



## Stock Prices and Consumption

By historical standards, equity prices now are exceptionally high in comparison with current corporate earnings. In January 2000, the price-earnings ratio (P/E)—the price of a typical stock to the earnings per share—for the S&P 500 was 32.4. Prior to 1999, the average annual P/E ratio for the S&P 500 had never been this high. Such high valuations might indicate that investors expect that corporate earnings will increase in the future or that investors are now willing to accept a lower average rate of return on equities than in the past.

Policymakers and other analysts have expressed concern that high equity prices could increase current consumption and aggregate demand, which could ignite inflation. This concern about asset prices reflects economic theory, which suggests that people choose to consume according to the present value of their lifetime income. Because wealth can be converted to income, or vice versa, an unexpected rise (fall) in wealth increases (decreases) consumption and aggregate demand. Increased demand might require higher interest rates to balance savings and investment, so as to maintain price stability and sustainable growth. Conversely, a large fall in wealth might conceivably cause a sharp decline in consumption and require lower interest rates.

Because equities are an important—and volatile—component of overall wealth, the link between stock prices and consumption has been carefully studied. Has consumption growth been high historically when equity prices were high, as reflected in the P/E ratio? A very simple examination of this issue would be to compare the January P/E ratio for the S&P 500 with annualized aggregate consumption growth of non-durables and services over that year. It is appropriate to restrict consumption growth to nondurables and services as durable consumption goods provide grati-

fication over a long period of time, rather than in just the current period. The chart plots the annual growth of consumption of nondurables and services against the January S&P 500 P/E ratio of the same year. The sample extends from 1889 to 1999. The chart shows only a tenuous relation between consumption growth and asset prices. A similar exercise plotting changes in P/E ratios during a year against consumption growth also fails to reveal a strong pattern.

These inconclusive illustrations are consistent with a long line of research that has examined the relation between asset prices and consumption with limited success. Although there are sound theoretical reasons to believe that the rise in stock market wealth has fueled high recent consumption growth and that consumption is related to wealth in the long run, neither asset prices nor other variables have proven especially useful in predicting future consumption growth. The weakness of the relation makes it difficult to quantify the extent to which recent stock price increases have fueled consumption or to predict the likely consequences of a sharp drop in stock prices.

—Christopher J. Neely



