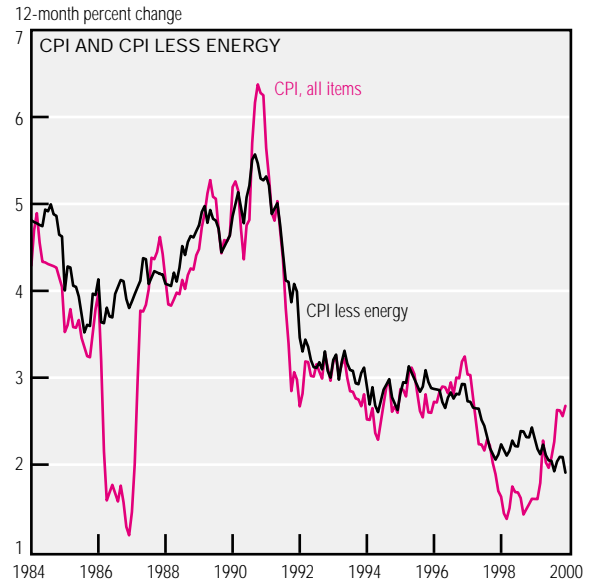
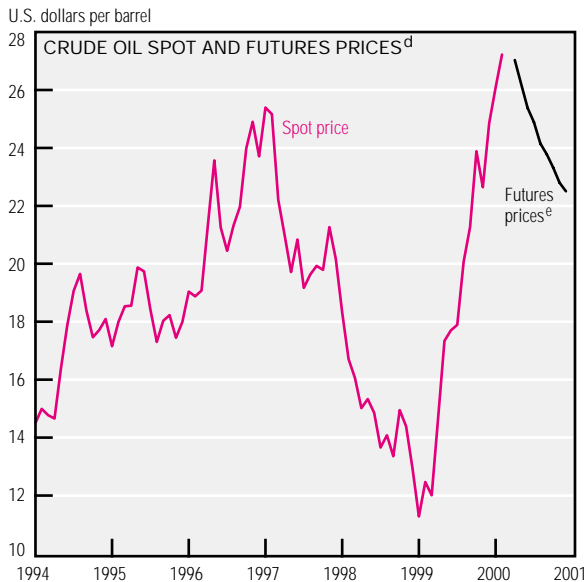
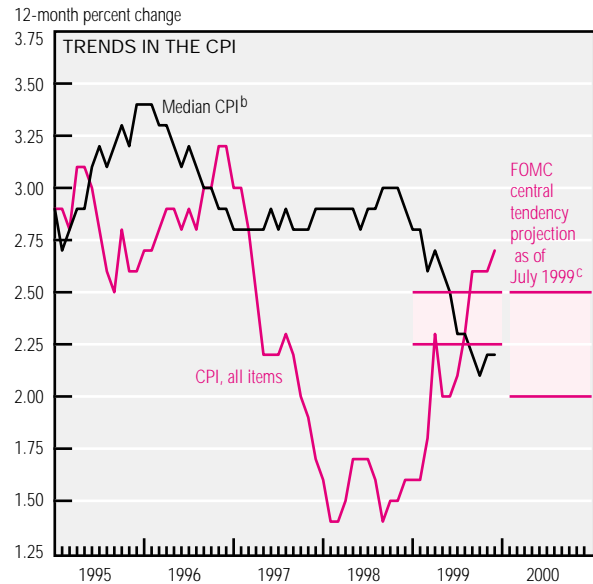


# Inflation and Prices

|                                  | Percent change, last: |                    |        |                    | 1998<br>avg. |
|----------------------------------|-----------------------|--------------------|--------|--------------------|--------------|
|                                  | 1 mo. <sup>a</sup>    | 3 mo. <sup>a</sup> | 12 mo. | 5 yr. <sup>a</sup> |              |
| <b>December Price Statistics</b> |                       |                    |        |                    |              |
| <b>Consumer prices</b>           |                       |                    |        |                    |              |
| All items                        | 2.9                   | 2.2                | 2.7    | 2.4                | 1.6          |
| Less food<br>and energy          | 1.4                   | 2.0                | 1.9    | 2.4                | 2.5          |
| Median <sup>b</sup>              | 2.5                   | 2.8                | 2.2    | 2.9                | 2.9          |
| <b>Producer prices</b>           |                       |                    |        |                    |              |
| Finished goods                   | 3.6                   | 1.5                | 3.0    | 1.3                | -0.1         |
| Less food<br>and energy          | 1.6                   | 1.6                | 0.9    | 1.3                | 2.5          |



a. Annualized.

b. Calculated by the Federal Reserve Bank of Cleveland.

c. Upper and lower bounds for CPI inflation path as implied by the central tendency growth ranges issued by the FOMC and nonvoting Reserve Bank presidents.

d. West Texas Intermediate crude oil.

e. As of January 31, 2000.

SOURCES: U.S. Department of Labor, Bureau of Labor Statistics; Federal Reserve Bank of Cleveland; Bloomberg Financial Information Services; and Dow Jones Energy Service.

Monthly inflation data continued to point higher at year's end, evidenced by a nearly 3% annualized rise in the Consumer Price Index (CPI) in December. For 1999 as a whole, the CPI rose 2.7%, more than a percentage point higher than its 1998 increase. Indeed, last year's CPI performance was about  $\frac{1}{4}$  percentage point above the upper end of the FOMC's projected growth range for 1999. However, the 1999 run-up in retail price growth does not appear to have been broad-based. The median CPI, which re-

duces the influence of extreme price movements, moderated in 1999 (up 2.2% compared to 2.9% in 1998).

Perhaps the single most influential price development in 1999 was the dramatic (140%) spike in crude oil prices, which greatly affected energy-related expenditures. Excluding energy items in the CPI, retail price increases were actually a bit lower last year than in 1998. The impact of energy costs on prices this year is still very uncertain. Higher energy costs will likely affect a broader range of consumer goods prices, at least temporarily. But a reading of the crude

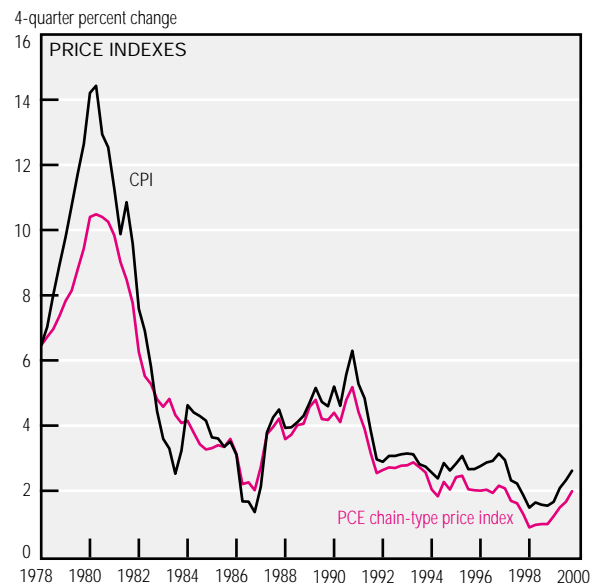
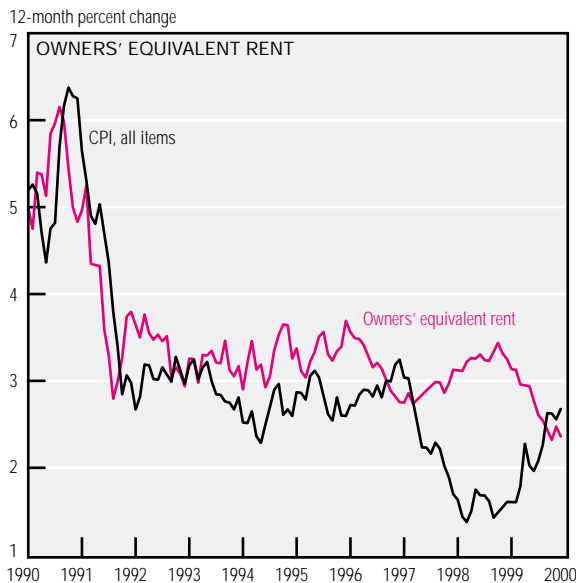
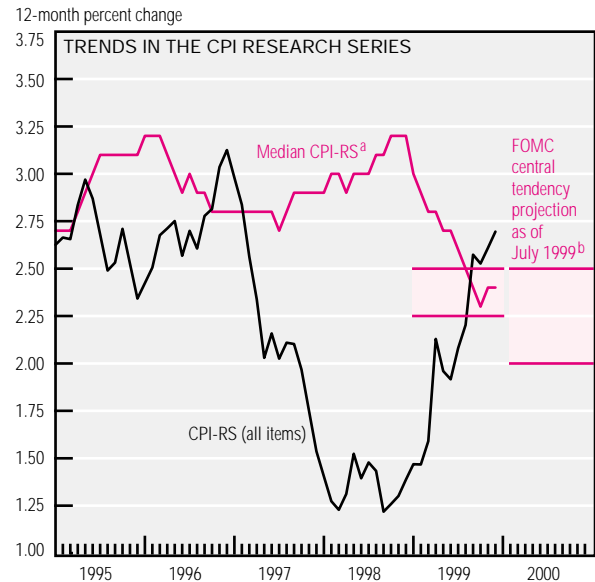
oil futures market suggests that these effects are likely to be short-lived, as investors have priced in a nearly 20% drop in crude oil costs over the course of 2000.

The CPI's behavior last year was also influenced by recent changes in its construction. Since 1978, 20 adjustments to the index have been made, including three major revisions to its market basket. At least six alterations have occurred in just the last three years, the cumulative impact of which is estimated to have

*(continued on next page)*

## Inflation and Prices (cont.)

| Effects of Recent Revisions on the CPI    |                 |   |
|---|-----------------|---|
| Components affected by methodology change | Year introduced | Effect on CPI growth rate (percentage points) |
| Generic prescription drugs                | 1995            | -0.01   |
| Food at home                              | 1995            | -0.04   |
| Home ownership                            | 1995            | -0.10   |
| Rent                                      | 1995            | 0.03  |
| All items (store sample)                  | 1996            | -0.10   |
| Hospital services                         | 1997            | -0.06   |
| Personal computers                        | 1998            | -0.06   |
| All items (updated market basket)         | 1998            | -0.15   |
| All items (averaging technique)           | 1999            | -0.20   |
| All items (item sample)                   | 1999            | -0.05   |
| <b>Total</b>                              |                 | <b>-0.74</b>                                  |



a. Calculated by the Federal Reserve Bank of Cleveland.

b. Upper and lower bounds for CPI inflation path as implied by the central tendency growth ranges issued by the FOMC and nonvoting Reserve Bank presidents.  
SOURCES: U.S. Department of Labor, Bureau of Labor Statistics; U.S. Department of Commerce, Bureau of Economic Analysis; and Federal Reserve Bank of Cleveland.

reduced the CPI growth rate by about 0.6 percentage point per year.

To better distinguish changes in the construction of the CPI from changes in actual inflation, the Bureau of Labor Statistics recently introduced the CPI Research Series—a retail price index dating back to 1978 that is based on current methodology. According to this measure, the recent 12-month trend in retail prices has reverted to its 1995–96 growth rate. A slightly different interpretation of the inflation trend is reflected in a methodologically consistent median CPI. According to this measure,

retail price increases are tracking about  $\frac{1}{2}$  percentage point under their 1995–96 average.

Recent changes in CPI methodology appear to have been motivated, in part, by growing criticism from government officials and economists. Chairman Alan Greenspan has been one critic of the index, most recently questioning the weights the index assigns to certain items. These weights are derived from survey data in which consumers may under-report spending on some items (like tobacco and alcohol) and over-report spending on other items,

notably housing. This latter component was a major contributing force in the upward movement of the CPI between 1997 and 1998.

An alternative inflation measure, called the Chain-type Price Index for Personal Consumption Expenditures, is constructed by the Bureau of Economic Analysis based on the spending patterns reported by businesses. Because this index gives less weight to housing costs (among other methodological differences), it has tended to track about  $\frac{1}{2}$  percentage point below the CPI since 1994.