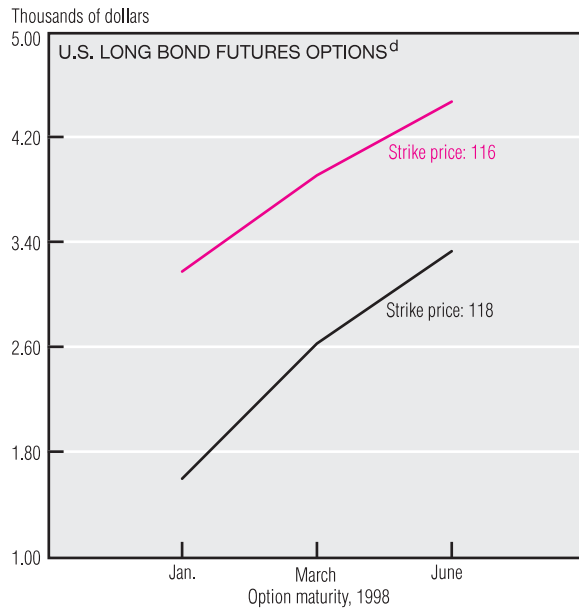
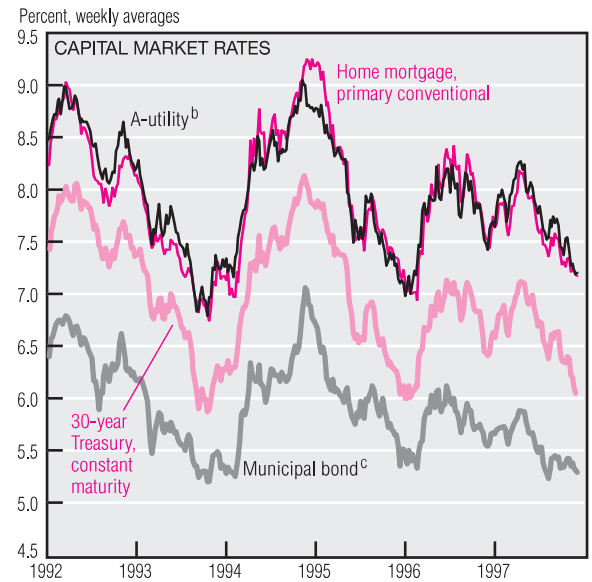
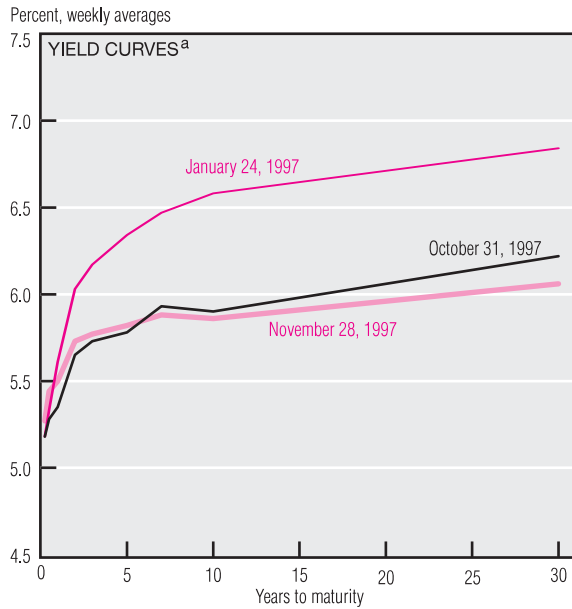


# Interest Rates



a. All instruments are constant-maturity series.  
 b. Estimate of the yield on a recently offered, A-rated utility bond with a maturity of 30 years and call protection of five years.  
 c. Bond Buyer Index, general obligation, 20 years to maturity, mixed quality.  
 d. Call futures options for November 28, 1997.  
 SOURCES: Board of Governors of the Federal Reserve System; and Bloomberg information services.

The yield curve has flattened since last month, with short rates up and long rates down. The shift in the weekly averages of constant-maturity rates was not large, however. The 3-year, 3-month spread decreased only five basis points (from 55 to 50), and the 10-year, 3-month spread shrank only 13 basis points (from 72 to 59). These spreads are narrower than their historical means of 85 and 120 basis points, respectively. Both medium and long rates remain well below

their levels at the start of 1997, while short rates are slightly higher. The downward trend in long rates has been accelerating in recent months. Municipal bond rates have held up the best, losing only seven basis points since the end of September. Mortgage rates have fallen 11 basis points, utilities are down 24, and 30-year Treasuries lost a full 30 basis points. An increasingly important part of the fixed-income market is not the bonds themselves but their deriva-

tives—contracts whose price depends on interest rates. One popular derivative is the option on the T-bond future. The *call* gives the owner the right to buy a futures contract on the bond at a specified price (the *strike price*). Any given option price is associated with an *implied volatility* for the underlying instrument. This enables us to chart the term structure, which shows how implied volatility changes as the maturity lengthens.