CHAPTER – 2

RESEARCH DESIGN

2.1 STATEMENT OF THE PROBLEM:

Equity markets in India have seen a metamorphic change in the past two decades exposing the markets and its participants to various kinds of risks and valuations. Valuation is the process of assigning a rupee value to a specific share. It states the true or intrinsic value of an asset. An ideal valuation technique would assign an accurate value to all shares. In general valuation is a complex topic, no single valuation model can truly predict the intrinsic value of a share and no valuation model can predict with certainty how the price of a share will vary in future. There are different types of valuation models like balance sheet valuation which is based on accounting information like book value, liquidation value, replacement cost, discounted cash flow techniques like dividend discount model, free cash flow model and relative valuation techniques like price earnings ratio, price to book value ratio, price – sales ratio. However valuation models provide a basis to compare the relative merits of two different shares. Among all these market value is most watched by investment and fund managers.

Valuation in this study refers to equity market value. Equity valuation is a central question which the fund managers, investment advisors, and stock brokers in the field of Capital markets are trying to address through different angles with various clues. As most of the fund managers, individual investors and investment advisors in the process of valuation facing challenges in determining the right avenue for investment. In this regard they try to analyze the fundamental factors which are related to economy such as GDP growth, inflation related factors majorly, and then start analyzing industry related factors, to choose a specific company for investment, and there starts a need, for investment managers to collect the company specific information (accounting variables) relating to companies for assessment of equity valuation. In this background they undertake a number of valuation tools that can facilitate them in assessing the right potential and information about the price of securities that the trader will be waiting for
taking various investment decisions like buying of shares, selling of shares or for holding of shares.

Risk also plays a prominent role towards portfolio construction by different fund managers, investment advisors and stock brokers. Risk is an unfavorable deviation from expected returns. In the Indian books the risk is defined as the actual outcome of an investment will differ from the expected outcome. This risk is divided into two types i.e., systematic risk and unsystematic risk. Systematic risk deals with a kind of risk which is uncontrollable, unavoidable and unpredictable in nature, on the other hand unsystematic risk is a kind of risk which is controllable, avoidable and predictable in nature. As the risk and return being considered as two faces of a coin, if there is any increase in risk then automatically it may lead to increase in return and vice versa. So, risk and return go hand in hand and help the fund managers for portfolio construction and hedging of shares.

In the international research writings, the word systematic risk is used for company specific risk; this is not in keeping the Indian practice. The international practice uses two concepts namely total risk (which is self explanatory) and company’s specific risk namely beta. Total risk as the name suggests consists of risk arising due to economy factors, industry factors, and company factors. Company specific risk which is measured by accounting variables. Since beta is related to company factors it is included in the study, and the total risk is confined to economy related factors, so it is excluded from the study.

Although with the help of secondary data, valuation and risk of Investment managers is been assessed, but the survey has become necessary to understand the prevailing practices existing presently with equity valuation and risk calculation to analyze a kind of information and data they gather for taking investment decision through the company financial statements, towards the effective portfolio construction.

The above discussion highlights the role of predicting market value and risk of an equity share in investment decisions. Further, it also brings out the role of accounting information in the estimation of value and risk of an equity share. This brings us to the question of practice
prevailing among the investment manager in the use of accounting information for estimation of market value and risk of equity.

2.2 REVIEW OF LITERATURE:

1. **Sasson, Bar – yosef, Jefrey .w. Callen and Joshua wivnat (1987)** in their research paper entitled ‘Autoregressive modeling of Earnings – Investment causality’ appeared in the journal of Finance, USA test the relationships between corporate earnings and investment by taking sample of 644 firms of US manufacturing companies. This study establishes linkage between corporate earnings and corporate investments and investigates whether knowledge of past investments improves the prediction of future earnings beyond prediction that are based on past earning alone. Similarly, it investigates whether knowledge of past earning improves the prediction of future investment beyond knowledge of past investment of future. This study concluded that investment does not cause earnings but earning cause investment.

2. **Gary.C. Biddle, Peter Chen, Gouchang Zhang (2001)** in their research article entitled ‘when capital follows profitability : non linear residual income dynamics’ appeared in Review of Accounting Studies , examined that economic reasoning suggests the capital follows profitability of underlying investment opportunities.

These investment dynamics predict convex versus linear relations between future and current residual income. They have tested these predictions against the linear information dynamics proposed by Ohlson (1995). These findings point the way to further development of link between firm value and the economics of value creation.

3. **David.C. Bugstahler and Ilia .D. Dichev (1997)** in their research paper entitled ‘Earnings adaptation and equity value’ appeared in The Accounting Review. This paper tests an option-style valuation model, the main prediction is that equity value is a convex function of both earnings and book value, earning provides a measure of how the firms resources are currently used. When the ratio earnings/ book value high, the firm is likely to continue its current way of using resources, because earnings is the more important determinant of equity value.
When earnings/ book value low, the firm is more likely to exercise the option to adapt its resources to a superior alternative used, and book value becomes the more important determinant of equity value.


5. **Daniel W. Collins and S.P Kothari (1989)** in their research paper entitled “An analysis of inter temporal and cross-sectional determinants of earnings response coefficients “appeared in Journal of Accounting and Economics, this paper studies stock price change associated with a given unexpected earnings change exhibits cross- sectional and temporal variation. They predict and document evidence that the earnings response coefficient is a function of riskless interest rates and the riskiness, growth and persistence of earnings. The earnings response coefficient also varies cross-sectionally with the holding period return interval. Collectively these results explain the previously reported differential earnings response coefficient with respect to size. By including the factors mentioned in this paper specifies the earnings/ returns relation is significantly improved.

results do not support the importance of book value in cross-sectional valuation. Rather, the results are consistent with book value serving as a value-relevant proxy for expected future normal earnings for loss firms in general and a proxy for abandonment option for loss firms most likely to cease operations and liquidate.

7. **John E. Core, Wayne R. Guay, Andrew Van Buskirk (2003)**, in their research paper entitled “Market Valuations in the New Economy: An Investigation of what has changed” appeared in journal of Accounting and Economics, in this study they find mixed support for the hypothesis that a “new economy” sub period occurred in the late 1990s in which the relation between equity value and traditional financial variables differs from previous periods. They examined a regression model of equity value on financial variables over 25 year a broad firm sample and for firm subsamples thought to be emblematic of the new economy. They found that regression model’s explanatory power declined in the new economy sub period for all firm subsamples. For all subsamples the regression model’s structure during the new economy sub period is not unusual compared to other sub periods.

8. **Patricia M. Dechow, Amy P. Hutton, Richard G. Sloan (1999)**, in their research paper entitled “An empirical assessment of the residual income valuation model” appeared in journal of Accounting and Economics, this study provides an empirical assessment of the residual income valuation model proposed in ohlson (ohlson.J.A 1995, “Earnings, book values and dividends in security valuation”. Contemporary Accounting Research 11, 661-687). They pointed out that existing empirical research relying on ohlson’s model is similar to past research relying explicitly on the dividend discounting model. The empirical results support ohlson’s information dynamics and illustrate that valuation models focusing directly on forecasting future abnormal earnings avoid having to forecast the timing of future dividend payments.

9. **Gerald A. Felltham and James A. Ohlson (1995)** in their research work entitled “Valuation and clean surplus Accounting for Operating and Financial Activities” appeared in the journal of Contemporary Accounting Research, models the relation between a firm’s market value and accounting data concerning operating and financial activities. Book value equals market value for financial activities, but they can differ for operating activities. Market value is assumed to equal the net present value of expected future dividends, and is
shown, under *clean surplus accounting*, to also equal book value plus the net present value of expected future *abnormal earnings*.

A linear model specifies the dynamics of information set that includes book value and normal earnings for operating activities. Three kinds of analyses develop from the model. The first set deals with value as relates to anticipated realizations of accounting data. The second set examines how value depends on contemporaneous realizations of accounting data. The third set examines asymptotic relations comparing market value to earnings and book values, and how earnings relate to beginning of period book values.

The conclusions hinge on the extent to which the accounting is conservative as opposed to unbiased. The absence/presence of growth in operating activities is relevant if, and only if, the accounting is conservative.

10. **S. P. Kothari (2001)** “Capital markets research in accounting” The Journal of Accounting and Economics, 31 (2001) pp. 105-231. They study the empirical research on the relation between capital markets and financial statements. The principal sources of demand for capital markets research in accounting are fundamental analysis and valuation, tests of market efficiency, and the role of accounting numbers in contracts and the political process. The capital markets research topics of current interest to researchers include tests of market efficiency with respect to accounting information, fundamental analysis, and value relevance of financial reporting. Evidence from research on these topics is helpful in capital market investment decisions, accounting standard setting, and corporate financial disclosure decisions.


valuation formulae. They are focusing on two problems related to residual income valuation (RIV). First, valuation depends on the recent value of expected dividends per share; applying RIV requires clean surplus accounting on a per share basis. Equity transactions that change the number of shares outstanding generally imply EPS ≠ ΔBVPS − DPS. A clean surplus equality holds only if one “reconceptualises” either end-of-period BVPS or EPS as a forced “plug”. Second, one cannot circumvent the per share issue by evaluating RIV on a total dollar value basis unless one introduces relatively subtle MM-type restrictions. In light of RIV’s unsatisfactory aspects, the paper proposes an alternative to RIV. this new approach maintains a strict EPS -focus. It derives by replacing BVPS, in RIV with EPS, +1capitalised generally approximates market price better than BVPS.

13. James A. Ohlson, Beate E. Juettner-Nauroth (2005) “Expected EPS and EPS Growth as Determinants of Value” Review of Accounting Studies, 10, 349-365, 2005. This paper develops a parsimonious model relating a firm’s price per share to (i). Next year expected earnings per share (Or 12 month’s forward EPS), (ii) short term growth in EPS, (iii) long term growth in EPS, and (IV) cost-of-equity capital. The model assumes that the present value of dividends per share (DPS) determines price, but it does not restrict how the DPS -sequence is expected to evolve. All this aspects equates the growth rates of expected EPS and DPS and fixes the growth rate and the payout rate. Though the constant growth model arises as a peculiar special case, the analysis in this paper rests on more general principles, including dividend policy irrelevancy. A second key result inverts the valuation formula to show how one expresses cost-of capital as a function of the forward EPS to price ratio and the two measures of growth in expected EPS. This analysis generalize the cost-of capital equals the DPS -yield plus the growth in expected EPS.

14. Stephen H. Penman, Xiao-Jun Zhang (2002) “Accounting Conservatism, the Quality of Earnings, and Stock Returns” The Accounting Review, Vol 77, No. 2, April 2002, pp 237-264. This paper studies, when a firm practices conservative accounting, changes in the amount of its investments can affect the quality of its earnings. Growth in investment reduces reported earnings and creates reserves. Reducing investment releases those reserves, increasing earnings. if the change in investment is temporary, then current earnings is temporarily depressed or inflated, and thus is not a good indicator of future earnings. This study develops diagnostic measures of this joint effect of investment and conservative
accounting. This study finds that these measures also forecast stock returns—indicating that investors do not appreciate how conservatism and changes in investment combine to raise questions about the quality of reported earnings.

15. Madhav V. Rajan, Stefan Reichstien, Mark T. Soliman – Conservatism, Growth, and Return on Investment- Review of accounting studies, 2007, pp. 325-370. It study’s about the Return on Investment (ROI) is widely regarded as a key measure of firm profitability. The accounting literature has recognized that ROI will generally not reflect economic profitability, as determined by the internal rate of return (IRR) of a firm’s investment projects. In particular, it has been noted that accounting conservatism may result in an upward bias of ROI, relative to the underlying IRR. Study examines both theoretically and empirically the behavior of ROI as a function of two variables: past growth in new investments and accounting conservatism. Higher growth is shown to result in lower levels of ROI provided the accounting policies. Conversely, more conservative accounting will increase ROI provided growth in new investments has been “moderate” over the relevant horizon. While the opposite is true if new investments grew at sufficiently high rates. They found that conservatism and growth are “substitutes” in their joint impact on ROI.

16. Gouchang Zhang - Accounting Information, Capital Investment Decisions, and Equity valuation, Theory and Empirical Implications- Journal of Accounting Research, vol.38, No.2, 2000, pp.271-295. This paper develops a theoretical model to reexamine the roles of earnings and book value for equity valuation and to explore cross-sectional differences in the properties of the valuation function. Equity value is shown equal to expected value from maintaining the present course of operations plus the value from maintaining present course of operations plus the value of the option to expand or contract the scale of operations. The author derived equity value in terms of accounting variables on three accounting rules: historical cost valuation, the clean-surplus relation, and a conservative depreciation policy.

17. Somoye, Russell Olukayode Christopher (2009), Akintoye, Ishola Rufus (2009), Oseni, Jimoh Ezekiel (2009) in their research work entitled “Determinants of Equity Prices in the Stock Markets” Empirical tests of linear asset pricing models show presence of mispricing in asset pricing. Asset pricing is considered efficient if the asset price reflects all available
market information to the extent no informed trader can outperform the market and/or the uninformed trader. This study examined the extent to which some information factors or market indices affect the stock price. A model defined by Al-Tamimi (2007) was used to regress the variables (stock prices, earnings per share, gross domestic product, and lending interest rate and foreign exchange rate) after testing for multicollinearit among the independent variables. The multicollinearit test revealed very strong correlation between gross domestic product and crude oil price, gross domestic product and foreign exchange rate, lending interest rate and inflation rate. All the variables have positive correlation to stock prices with the exception of Lending interest rate and foreign exchange rate.

18. **Kheder Alaghi (2012)** “Operating leverage and systematic risk” African Journal of Business Management Vol.6 (3), pp. 1095-1099. The aim of this paper is to study the effect of operating leverage in the systematic risk of listed companies in Tehran Stock Exchange. In this study, operating leverage (OL) as independent variable and systematic risk (β) as the dependent variable are considered. SIG ≤ 0.05 means H0 hypothesis is rejected; otherwise there is no adequate reason for rejecting H0. For testing the hypothesis of this study, linear regression technique has been used. According to the results obtained, H0 is confirmed because SIG = 0.20 > 0.05. Thus, operating leverage has no effect on the systematic risk of listed companies in Tehran Stock Exchange.

19. **Dr. Sanjeet Sharma (2011)** “Determinants of Equity share prices in India “Journal of Arts, Science & Commerce, Vol. – II, Issue –4, Oct. 2011 [51]. This study has been undertaken to examine the empirical relationship between equity Share prices and explanatory variables such as: book value per share, dividend per share, earning per share, price earning ratio, dividend yield, dividend payout, size in terms of sale and net worth for the period 1993-94 to 2008-09. The results revealed that earning per share, dividend per share and book value per share has significant impact on the market price of share. Further, results of Study indicated that dividend per share and earning per share being the strongest determinants of market price, so the results of the present study supports liberal dividend policy and suggests Companies to pay regular dividends. This policy will affect market price of share in positive direction. Since, book value per share depicts the owner’s funds, a higher book value per
share is perhaps perceived by an investor to be an indicator of the sound financial position of a company for investing. All this shows that the study of financial factors prove to be beneficial for the investor in India, as these factors possess strong explanatory power and hence, can be used to make accurate future forecasts of stock prices. So, investors are suggested to take care of accounting variables of company before investing.

20. K. R. Subramanyam, Mohan Venkatachalam, (June 1998) “The role of book value in equity valuation: Does the stock variable merely proxy for relevant past flows”? Stanford University Stanford, CA 94305-50 15, (650)-725-946 1. This paper proposes an alternative explanation for the value-relevance of book value. They suggest that book value can have an indirect role in valuation even under an earnings capitalization framework and show that past earnings are relevant for valuation (in addition to current earnings) when earnings have transitory components. Next, they argue that book value may correlate with stock price simply because it aggregates past (and current) earnings. That is, the stock variable does not have a direct role in valuation; rather, its role arises indirectly because it proxies for relevant past flows and tested hypothesis using a broad sample from a 30 year period 1967-96. The findings are consistent with their predictions. They find that past earnings provide incremental explanatory power beyond that provided by current earnings. More important, they find that a model of current and past earnings outperforms a model of current earnings and book value in terms of explanatory power. The results are striking when they split sample into profit firms and loss firms. For profit firms we report that book value provides no incremental explanatory power beyond that provided by current and past earnings. However, for loss firm’s book value provides significant incremental explanatory power while current and past earnings provide only marginal explanatory power. This suggests a very restrictive direct role for book value in equity valuation that is as a proxy for the firm’s abandonment or liquidation value.

has shown the relevance of macroeconomic factors for forecasting and stress testing credit portfolio models. Despite this, most banks still work with a through-the-cycle approach. We show how to integrate macro-economic variables into the risk management system of a bank using a multi-factor credit risk model with observable macroeconomic and latent variables. In an empirical study, they compare the point-in-time results of this model with those of a through-the-cycle model and explain the decencies of the latter. They also provide a solution for the important case in which the bank’s credit risk model includes no macroeconomic information so that macro-level stress tests and scenario analyses may be executed in a straightforward and consistent way.

22. Steven Toms, Aly Salama, Duc Tuan Nguyen (2005) “The Association between Accounting and Market-Based Risk Measures” University of York, Department of Management Studies, Working Paper 15, December 2005, and ISSN Number: 1743-4041. This study derives that operating and financial measures of leverage and tests their association with market based measures of equity risk. The percentage changes are computed using data from 1997 to 2003 inclusive to compute ratios for 1998 to 2003 and then averaged. It is the first such study to use purely accounting-based data to derive the leverage measures. In line with previous literature it conducts a new test on the relative importance of operating and financial leverage. The linear relationship between operating cost and stock market beta suggest there is a security market line equivalent representing the underlying fixed costs of the business. The results suggest that operating costs have a greater impact.

23. Peter Armstrong (2002) “The Costs of Activity-Based Management” University of Keele. In this study Activity-based costing and management are now the stock-in-trade of a lucrative industry, with at least one Big Six consultancy operation devoted wholly to their promotion. Both techniques represent a major extension of accountability in the modern corporation, into a zone previously defined in accounting terms as fixed overhead. The mechanics depend on treating the staff department as a mass-producer of repeated acts of routine service (‘activities’) performed ‘for’ particular cost-objects, usually products. By treating these activities as performance indicators, payroll budgets can be linked to activity volumes thus
creating pressures for the casualisation of staff employment. The activity frame of reference, particularly when linked with ‘value analysis’ also encourages the stripping-out of all staff work which cannot be accommodated within its definition of activities. This threatens a dumping-down of staff departments in which non-routine initiatives aimed at competitive advantage in fields such as human resource management or marketing may be stifled because they cannot be accommodated within the language of accountability imposed by ABM. These arguments are concretized through an examination of the ABM treatment of one of its favoured targets: the purchasing function. The contrast between this and the supply chain management approach advocated by practitioners and academics who take the function seriously is a stark illustration of the limitations of ABM as an approach to the management of staff activity.

24. James M. Gahlon and James A. Gentry (1982) “On the Relationship between Systematic Risk and the Degrees of Operating and Financial Leverage” Financial Management Association International, Vol. 11, No. 2 (1982), pp. 15-23. In this study, in order to use the capital asset pricing model (CAPM) to make operating and financial decisions, financial managers must confront the problem of estimating a security's systematic risk, or beta. By regressing the time series of a security's realized financial return (dividend plus capital gain or loss) on the contemporaneous realized financial return on a market portfolio is the approach adapted to this problem. This paper adds to this body of knowledge by developing and analyzing a model that demonstrates how the degrees of operating and financial leverage, along with the coefficient of variation of revenue and a cash flow correlation coefficient, affect a security's systematic risk, expected return, and value. It also provides a simple conceptualization of the sources of systematic risk: revenue variability, its magnification by operating and financial leverage, and the degree of sensitivity of the firm's cash flow to developments in the economic and financial environment.

alternative. L. Huffman provides such an alternative. These results support Huffman's theory.
Interactions between investment and financing can either increase or decrease the impact of
leverage on stock risk. Combined leverage, estimated without regard to levels of its operating
and financing components, better explains stock risk.

2.3 RESEARCH GAP:

A lot of research on equity valuation has taken place internationally especially with the data of
USA. A research paper published by Shengquan Hao, Qinglu Jin, Guochang Zhang (2011) Hong
Kong University of Science and Technology, studied the relationship between equity value and
accounting variables. But in India though research has been done on equity valuation, to name
with few like Monica Singhania (2006), Dr. Sanjeet Sharma (2011), made an attempt to study
about the below listed accounting variables and there combine influence on valuation of equity
markets. But they have not discussed about the individual effect of each explanatory variable on
equity market value. The explanatory variables are Earning per share (EPS), Book value,
Profitability (ROE), Growth of company, dividend per share, dividend payout ratio, are some of
the variables used to explain equity valuation.

Similarly, the study conducted by Kheder Alaghi (2012), African journal of business
management, Steven Toms, Aly Salama, Duc Tuan Nguyen (2005), university of York, and
James M. Gahlon and James A. Gentry (1982) University of Illinois “studied systematic risk,
Operating leverage and Financial leverage for risk calculation of equities at the international
markets.

But, there is no research carried out in India to assess the prevailing practice among investment
managers in assessing the role of accounting information in estimating market value and risk.

Hence, the researcher has made an attempt to study about the risk by selecting the accounting
variables such as operating leverage, financial leverage, Growth, debt equity ratio, and size
factor of fifty nifty companies and to examine its impact on valuation and risk of Indian equity
markets.
2.4 Objectives of the Study:

1. To assess the impact of selected accounting variables on Market Value, and to assess the explanatory power of selected accounting variables in Indian Equity Market. The variables are as follows:
   - EPS (earnings per share) and its impact on market value of equity.
   - BV (book value) and its impact on market value of equity.
   - DPS (dividend per share) and its impact on market value of equity.
   - DPR (dividend payout ratio) and its impact on market value of equity.
   - ROE (profitability) and its impact on market value of equity.
   - Growth (net sales) and its impact on market value of equity.

2. To assess the impact of selected accounting variables in quantification of beta in Indian Equity Market. The variables are as follows:
   - OL (operating leverage) and its impact on Beta.
   - FL (financial leverage) and its impact on Beta.
   - Growth (net sales) and its impact on Beta.
   - D/E (debt equity ratio) and its impact on Beta.
   - Size factor (market share) and its impact on Beta.

3. To study the above listed variables in assessing market value and risk by the fund managers.

4. To throw light on the prevailing practices among fund managers with regard to use of accounting information in predicting market value and beta through a survey.

5. To assess the gap between the findings of empirical research with regard to the role of accounting information in determining market value and beta and the prevailing practice among fund managers in this regard.

2.5 Scope of the Study:

This study is exclusively made to understand, and analyze the usage of accounting variables, with Market Value to Valuation of equity markets and with Beta to Risk quantification of Indian equity markets. There are few models existing related to valuations. However valuation models provide a basis to compare the relative merits of two different shares. Market value is determined by fundamental factors such as economy, industry, and company specific risk factors and the study is confined to accounting related variables. Valuation in this study refers to equity market
value. The evaluation of the market performance of real value of selected 50 companies using financial statements like balance sheet, profit and loss accounts and annual reports of selected companies. Since beta is related to company factors it is included in the study, and the total risk is confined to economy related factors, so it is excluded from the study.

2.6 HYPOTHESIS:

The researcher has defined the research hypothesis, sampling and data collection techniques as well as the statistical techniques used to test the data for valuation.

We test the following hypotheses for valuation:

H1: EPS (earnings per share) earnings per share significantly affect the equity market value
H2: BV (book value) book value of share significantly affects the equity market value
H3: DPS (dividend per share) is not affecting the market value of equity.
H4: DPR (dividend payout ratio) is not affecting the market value of equity.
H5: ROE (profitability) is not affecting the market value of equity.
H6: Growth (net sales) is not affecting the market value of equity.

Testing the hypothesis for quantification of risk:

H1: OL (operating leverage) is not having impact on Beta.
H2: FL (financial leverage) is not having impact on Beta.
H3: BR (business risk) is not having impact on Beta.
H4: D/E (debt equity ratio) is not having impact on Beta.
H5: Size factor (market share) is not having impact on Beta.

2.7 OPERATIONAL DEFINITION OF THE CONCEPTS:

2.7.1 Equity valuation: Valuation helps in determining the price of a security, where price of a security indicates the value that the investor has to surrender for buying a security of his choice. Further, the price of a security also indicates the potential that these securities carry in their
respective markets of trading. It is the process of assigning a rupee value to a specific share. An ideal share valuation technique would assign an accurate value to all shares.

**2.7.2 Earnings per share (EPS):** The revenue earned by a company after meeting cost of production, then interest, depreciation and tax belongs to the equity share holders. This earnings divided by the number of outstanding equity shares is referred to as EPS.

**2.7.3 Book Value:** Book value per share is the net worth of the company which is equal to paid up equity capital plus reserves and surplus divided by the number of outstanding equity shares. It is an important variable affecting the market value of equity share. It shows worth of shareholders stake in a company. Book value is affected both by investment decisions and dividend decisions of a company.

**2.7.4 Dividend Pay-Out Ratio:** It is the percentage of earnings paid to the share holders in the form of dividends. It is the percentage share of the net earnings distributed to the shareholders as dividends. Dividends imply outflow of cash and lower future growth. In other words, the dividend policy of the firm affects both the shareholders wealth and the long term growth of the firm. The optimum dividend policy should strike the balance between current dividends and future growth which maximizes the price of the firm’s shares.

**2.7.5 Dividend per Share:** Dividend is the portion of the profit after taxes, which is distributed to the share holders for their investment, and bearing risk in the company. It has a significant influence on the market price of shares.

**2.7.6 Profitability:** Profitability defined as earnings in a period divided by the equity book value at the beginning of the period (ROE). It represents a firm’s ability to generate value from invested capital. It is a measure of evaluating the overall efficiency of the business.

**2.7.7 Growth:** Growth is measured in terms of net sales in the present study.

**2.7.8 Risk:** Risk refers to the possibility that the actual outcome of an investment will differ from its expected outcome. It can be defined as the probability that the expected return from the security will not materialize. Every investment involves uncertainties that make future investment returns risk-prone. Uncertainties could be due to the political, economic and industry factors.
Risk could be systematic, which is for the market as a whole, while unsystematic risk is specific to an industry or the company individually.

2.7.9 Debt-Equity Ratio: It is a measure of company’s financial leverage calculated by dividing by its total liabilities by stock holder’s equity. This ratio is a wise mix of debt and equity can increase the return on equity.

2.7.10 Financial leverage: Financial leverage refers to the use of debt finance. The degree to which an investor or business is utilizing the borrowed funds. It relates to the financing activities of a firm. Financial leverage results from the presence of fixed financial charges in the firm’s income stream. These fixed charges do not vary with the earnings before interest and taxes (EBIT) or operating profits.

2.7.11 Operating Leverage: A measurement of the degree to which a firm or project incurs a combination of fixed and variable costs. It results from the existence of fixed operating expenses in the firm’s income stream. The operating leverage may be defined as the firm’s ability to use fixed operating costs to magnify the effects of changes in sales on its earnings before interest and taxes.

2.7.12 Size: Size is measured by market capitalization, which is the product of the market price and the total number of shares outstanding. Size refers to when large companies offer better investment opportunities for investors than the smaller ones. When companies occupy a stronger and dominant position in the stock market then automatically market price of shares will increase.

2.7.13 Market Price:
The market price of the share is mainly determined by the forces of demand and supply of a particular security in the market (Malhtra, 1987, Piotrosbi D Joseph. Et al. 2004; Zakir and Khanna, 1982). The market price reflects the collective wisdom and knowledge of the market.

2.8 METHODOLOGY

The study is done in two parts, the first part is an analytical study and it is a cause and effect study. We start with market value of equity of a company as dependent variable and these are the
independent variables such as EPS (earnings per share), Book Value, Profitability, Dividend per share, Dividend Payout Ratio, and Growth etc., on the market value of an equity share. We proceed with company specific risk i.e., Beta as dependent variable and, Debt equity ratio, operating leverage, financial leverage, Growth and the Size factor of selected companies are independent variables. This part uses time series data for the time period of the years 2006 – 2010 to the above variables. In each of the year we use a sample of 50 companies this part uses a cross sectional data.

The next Para is a descriptive study which aims at finding out the total prevailing practice in the profession. It focuses on the same two dependent variables in predicting market value and the company specific risk mainly Beta.

Finally a comparison which done between the findings of the cause and effect study and the outcome of the survey.

**2.8.1 METHODS OF DATA COLLECTION:**

The study is basically an empirical in nature. The data for the present study are collected from both primary and secondary sources. Primary data are collected by administering a structured questionnaire to 50 respondents. They are the stock brokers, investment advisors, and fund managers in different private and public limited companies.

However, secondary data is collected from capital line database, Bangalore stock exchange, the top 50 companies selected, which are listed in both NSE and BSE for the period of 5 years, from the year 2006-2007 to 2010-2011 and is supplemented with CMIE (Centre for Monitoring of the Indian Economy) Prowess database, various management journals, financial dailies, magazine reports, industry reports, annual reports of the companies websites, Finance websites like investopedia.com, finance india.com, bse-india.com, nse-india.com and news papers the required data is gathered.

**2.8.2 SAMPLING:**

For the study the researcher has collected two types of samples for collecting the required data. Firstly from secondary sources the data available in capital line database from Bangalore stock
exchange for the period of five years i.e. from the year 2006 – 2010. For the study the top 50 companies is selected in the ranking of companies by market value as listed by Business To-day survey for 2010. This top 50 companies sample includes almost all the sectors for the study.

For the collection of data purposive sampling is conducted to fulfill the said objectives from fund managers. For the study a sample size of 50 respondents are selected to collect the primary data.

2.8.3 QUESTIONNAIRE:

For the study to collect the primary data the questions are designed by using five point likert scale. The questionnaire is divided into two parts. Accordingly, part I, is intended to get the personal profile of selected respondents. Part II elicits information about the usage of accounting variables, importance and the level of impact these accounting variables will have on investment decisions by the above said fund managers for doing valuations as well as for assessment of risk, in Indian equity markets.

2.8.4 FIELD COLLECTION OF DATA:  For the study to collect the primary data the questions are designed by using five point likert scale. The questionnaire is divided into two parts. Accordingly, part I, is intended to get the personal profile of selected respondents. Part II elicits information about the usage of accounting variables, importance and the level of impact these accounting variables will have on investment decisions by the investment managers.

The required primary data for the study is collected, by distributing questionnaires to about 50 respondents belonging to different private and public limited companies fund managers, stock brokers, sub-brokers and investment advisors, to collect their different viewpoints and responses in assessing the role of accounting information in estimating market value and risk.

2.8.5 PLAN OF ANALYSIS: The study has been done by using various statistical tools like (descriptive statistics) mean calculation, standard deviation, correlation and simple regression is been done in the study, to check the validity of data.

DESCRIPTIVE STATISTICS:
Descriptive Statistics such as mean values of the dependent and independent variables have been computed. The mean values are compared with the values of ground data of different variables over the period of study to analyze the effect of explanatory variables on the dependent variables.

**STANDARD DEVIATION:**

Standard deviation of dependent and explanatory variables has also been computed to examine, the variation in various variables from their mean values and also to analyze the consistency and homogeneity in data collection.

**CORRELATION:**

In this study it analyses the degree of linear association between variables used. The lower the value of ‘r’ the lower is the degree of linear relationship between the variables. A low value of ‘r’ represents a non-linear relationship between variables, the high degree does not imply cause and effect relationship between two variables.

**REGRESSION:**

A regression is a statistical analysis assessing the association between two variables. It is used to find the relationship between two variables. The significance is tested using ‘T’ and ‘F’ test.

**2.9 LIMITATIONS OF THE STUDY:**

There are a number of limitations the researcher has come across during the study, a few is been highlighted in the following:

1. The calculations are based on an analysis of only five year data and to make generalizations of dependence, we need to take samples of companies over about 25-30 years, and run a panel data regression.

2. The companies selected for the study is about only 50 in number. Results derived are only a comprehensive insight about the India’s most valuable companies list of 500 companies and hence the characteristics cannot be generalized.

3. For the collection of primary data only 50 respondents been chosen from the field.
2.10 REFERENCE PERIOD

The required primary data collection was commenced on 11.05.2013 to 25.06.2013 from the different stock brokers, fund managers and few investment advisors, who belongs to the public and private limited companies and the secondary data is collected from capital line database for the period of five years from 2006 to 2010.

2.11 CHAPTER SCHEME

The thesis is presented in five chapters

CHAPTER- 1 THEORETICAL OVERVIEW

CHAPTER -2 RESEARCH DESIGN

CHAPTER -3 PROFILES OF SAMPLE COMPANIES.

CHAPTER - 4 DATA ANALYSIS REGARDING ACCOUNTING FACTORS AFFECTING MARKET VALUE.

CHAPTER - 5 DATA ANALYSIS REGARDING ACCOUNTING FACTORS AFFECTING BETA.

CHAPTER - 6 FINDINGS OF SURVEY.

CHAPTER -7 SUMMARY OF FINDINGS, SUGGESTIONS AND CONCLUSION.