RATIO ANALYSIS OF STOCKS

IPO ANALYSIS 2022 (FAC)

Need for ratio analysis

- Not always possible to value a company and compare it with others only qualitatively and through sentiments analysis.
- Ratios often let investors compare companies as they indicate profitability, debt and asset management, as well as help avoid misleading signs.

Types of Ratios for analysis

- Valuation ratios (P/E ratio, P/S ratio etc)
- Leverage ratios (D/E ratio, Debt ratio etc.)
- Liquidity Ratios (Current ratio, Quick ratio etc.)

Important terms and concepts

- Revenue vs earning - Revenue is what the company makes by selling its products, while earnings are what it makes after deducting all expenses. Say Riot Games makes 10000$ (its revenue) selling 100 video game copies of 100$ each, but after paying its taxes (500$), paying its employees (2000$) and paying for its offices and setups (2000$), its left with only 5500$, which are its earnings.
- Assets - Objects a firm owns are part of its assets; e.g., a welding machine for a tools company is an asset.
- Liabilities - Amount, or material objects that a company owes. A building, for which a company has to pay, for example, is a liability.
- Book Value - The company's value if it liquidates all it's assets and pays back all its liabilities.

Valuation Ratios

1. P/E ratio :

- Price to earning ratio - price of stocks (market price per share) / Earning per share = (Profit after tax/total no. of shares). Too much?
- Basically shows how much the shares are overvalued or undervalued compares to the company's earnings.
- A high P/E ratio shows the company is overvalued, while a lower ratio shows its undervalued, and its cheaper.

- DOES NOT take into account debts

Valuation Ratios

2. P/S ratio :

- Price to sales ratio - price of stocks (market price per share) / Sales per share = (Total Sales(or) Revenue/#shares).
- Use for small companies that hardly have any earnings, but do have revenue. Same goes for newly established companies as well.
- Revenue tends to be a stabler metric than earnings.

- **DOES NOT take profitability into account.**

Valuation Ratios

3. P/BV ratio :

- Price to sales ratio - price of stocks (market price per share) / Book Value per share = (Book Value/#shares).
- Base metric, Book Value, tends to be a stabler metric than the other metrics we talked about.

- DOES NOT take profitability into account.

Leverage/Solvency ratios

Used to assess company's capital on debt and equity, and indicates the solvency, financial obligations and the ability to meet those obligations.

Differs from Liquidity ratio in terms of the time-frame considered; Liquidity ratios focus on how easily the company can meet short term obligations, while Solvency ratios focus on the long term well being.

Leverage/Solvency ratios

4. Debt Ratio

- Shows how much of the company's assets are funded by equity and how much by debt.
- Is calculated as = Total debt/ Total Assets
- A higher Debt ratio shows that most of the company's assets are met by debt, hence more liabilities, and the company may be at a risk of defaulting if the interest rates increase.

Leverage/Solvency ratios

5. Debt to equity Ratio

- Shows how much of the company's assets are funded by equity and how much by debt.
- Is calculated as = Total debt/ Shareholder's equity

Liquidity Ratios

6. Current Ratio

- Is calculated as the ratio of Current Assets and current Liabilities of a company
- Indicates the ability of a company to pay off its short term obligations, due within a year.
- A current ratio greater than 1 is normally desirable, but a very high current ratio indicates an inefficient management of assets.

Liquidity Ratios

7. Quick Ratio

- Is calculated as (Current Asset - Inventory)/ Current Liability.
- Indicates the ability of a company to pay off its short term obligations, due within a year, however, takes into account only the most liquid assets, or those assets which can be converted into cash most quickly.
- An acid test to determine a company’s financial health.

RETURN ON EQUITY (ROE)

- Calculated as the ratio of Net Income to the Average SHareholders' equity.
- Since the Average Shareholders' equity can be equated to the Assets minus debts of a company, it can be thought of return on Net Assets, or how good is the company able to use the equities to generate profit.
- A good RoE shows the management is efficient in converting investors' money into profit.

GENERAL POINTS TO BE KEPT IN MIND

- Do not use a single ratio in isolation to judge a company's fundamentals. Rather, use a combination of ratios of different types to do so, as well as to compare companies.
- In general, ratio analysis is done on companies within the same sector, as various sectors have different debt requirements etc.