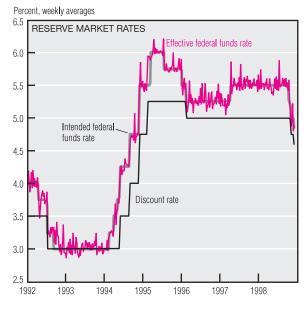
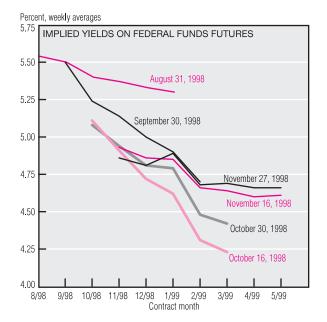
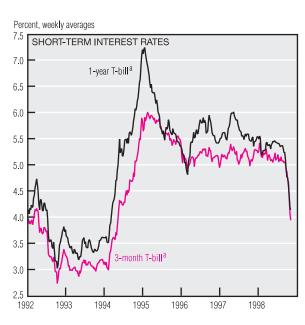
## Monetary Policy









a. Constant maturity.
 SOURCES: Board of Governors of the Federal Reserve System; and the Chicago Board of Trade.

On November 17, the Federal Open Market Committee (FOMC) again lowered its target for the federal funds rate. On the same day, the Board of Governors approved Reserve Banks' requests to lower their discount rates. In each case, the drop was 25 basis points, bringing the federal funds rate target to 4.75% and the discount rate to 4.50%. This was the third reduction in policy rates since the August FOMC meeting.

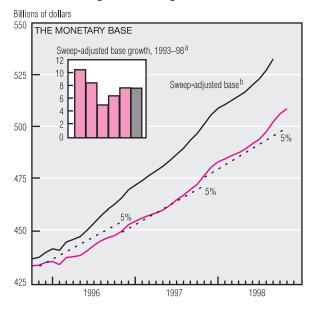
Evidence from the federal funds futures market suggests that its participants do not expect significant rate cuts to follow. Futures for March 1999 were trading at an implied yield just below 4.25% after the unexpected easing of rates on October 15. On November 27, 1998, however, the implied yield for the March 1999 contract had increased to just under 4.7%, indicating that futures market participants no longer anticipated further significant easing of the federal funds rate by the end of 1999:IQ. In fact, indications from the futures market are that the federal funds rate will change very little through the middle of 1999:IIQ; the implied yield for the May 1999 contract was

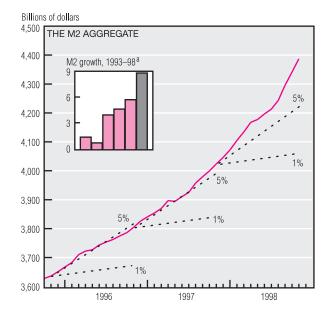
4.66% on November 27, 1998.

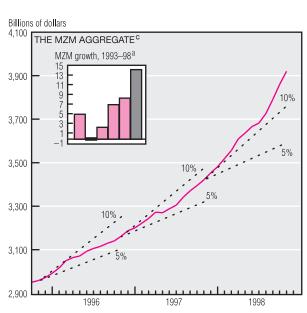
Other short-term interest rates have moved down with the funds rate target and the discount rate. The average 3-month T-bill rate fell below 4% in the week ended October 16, 1998, for the first time since April 29, 1994. The average 1-year T-bill rate declined to 4.14% for the same week.

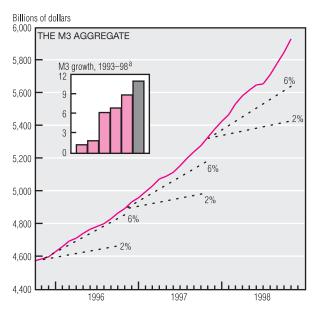
Long-term interest rates also declined through early October, but have risen since then. The weekly averages for both 30-year Treasury and conventional mortgage rates (continued on next page)

## Monetary Policy (cont.)









- a. Growth rates are percentage rates calculated on a fourth-quarter over fourth-quarter basis. Annualized 1998 growth rates for M2, MZM, and M3 are calculated on an estimated November over 1997:IVQ basis; for the sweep-adjusted base, 1998 growth is calculated on a September over 1997:IVQ basis.
- b. The sweep-adjusted base includes an estimate of required reserves saved when balances are temporarily shifted from reservable to nonreservable accounts c. MZM is an alternative measure of money that is equal to M2 plus institutional money market mutual funds less small time deposits.

NOTE: Data are seasonally adjusted. Last plots for M2, MZM, and M3 are estimated for November 1998. Dotted lines for M2 and M3 are FOMC-determined provisional ranges. Dotted lines for the monetary base and MZM represent growth in levels and are for reference only.

SOURCE: Board of Governors of the Federal Reserve System.

have rebounded about 30 basis points from their October lows.

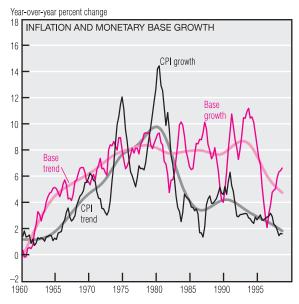
Monetary aggregates continue to grow at a relatively rapid pace, a trend that shows little sign of easing as the holiday season approaches. While the growth rate of the monetary base itself appears to be tapering off, the growth rate of the more relevant sweep-adjusted base continues to rise, having increased at about a 7.5% rate for the year to date, the same growth rate as for 1997.

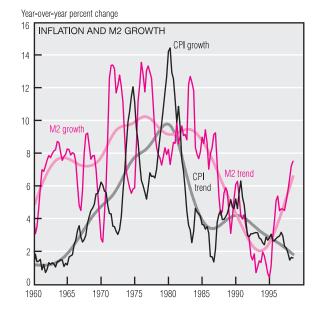
Growth rates of M2, MZM, and M3 remain more robust than for the narrower monetary base aggregate. Annualized monthly growth rates for M2 were 14.8% in September and 12.7% in October. Year-to-date M2 growth of more than 8.75% is well above the FOMC-determined provisional range of 1% to 5% and appears to be climbing. Year-to-date growth for MZM has topped 14%, with recent annualized monthly increases as high as 21% (in both September and October). M3, the

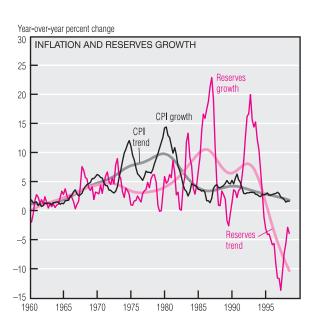
broadest of the money measures charted here, also is growing rapidly. With year-to-date growth nearing 11%, M3 seems likely to exceed its previous year's growth rate for the sixth consecutive time. Even if M3 stabilized at its preliminary November 16 level, 1998 growth would exceed that of 1997 by more than five percentage points. It is examples like these that some view as warning signals of future inflation.

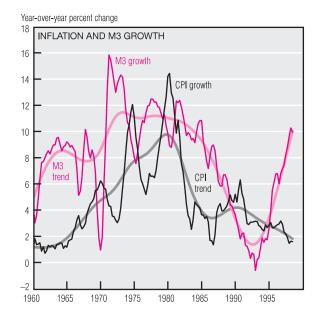
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## Monetary Policy (cont.)









NOTE: All trends are calculated using the Hodrick–Prescott filter.
SOURCES: U.S. Department of Labor, Bureau of Labor Statistics; and Board of Governors of the Federal Reserve System.

Milton Friedman's statement that "inflation is always and everywhere a monetary phenomenon" is often quoted, but what do contemporary data tell us about this relationship?

Little systematic relationship appears between narrow money growth and inflation, either for long-term trends or for quarter-to-quarter movements. From 1960 to 1980, base growth rose in advance of inflation. However, inflation in the 1980s fell sharply with no corresponding drop in base growth. The behavior of M1 (not shown) is generally similar. Reserves growth followed that of inflation in the 1960s,

but trended downward in the 1970s as inflation took off, then trended upward as inflation moderated in the 1980s.

The broader aggregates provide even less support for a story of tight money growth and inflation. High M2 growth in 1972–73 led the 1974–75 inflation spike, and high M2 growth in 1975–76 led another inflation spike in 1979–80. However, lower M2 growth in the 1980s followed the decline in inflation. The behavior of M3 is similar to that of M2.

The increase in inflation in the 1970s might be attributed to high

money growth, probably with some lag. Yet in the early 1980s, growth in all of the monetary aggregates continued apace as inflation was falling. This evidence makes it difficult to know how to interpret current high growth rates in the monetary aggregates.

Of course, this broad-brush analysis omits several potentially important factors. Variations in real output growth might cause money growth and inflation to diverge. Likewise, changes in interest rates and financial technology can affect money demand and so money growth.