er, or innovative, the firm may carry a higher P/E ratio. Investors may look to azines such as *Forbes* or *BusinessWeek,* which highlight management strategies arious companies.

Not only is the quality of management important to investors in determining firm's P/E ratio, but the quality of earnings is also important. There are many rpretations of a dollar's worth of earnings. Some companies choose to use conservative accounting practices so their reported earnings can be inter- ted as being very solid by investors (they may even be understated). Other npanies use more liberal accounting interpretations to report maximum earn- s to their shareholders, and they, at times, overstate their true performance. It asy to see that a dollar's worth of conservatively reported earnings (high qual- earnings) may be valued at a P/E ratio of 20 to 25 times, whereas a dollar's rth of liberally reported earnings (low quality earnings) should be valued at a ch lower multiple.

All of these factors affect a firm's P/E ratio. Thus, investors will consider growth sales and earnings, future risk, the debt position, the dividend policy, the quality management and earnings, and a multitude of other factors in arriving at the P/E io. The P/E ratio, like the price of the stock, is set by the interaction of the forces demand and supply. Those firms that are expected to provide returns greater than e overall economy, with equal or less risk, generally have superior P/E ratios.

he Historical Short-Term Earnings Model

ften investors/speculators take a very short-term view of the market and ignore esent value analysis with its associated long-term forecasts of dividends and rnings per share. Instead, they only use earnings per share and apply an appro- iate multiplier to compute the estimated value.

Table 7–5, if we look at Johnson & Johnson's (J&J's) 10-year high and low P/E ratios e get a high average P/E of 20.27 and a low average P/E of 15.27, which gives us an verage of 17.77. From Table 7–2 on page 172 we estimated Johnson & Johnson's 2011 arnings per share to be \$5.35. Using these data, we can come up with high, low, and verage values for 2011.

$$\text{Price} = \text{EPS}_{2011} \times \text{P/E}_{\text{10-year high, average, low}}$$

$$\text{High price} = \$5.35 \quad \times 20.27 = \$108.45$$

$$\text{Average price} = \$5.35 \quad \times 17.77 = \$95.07$$

$$\text{Low price} = \$5.35 \quad \times 15.27 = \$81.70$$

Given that Johnson & Johnson was selling at about \$59 per share at the time of this aluation, we could assume that it appears to be undervalued based on past history. Even at the low P/E, it is undervalued. Every valuation method has its limitations. Although this method is simplified by ignoring dividends and present value calculations, earnings need to be correctly estimated, and the appropriate price-earnings multiplier must be applied. Since the P/E is also a function of expected growth rates the analyst has to consider whether the future growth will be higher or lower than past growth and thereby adjust the P/E appropriately. Unfortunately, even if you have the correct forecast for EPS, there is no assurance that the market will agree with your forecast or your price-earnings ratio. You may have to wait for the price to adjust until the market comes to see things through your eyes. If we were to use four-year average P/E ratios, the average price would fall to \$71.83 with a high of \$80 and a low of \$63.