The Current P/E Ratio: Higher Than You Think

The price-to-earnings ratio (P/E) of the Standard & Poor's composite stock index averaged 27.76 during April 1998, slightly exceeding the P/E of 27 observed during January 1894. This was the highest level observed in any January since 1871 (see the chart, which shows the P/E ratio observed in January from 1871 through 1998).* Yet from a business-cycle perspective, the U.S. stock market had already far surpassed all previous records for high levels of valuation.

In contrast to 1997 and 1998, virtually all previous years with high P/E ratios were either recession years or closely followed the end of a recession. For example, the market P/E reached its previous historic January high of 27 during the relatively severe recession of January 1893 through June 1894. The second highest January P/E ratio was 26.2 in 1931, in the middle of the Great Depression (August 1929-March 1933). Other peak P/E years were 1921 and 1930, which also were recession years, and 1992, which followed a recession lasting from July 1990 to March 1991. Other years with January P/E ratios over 20 include 1888, 1893, 1896, 1934, 1991 and 1998. With the exception of 1998, all of these years occurred either during or shortly after a recession.

High P/E ratios typically occur during or soon after recessions because corporate earnings tend to fall more than stock prices during recessions. Investors rationally expect future corporate earnings to bounce back, so they are willing to pay a relatively high price for a given level of current earnings as they wait for the economy and publicly traded companies to recover. As earnings rise in an expansion, the P/E ratio (roughly, the price paid for a claim on all future earnings) tends to fall.

The 1990s present an interesting contrast to this historical pattern. During every January of this decade, the P/E ratio has been above the average of 13.4 experienced over 1871-1989. More strikingly, P/E levels reached in January 1997 and 1998 are without historical precedent for a mature expansion. At the current level of stock prices, a decline in corporate earnings of 30 percent, as occurred in the recessionary period 1989-91, would cause the market P/E ratio to soar to about 40—a level never before seen in the U.S. stock market. Thus, from a cyclically-adjusted historical perspective, stock prices are unprecedentedly high.

—William R. Emmons

*For these and other historical data, see www.econ.yale.edu/~shiller/chapt26.html

Views expressed do not necessarily reflect official positions of the Federal Reserve System.