

Chapter 2

Traditional Approach for Stock Analysis

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Chapter 2: Traditional Approach for Stock Analysis

The objective of this chapter is to show text book approach for valuation of equity shares like fundamental and technical analysis. The analyst uses information provided in financial statement or price related data and applies the following methods to forecast shares price.

2.1 Fundamental Analysis

Fundamental analysis deals with analyzing movement in stock price by using financial and economic analysis. It may include the data like company's financial report and other information for example estimate of growth and economic wide changes etc. This analysis will give what should be the intrinsic value. If intrinsic value of the stock is higher than the present market price investor will prefer to purchase the stock with the expectation that it will rise and reach to the intrinsic value. If intrinsic value of the stock is lower than the market price then the investor will sell the stock with the expectation that the market price will drop and reach to intrinsic price of the stock.

For the purpose of calculating the intrinsic value of the stock the fundamental analyst first analyze the macro-economic factors and then after analyze the industry environment in which the company operates.

2.1.1 Equity Valuation Model

Analysts frequently study the balance sheet of the firm to calculate valuation of assets. Generally three measures for valuation are calculated based on the balance sheet i.e. book value, liquidation value, and replacement cost.

Balance Sheet Valuation Methods

Book Value

Book value is the most common valuation measures. The book value per share is defined as the ratio of Net worth (paid up equity capital plus reserves and surplus) of the company and number of outstanding equity shares. In financial accounting it is being roofed strongly and therefore can be measured comparatively easily. Because of

this, it is offered as an objective measure of value by its proponent. An in-depth inspection indicates that what is viewed as 'objective' is based on accounting conventions and policies which are prone to subjectivity and arbitrariness. The book value measure is also criticized on the ground that the past balance sheet data on which it is based on frequently different from the present economic value. Balance sheet data does not reveal the earning capacity and therefore the book value per share cannot be viewed as a good estimate of right investment value.

The equity share which is traded on stock market at a price lower than the book value is usually believed to be undervalued or relatively less riskier than those shares of companies trading at higher price than the book value. As majority of companies are traded in the market at higher price than the book value per share so the company whose share is trading at lower price than the book value may have good chances of price appreciation.

Liquidation Value per Share

It is the value remains left after liquidating all assets of the company and payment given to all the creditors of the firm and preference shareholders then divided by the Number issued equity shares. If this value is more than the market value of the share then it is considered that the share is undervalued and if it is lower than the current price then it will considered as overvalued. This method suffers from limitation that it is very difficult to calculate the liquidation value of the assets of the company. If the company is undervalued then the other company may try to take over it and its impact is observed on the share prices of investors.

Replacement Cost of Asset

The replacement cost of company's assets less liabilities. This method used by analyst on the supposition that the market value of firm should not be more than the replacement cost of assets otherwise it will attract other firm to enter in the industry. The ratio of market value and replacement cost should be one in long run as per the Tobin q (theory given by James Tobin). In reality the empirical research has found that this ratio significantly deviate from 1 in long run

This method suffers from the limitation that it does not consider the organization capital not publicized on balance sheet. Organizational capital includes the value generated by the employee, customer, good supplier relationship and manager's mutual beneficial relationship.

2.1.2 Quantitative Analysis

Profit Margin Analysis

Profit and loss statement of the company includes Gross profit, Operating profit, Profit before tax, Net profit. Profit margin is calculated as percentage of Net sales/Revenue. This profit margin percentage can be used to compare the performance of the company over 3 to 5 years past performance data and to compare the performance of the company with peer companies of the industry to judge the relative performance of the company. This gives an idea of percentage of profit the company earned by sales generated. By looking to the trend of profit margin investor is taking decision to hold or sell or buy decision. If trend is positive the investors may think to buy it.

$$\text{Gross profit Margin} = \frac{\text{Gross Profit}}{\text{Net sales}}$$

$$\text{Operating Profit Margin} = \frac{\text{Operating Profit}}{\text{Net sales}}$$

$$\text{Pretax Profit Margin} = \frac{\text{Pretax Profit}}{\text{Net sales}}$$

$$\text{Net Profit Margin} = \frac{\text{Net profit}}{\text{Net sales}}$$

Gross Profit Margin

A company's cost of goods sold (cost of material, labour and manufacturing related overhead) should be deducted from the company's sales or revenue. The company which has higher profit margin ratio is considered as better and preferred by investors.

Operating Profit Margin

Operating profit margin is derived by abstracting operating expenses from gross profit of the company. Operating expenses include the administrative and selling expenses. If the operating profit of the company is higher, it is assumed that the company manages its operations effectively. Positive or negative trend in this ratio is considered as impact of management decisions. This ratio is highly preferred by investors for inter-company comparison

Pretax Profit Margin

This profit margin is considered very important because the company is managing tax liability in different manner as per country's corporate tax law and can show its net profit margin very lucrative.

Net Profit Margin

Net profit margin is calculated by subtracting the tax from the pretax profit margin.

Return on Assets

This ratio shows how efficiently the company is using its assets. It shows the percentage of earnings of the company to its total investment in the company. It proves the caliber of the management. It is estimated by comparing net income with the average total assets.

$$ROA = \frac{\text{Net Income}}{\text{Average Total Assets}}$$

Return on assets is also affected by stage of the industry in product life cycle like introduction, growth, maturity and declining stage.

Limitation of ROA: The different industries require different level of investment in assets, like capital intensive industry requires more investment in fixed assets in comparison to service industry, so while considering the return on assets ratio the service industry may be preferred with a relatively high ROA because of a low denominator number. So it is advisable that while considering the ROA the investors

should use this for peer company comparison of the same industry or for comparing performance of the company with historical data.

Return on Equity

The return on equity ratio calculates the viability of the capital investment in business by equity share holders. Managerial efficiency and business success can be measured through this ratio. It shows the association between the net income after tax, interest and preference dividend.

$$ROE = \frac{\text{Net Income after tax, Interest and Preference Dividend}}{\text{Equity Share Holders' funds}}$$

Equity share holders' fund

$$= \text{Paid up equity capital} + \text{Reserves and surplus} \\ + \text{Net Profit} - \text{Miscellaneous Expenditure}$$

This ratio will give result of rupee earned on investment done by shareholder of the company. This ratio can be used to compare the performance of the company with peer company of industry.

Limitation: This ratio has some weaknesses like if the company has disproportionate amount of debt capital in the capital structure then in that case the company which has higher amount of debt capital and small equity capital will show better picture with small amount of net profit because the denominator amount is small.

Return on Investment

This ratio measure the operational efficiency and borrowing policy of the company. It shows how efficiently the capital employed in the company. The components of capital employed include shareholders fund and long term loan. Loan is always preferred by good performing company because it earns return on investment higher than the interest that to be paid on loan. It will be advantageous to equity holder because they will get higher return.

$$ROI = \frac{\text{Net Profit Before tax, interest and dividends}}{\text{Capital Employed}} \times 100$$

Capital Structure Ratio or Solvency Ratio

Solvency means ability of the firm to pay its liabilities (Long term). It is accepted that company must have sufficient long term funds to finance its long term liabilities.

This includes following ratios:

- (1) Debt Equity Ratio
- (2) Interest Coverage Ratio
- (3) Proprietary Ratio

Debt Equity Ratio

This ratio is considered to judge long-term finance policy of the firm. It establishes connection between long term loan and owner funds. Debt is the long term loan which consists of debenture, loan from any financial institution, bank, public deposit, term loan and mortgage loan. It has maturity period of more than one year.

Shareholders' fund

$$\begin{aligned} &= \text{Equity share capital} + \text{Preference share Capital} \\ &+ \text{Reserves and surplus} + \text{Securities Premium} - \text{Net Loss} \\ &+ \text{Fictitious Assets (Preliminary Expenses} \\ &+ \text{Discount on issue of equity share} \\ &+ \text{Underwriting commission)} \end{aligned}$$

$$\text{Debt Equity Ratio} = \frac{\text{Debt}}{\text{Equity}} \text{ or } \frac{\text{Long term loan}}{\text{Shareholder's fund}}$$

The ideal debt equity ratio is 2:1. This means that debt capital if used by company two times than the shareholders' funds, it gives benefit to equity shareholders by way of higher returns, but simultaneously it increases the risk of shareholders. Higher the debt held by a company the higher the financial risk of bankruptcy. It gives a general idea of a company's financial leverage.

Debt Ratio

It is ratio of total debt to total assets of company. It is measured to get an idea of amount of leverage created by a company. The lower proportion shows that the firm is less reliant on leverage (money owed to others) and the stronger its equity base. On the contrary, the higher debt ratio indicates the company is having more risk.

$$\text{Debt Ratio} = \frac{\text{Total Liabilities}}{\text{Total Assets}}$$

Interest Coverage Ratio

This ratio indicates that how effortlessly the company is able to pay its interest obligation on unpaid debt. It is the ratio of company's earnings before interest and taxes (EBIT) and interest expenses of the company for the matching period. The higher ratio indicates the company is more able to service its debt or interest obligation.

$$\text{Interest Coverage Ratio} = \frac{\text{EBIT}}{\text{Interest Expense}}$$

If the company is unable to make payment of interest on debt capital, it is considered a serious problem for the company. The company finding itself in financial/operational problems should remain stay away from debt capital till it does not be able to service its interest expenses. The use of debt capital should be in prudent manner.

Cash Flow to Debt Ratio

This ratio compares operating cash flow to debt. This ratio is helpful in estimating the length of the time required by the company by applying all of its cash flow from operation to repay its debt

$$\text{Cash Flow to Debt Ratio} = \frac{\text{Operating Cash Flow}}{\text{Total Debt}}$$

If this ratio is higher, it gives sign of positive financial strength and ability to repay the debt obligation.

Proprietary Ratio

It is also known as equity ratio or net worth to total assets ratio. It indicates the long-term or prospective solvency condition of the business.

$$\textbf{Proprietary or Equity Ratio} = \frac{\textit{Shareholders' Fund}}{\textit{Total Assets}}$$

This ratio gives an idea about the overall financial muscles of the company. The capital structure strength is measured through this test. The higher value of this ratio or the portion of shareholders' funds in the total capital of the company indicates better solvency position of the company in long-term. A low proprietary ratio indicates more risk for the creditors.

Current Ratio

It is the ratio of current assets to current liabilities. This ratio is also recognized as "working capital ratio". It is used for the measurement of liquidity or short term financial situation of a firm. It is calculated through dividing the total current assets by total current liabilities.

$$\textbf{Current Ratio} = \frac{\textit{Current Assets}}{\textit{Current Liabilities}}$$

Current assets comprise cash and those assets near to cash. The assets which can be easily converted into cash within a short period of time, generally, one year, for example saleable securities or readily realizable investments, bills receivables, prepaid expenses, sundry debtors, inventories, work in progress are part of current assets.

The obligations which mature within a short period of time usually one year are known as current liabilities. The current liability comprises outstanding expenses, bills payable, sundry creditors, bank overdraft, accrued expenses, short term advances, income tax payable, dividend payable.

This ratio is used for speedy measurement of liquidity of a firm. It signifies the side of safety existing to the creditors. The firm is considered liquid and having ability to pay its current obligations in time as and when they become due, if the current ratio is

relatively high. The ratio equal to or near 2:1 is reflected as a customary or satisfactory. The purpose of keeping double the current assets in comparison to current liabilities is to create provision for the delays and losses in the recovery of current assets. Though, the rule of thumb is 2:1 it must be used carefully while giving explanation of the ratio. The current ratio measures the quantity of the current assets and not the quality of the current assets, hence sometimes the firms possessing less than 2:1 ratio may have a better liquidity position than even firms having more than 2:1 ratio.

Limitation of Current Ratio: It is basic ratio because it estimates only the quantity and not the quality of the current assets, though the ratio is encouraging, the firm may be in financial distress, because of more stock and work in process which is not easily realizable into cash and thus firm may be having a smaller amount of cash to repay current liabilities.

Acid-Test Ratio

The acid-test ratio is also termed the quick ratio. Quick asset comprises of cash, saleable (or short-term) securities, and accounts receivable and notes receivable, net of the provision for doubtful accounts. These assets are believed to be very liquid (easy to convert asset into cash) and thus, available for instant payment of obligations. The acid-test ratio is measured through dividing quick assets by current liabilities

$$\text{Acid – Test Ratio} = \frac{\text{Quick Asset}}{\text{Current Liabilities}}$$

The ratio of 1:1 is considered to be ideal. If for a particular company this ratio is below the standard, it requires further examination of receivables to know how frequently the company turns them into cash. It may also reveal that the company needs to do arrangement for credit facility from a financial institution to ensure the company has easy access to cash when it needs to repay its debts.

Receivables Turnover

The receivable turnover ratio measures the number of times in particular operating cycle (normally one year) the company gathers its receivable balance. It is ratio of net credit sales to the average net receivables. A net credit sale is net sales less cash sales.

If cash sales data are missing, use net sales. Average net receivable is generally the balance of net receivables at the commencement of the year plus the balance of net receivables at the closing of the year divided by two. If the company is cyclical, an average is considered on a rational basis for example monthly or quarterly.

$$\text{Receivable Turnover} = \frac{\text{Net credit sales}}{\text{Average net receivable}}$$

Average Collection Period

The average collection period (also recognized as day's sales unsettled) is a variation of receivables turnover. It measures the number of days it requires to collect the average receivable balance. It is frequently used to assess the success of a company's credit and collection policies. The average collection period is estimated through dividing 365 days by the receivables turnover ratio.

$$\text{Average Collection Period} = \frac{365 \text{ days}}{\text{Receivable turnover}}$$

The diminution in the average collection period is advantageous. The average collection period should be less than the credit period of the company.

Inventory Turnover

This ratio gives an idea about the number of times the company sells its inventory during the period. To calculate the inventory turnover ratio the cost of goods sold must be divided by average inventory. Average inventory is calculated by totaling starting inventory and closing inventory and dividing by 2. If the company is cyclical, an average calculated on a rationally for the company's operations. It should be based on monthly or quarterly.

$$\text{Inventory Turnover} = \frac{\text{Cost of Goods Sold}}{\text{Average Inventory}}$$

Creditors / Accounts Payable Turnover Ratio

It compares creditors with the total credit purchases. It is giving a general idea of the credit period received by the company in paying creditors. Accounts payable comprises both sundry creditors and bills payable. Same as debtor's turnover ratio,

creditor's turnover ratio can be calculated in two forms, creditor's turnover ratio and average payment period.

$$\text{Creditors Turnover Ratio} = \frac{\text{Credit Purchase}}{\text{Average Trade Creditors}}$$

This ratio suggests how quickly payment is given to creditors. If the company is enjoying liberal credit from creditors, then it shows credit worthiness of the company.

Intrinsic value

Intrinsic value is the true value of share and that is calculated by using best risk and expected return data. Usually it is expected that the market price of the stock and intrinsic value should be same otherwise it will be considered as under or overvalued. If intrinsic value is higher than the current market price then the stock will be considered as undervalued and it is expected that in long term it will go up to its intrinsic value and if current market price is higher, the investor will choose to sell it because it is expected that the price will fall and reach to its true value. The expected return consists of cash dividend income and price appreciations benefit or price depreciation loss by holding stock.

Discounted Cash Flow Model

An investor earns the only cash flow from the stock is dividend. The simplest model for valuing equity is dividend discount model. As per this model the value of the stock is the present value of the entire expected dividend on it.

One period valuation model

$$P_0 = \frac{D_1}{(1 + Re)} + \frac{P_1}{(1 + Re)}$$

Multi-periods Valuation model

$$P_0 = \frac{E \text{ Div}1}{(1 + RE)} + \frac{E \text{ Div} 2}{1 + RE} + \dots \dots$$

Where the P_0 = Current share price, Div_t = dividend for particular year,

RE = Cost of equity which assumed to be constant

The rationale behind this model is that it applies the present value norms. Present value of any asset is the present value of its expected future cash flow discounted by appropriate risk factor. The main component of this model is the expected dividend and cost of equity. The expected dividend amount can be calculated on the basis of the expected future growth rate and dividend payout ratio. The required rate of return on stock is calculated based on its riskiness. The Dividend Discount (DD) Model is appropriate for a firm that pays dividends almost all or near to the free cash flow or where it is difficult to measure free cash flow for the equity.

Gordon Growth Model

Gordon model used to value the firm where dividend is growing at the steadily forever

$$P_0 = \frac{D_0 (1+g)^1}{1+K_e} + \frac{D_0 (1+g)^2}{1+K_e^2} + \dots + \frac{D_0 (1+g)^\infty}{1+K_e^\infty}$$

Or

$$P_0 = \frac{D_1}{K_e - g}$$

Where: D = dividend paid or expected, g = dividend's growth rate,

K_e = cost of equity or equity rate of return, n = period of variation

This model relates the value of a stock to its expected dividends in the next year, the cost of equity and the expected growth rate in dividends. One of the motives behind the use of this valuation model is to identify over and underpriced shares.

Limitations: Its use is limited to firms that are growing at a stable rate. If the growth rate exceeds the cost of equity, the value per share becomes negative. Assumption about growth is to be stable one is not found in most of the case. Although the model's simple in its use that is the major strength of it but it suffers from weakness that it is the purely quantitative model and does not consider qualitative factors.

Two-Stage Dividend Discount Model

The two-stage dividend discount model comprises two parts and assumes that dividends will go through two stages of growth. In the first stage, the dividend does not grow by a stable rate for a set amount of time. In the second stage, the dividend is presumed to grow at a different rate for the residue of the company's life. In this way, the subsequent part of the two-stage model is basically matching to the Gordon Growth Model. While, in most cases, the growth rate during the first stage is higher than the stable growth rate, the two-stage model is often used to determine the intrinsic value of a stock issued by a company that is undergoing rapid expansion. Newer companies that have proven their staying power but are still in their initial stage of rapid growth are good candidates for this valuation method. The first stage of two-stage dividend growth is generally assumed to be quite aggressive, reflecting the company's swift expansion, while the second stage assumes a lower, more sustainable rate of dividend growth.

Extraordinary growth rate: g % each year for n years

Stable growth rate: g_n forever

$$P_0 = \sum_{t=1}^{t=n} \frac{DPS_t}{(1 + K_{e,hg})^t} + \frac{P_n}{1 + K_{e,hg}}^n$$

Where $P_n = \frac{DPS_{n+1}}{K_{e,st} - g_n}$

Value of the stock

*= PV of Dividend during extraordinary phase or first stage
+ PV of terminal price*

Where,

DPS_t = *Expected dividends per share in year t*

K_e = *Cost of Equity (hg: High growth period; st: Stable growth period)*

P_n = *Price terminal value at the end of year n*

g = *Extraordinary growth rate for the first n years*

g_n = *steady state growth rate forever after year n*

In the case where the extraordinary growth rate (g) and payout ratio are unchanged for the first n years, this formula can be simplified.

$$P_0 = \frac{DPS_0 * 1 + g * 1 - \frac{1 + g^n}{(1 + K_{e,hg})^n}}{(K_{e,hg} - g)} + \frac{DPS_{n+1}}{(K_{e,st} - g_n) 1 + k_{e,hg}^n}$$

Where the inputs are as defined above.

This model has the same limitation that applies to the growth rate for the Gordon Growth Rate model, for example the growth rate in the firm is similar to the nominal growth rate in the economy, applicable for the terminal growth rate (gn) in this model as well. Except this, the pay-out ratio must be constant with the projected growth rate. If the growth rate is predicted to fall considerably after the first growth phase, the pay-out ratio must be greater in the stable phase than in the growth phase. A stable firm can pay out more of its earnings in dividends than a growing firm.

While the two-stage dividend discount model can provide a more accurate valuation than simpler formulas, it does inherit some disadvantages from its single-rate predecessor, the Gordon Growth Model. Firstly, both models assume constant rates of growth, which is rarely an accurate representation of dividend growth. Though the two-stage model does account for multiple growth rates, it assumes that the switch happens overnight, rather than accounting for a continuing reduction between the first, more aggressive growth rate to the stable growth rate in the later stage.

Another drawback shared by all dividend models is that they do not account for outside factors that influence stock prices, such as public sentiment or company innovations. These valuations are based solely on dividend payments and do not provide a comprehensive reflection of the true value of a stock.

$$\textbf{Expected Growth Rate} = \textit{Retention Ratio} \times \textit{Return on Equity}$$

$$\textbf{Price Earnings Ratio} = \frac{\textit{Current Market Price of Share}}{\textit{Earning Per Share}}$$

P/E ratio is one of the important stock valuation techniques. This is most widely used by investment professional and investors. It is the price paid for earning one rupee net

profit per share. It is the ratio of market price of share to earning per share (EPS). If P/E ratio of particular company is less than the other peer company of the industry then that company will be considered as undervalued and if the P/E ratio of the company is higher than the other peer company of that industry then the company will be considered as overvalued. If the stock is undervalued then the investors would prefer to buy it with the expectation that the price will rise in future and if it is overvalued then the investors prefer to sell it because the chances are there the price of the company will fall.

This method suffers from certain limitations like if a company is having higher EPS it does not mean that the company is more profitable. It is observed that companies in order to show better EPS sometimes buy back their shares which will result in higher EPS and lower P/E ratio.

It may be observed that the scale of operation of two companies may be different and the absolute amount of profit may have vast differences but even though the small company may show better EPS and a large company will have lower EPS the reason may be the outstanding share. The small company might be operating with high debt capital and less number of equity shares. The small company is having higher financial risk.

The above mentioned methodology is used for fundamental analysis by an analyst. It is observed that the company is showing different items of the balance sheet in many ways as per the acceptance norms of generally accepted accounting principles like inventory valuation method and depreciation calculation etc. and because of that the balance sheet of two companies may be showing different levels of financial profit but may be having the same economic profit so again an investor or analyst is required to consider this issue for making comparison.

It is observed that fundamental analysis suffers from limitations during the extreme phases. During the New Economy bubble at the end of the nineties the psychology of the participants of the market is gaining the impact and fundamental aspects are neglected (Malkiel 1999).

Test of Fundamental Analysis

Abdullah and Hayworth (1993) study had confirmed that there is direct relation between stock market returns with both inflation and money supply growth rate but having negative impact of trade deficits, government budget deficits and interest rates.

Mukherjee and Naka (1995) examine the association between six macroeconomic variables and Tokyo stock during the time duration of January 1971 to December 1990. The outcomes of the investigation indicates positive relationship between Tokyo stock prices, the exchange rate, money supply, and industrial production, while there is mix relationship between Tokyo stock prices and inflation and interest rates.

Maysami and Koh (2000) study the relationship between Singapore stock markets and macro-economic variables. The macro-economic variables comprise the exchange rate, inflation, long and short term interest rates, money supply, domestic exports, and industrial production. The data cover the sample time duration from 1988 to 1995. The outcome of study shows that inflation, change in short and long term interest rates, money supply growth and variation in exchange rates are significantly affecting in Singapore's stock market levels. This study also investigated the relation among the Japanese stock markets, American and the Singapore stock market and the outcome of study indicates that all these markets are extremely co-integrated.

Clerc and Pfister (2001) found that asset prices in the long run are significantly influenced by monetary policy.

Ibrahim (2003) investigated the relationship of macroeconomic variable and stock price. The result indicates that the Malaysian stock price index has positive relationship with money supply, consumer price index, and industrial production. But, it is inversely related to changes of currency rates.

Accoering to Ashiq Ali et al. (2003) those stocks having characteristic of return volatility, higher transaction costs, and lower investor sophistication are highly influenced by the book to market (B/M) value of share which is in line with the market mispricing description for the anomaly

Hartone (2004) suggested if progressive earnings information arises after adverse dividend information, a significantly positive effect is observed on equity prices. Likewise, if affirmative dividend information is followed by adverse earning information, a significantly negative impact is observed in equity pricing.

Chaudhuri and Smiles (2004) studied association between stock prices and macroeconomic activity in the Australia covered the period from 1960 to 1998 and results indicates long-run relationships exist between stock prices and real GDP, real private consumption, real money, and real oil price.

With the help of varimax algorithm of orthogonal rotation of factor analysis Merikas et al. (2011) have examined 26 factors influencing individual investor's behaviour in the Greek stock exchange. They found that investor mostly considers "expected corporate earning", "condition of financial statement" and "firm status in the industry".

Joshi et al. (2011) investigated the dynamics of investor's behaviour. The researcher came to know that investors of two cities namely Ahmedabad and Khambhat are typically impressed by certain factors for example "financial performance of company", "long term performance of stock", "sentiment for the stock market", "Expected (cash dividend, bonus share, Buyback of share) of the company", "Reputation of the firm", "Movement of stock market", and "affordability of share price" whereas other factors for example "corporate responsibility of the company", "coverage in print media", "companies ratio analysis" and "traded in multiple stock exchanges" are less influencing .

2.2 Technical Analysis

Fundamental analysts' judgment of stock intrinsic value and risk return is based upon the earning power of the company and economic environment whereas the technical analysis uses the charting technique (Murphy 1999) and technical indicator for forecasting of the price trend of share. The charting technique focuses on the graphical data of the stock and technical indicator focuses on the statistical analysis of stock data. The technical analyst is using the statistics of market data like the price and volume of script for evaluation purpose and try to identify the pattern in the price to forecast the price.

The technical analysis is based on the Dow Theory which was developed by Charles Dow and Edward Jones around 19th century (Pring 2002). As, there are different investments styles on the fundamental side in the same way dissimilar types of technical traders are there. Some trader may depend on pattern of chart others use technical indicators and oscillators, and many times majority of the trader use mixture of the two. Technical analysts' selectively use of historical price and volume data is what divides them from fundamental analyst. Technical analysts are not like fundamental analysts so they don't give importance to the undervaluation or overvaluation of the stock, but their focus is on securities past data on trading and what information this data can provide about market psychology and future price trend of the securities.

Technical analysts believe the forces of demand and supply is reflected in pattern of price. This pattern of price has been repeating most of the time. So it assumes that human psychology will not change (Murphy 1999). The technical analyst assumes that price fluctuation reflect emotions of traders. The fundamental analysis is helpful to forecast the yield and risk to get that yield whereas the technical analysis is helpful in identifying the timing (Murphy 1999) to get that yield. This will be helpful to identify buying and selling best timing to get higher yield. Technical analysis is based on three principles which are as follows (Murphy 1999):

- 1) Market action discounts everything
- 2) Price moves in trend
- 3) History repeats itself

Market action discounts everything: It means that all the factors which can influence the market price of share will be reflected automatically whether that factors are fundamental, technical or behavioral. The existence of the trend in the stock price is closely specifying the third principle of history repeat itself (Murphy1999).

It can be said that technical analysis takes into consideration the market psychology but it does not specify which factor constitutes the market psychology. Therefore, we have to look at the tools used by Individual Investors while making investment in equity shares. There is existing doubt for, whether individual Investor understands and cares the text book techniques for equity valuation.

The analysts' expectations have been proven wrong many times. These analysts give their recommendation based on financial data of company that indicates subjective factors may be playing important role.

2.3 Conclusion

The present chapter has provided an in depth idea of text book approach of equity valuation like fundamental analysis and technical analysis. It has been found that fundamental analysis is unable to predict the crash in stock market because fundamentals change slowly but prices change drastically which shows that human behavior is important in market pricing process. The technical analysis is one of the methods which considers market psychology and forecast the share prices through identifying trend in price but it does not specify which factors constitute the market psychology so the focus of the next chapter is to review literature on impact of investor's behavior towards equity market and its impact on stock prices.