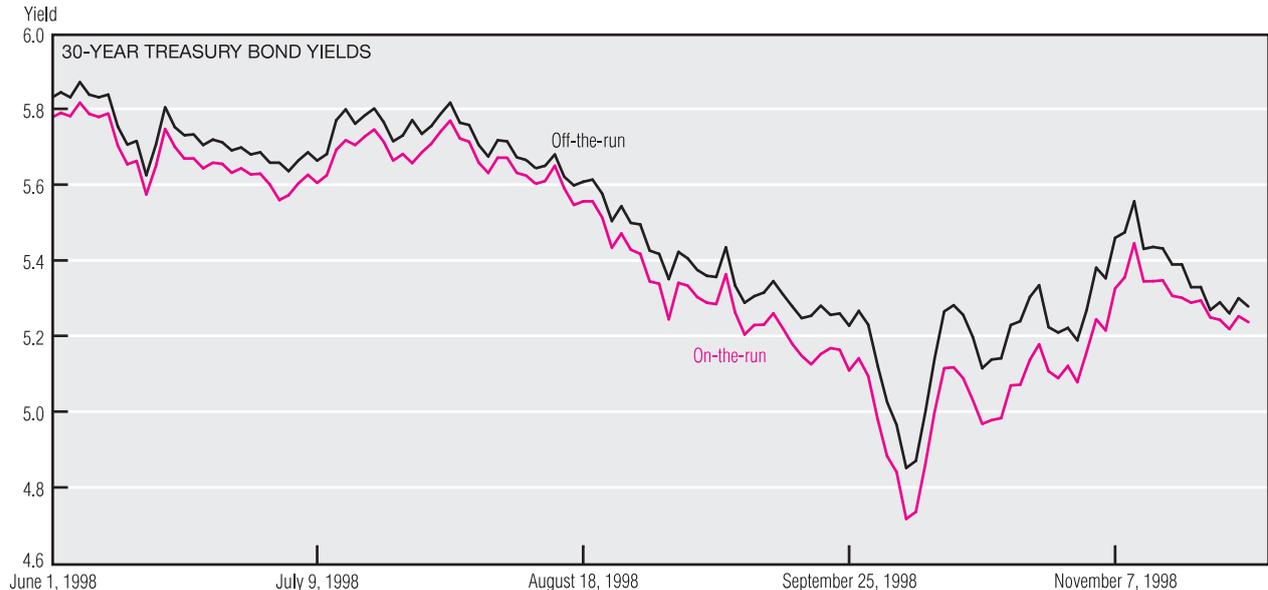
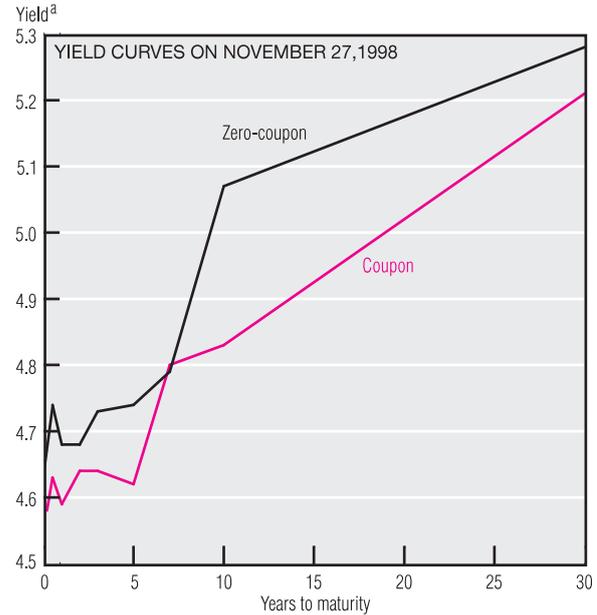
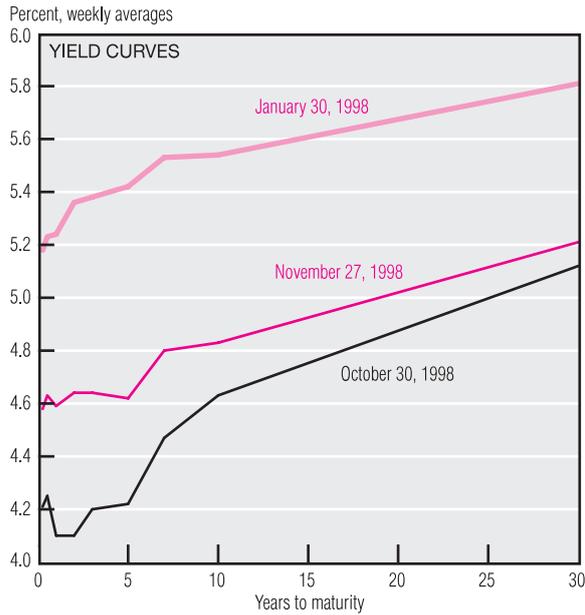


Interest Rates



a. For zero-coupon bonds, the yield is the average of yields on zero-coupon Treasury bonds maturing in the same month, as of November 27, 1998.
 SOURCES: Board of Governors of the Federal Reserve System, "Federal Reserve Statistical Release H.15: Selected Interest Rates," November 30, 1998, <http://www.bog.frb.fed.us/releases/H15/>; the *Wall Street Journal*, November 30, 1998; and Bloomberg information services.

Over the past month, interest rates on Treasury securities have shifted higher across the board. This has moved the yield curve upward, although it remains well below its position at the start of the year. The curve has also become somewhat smoother, with the 3-year, 3-month spread increasing from -11 to +1 basis points, and the 10-year, 3-month spread decreasing from 42 to 25 basis points.

The somewhat jagged short end of the curve is reflected in the yield

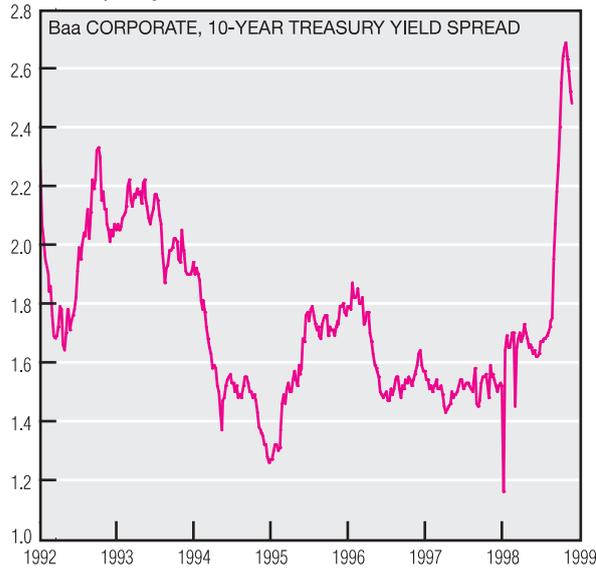
curve for zero-coupon bonds as well. Compared to early this year, however, the zero curve has resumed its classic position. Rates on short-term zeroes exceed those for Treasuries of comparable maturities, as one would expect of less liquid securities. For long bonds, coupon payments effectively shorten the duration on Treasuries, so that an upward-sloping curve produces a higher yield on zeroes.

Recent concern about "flight to liquidity" and hedge-fund invest-

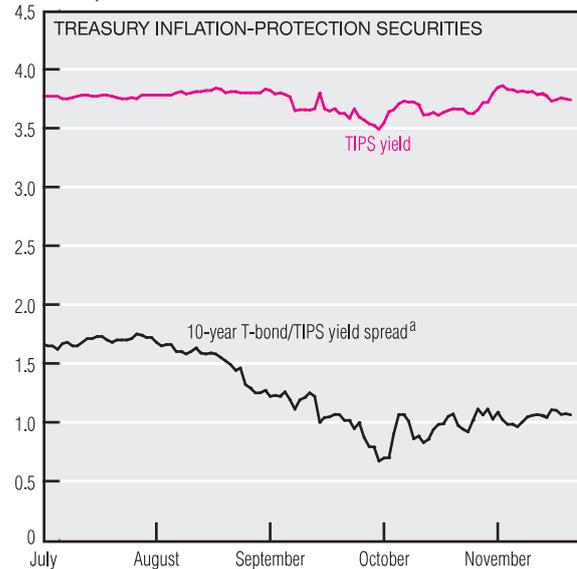
ments has focused attention on the spread between *on-the-run* and *off-the-run* Treasury bonds. The on-the-run, 30-year bond is the most recently issued, and it is the most liquid. Other bonds, called off-the-run, are less liquid and hence less desirable. They sell for a lower price and consequently show a higher yield. In early summer, the spread between the two types of bonds stayed around 50 basis points, but the collapse of the
(continued on next page)

Interest Rates (cont.)

Percent, weekly averages



Percent, daily numbers



Percent, weekly averages



a. 10-year Treasury bond constant-maturity yield minus the yield quote for the TIPS-adjusted 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.

SOURCES: Board of Governors of the Federal Reserve System; and Bloomberg information services.

Russian ruble in August caused the spread to double and then triple, peaking at a high of 168 basis points in late October. Since then, spreads have returned to the neighborhood of 40 basis points; one explanation for their return is that liquidity concerns have abated.

Quality spreads have not completely readjusted. Although the spread between corporate Baa bonds and 10-year Treasuries decreased by nine basis points this month, it remains well above its

levels earlier in the year.

Other spreads suggest that the flight to quality is reversing. With the exception of Treasury yields, capital market rates have remained flat from the previous month. The 30-year Treasury bond's spreads below A-rated utilities and conventional mortgages have narrowed by seven and 13 basis points, respectively, while its spread above municipal bonds has widened by eight basis points. Flight to quality is still an issue.

The spread between yields on 10-year Treasury bonds and 10-year Treasury inflation-protected securities (TIPS) has not changed recently, although both yields have increased slightly. One might attribute November's rise in longer-maturity Treasury rates to higher inflation expectations after the Fed lowered the federal funds rate, but the relatively constant spread of the longer-term rates over the TIPS yield contradicts this explanation.