



STOCK COMPUTATIONAL TOOLS

Beta

A measure of the volatility of a stock relative to the overall market. A beta of less than one indicates lower volatility than the market; a beta of more than one indicates higher volatility than the market. Generally Consumer and utility stocks have low beta compared to cyclicals and industrials.

Book Value

It shows the **historic cost of the assets as reduced by the depreciation** . It is significant for evaluating Banking company stocks. Stocks of companies holding large blocks of land and other hidden assets are evaluated on this basis. It does not make sense to look at book value for companies in high growth businesses.

Shareholders funds

No. Of Equity shares

Cost of Capital

This is the cost of borrowing funds from the market. **The ROE and the ROCE should be more than the cost of capital** or else it would make little sense for the company to borrow funds . **For stocks in the emerging markets the cost of capital should be 300 to 400 basis points above the risk free rate of return .**

Risk free rate of return + Equity risk premium.

Debt Equity Ratio

Long-term debt divided by shareholders' equity, showing relationship between long-term funds provided by creditors with respect to the Shareholders funds. **A high Debt Equity ratio indicates high risk while a lower ratio may indicates lower risk** . Short-term debt is not

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included as long as cash is greater than short-term debt. As equity increases relative to debt, the company becomes a more attractive investment. Finally, **BOND debt is preferred to BANK debt because bank debt is due on demand. Companies that repay back debt experience PE expansion compared to companies that take on debt.**

Long term loans

Shareholders Funds

Delta

The delta factor is calculated by dividing the amount of price difference of the option value by the amount of price difference in the underlying stock. For example if the price of the stock option increases by 2% when the stock price went up 4%, you would have a delta factor of 0.50 arrived at by dividing 2% by 4%. This means you would expect your option to increase at half the rate of the stock

Dividend yield

This is the current yield on a stock. **Dividend paying companies have in built bottoms. When the stock prices fall too much their dividend yield becomes attractive enough for existing investors to hold on as well as for new investors to get in.** This is a basic criterion for a value investor **Stocks that pay dividends are obviously favored over stocks that don't**. Dividend paying stocks are likely to fall less in an economic downturn As stock prices fall with no fall in dividends, the dividend yield rises attracting new investors. Finally, if you do buy a stock for dividend, you should **make sure that the company has a history of paying the dividend** in both good times and bad.

Dividend per share

Market Price

Discounted cash flow statement

Discounted Value of free cash flow that a business generates during a particular period of time. **Companies embarking on a major Capital expenditure program will experience reduced free cash flow and lower valuations. A rise in interest rates increases the cost of capital and also reduces valuations** Most of the analyst fraternity uses this concept. The risk free rate is used as the discount rate. **This**

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evaluation tool is helpful only for evaluating stable businesses rather than high growth businesses .

Earning per share (EPS):

This is the **net income divided by the number of shares outstanding** however; both the numerator and denominator **can change depending on how you define "earnings" and "shares outstanding** . The E.PS as an absolute figure means nothing and is significant only when viewed in relation to the price of the stock.

Net Profits

No. Of Equity Shares

Enterprise Value

The sum total of market cap and debt. Enterprise value for cash rich companies is market cap as reduced by cash. **During bear markets smart Investors are able to spot a number of companies that are available at zero or negative enterprise value. In 2002 Trent was available at Rs 60 when it had Rs 100 as cash on its balance sheet.** The stock has been a multibagger since.

Market Capitalization + Debt

EVA

Economic Value added is the excess of ROCE over the cost of capital . Companies with higher EVA's are able to generate higher PE's and are generally wealth creators compared to companies that have a low or negative EVA.

(ROCE – Cost of capital) Capital employed

Free Cash flows

The amount of cash left in a company after all expenditure both revenue and capital has been accounted for. This is also known as the net addition

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to cash. **Free cash flow per share = Cash earnings - capital spending.** Companies that generate substantial free cash flows make for very good investments.

Growth in Stock Price vs. Growth in earnings

A dangerous signal is generated when the stock price of a company increases faster than its earnings. Invariably this leads to a higher PE multiple and makes the stocks liable for decline. Generally it is better to invest into businesses their earnings growing at an equal pace to their stock prices.

Inventory Growth vs. Sales

Inventories that are "piling up" and are not sold signal poor business . **If the growth in inventories is greater than the growth in sales, then the company's products are piling up, leading to a potential decline in the price as this information spreads.**

Market Capitalization

The market cap is the amount of money that the acquirer would need to buy back all the outstanding shares . In case of absurd valuations the market cap reaches stupid levels. During the 2000 tech boom Himachal Futuristic sold at a market cap of Rs 20,000 crores .Multibaggers (stocks that go up a number of times) generally have a very small market cap to start with. Companies with a market cap of more than US \$ 1 billion are classified as large caps, between US \$ 250 million to 1 \$billion as mid caps and less than 250 million as small caps. Read the section on market cap argument

Market price x No. Of Equity shares

Market PE

Generally the weighted average of all the 30 stocks in the BSE Sensitive Index is termed as the market PE. The Market PE is inversely related with interest rates. This means that if interest rates go up the market PE contracts and vice versa. Falling interest is a rate is bullish for markets while rising interest rates are a bearish signal.

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Risk free rate of return

Market Cap to Sales

It is the number of times the sales exceeds the market cap. **For companies in growth businesses the market cap to sales could be about 3 times whereas for companies in low growth businesses it should be equal to 1** .The sales number are the most difficult to fudge and therefore the market cap to sales is a more reliable indicator in corporate analysis. In the 2000 technology bubble Infosys traded at a market cap to sales of more than 100!

Market Cap

Sales

Overpriced stock

There are many ways to indicate an overpriced stock but generally a stock will be categorized as overpriced when its PE would exceed the sustainable growth rate . For instance if Hindustan Lever Ltd (HLL) trades at a PE of 25 and investors expect the company to show an earnings growth of 10% over the next few years the stock would be considered over priced. **Companies in a turnaround mode merit investment even while they have an indefinite PE For small market cap companies and companies that have a lot of inherent value the PE could be less then the growth rate.**

PE > sustainable growth rate

PEG

This is known as the Price earnings to growth ratio. It should be less then equal to 1 Growth in Earnings vs. the P/E Ratio . The ratio will be lower for slow growers and higher for fast growers. An important indicator that is related to

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PE

Sustainable Growth

Percent of Sales

If a company appears attractive because of a particular product, one must see how much that product contributes to the overall sales of the company. If the percentage is low, then even a very successful product will not mean much to the company's bottom line. In the technology boom many people bought L&T and Siemens hoping to make money from their software divisions but their stock prices hardly moved since the weight of software was a very small part of their total sales.

Price Earnings (PE)

This is one of the most widely used tools in sizing up stocks. Simply put, **it is how much investors are willing to pay for a rupee of the company's earnings**. It is also termed as referred to as a "multiple." When you calculate a P/E based on the past year's earnings, the P/E is called "**trailing**." Another way to determine a P/E is to substitute future earnings projections. This is the "**forward**" P/E (also referred to as the "anticipated" P/E). Another way of looking at the PE This as the **number of years it will take to earn back the initial investment** .

Market price

EPS

Price to BookValue

This is used mainly for Banking (where the book value is adjusted for Non performing assets) and old economy stocks. It is defined as the number of times the market price equals the book value of the stocks.

Market Price

Book Value

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Profit margin

The profit margin after taxes = (Sales - all costs including depreciation, interest and tax) /total sales. As profit margins vary widely across industries, comparing profit margins among different companies make sense only within the same industry or to industry averages. **The company that has the highest profit margin is also the lowest cost producer. Margins can be increased either by increasing sales or by decreasing cost .** Since Selling price is seldom in the hands of the company it increases margins generally by reducing costs. The company with the largest profit margin will be the company that is most likely to survive in an economic downturn.

Return on Equity (RoE)

Return on Equity (RoE) is an **indicator of how efficiently the shareholders funds (Equity) are being used** . Companies having a **higher RoE tend to be wealth creators and companies having an RoE of less then 15% tend to be wealth destroyers . Normally higher the RoE higher the PE** . Companies that are engaged into **commodity businesses have lower RoE's** compared to the ones that are engaged into high growth businesses. As with the PE **Companies that are in the initial stages of growth and are available at small market caps or the ones, which are yet to see the earnings hit a peak, can be bought in spite of having a low RoE. Commodity companies exhibiting very high RoE's are a sign of danger since that would encourage new entrants to rush in and push prices down.**

EPS

Book Value

Return on Market Cap

The **percentage that profits that can be earned if an investor buys all the shares from the market.** It is theoretically equal to the inverse of the PE (1/PE)

Net Profits

Market Cap

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Under valued stock

For an **undervalued stock the PE should not exceed the growth rate** . For instance if Hindustan Lever Ltd trades at a PE of 25 and investors expect the company to show an earnings growth of 40% over the next few years the stock would be considered under priced. Similarly **for companies having inherent value either in terms of cash, property or other hidden assets or companies that have a very small market cap the PE to growth can be ignored** .

PE < growth rate