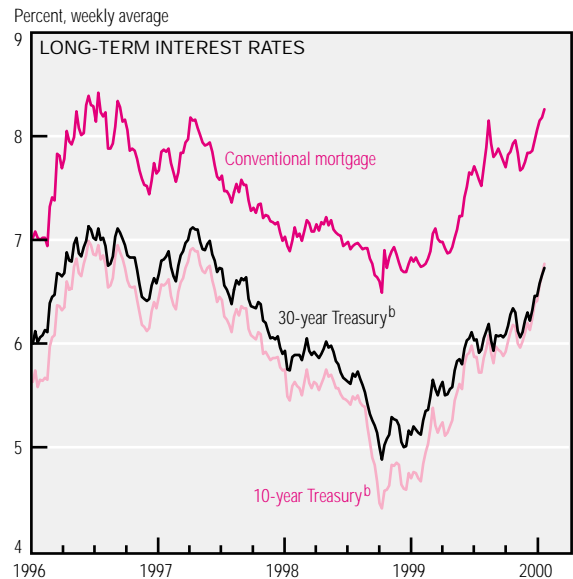
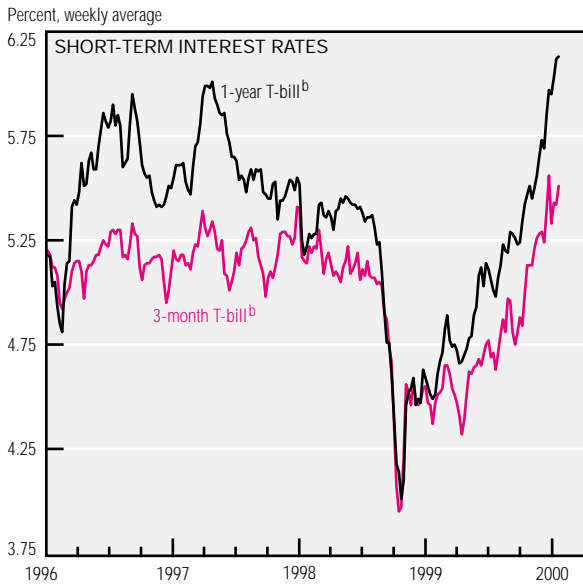
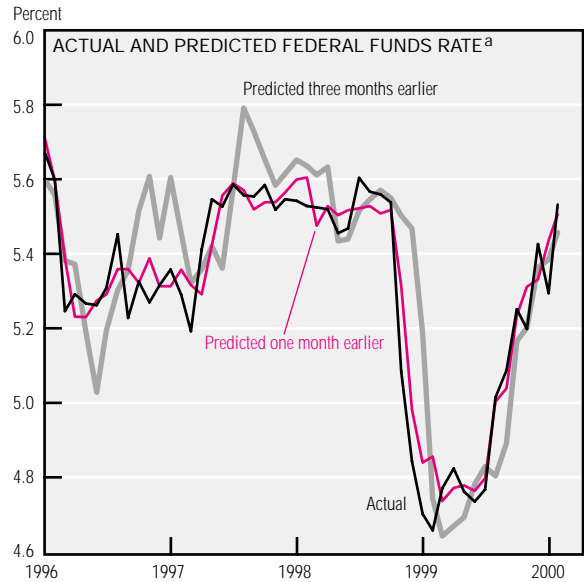
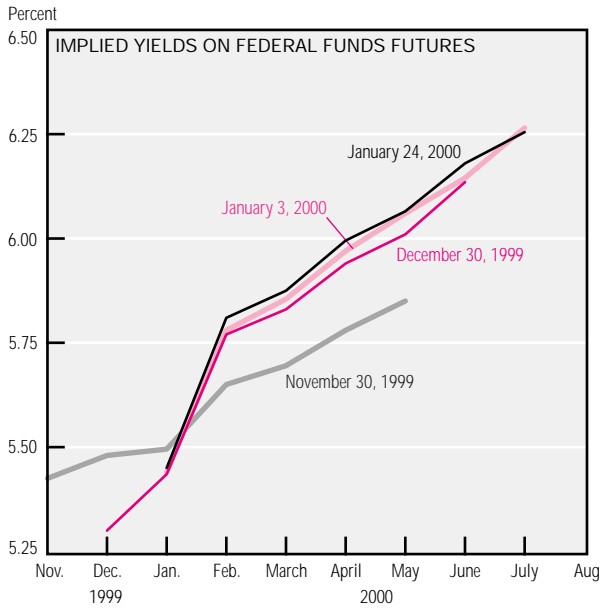


Monetary Policy



a. Predicted rates are 1-month and 3-month federal funds futures lagged one and three months, respectively.
 b. Constant maturity.
 SOURCES: Board of Governors of the Federal Reserve System; and Chicago Board of Trade.

Implied yields on federal funds futures are often used to gauge market participants' expectations for the future path of policy. Since late December, market participants consistently have priced in a 25 basis point (bp) increase for February and at least one more such increase by June.

Historically, federal funds futures do a fair job of predicting movements in the effective federal funds rate. Generally speaking, when the fed funds rate rises, futures tend to

underpredict the rate's level; when the rate falls, futures tend to overpredict. The average error for January 1996 to January 2000 is 13 bp for the 3-month future and 6 bp for the 1-month future.

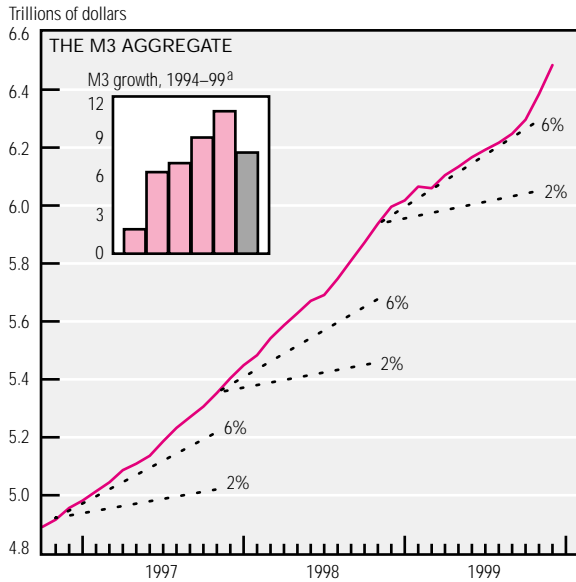
Short-term interest rates continue to rise briskly. The 3-month Treasury bill rate ended 1999 at 5.33%, up 75 bp on the year. Similarly, the 1-year Treasury bill rate finished at 5.95%, a substantial 135 bp increase. From year's end through the week ending January 21, the 3-month and

1-year Treasury bill rates made identical 18 bp gains. The recent rise of short-term interest rates may have reflected the market's anticipation of February federal funds rate increases.

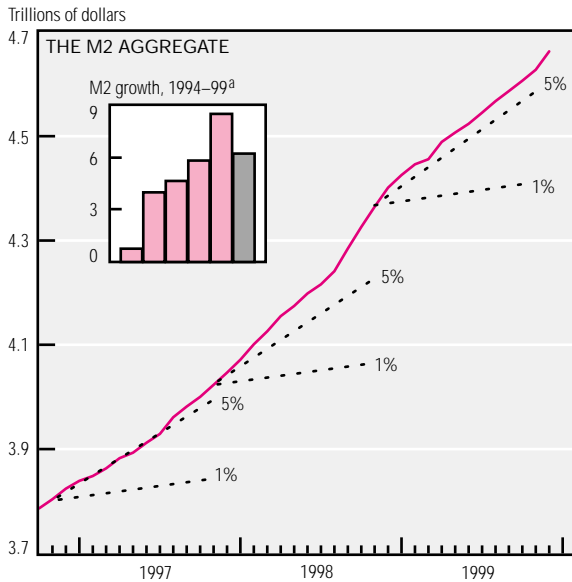
Long-term interest rates display a similar pattern. The 10-year and 30-year Treasury rates ended the year at 6.41% and 6.46%, increases of 171 and 134 bp, respectively. Gains since January 1 are 36 bp for the 10-year rate and 27 bp for the 30-year rate.

The Board of Governors of the
(continued on next page)

Monetary Policy (cont.)



Component	Percent of M3	Percent of change
M2	71.9	35.3
Large time deposits	11.0	30.2
Repurchase liabilities	5.1	12.3
Eurodollars	2.6	4.4
Institutional money-market mutual funds	9.4	17.9



Component	Percent of M2	Percent of change
M1	24.1	48.4
Savings deposits	37.3	-9.6
Small time deposits	20.4	15.3
Retail money-market mutual funds	18.2	45.9

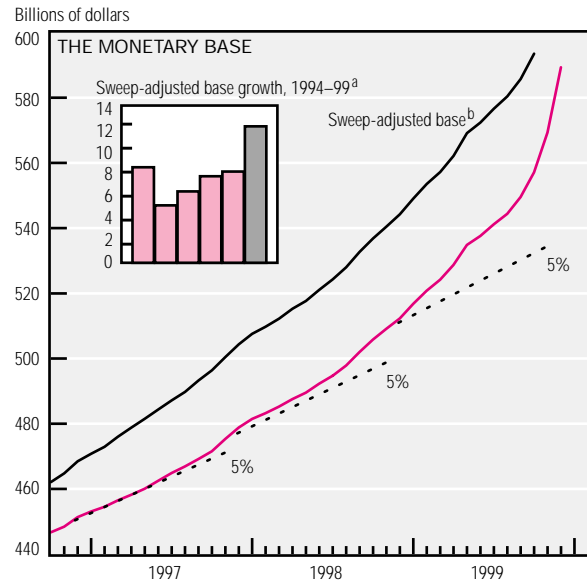
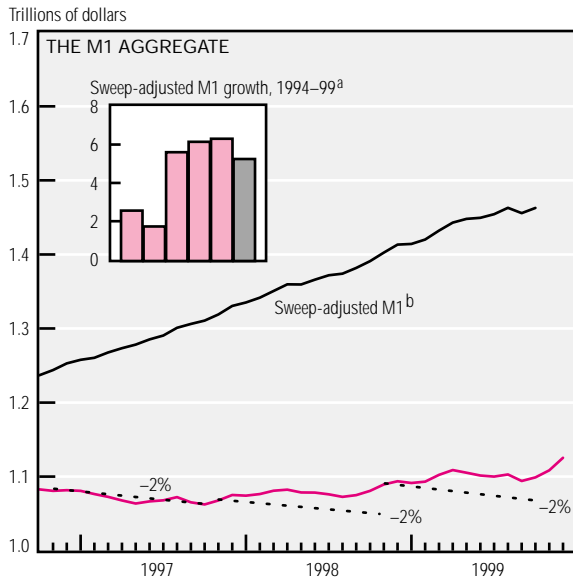
a. Growth rates are percentage rates calculated on a fourth-quarter over fourth-quarter basis.
 NOTE: Data are seasonally adjusted. Last plots for M2 and M3 are December 1999. Dotted lines for M2 and M3 are FOMC-determined provisional ranges.
 SOURCE: Board of Governors of the Federal Reserve System.

Federal Reserve System constructs several different measures of the amount of money existing in the U.S. at any given time. The broad monetary aggregates (M2 and M3) include less liquid assets than do the narrow components. Growth rates for virtually all the monetary aggregates spiked in December. This is not terribly surprising, in view of the public concern that surrounded the century date change. Furthermore, careful examination of which components contributed to this growth suggests

that much of the change, especially in the narrow monetary aggregates, can be attributed to Y2K. Annualized monthly growth of the M3 monetary aggregate soared to 18.8% in December; calculated on a fourth-quarter over fourth-quarter basis, it was a modest 7.6%. It is difficult to discern a clear pattern in the growth of M3 components. Annualized monthly M2 growth reached 9.1%, driven by nearly equal growth in M1 and retail money-market mutual funds, with offsetting

changes in savings deposits and small time deposits. One would expect savings deposits to decrease if individuals withdrew cash in preparation for possible Y2K disruptions. Bear in mind that these data are seasonally adjusted—that is, they already account for the normal fluctuations associated with holiday shopping. (It may be helpful to think of increases in the monetary aggregates around Y2K as a fluctuation that cannot be accounted for by *(continued on next page)*)

Monetary Policy (cont.)

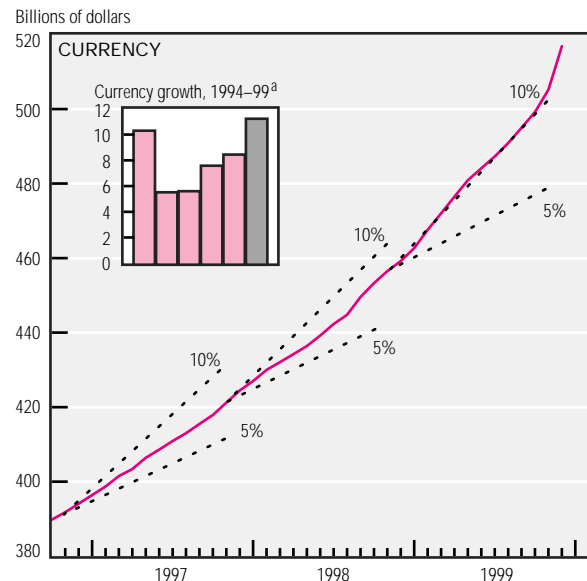


Breakdown of Recent Changes in M1

Component	Percent of M1	Percent of change
Currency	45.9	68.4
Traveler's checks	0.7	0
Demand deposits	31.9	9.9
Other checkable deposits	21.5	21.6

Breakdown of Recent Changes in the Monetary Base

Component	Percent of base	Percent of change
Currency	87.6	55.9
Total reserves	7.0	1.6
Surplus vault cash	5.4	42.5



a. Growth rates are percentage rates calculated on a fourth-quarter over fourth-quarter basis. The 1999 growth rates for sweep-adjusted M1 and the sweep-adjusted base are calculated on a November over 1998:IVQ basis.

b. Sweep-adjusted M1 contains an estimate of balances temporarily moved from M1 to non-M1 accounts. The sweep-adjusted base contains an estimate of required reserves saved when balances are shifted from reservable to nonreservable accounts.

NOTE: Data are seasonally adjusted. Last plots for M1, the monetary base, and currency are December 1999. Last plots for sweep-adjusted M1 and the sweep-adjusted base are November 1999. Dotted lines represent growth rates and are for reference only.

SOURCE: Board of Governors of the Federal Reserve System.

cause it is a one-time event.) In addition, growth in FDIC-insured small time deposits would be consistent with a desire to earn interest in an essentially risk-free environment—just in case Y2K had brought major problems.

Turning to narrower measures of money, we can see a clearer pattern of increased volume in highly liquid assets. Annualized monthly M1 growth leapt to 18.4% for December, spurred by an increase in the currency component. Currency con-

tributed nearly 70% of growth for the month, although it accounts for only 45.9% of total M1.

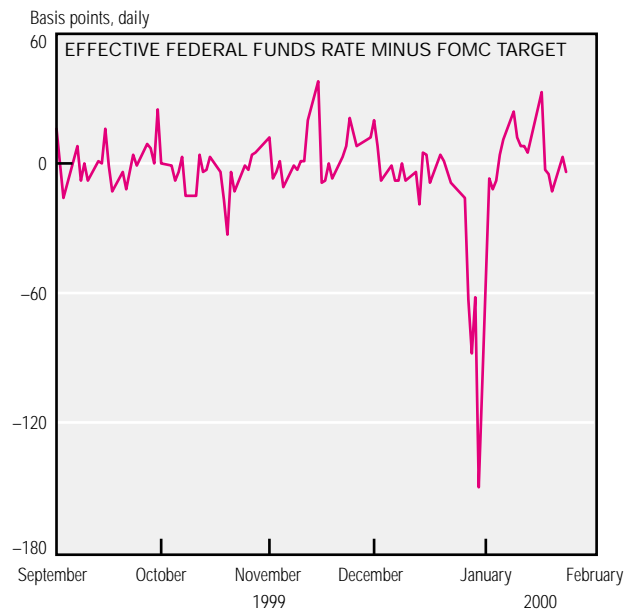
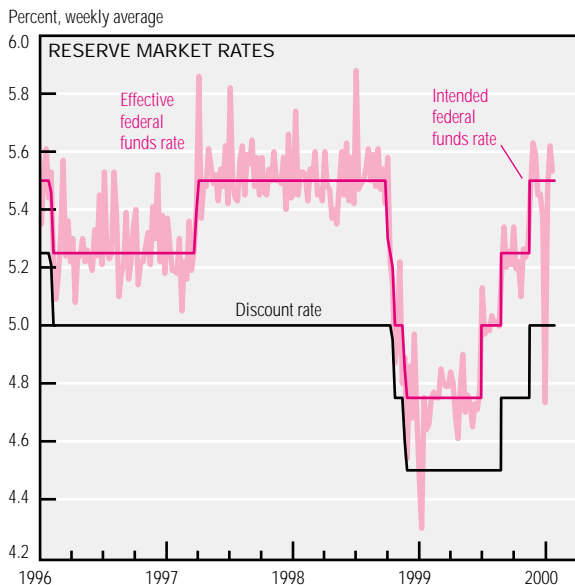
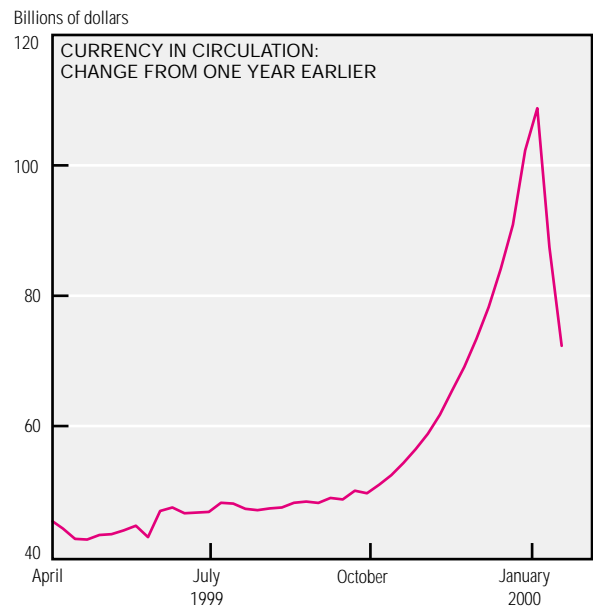
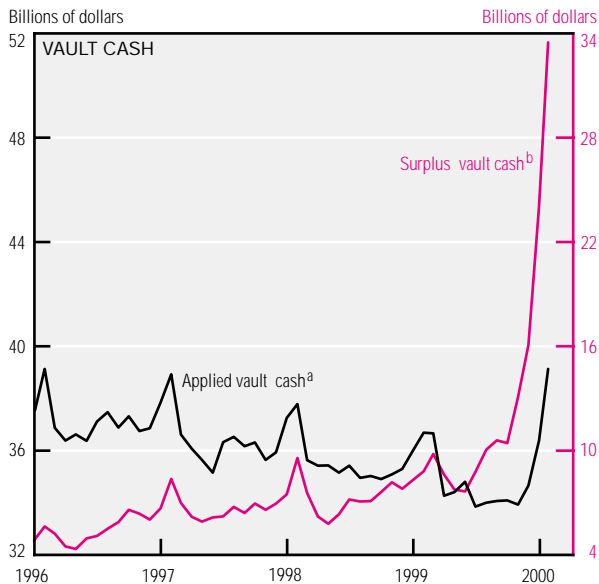
The most striking information comes from the monetary base, whose annualized monthly growth rate soared to 44.2% in December. Although currency contributed substantially (55.9%) to the change on the month, banks' surplus vault cash contributed almost as much (42.5%) yet accounts for only about 5% of the monetary base.

In 1998, the Federal Reserve, an-

ticipating heightened demand for currency around the century date change, prepared by ordering \$50 billion of extra currency to be printed in 1999. It injected the extra currency into the system during the rollover period to ensure that supplies would be sufficient to cover any surge in withdrawals. Currency did jump during December, with the annualized monthly growth rate reaching 27.8%.

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Monetary Policy (cont.)



a. Vault cash held by banks whose reserve requirements exceed their vault cash plus the amount used to satisfy requirements by banks whose vault cash exceeds their reserve requirements.

b. Vault cash minus the amount used to satisfy reserve requirements.

NOTE: Data are not seasonally adjusted.

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

It is important to note that levels of surplus vault cash were elevated relative to the previous year and remained so into January. Following the century date change, currency in circulation decreased as cash flowed back to banks. In fact, the Federal Reserve Board announced in August 1999 that it would be unnecessary to print new \$50 or \$100 bills for the coming year because sufficient inventories already would exist.

The need to provide extraordinary liquidity around the century date change caused the Federal Open Market Committee to err on the side of caution by injecting surplus bank reserves. Briefly put, the FOMC selects a target federal funds rate, then adds or drains reserves from the system on a daily basis to match the effective federal funds rate to the target rate. Normally, the effective federal funds rate is very

close to the target rate, but during the final week of 1999, the actual fed funds rate missed its target by an average of 76 bp, including a hefty 150 bp miss on December 31. In retrospect, one might argue that the Federal Reserve should have supplied less liquidity; paradoxically, however, by purposely supplying excess liquidity, the Fed may have helped prevent a currency crisis.