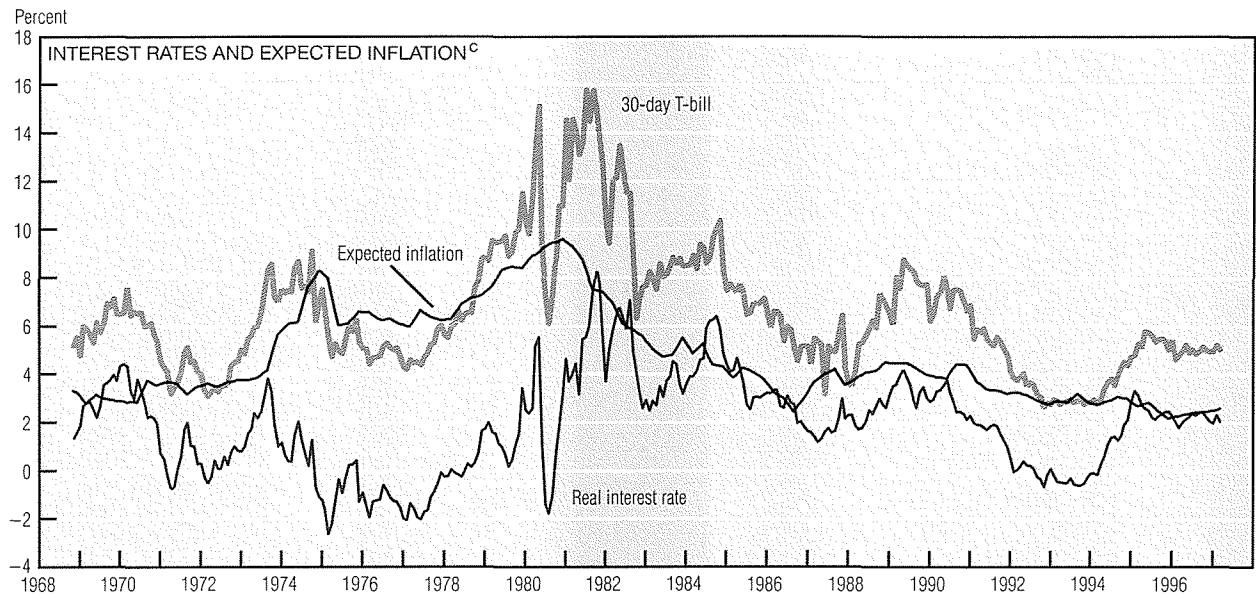
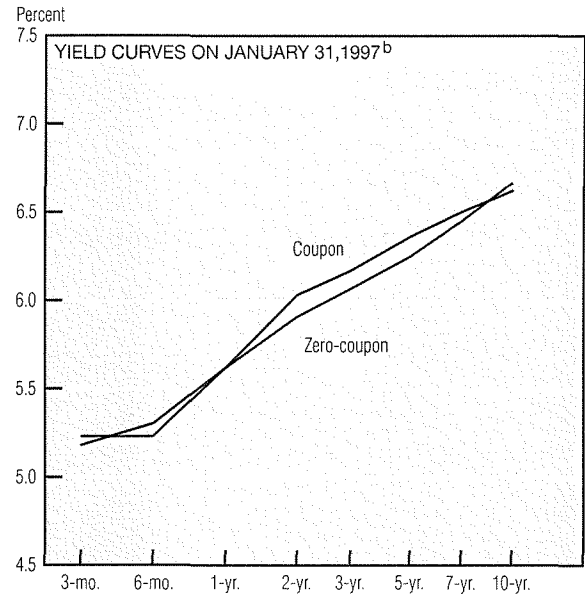
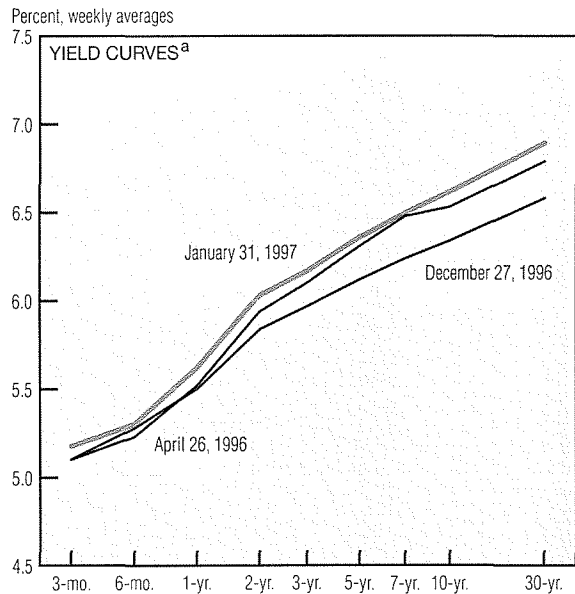


Interest Rates



- a. All instruments are constant-maturity series.
b. The coupon yield is a weekly average and the zero-coupon yield is a daily number.
c. The real interest rate and expected inflation rate are calculated from the Survey of Professional Forecasters using the 30-day T-bill rate.

SOURCES: Board of Governors of the Federal Reserve System; the Federal Reserve Bank of Philadelphia; and *The Wall Street Journal*, various issues.

Interest rates have moved up since last month, and the yield curve has steepened. The yield on 30-year bonds has increased 31 basis points, (to 6.89%); the 3-year, 3-month spread stands at 99 basis points, and the 10-year, 3-month spread is at 144.

The yields on zero-coupon bonds continue to closely track the yields on coupon bonds. This month, however, the yields on 2-, 3-, 5-, and 7-year notes exceed that of same-maturity zeroes. This is surprising, because the shorter dura-

tion of the notes usually leads to a lower yield. It also serves as a reminder that other factors, such as market liquidity, do matter.

Nominal interest rates depend both on expected inflation and on real (inflation-adjusted) rates; uncertainty also has an effect. Prior to maturity, a bond's yield can be adjusted for expected inflation, giving an estimate of the real interest rate. In the bottom chart, which shows such a breakdown for the 30-day T-bill rate, several relationships stand out. From 1990 to late 1995, expected in-

flation rates declined fairly steadily. Since then, expected inflation has inched higher for 14 consecutive months.

Expected inflation does not account for most of the variation in nominal rates, however, at least since the mid-1980s. Changes in the underlying real rate have been more important. Careful observers may note that the real rate and expected inflation do not add up to the nominal rate; the difference is the risk premium that investors demand for bearing uncertainty about inflation.