

## How Expensive Are Stocks?

People buy assets, such as stocks, to obtain future income. A firm's earnings determine its ability to generate income for investors and therefore should influence its stock price. The ratio of a firm's stock price to its recent earnings-called a P/E ratio-is often used to gauge how expensive a stock is. Because earnings fluctuate and have seasonal patterns, recent earnings are usually summed over the past year to smooth this variation.

The upper chart shows that the conventionally calculated P/E ratio for the S\&P 500 Composite Index is now unusually high by historical standards. In fact, it is higher than it has been since before World War II. This high P/E ratio implies that stocks are unusually expensive relative to their past values. Many analysts predict that future returns will be low as prices grow slowlyuntil they get back in line with earnings.

But past performance might not be a good guide to the future. If recent earnings have been unusually high or low, they might not accurately forecast future gains; conventional P/E ratios, then, might be misleading. Indeed, the lower chart illustrates that earnings fell precipitously during last year's recession, which drove up the P/E ratio. Therefore it might be more sensible to calculate P/E ratios with a less volatile earnings measure. One such measure that captures the rise in earnings with the size of the economy is an exponential growth trend (see the lower chart).

The upper chart shows that the
two methods of calculating P/E ratios have usually tracked each other fairly closely because stock prices have typically been more volatile than earnings. One period in which they diverged was 1991-95, when earnings were unusually low, as they are now.

While the current P/E ratio calculated using the exponential growth trend is still fairly high by historical standards, it is not as extreme as the P/E ratio calculated from earnings over the last year. Hence, stocks now seem considerably less expensive when one compares their price with the exponential trend for earnings rather than with earnings of only the past year.
-Christopher J. Neely


