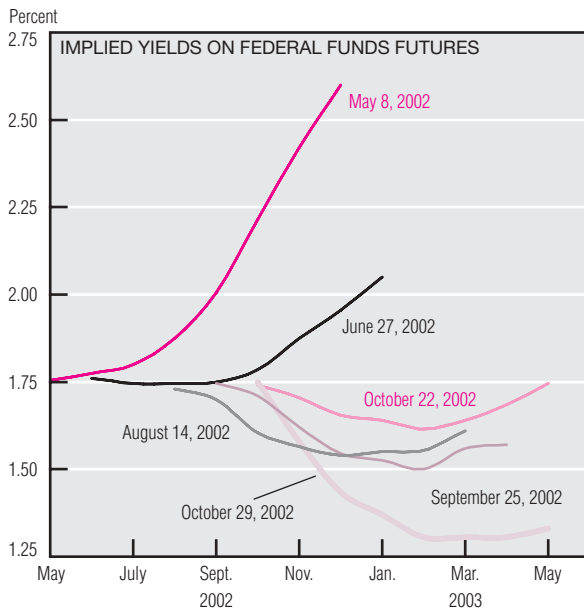
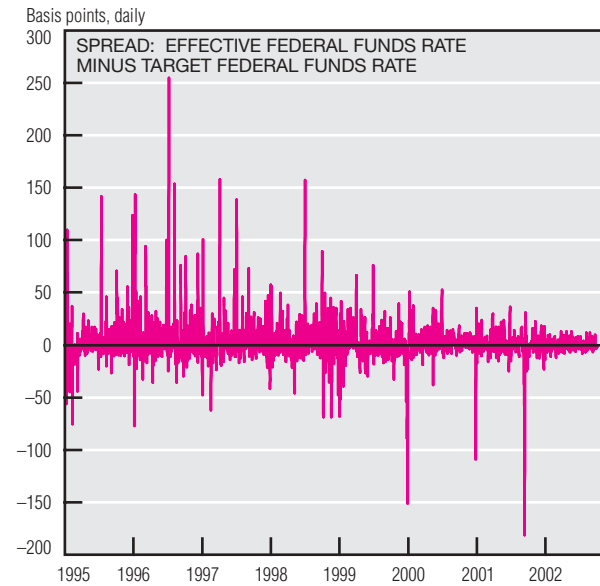
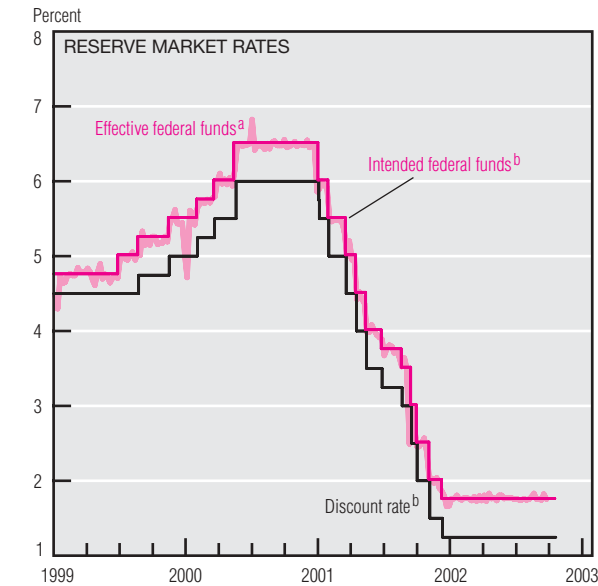


Monetary Policy



a. Weekly average of daily figures.

b. Daily observations.

c. The unexpected rate change is the difference in the federal funds futures market between the day of an FOMC announcement and the day before, weighted as described in Kenneth N. Kuttner, "Monetary Policy Surprises and Interest Rates: Evidence from the Fed Funds Futures Market," *Journal of Monetary Economics*, vol. 47 (2001), pp. 523–44.

SOURCES: Board of Governors of the Federal Reserve System, "Selected Interest Rates," *Federal Reserve Statistical Releases*, H.15; Federal Reserve Bank of New York; and Bloomberg Financial Information Services.

The daily average effective federal funds rate typically remains close to target. Since the beginning of 2000, the average absolute deviation of the effective rate from the intended rate has been about 7 basis points (bp); the effective rate was within 5 bp of the intended rate for around 60% of the observations. Nonetheless, misses of 50 bp or more are not uncommon.

In the month following the Federal Open Market Committee's September 24 meeting, implied yields on federal funds futures rose roughly

10 bp across the various maturities, then fell dramatically late in October. Market participants currently place a high probability on a 25 bp cut in the federal funds rate at the FOMC's November 6 meeting and a total cut of 50 bp by early 2003.

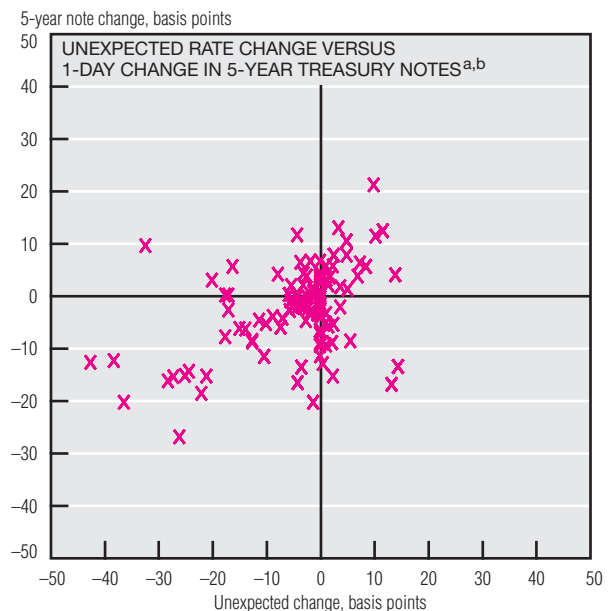
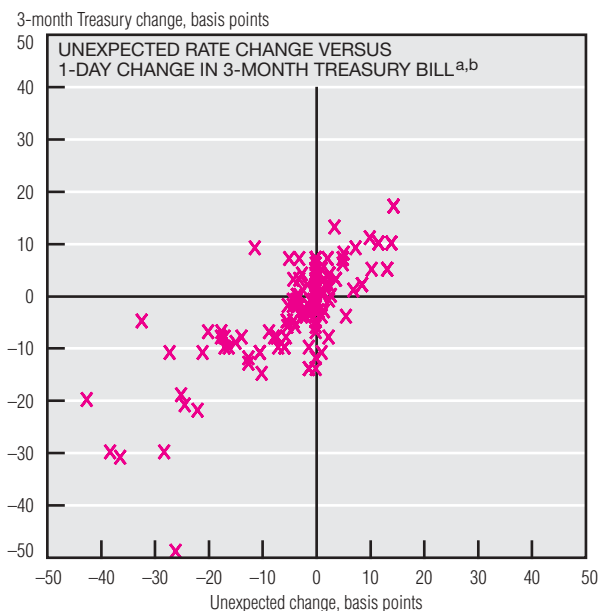
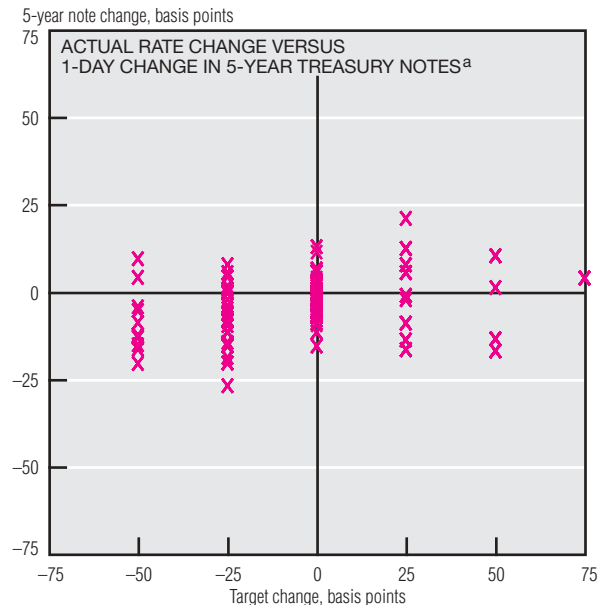
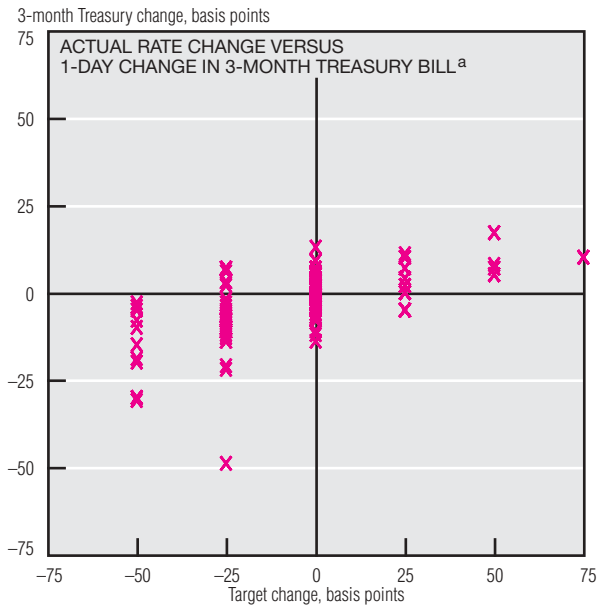
Apart from a premium for interest rate risk, implied fed funds futures yields should reflect expectations of the effective rate for the delivery month. Fed funds futures predict short-term movements in the intended fed funds rate fairly well, typically within 5 bp of actions at FOMC

meetings. Still, market participants often are caught by surprise, especially during periods of rapid adjustment in the intended fed funds rate.

How are changes in the intended fed funds rate related to other market interest rates? Conventional wisdom says that intended fed funds rate increases should lead to equal increases in short-term market interest rates and to less-than-proportional increases in long-term rates, but studies do not support this view. Indeed, if we look at actual changes in the intended rate at FOMC meeting dates

(continued on next page)

Monetary Policy (cont.)



a. Observations are included if it is an FOMC meeting day announcement or a change in the target rate starting June 1, 1989. The calculated change is the yield on the day of the observation minus the previous days yield.

b. The unexpected rate change is the difference in the federal funds futures market between the day of an FOMC announcement or target rate change and the day before, weighted as described in Kenneth N. Kuttner, "Monetary Policy Surprises and Interest Rates: Evidence from the Fed Funds Futures Market," *Journal of Monetary Economics*, vol. 47 (2001), pp. 523–44.

SOURCES: Board of Governors of the Federal Reserve System, "Selected Rates," *Federal Reserve Statistical Releases*, H. 15; Federal Reserve Bank of New York; and Bloomberg Financial Information Services.

versus the change in yields on U.S. Treasury securities from the day of each meeting to the next day, we do not see a strong correlation, especially for longer-term rates. For example, the top left chart plots the actual change in the intended fed funds rate versus the change in the three-month T-bill rate from the day of the intended rate change to the day after. The points in this chart are positively correlated, but certainly less than proportional, contrary to the simple theory. This illustrates that increases in the intended rate are only mildly

associated with increases in the three-month T-bill rate. Changes in the intended rate have little impact on the five-year Treasury note rate. The conventional wisdom is wrong because the FOMC often is responding to movements in market rates rather than vice versa.

How do these patterns alter if we look only at unanticipated Fed actions? By using fed funds futures, we can analyze the relation between unanticipated changes in the intended rate and other market interest rates. Here, the link seems tighter.

Unanticipated changes in the intended rate show a strong positive correlation with ensuing one-day changes in the three-month Treasury bill rate. Furthermore, they are of similar magnitude—an unanticipated 10 bp increase in the intended rate is matched with an increase of about 10 bp in the three-month T-bill rate. Although the correlation between unanticipated changes in the intended rate and changes in longer-term Treasury securities is positive, it is weaker than for shorter-term securities.