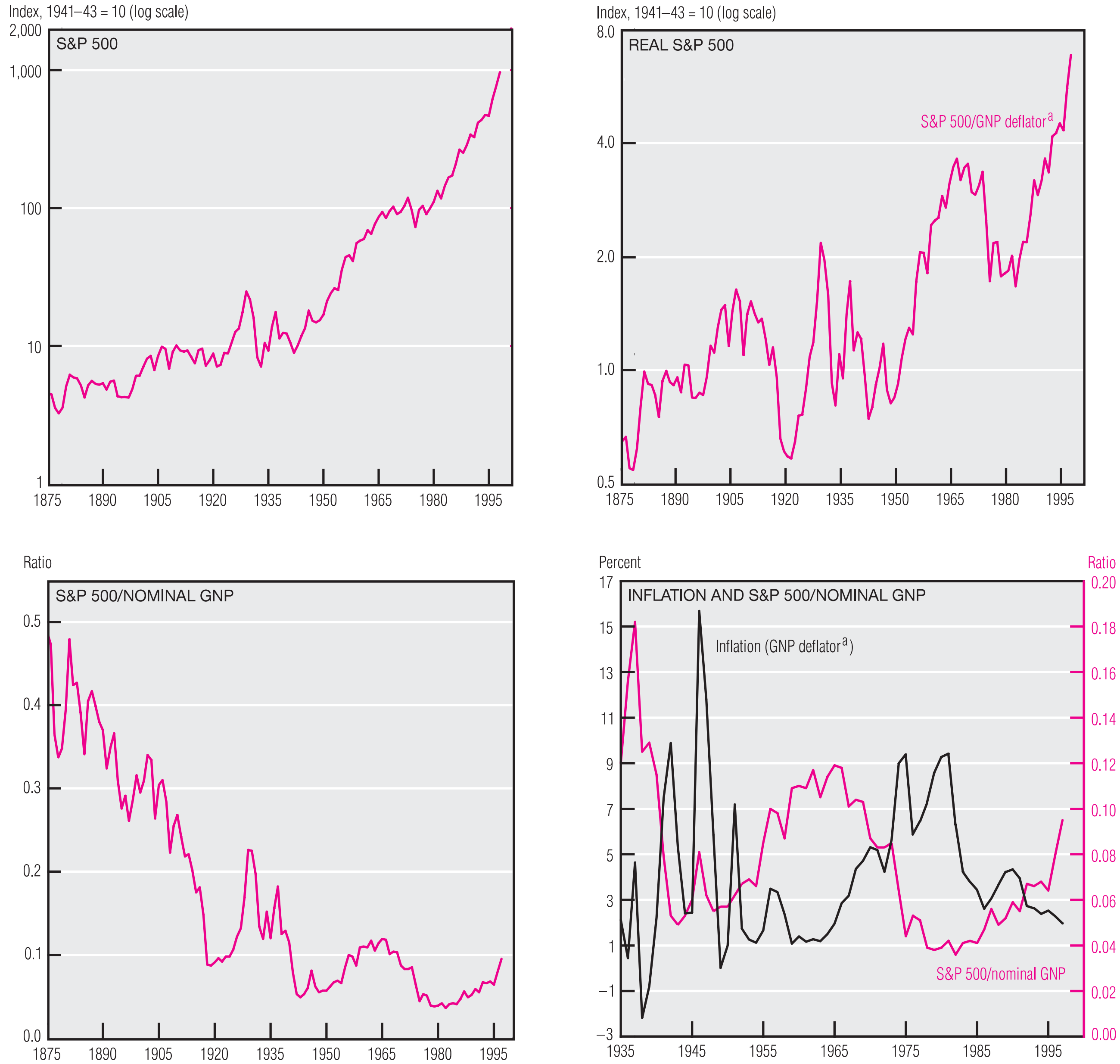
Is the Stock Market Overvalued?



a. GNP deflator, 1980 = 100.
SOURCES: Standard & Poor's Corporation; DRI/McGraw–Hill; and Robert J. Gordon, ed., *The American Business Cycle: Continuity and Change,* Chicago, University of Chicago Press, 1986, pp. 789–95.

With the Standard and Poor's 500 still near the record highs set earlier this year, analysts and investors alike are asking, "Are stock prices too high?" To answer this question, two adjustments are useful.

First, stock prices should be adjusted for inflation. By way of comparison, in measuring output, we typically focus on real output so that we do not get fooled by changes in the general price level. Making a similar adjustment for stock prices still leaves a marked upward trend.

Second, economic theory says that the "fundamental price" of a stock will depend on its dividends —or, more precisely, on the expected present discounted value of its dividends. This expectation is difficult to measure, but should closely mirror changes in real output over the long haul. This means that if stocks are rationally valued, the ratio of the Standard and Poor's (S&P) 500—an index of the market as a whole—to nominal GNP should be fairly stable.

By this measure, current stock prices are hardly remarkable. In fact, the ratio of stock prices to nominal GNP was far higher at the turn of the century than today. Were stocks overvalued then? Since World War II, the ratio has been fairly stable. Relative to output, however, stock prices were higher in the mid-1960s, a time of robust economic growth. Perhaps current stock prices are not so far out of line.

The ratio of the S&P 500 to nominal GNP is high when inflation is low, and vice versa, suggesting that low inflation is good for the market.