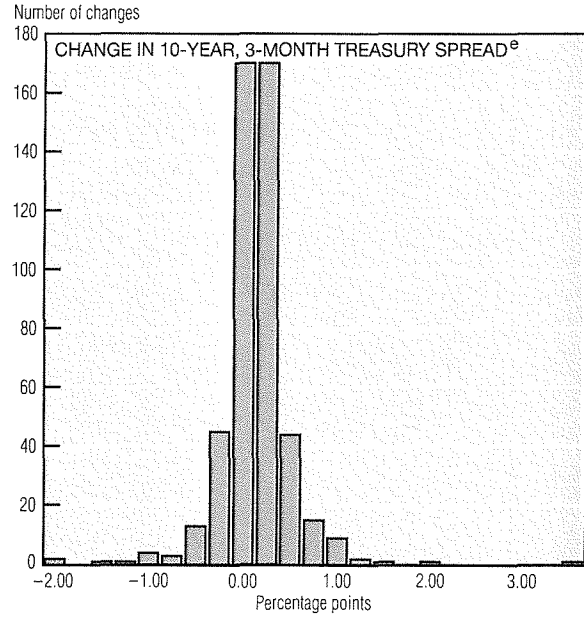
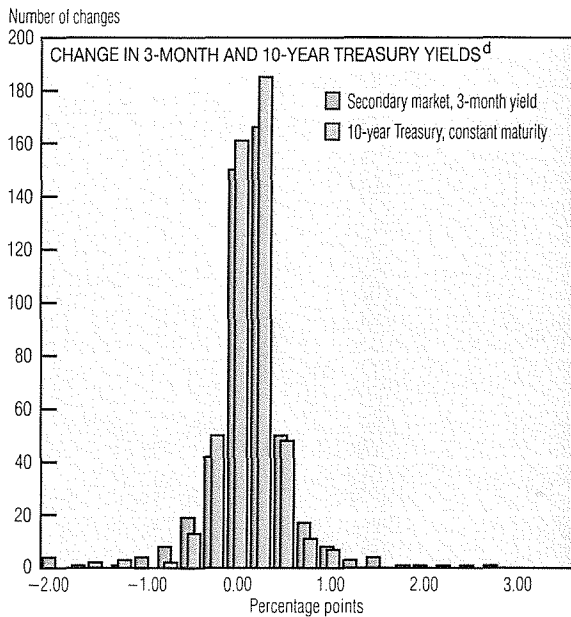
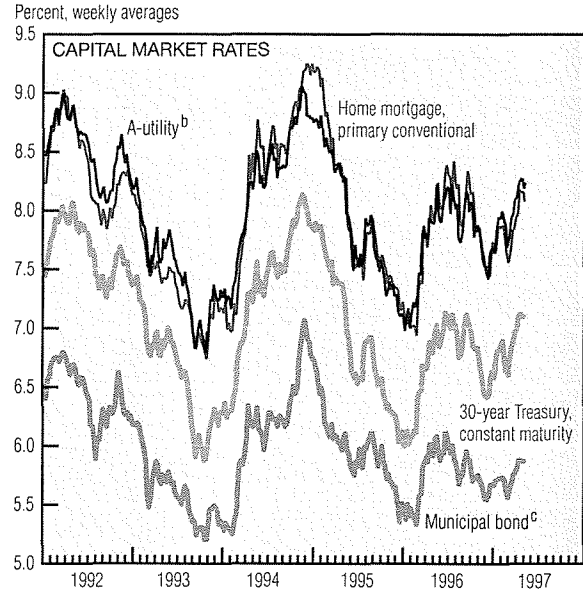
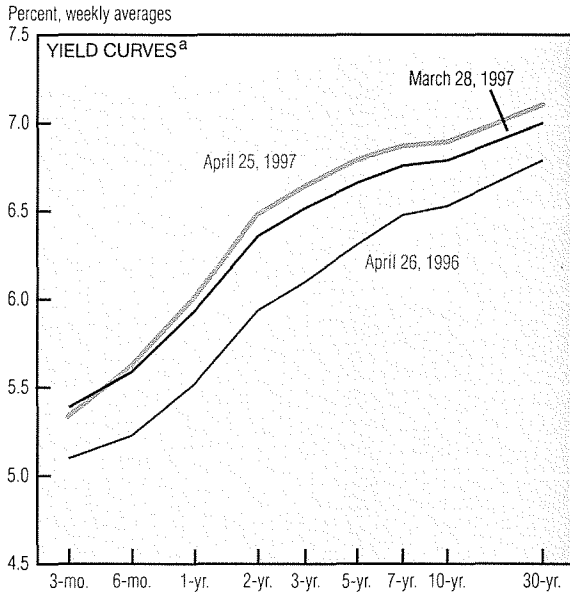


Interest Rates



- 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. Change is the difference between the security's yield and the same security's yield one month prior.
 - e. Spread is the 10-year Treasury constant-maturity yield less the 3-month yield. The change in the spread is relative to one month prior.
- SOURCE: Board of Governors of the Federal Reserve System.

The yield curve has steepened slightly since last month, with short rates falling and long rates rising. Yield spreads have correspondingly opened up. The 3-year, 3-month spread widened from 113 to 130 basis points (b.p.), and the 10-year, 3-month spread grew from 140 to 155 b.p.

Relative to last year, the yield curve is about 25 b.p. higher, but has approximately the same slope. The 30-year long bond rate has edged up to 7.1%, a shift that is reflected in other capital market rates. Since the end of February, Treasury

bonds, municipal bonds, and utility bonds have all increased (by 35, 22, and 30 b.p., respectively). Mortgage rates moved up 43 b.p. over the same period, partially closing the gap with utility rates.

A central feature of interest rate movements is their randomness. Next month's yield curve is unknown today, and a major goal of researchers and speculators is to better understand that uncertainty. One way to characterize this randomness is to look at the (unconditional) distribution of interest rate changes. Monthly movements tend

to be relatively small, with the majority of changes falling between 25 b.p. up or down. Some differences between maturities also appear. Ten-year rates are more centrally clustered: 72% of all observations lie between -0.25 and 0.25, and none fall outside the -1.85 to 1.75 range. Three-month rates show a wider dispersion, ranging from -4.6 to 2.6, and only 66% lie between -0.25 and 0.25. Since extreme 3-month and 10-year changes often do not affect their spread, the distribution shows an even tighter clustering around the mean.