.
c. All yields are from constant-maturity series.
d. 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; Federal Reserve Bank of Philadelphia; Wall Street Journal; and Bloomberg Financial Information Services.
expectations regarding shorter-term real inflation rates can be gauged by combining 30-day T-bill rates with survey measures of inflation. The one-month measure, originally developed by George Pennacchi, has risen recently; however, at $2.84 \%$ in April 2006, it was still in the $2.0 \%-3.0 \%$ band it has occupied since 1998.

In addition to spreads between bonds of different maturities, or between real and nominal bonds, we can gather useful information from the spread between safe and risky
bonds. Such spreads have generally been creeping up for 18 months but have remained stable if not slightly down since the beginning of 2006. Spreads between BBB corporate bonds and 10-year Treasuries dropped from 125 bp in January to 119 bp in mid-May, while spreads between AA corporate bonds and 10-year Treasuries were nearly unchanged ( 79 bp ).

The more volatile short spread between 90 -day commercial paper and three-month T-bills was 25 bp in the middle of May, close to the 23 bp
level of early January. Another closely watched risk spread is that between three-month Eurodollar deposits and the three-month T-bill rate (the TED spread). As the difference between two dollar-denominated interest rates based in different countries, it measures international financial risk while avoiding exchange rate uncertainty. Although the TED spread trended up in 2005 , reaching 56 bp at year's end, it is now at the 35 bp level, suggesting that the peak of market uneasiness about international conditions is past.

