



a. Growth rates are percentage rates calculated on a fourth-quarter over fourth-quarter basis. The 2001 growth rates for the monetary base, sweep-adjusted base, and M2 are calculated on a February, January, and estimated March over 2000:IVQ basis, respectively. Data are seasonally adjusted.
b. The sweep-adjusted base contains an estimate of required reserves saved when balances are shifted from reservable to nonreservable accounts. NOTE: Last plots for the monetary base and the sweep-adjusted base are February and January, respectively. Last plot for M2 is estimated for March 2001. Prior to November 2000, dotted lines for M2 and M3 are FOMC-determined provisional ranges. Subsequent dotted lines represent growth rates and are for reference only.
SOURCE: Board of Governors of the Federal Reserve System.

The March 20 reduction of the federal funds rate target (from 5.50\% to $5.00 \%$ ) has not quelled discussion on the appropriateness of monetary policy. Debate about interest rates, however, tends to ignore a crucial aspect of the question-the money supply. Monetary aggregates have continued to grow at substantial rates and might lead to the suggestion that monetary policy has, if anything, become too loose.

The broad money aggregate, M2, has grown at a year-to-date annualized
rate of $11.7 \%$, faster than in 2000 and well above the average rates for 1996-2000. Only part of this increase can be attributed to the monetary base, whose year-to-date growth rate is just $7.9 \%$. Monetary aggregates must be treated with caution at this time of year because of tax payments and rebates, but the year-to-date numbers are not encouraging.

Money growth by itself is only half the picture: Money supply will not be excessive if real money demand is also growing briskly-and that
demand depends on the influence of overall real economic growth and interest rates. A plot of the difference between actual M2 and an econometric estimate of M2 demand shows that M2 has been growing faster than the economy can absorb it, given real GDP growth and current interest rates. In the past, this condition has often predicted an increase in inflation correctly and it appears to be doing so now.

One key interest rate measure, however, does not reflect such

## Money and Financial Markets (cont.)



a. All yields are from constant-maturity series.
b. Average for the week ending on this date.
c. Real GDP growth leads four quarters.

SOURCES: Board of Governors of the Federal Reserve System, "Selected Interest Rates," Federal Reserve Statistical Releases, H.15; and Bloomberg Financial Information Services.
excess money growth. The spread between the target federal funds rate and the yield on 2-year Treasury bonds has increased dramatically over the past year because interest rates have generally been decreasing. Of course, the 150 basis point reduction in the federal funds target rate since January 3 seems to have reduced the spread somewhat.

The yield curve has shifted downward since last month. While the curve remains inverted at the short end, the low point of the curve is
moving toward earlier maturities (the current minimum is the 1-year yield), suggesting an incipient unbending. The 3-year, 3-month spread stands at -15 basis points (bp) and the 10-year, 3-month spread stands at 28 bp. Longer-term rates generally have also come down, as have long-term Treasuries, but the recent picture is a bit more mixed. Municipal bond yields have actually increased so far in 2001. In an unusual move, conventional mortgage rates have dropped below AAA corporate bond yields.

One reason the yield curve receives so much attention is its history as a predictor of future economic performance. A steep yield curve usually indicates high future growth, and an inverted yield curve indicates a recession. While this pattern is apparent in the plots for the 10 -year, 3 -month spread, as well as in GDP growth for the following year, both the 1960s and the 1990s show long periods in which low spreads were associated with high growth. Does this mean the recession suggested by the recent yield-curve inversion should also be discounted? Time will tell.

## Money and Financial Markets (cont.)



Percent


a. Quote for semiannually fixed rate versus the U.S. dollar's 3-month London interbank offered rate (LIBOR)
b. Bloomberg generic series.
c. The estimated expected inflation rate and the estimated real 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, "Selected Interest Rates," Federal Reserve Statistical Releases, H.15; Federal Reserve Bank of Philadelphia, Survey of Professional Forecasters; and Bloomberg Financial Information Services.

The spread between long- and short-term yields, often called the term spread, has a counterpart in the spread between risky and safe bonds, often called the risk spread. This can sometimes be interpreted as a predictor of future growth-under the assumption that risk increases in a recession-but it can also be seen as a more contemporaneous indicator of uncertainty. If so, then bond markets are having a rather tranquil time. At longer maturities, the spread between 10 -year interest rate swaps
and 10-year Treasuries has decreased 42 bp since May 2000, although it remains above the levels seen in 1997 and 1998. On the short end, the spread between 90-day commercial paper and 3-month Treasury bills has eliminated the spike seen around the turn of the year and resumed a value on the low side of its range for 1997-2001.

Yet another sort of spread may provide information about future inflation. The spread between nominal Treasury bond yields and
yields on Treasury inflation-indexed securities (TIIS) measures the difference between real and nominal interest rates, of which inflation is an important component. Another approach is to estimate inflation and real rates from nominal rates and survey measures of inflation. Although both of these measures indicate that real rates have fallen in 2001, they differ as to the prospects for inflation.

