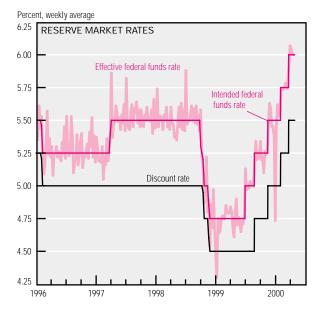
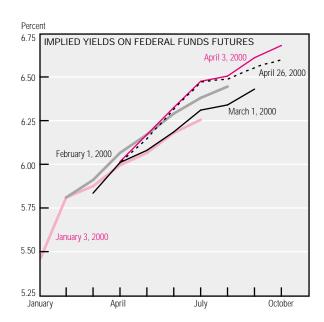
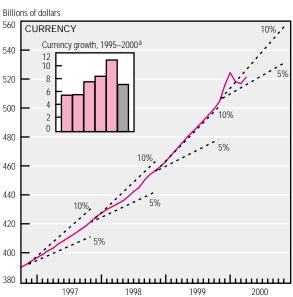
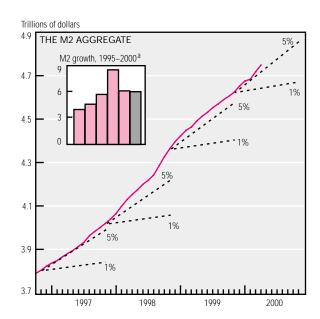
## . Monetary Policy









a. Growth rates are percentage rates calculated on a fourth-quarter over fourth-quarter basis. The 2000 growth rates for currency and M2 are calculated on an estimated April over 1999:IVQ basis.

NOTE: Data are seasonally adjusted. Last plots for currency and M2 are estimated for April 2000. Dotted lines for M2 are FOMC-determined provisional ranges. All other lines represent growth in levels and are for reference only.

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

The intended federal funds rate has been at 6.0% since the March 21 meeting of the Federal Open Market Committee (FOMC). Similarly, the discount rates at which banks can borrow balances from the Federal Reserve Banks' discount windows all remain at 5.5%. The next FOMC meeting will be held May 16.

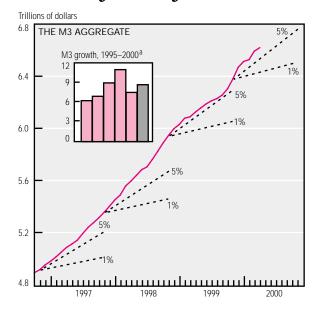
Implied yields on federal funds futures reveal that market participants continue to price in an increase of at least 25 basis points (bp) at the May meeting. Although the implied yield curve drifted downward in mid-April, the subsequent increase suggests that market participants now consider it more likely that increases in the intended rate will occur later in the year. Surprisingly, yields on fed funds futures did not seem to react to the April 14 announcement of stronger-than-expected increases in the consumer price index (CPI).

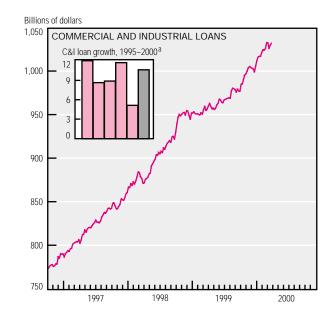
Surging currency growth, driven by liquidity preparations for Y2K, received considerable attention at the end of last year. After the century date change came and went without a hitch, currency levels fell as liquidity drained out of the system. The use of fourth-quarter averages to calculate growth rates obscures the full extent of the acceleration and subsequent drop in these rates. It may be more revealing to consider instead the growth rate for December 1999 over December 1998 (12.2%) and the annualized rate for April 2000 over December 1999 (2.7%).

Growth rates of the broader monetary aggregates (M2 and M3) appear to have accelerated recently. However, interpreting monetary aggregates in April is always fraught with difficulty, but especially so

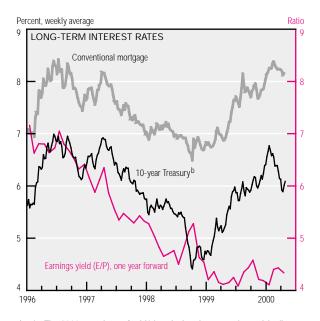
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## Monetary Policy (cont.)









a. Growth rates are percentage rates calculated on a fourth-quarter over fourth-quarter basis. The 2000 growth rate for M3 is calculated on an estimated April
over 1999:IVQ basis. The 2000 growth rate for C&I loans is calculated on a March over 1999:IVQ basis.
 b. Constant maturity.

NOTE: Data are seasonally adjusted. Last plot for M3 is estimated for April 2000. Last plot for C&I loans is March 1999. Dotted lines for M3 are FOMC-determined provisional ranges.

 $SOURCES: \ Board \ of \ Governors \ of \ the \ Federal \ Reserve \ System; \ and \ I/B/E/S \ International \ Inc.$ 

following high year-end capital gains. Such gains typically result in large April tax payments, causing M2 to swell above seasonal levels. These increases are reversed as payments are processed and credited to the U.S. Treasury account (not included in the monetary aggregates). Because the M2 increase is transitory, it is not seen as inflationary.

Strong M3 growth, coupled with steady growth in the narrower monetary aggregates, can often be explained by heavy demand for commercial and industrial (C&I) loans. Banks often finance these loans by

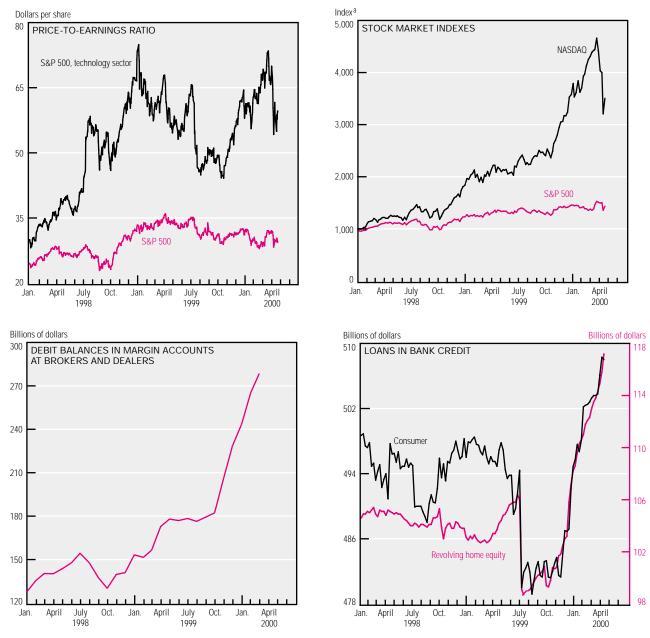
issuing large-dollar-value certificates of deposit, which are counted in M3 but not in M2. Year-to-date M3 growth is estimated at 8.8% for April (compared to 7.4% in 1999). Through March, year-to-date growth in C&I loans had reached 10.4% (4.9% in 1999).

One often-overlooked consequence of higher productivity is a higher real interest rate. As productivity increases, more investment projects become profitable and greater investment demand puts upward pressure on interest rates. This view provides an alternative to the

commonly told story that the FOMC is using the interest rate as a "brake" to slow an overheating economy. Instead, market rates rise naturally and the FOMC must increase the intended federal funds rate in response. Since summer 1998, the FOMC has raised the intended rate 125 bp. During the same period, 3-month and 1-year T-bills have risen 123 bp and 150 bp, respectively.

Long-term interest rates show a similar pattern, although the well-publicized budget issues surrounding both the issuance and buy-back (continued on next page)

## Monetary Policy (cont.)



a. The S&P 500 Index was developed with a base level of 10 for the 1941-43 base period. The NASDAQ is indexed to 250 on February 1, 1985 SOURCES: Bloomberg Financial Information Services; and New York Stock Exchange

of long-term government debt have recently affected yields-most notably on the 30-year Treasury.

Over the past two years, the stock market has produced stellar returns, primarily through price appreciation. These gains came on top of a market value that had already raised concerns about irrational exuberance. Unlike the earlier advance, this one lacked breadth. Indeed, in 1999 the majority of stocks declined in value.

This phenomenon is often characterized as a bifurcation between oldand new-economy stocks. Neweconomy stocks are comprised largely of companies whose values reflect the promise that cutting-edge technology holds for future profits. Their price-to-earnings ratios tend to be high because their prices factor in higher earnings growth in outlying years. Moreover, new-economy firms typically pay small or no current dividends because internal investment opportunities are so good.

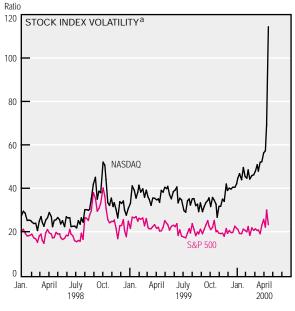
This so-called bifurcation is evident in the difference between the levels of the NASDAQ and S&P 500 indexes. The NASDAQ reflects the phenomenon more clearly because it has a higher concentration of new-

economy stocks than does the more broadly based S&P 500.

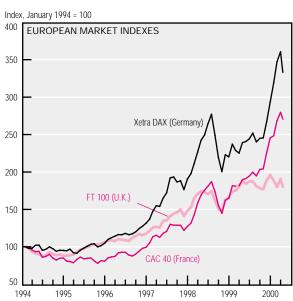
Concerns about a speculative bubble were fueled last fall when the NASDAQ accelerated sharply. particularly because this last spurt coincided with a sharp increase in margin-account borrowing. Margin accounts allow investors to leverage—that is, to finance an investment by borrowing at an interest rate that is lower than the yield anticipated from that investment. Some analysts point to the surges in consumer and home equity loans

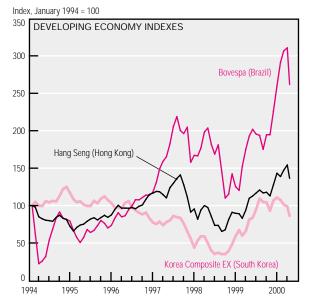
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## Monetary Policy (cont.)









a. The S&P 500 Index was developed with a base level of 10 for the 1941–43 base period. The NASDAQ is indexed to 250 on February 1, 1985. Implied volatility is a measure of the market's current prediction of a security's volatility, derived from a weighted average of the current volatilities of at-the-money options. (Volatility is the extent to which a price fluctuates over a period of time.)
SOURCES: Standard & Poor's Corporation; Wall Street Journal; and Financial Times.

posted late last year as sources of additional leverage.

Although margin accounts create a potential for speculative excesses, the data do not provide definitive evidence that these accounts are, in fact, producing such effects. Nonetheless, many analysts argue that recent precipitous declines in the NASDAQ represent an unwinding of former excesses. On the other hand, the declines may reflect changing economic fundamentals, such as expected earnings in outlying years, which are not observable.

These sharp declines could also portend a permanently higher level of volatility. Formal approaches to stock valuation, based on economic fundamentals, reveal that stock market volatility increases when the dividend-to-price ratio declines. The intuition behind this result is straightforward: Stock returns take two forms, dividend payments and price appreciation, of which the former component is the less volatile. Thus, the greater the dividend (relative to total return), the more stable the return—and hence the value—

of the stock. The decline in the aggregate dividend-to-price ratio is consistent with rising volatility.

Although equity values around the world have generally appreciated in the past few years, stock price increases have been temperate. To some extent, the European indexes reflect the greater vulnerability of their economies to the Russian default late in the summer of 1998. Similarly, developing-economy indexes are making up losses that resulted from the Asian crises of 1997.