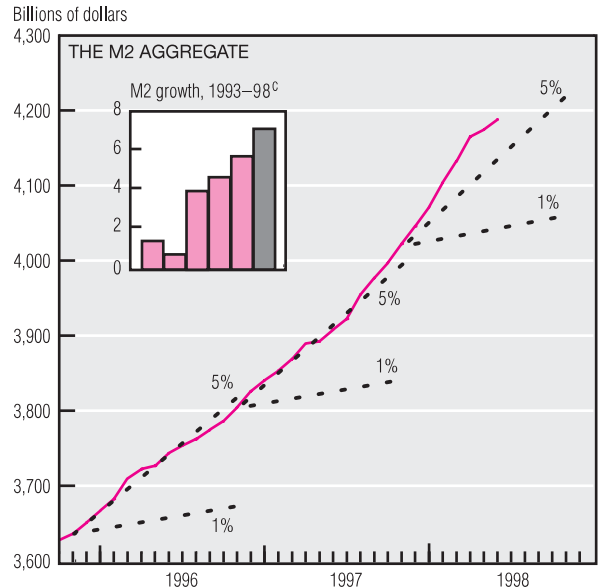
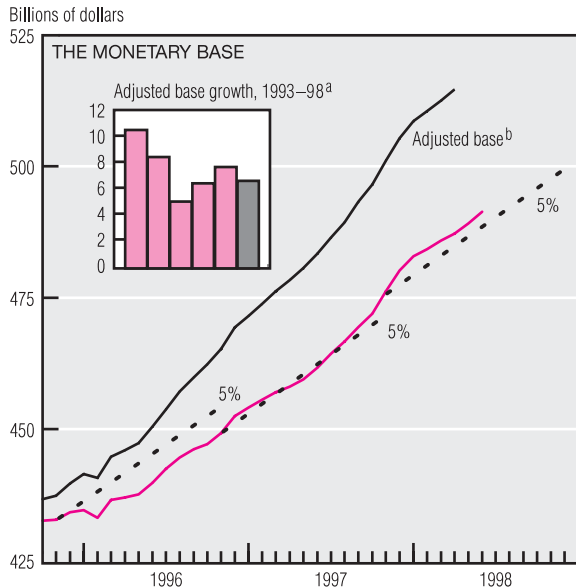
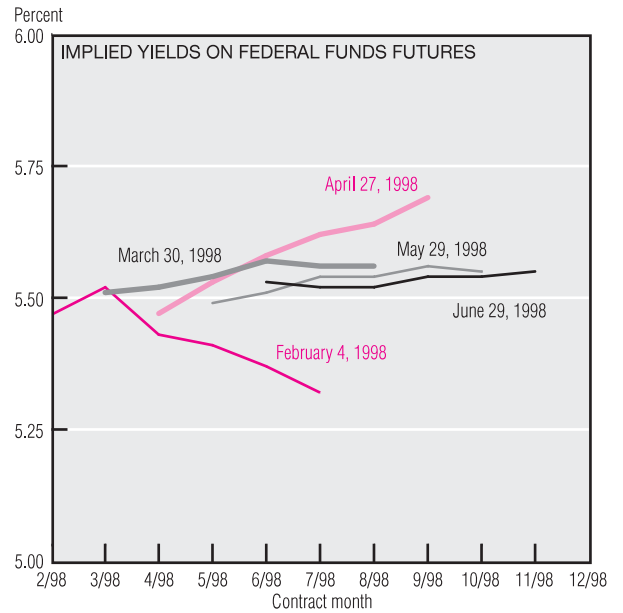
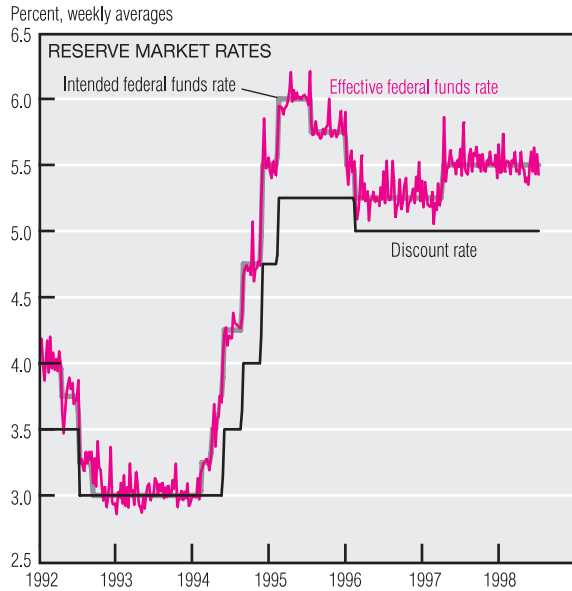


# Monetary Policy



a. Growth rates are percentage rates calculated on a fourth-quarter over fourth-quarter basis. Annualized growth rate for 1998 is calculated on an April over 1997:IVQ basis.  
 b. Adjusted for sweep accounts.  
 c. Growth rates are percentage rates calculated on a fourth-quarter over fourth-quarter basis. Annualized growth rate for 1998 is calculated on an estimated June over 1997:IVQ basis.  
 NOTE: M2 and monetary base aggregates are seasonally adjusted. The last plots for M2 and the (unadjusted) monetary base are estimated for June 1998. For M2, dotted lines are FOMC-determined provisional ranges. For the monetary base, dotted lines represent growth rates and are for reference only.  
 SOURCES: Board of Governors of the Federal Reserve System; and the Chicago Board of Trade.

At its June 30 meeting, the Federal Open Market Committee (FOMC) left the 5.5% federal funds rate target unchanged, as it has since March 1997. (The next scheduled meeting is on August 18.) For most participants in financial markets, the committee's decision came as no surprise. The Reserve Banks' discount rates have remained unchanged at 5.0% over an even longer period, since February 1996. Market participants' expectations

for the direction of future monetary policy can be inferred from the implied yields on federal funds futures. The yields' downward slope as of early February reflected traders' belief that a rate decrease was more likely than a rate increase, while the upward-sloping yields as of late April suggested just the opposite. More recently, the implied yields have become quite flat, suggesting a market belief that rates will remain unchanged over the next several months.

Relatively rapid growth in the monetary aggregates continues to be a source of concern for at least some policymakers, because sustained high growth rates in money may signal an impending increase in the inflation rate. The growth rates of M2 and M3 continue to be substantially above the provisional ranges set by the FOMC, and growth in the monetary base adjusted for sweep accounts has remained strong.  
*(continued on next page)*

## Monetary Policy (cont.)

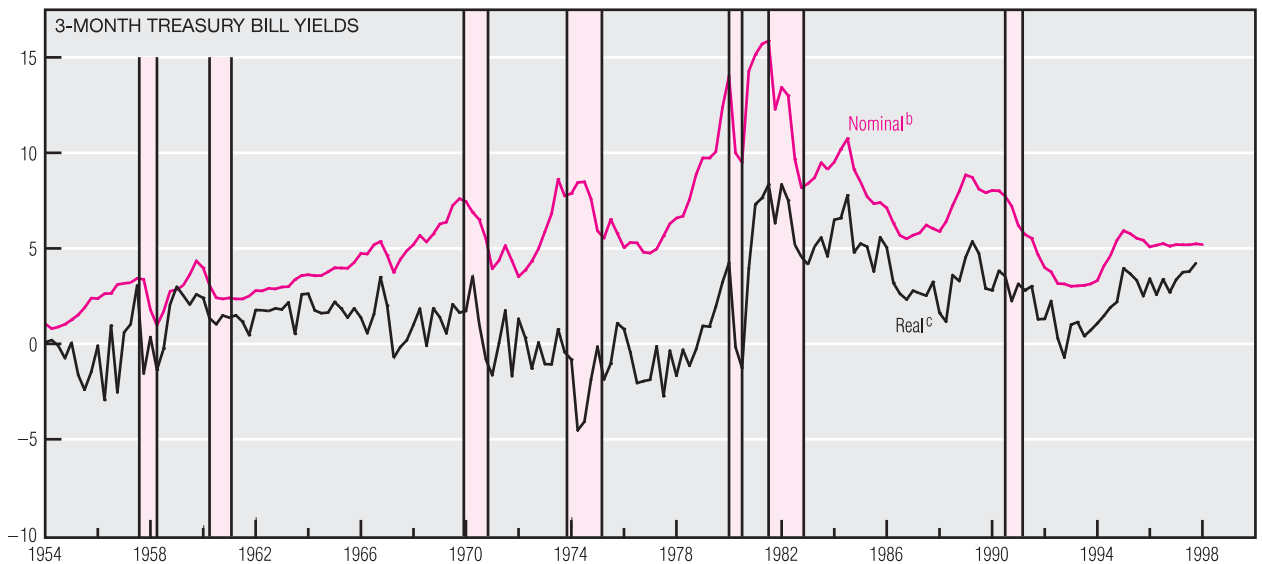
Percent, weekly averages



Percent, weekly averages



Percent, quarterly averages



a. Constant maturity.

b. Secondary market 3-month T-bill yield.

c. Secondary market 3-month T-bill yield minus the change in the GDP deflator.

NOTE: Shaded areas indicate recessions.

SOURCE: Board of Governors of the Federal Reserve System.

Short-term interest rates have held fairly steady over the past several weeks, while long-term rates have declined. Both the 3-month and 1-year Treasury bill yields have fluctuated within a relatively narrow range since last summer. After declining sharply through the end of 1997, long-term rates increased somewhat through March, but have since fallen back. For the week ending June 26, the 30-year constant maturity yield reached the lowest level recorded since the series' beginning in 1977.

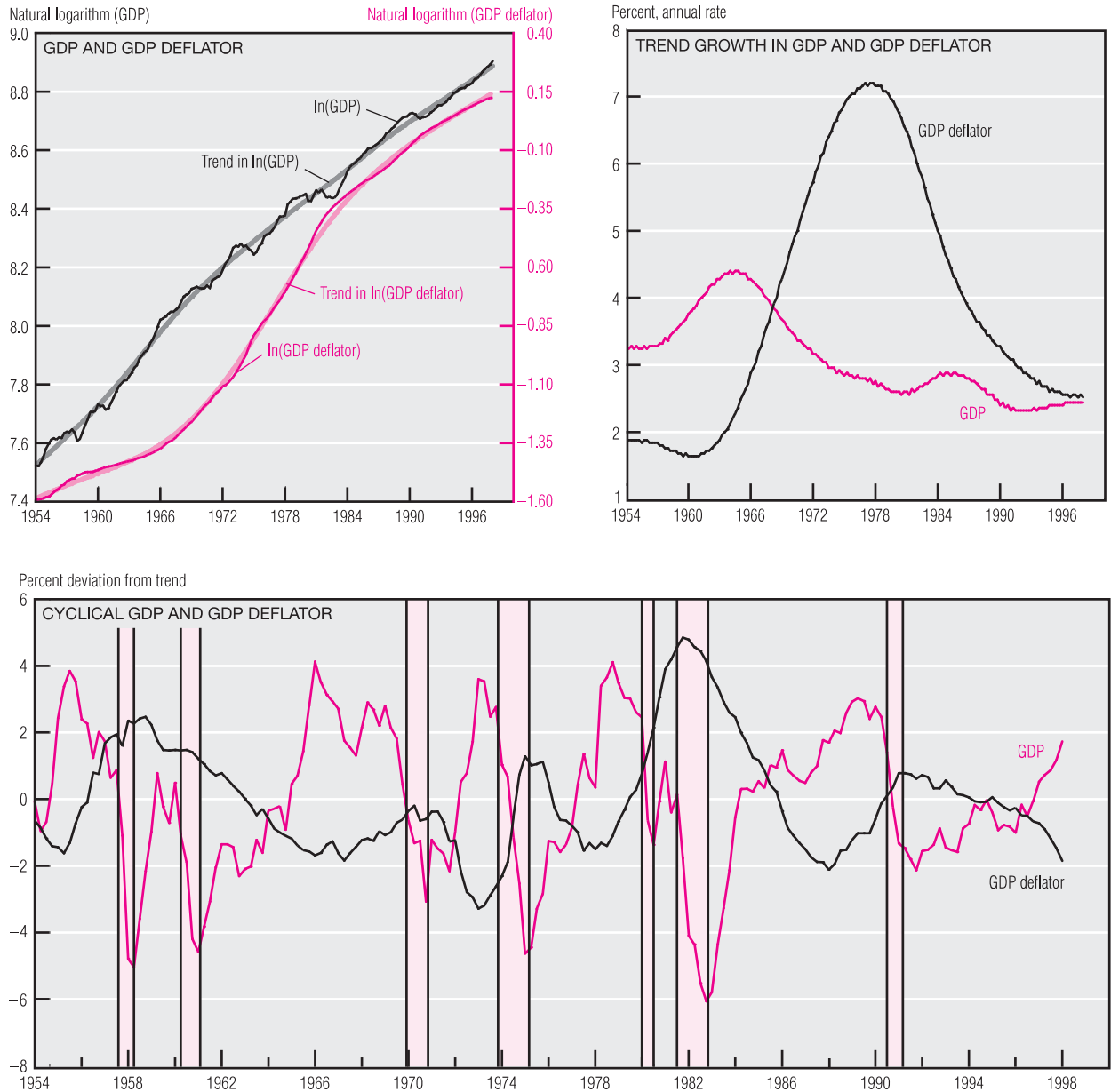
Looking over a longer horizon, the 3-month Treasury yield has remained below 6% since early 1991. One must go back to the 1960s to find a similar period of sustained low interest rates. It is no coincidence that one must also go back to the 1960s to find a comparable period of sustained low inflation.

While nominal interest rates have been relatively low in recent years, real interest rates have not. The ex post real interest rate, defined as the nominal 3-month Treasury bill yield minus inflation over the following

quarter, has stood between roughly 3% and 4% in recent years — somewhat higher than the real rates of the 1960s and considerably higher than the negative rates experienced during the 1970s. It is real rates of interest, rather than nominal rates, which are crucial to both firms and investors in making investment and savings decisions.

It is widely thought that strong growth during short-lived economic booms leads to higher prices and accelerated inflation. One method of  
*(continued on next page)*

## Monetary Policy (cont.)



NOTE: Shaded areas indicate recessions. GDP is in billions of chain-weighted dollars; GDP deflator is a chain-weighted implicit price deflator index 1992=10. Both are seasonally adjusted annual rates. Trend is calculated using the Hodrick-Prescott filter.  
SOURCES: Federal Reserve Bank of Cleveland; and DRI/McGraw-Hill.

exploring the price level's behavior over business cycles is to break down the historical path of the price level and output into two parts—a trend component and a cyclical component.

The trend in the price level and output can be interpreted as reflecting the underlying, or long-run, momentum in these variables. The changing trend in the GDP deflator clearly illustrates the steady increase in the underlying inflation rate from the early 1960s through 1980, and the deceleration in inflation which followed.

Cyclical components of the price level and output (that is, deviations from their respective trends) highlight the behavior of prices and output over the business cycle. Not surprisingly, the cyclical component of output falls sharply during recessions.

Contrary to a commonly held belief, however, the price level is not procyclical, but rather is clearly countercyclical. In other words, the cyclical component of the price level tends to be high when the cyclical component of output is low, and vice versa.

Furthermore, in terms of cyclical components, output growth is negatively associated with inflation, meaning that when output grows more rapidly, the price level rises less rapidly, and vice versa. To the extent that real output is currently above its long-run trend, this suggests that as output returns to its trend, inflation is likely to increase from the relatively low rate of the past year (1.5%) to a rate more in line with the underlying trend of the past few years (around 2.5%).