

The PE (price-earnings) ratio is among the basic tools used to measure how cheap or expensive a stock is. The P/E looks at the relationship between the stock price and the company's earnings. The P/E is the most popular stock analysis ratio, although it is not the only one you should consider. It is a valuation ratio of a company's current share price compared to its per-share earnings. Also sometimes known as "price multiple" or "earnings multiple".

The P/E is calculated by taking the share price and dividing it by the company's EPS (Earnings Per Share that we saw above)

$$= \frac{\text{Market Value per share}}{\text{Earnings per Share (EPS)}}$$

For example: A company with a share price of Rs.40 and an EPS of 8 would have a P/E of:  $(40 / 8) = 5$

EPS is usually from the last four quarters (trailing P/E), but sometimes it can be taken from the estimates of earnings expected in the next four quarters (projected or forward P/E). A third variation uses the sum of the last two actual quarters and the estimates of the next two quarters. In calculating the PE multiple, various time-frames can be used to arrive at the earnings per share - annualised quarterly earnings or future earnings. However, the commonly used time-frame to calculate price-earnings multiple is the trailing 12-month period.

### **Indication of Price-Earnings Ratio (P/E Ratio)**

In general, a high P/E suggests that investors are expecting higher earnings growth in the future compared to companies with a lower P/E. However, the P/E ratio is usually more useful to compare the P/E ratios of one company to other companies in the same industry, to the market in general or against the company's own historical P/E. It would not be useful for investors using the P/E ratio as a basis for their investment to compare the P/E of a technology company (high P/E) to a utility company (low P/E) as each industry has much different growth prospects.

### **Why is the price earning ratio important to stock traders?**

This ratio is used by traders to get a basic assessment of what the market will pay for the earnings of a company. The higher the price earnings ratio is, the more money the market is willing to pay for earnings from a company. Some investors stay away from stocks that have a high price earnings ratio, and this may be because they think the stock is overpriced. But a high price earnings ratio may also mean

that there are high hopes for the company on the market. A low price earnings ratio may mean that there is no confidence in the company on the market, but that does not make this stock a loser. Some stocks, called sleepers, are good stocks that get overlooked by the market. These sleeper stocks are also known as value stocks, and many traders have made a killing by recognizing these stocks when the market does not. There is no right or good price earnings ratio. One investor may see a value stock while another investor disagrees and sees junk stock. The right price earnings ratio is determined by the individual investor.

The price earnings ratio is one of the most frequently used stock analysis tools. The price earnings ratio can mean different things to different traders, depending on their trading strategies. One trader may see a stock with a low price earnings ratio and think of the stock as a loss, and another trader may see the same stock and same low price earnings ratio as a sleeper or value stock that is worth investing in. Calculating the price earnings ratio is an important financial tool used by market traders to help them predict the market.

### **Is lower PE better?**

Value investors tend to adopt a low PE as a rulebook for an investment. While a low PE multiple is desirable, it would be inappropriate to adopt this ratio as a stock-picking tool across industries. Technology stocks tend to quote at trailing 12-month PE multiples between 30 and 40 compared to basic industry stocks that usually have single-digit PE multiples. As such, investors would be better off adopting this tool for peer comparisons within the same sector.

This tool has its own defects; it bypasses investment opportunities in companies that are making losses and are on the verge of a turnaround. For instance, investors who focus on the PE multiple alone may have missed out on stupendous gains in India Cements, which has more than doubled within a space of a year. In December 2005, the company reported a loss on a trailing 12-month basis; however, this December, the stock quotes at a price-earnings multiple of 20.

The price-to-earnings ratio (P/E ratio) is calculated as a stock's current share price divided by its earnings per share (EPS) for a twelve-month period (usually the last 12 months, or trailing twelve months (TTM)). Most of the P/E ratios you see for publicly-traded stocks are an expression of the stock's current price compared against its previous twelve months' earnings.

A stock trading at Rs. 40/share with an EPS of Rs. 2 would have a P/E of 20 ( $40/2$ ), as would a stock priced at 20/share with an EPS of 1 ( $20/1$ ).

These two stocks have the same price-to-earnings valuation - in both cases investors pay 10 for each dollar of earnings.

But, what if a stock earning Rs. 1 per share was trading at Rs. 40/share? Now we'd have a P/E ratio of 40 instead of 20, which means the investor would be paying Rs. 40 to claim a mere Rs. 1 of earnings. This seems like a bad deal, but there are several factors which could mitigate this apparent overpricing problem.

First, the company could be expected to grow revenue and earnings much more quickly in the future than companies with a P/E of 20, thus commanding a higher price today for the higher future earnings. Second, suppose the estimated (trailing) earnings of the 40-P/E company are very certain to materialize, whereas the 20-P/E company's future earnings are somewhat uncertain, indicating a higher investment risk. Investors would incur less risk by investing in more certain earnings instead of less certain ones, so the company producing those sure-thing earnings again commands a higher price today.

Secondly, it must also be noted that average P/E ratios tend to vary from industry to industry. Typically, P/E ratios of companies in very stable, mature industries which have more moderate growth potential have lower P/E ratios than companies in relatively young, quick-growing industries with more robust future potential. Thus, when an investor is comparing P/E ratios from two companies as potential investments, it is important to compare companies from the same industry with similar characteristics. Otherwise, if an investor simply purchased stocks with the lowest P/E ratios, they would likely end up with a portfolio full of utilities stocks and similar companies, which would leave them poorly diversified and exposed to more risk than if they had diversified into other industries with higher-than-average P/E ratios.

However, this doesn't mean that stocks with high P/E ratios cannot turn out to be good investments. Suppose the same company mentioned earlier with a 40-P/E ratio (stock at Rs. 40, earned Rs. 1/share last year) was widely expected to earn Rs. 4/share in the coming year. This would mean (if the stock price didn't change) the company would have a P/E ratio of only 10 in one year's time ( $40/4$ ), making it appear very inexpensive.

The important thing to remember when looking at P/E ratios as part of your stock analysis is to consider what premium you are paying for a company's earnings today, and determine if the expected growth warrants the premium. Also compare it to its industry peers to see its relative valuation to determine whether the premium is the worth the cost of the investment.

### **Can a stock have a negative price-to-earnings (P/E) ratio?**

Yes, a stock can have a negative price-to-earnings ratio (P/E), but it is very unlikely that you will ever see it reported. Although negative P/E ratios are mathematically possible, they generally aren't accepted in the financial community and are considered to be invalid or just not applicable. We'll explain why this is.

The price-earnings ratio is arguably the most popular fundamental factor used by investors who try to determine the attractiveness of an asset's current value and, more importantly, whether the current price level makes for a good buying opportunity. Generally speaking, a low P/E value suggests that an investor needs to pay a low amount for each Rs of earnings made by the company. This could be used by investors as a sign that the given asset is undervalued and a potentially good investment at current levels. Conversely, a relatively high P/E value is used to suggest that investors will need to pay a high amount for the company's earnings, which can then be used to suggest that the asset is relatively expensive and that it may be a good idea to wait for a better entry.

Mathematically, there are only two ways for a ratio of this form to have a negative value:

1. The numerator falls below zero
2. The denominator falls below zero.

In the case of the P/E ratio, it is impossible for the numerator to fall below zero because this represents the price of the asset. However, the denominator, which is equal to the earnings of the company, can become negative. EPS values below zero mean that the company is losing money and is the reason why it is possible to have a negative P/E ratio.