# PROJECT APPRAISAL AND INVESTMENT ANALYSIS 

LECTURE 4
PRICING PROJECT COST AND
BENEFIT

Romaisa Khan

## MARKET PRICE

The market price is the current price at which an asset or service can be bought or sold. The market price of an asset or service is determined by the forces of supply and demand. The price at which quantity supplied equals quantity demanded is the market price.

## MARKET PRICE CONT.

- Economic surplus refers to two related quantities: consumer surplus and producer surplus.
- Producer surplus may also be referred to as profit: it is the amount that producers benefit by selling at the market price.
- Consumer surplus is one way to determine the total benefit that consumers receive from their goods and services.
- Economic surplus is the sum total of consumer surplus and producer surplus.


## MARKET VALUE RATIOS

The market value ratios are important for investors, management, etc as these ratios are used to decide whether the valuation of the shares are overvalued, undervalued with the market.

These ratios are used for making investment decisions in stocks of companies.
The decision of buying and selling shares is very important. And if not done at the right price then the money invested can turn into losses.

## MARKET VALUE RATIO

The market value ratios are the financial metrics which are used to evaluate the stocks' worth of publicly traded companies. There are different market value ratios used by the share market investors and some of the most used ratios are mentioned below;

Price-To-Book (P/B) Ratio
Price-To-Earnings (P/E) Ratio
Dividend Yield
Market Value per Share
Market to book ratio
Earnings per Share
Book Value per Share

The market value ratios are important for the investors as these ratios are used to lecide the prices of the shares, whether overpriced or undervalued or at par with the narket. These ratios are used for making share investment decisions.

## Market Value Ratios

Price/
Earnings or
PE Ratio

It is used to check whether the shares are over or underpriced. It is measured as the price of the share in the current time against the earnings the company has reported for the financial period on per share basis.
Formula: Price/Earnings or PE Ratio = Price per share / Earnings per share (EPS)
This ratio shows the earnings of the company earned in a particular time period against the number of the company's shares which are outstanding.
Formula: Earnings per Share (EPS) = Net Profit (Earnings) / total number of shares outstanding in the market

This ratio shows the relation between the book value of the company and the outstanding shares in the market.
Formula: Book Value per Share = (Shareholder's Equity - Preference stock) / Outstanding numbers of shares.

This is the ratio which is obtained by dividing the total market value of the shares of the company by the number of the shares which are outstanding.
Formula: Market Value per Share = Market Capitalization / Outstanding shares in the market.

Investors check both the price and dividend earnings from a share so, this ratio helps in measuring the amount of dividend distributed in a year against the number of shares outstanding.
Formula: Dividend Yield = Total dividend paid in a year / Number of shares outstanding.
This is the ratio which shows the relation between the market value of a share to its book value and thus one can easily figure out the difference between the two to evaluate whether the prices are under or overvalued for the shares
Formula: Market to Rook Ratio = Price of one share / Rook value of one share

## FORMULAS

- The formula for each market value ratio is as follows:
- Price/Earnings or PE Ratio = Price per share / Earnings per share (EPS)
- Earnings per Share (EPS) $=$ Net Profit (Earnings) / total number of shares outstanding in the market
- Book Value per Share = (Shareholder's Equity - Preference stock) / Outstanding numbers of shares.
- Market Value per Share = Market Capitalization / Outstanding shares in the market.
- Dividend Yield = Total dividend paid in a year / Number of shares outstanding.
- Market to Book Ratio = Price of one share / Book value of one share.


## THE PRICE-EARNINGS RATIO

## Price/Earnings-to-Growth (PEG) Ratio

- The PEG ratio enhances the P/E ratio by adding in expected earnings growth into the calculation.
- The PEG ratio is considered to be an indicator of a stock's true value, and similar to the P/E ratio, a lower PEG may indicate that a stock is undervalued.
- The PEG ratio is used to determine a stock's value while also factoring in the company's expected earnings growth, and it is thought to provide a more complete picture than the more standard $\mathrm{P} / \mathrm{E}$ ratio

PEG Ratio= Price/ EPS Growth
where:
EPS = The earnings per share


Figure 18.4 Earnings growth for two companies


Figure 18.5 Price-earnings ratios

## EXAMPLE OF PEG RATIO

This example shows why analysts must be careful in using P/E ratios. There is no way to say the P/E ratio is overly high or low without referring to the company's long-run growth prospects, as well as to current earnings per share relative to the long-run trend line. Nevertheless, Figures 18.4 and 18.5 demonstrate a clear relation between P/E ratios and growth. Despite considerable short-run fluctuations, FedEx's EPS clearly trended upward over the period. Con Ed's earnings were essentially flat. FedEx's growth prospects are reflected in its consistently higher P/E multiple.

## MARKET VALUE RATIOS USES

The usage of market value ratios is varied. And some of the most important uses are as follows -

- It gives an insight to the investor about the price of the shares, financial and managerial efficiency of the company.
- It also helps in the analysis of the future prospect of the company.
- This is required to analyze the different trends in the stock market.
- It can be used to find out the undervalued shares which have high potential to earn money in the future.


## STOCK MARKET PRICE AND PROBLEMS

Stock market is a financial market, where stocks and bonds are used to buy and sell. Shareholders i.e. investors exchange their shares in the stock market. The current market price of a share is determined by the demand and supply of that particular share.

Inefficient Stock Market It refers that type of stock market which is not stable and healthy for investors.

## STOCK MARKET PRICE AND

 PROBLEMSMarket Price and related problem of a Stock Market

- Financial literacy or poor knowledge about the Stock market.
- The reasons of inefficient capital market is the lack of accurate information which has huge influence over the stock market.


## STOCK MARKET PRICE AND <br> PROBLEMS

- Rumors spread by media hampers the efficiency of stock market.
- There are a number of fake companies listed in share market. (They have no physical existence. But the shares of those company's are exchanging at a high rate in the market).
- Sever security issues.
- Instable economy


## REFERENCES

## Book

Zvi Bodie, Alex Kane, Alan K., Essentials of Investment, McGraw Hill 11 ${ }^{\text {th }}$ Ed (The Price-Earnings Ratio Page,587)
https://efinancemanagement.com/financial-analysis/market-value-ratios

