CHAPTER II

REVIEW OF LITERATURE

Review of literature is one of the significant parts of a research study. The researcher has to acquire information about what has already been done in the field of study, to arrive at some meaningful conclusion. The review of literature and previous studies helps the researcher to gather the latest information about what has been done in the particular field in which one intends to do research. The collected reviews have been given under following headings:

2.1 Studies on Indian stock market and Index stocks.

2.2 Studies on risk- return assessment.

2.3 Studies on share trading volume and stock delivery position.

2.4 Studies on Economic Value Added and Market Value Added.

2.5 Studies on pooled regression, factor and path analysis.

2.1 STUDIES ON INDIAN STOCK MARKET AND INDEX STOCKS

Bennet (1988) has analyzed the study to know the individual investor's sentiment and how the stock specific aspects operate the investors' sentiment. The approach of the investor's has been influenced by so many factors such as rumors regarding stocks, intuition, herd behaviour among investors and media coverage of the stock. The selected sample size of the study was 400 retail investors who were spread through ten different investment centers in Tamil Nadu, India. The study was conducted during the period from May to September 2010. The researcher considered two dependent variables of this study were as; In India the stock prices will increase in the next twelve Months and plan to raise individual investment in the Indian stock Market in the next twelve months. The rating was used to list the independent stock variables that could impact the investor's sentiment. The findings of the study are during the period of the post-global crisis, the investor's optimism was influenced by stock-specific factors like Quality of Management (QM), Expected Events Surrounding the Stock (EESS), Book value,

Risk and Cost Factor (RCF) and Recommendation by the Financial Community (RFC). He concluded that factors have not influenced on the investors' sentiments in India.

Campbell et al. (1992) have conducted a research study seeks to reveal the dynamic behaviour of market volatility and by forecasting the volatility transaction prices of standard &poor's 100 index options. In this study they have provided evidence that volatility changes are predictable in a statistical sense. They were examined whether this predictability is large and persistent enough to be economically meaningful. Specifically, they test whether the out-of-sample volatility change predictions can be used to generate abnormal rates of return in the S&P 100 index option market. They test and reject the hypothesis that volatility changes are unpredictable. This paper also discusses index option valuation and implied volatility estimation. This study describes the data sources, primarily the S&P 100 index option. Transaction history from October 1985 through July 1989 was obtained from the Chicago Board Options Exchange. Based on the analysis they found that, after transaction costs, a trading strategy, based upon out-of-sample volatility changes, does not generate economic profits. The result supported the notion that S&P 100 index option market is efficient.

Chris Brooks (1997) has carried out a research study to examine the inter-temporal relationship between stock index volatility and market trading volume. It explores a number of statistical models for predicting the daily stock volatility of an aggregate of all stocks traded on the NYSE. An application of linear and non-linear causality tests highlights evidence of bi-directional causality, although the relationship is stronger from volatility to volume than the other way around. The data used in this study comprised 2431 daily observation on New York Stock Exchange (NYSE) aggregate volume, together with daily observation on the Dow Jones Composite running from 17 November 1978 to 30 June 1988. The data was taken from the data set used in Weigend and LeBaron (1994). The out-of –sample forecasting performance of various linear, GARCH, EGARCH, GJR and neural network models of volatility are evaluated and compared. The models are also augmented by the addition of a measure of lagged volume to

form more general ex ante forecasting models. The results indicate that augmenting models of volatility with measures of lagged volume leads only to very modest improvement, if any, in forecasting performance.

Vanden Baviere and JU de Villiers (1997) studied the effects of the listing of equity futures contracts on the South African Futures Exchange (SAFEX), on the volatility of the index constituents, listed on the Johannesburg Stock Exchange (JSE). This paper measures the volatility of a sample of 37 index constituents from 1988 to 1994. Data for the research consists of daily share prices obtained from the I-Net financial database. They find no significant increasing trend in the volatility of the index constituents relative to that of non-constituents over the period 1989 to 1994. They also conclude that the establishment of safex and the listing of equity index contracts did not have an adverse effect on the volatility of index constituents on the JSE.

Sah, Ash and Omkarnath (2006) examined the influence of derivatives trading on the fluctuations of S&P, NIFTY and BSE Sensex by applied ARCH/GARCH technique. This study also made an attempt to understand whether the market wide fluctuation has declined over the sample period by examine the behaviour of the fluctuations of other indices such as NIFTY Junior, NSE 200, S&P NIFTY 500, BSE-100 and BSE-200.The results indicated that introducing futures and options is, no effect or negligible on the fluctuation as evident from GARCH (1, 1) model. While considering the surrogate index, S&P NIFTY has resulted that the volatility declined while BSE Sensex exhibited rise in fluctuation. EGARCH model advocates fall in fluctuation in case of all indices.

Debjiban Mukherjee (2007) attempted to understand the trends, similarities and patterns in the activities and movements of the Indian Stock Market in comparison to its international Stock Markets. This study was helping the investors (current and potential) to understand the impact of important happenings on the Indian stock exchange. This has covered the five stock exchanges such as, 1.New York stock exchange (NYSE), 2.Hong Kong stock exchange (HSE), 3.Tokyo Stock exchange (TSE), 4. Russian Stock Exchange (RSE), 5.Korean stock exchange (KSE) from a range of socio-politico- economic backgrounds and both BSE and NSE in Indian stock market. The period of the

study was from 1st January 1995 to 31st July 2006. It was found that the Indian stock exchanges are ready to make the transaction should the government decides to further relax the regulations and open up. The markets react to global cubs and anything happen in the global scenario be it macroeconomic or country specific (foreign trade channel) affect the various markets.

Bennet and Selvam (2010) carried out a research to analyze the investor's perception of the influence of Social, Political, Economical, Regulatory, Technological, Environment and Legal (SPERTEL) risks on the value of equity shares in the market. The primary data was collected from the retail investors in Tamil Nadu. The study conducted between May and July, 2010, through a structured Questionnaire. This study was based on 152 responses from the retail investors. The study tested the hypothesis that the retail investors firmly believe that SPERTEL risk factors have influence on their future investment i.e. value of equity shares. The data collected have been analyzed through the application of statistical tools such as independent sample t-tests and One- Way ANOVA. The finding of the study was based on the perception of the investors in Tamil Nadu. SPERTEL risk was proven to have influence over the market price of the equity share. It is to be noted that except for the social factors between married and unmarried investors, political, regulatory and legal factors for age and occupation, all other factors seemed to be insignificant.

Goudarzi Hojatallah and Ramanarayanan (2011) carried out the study on effects of good and bad news on volatility in the Indian stock markets during the global financial crisis of 2008-09. The BSE500 stock index was used as a proxy to the Indian stock market to analyze the asymmetric volatility over a period of 10 years from 2000 to2007 and from 2009 to 2010. Two commonly used asymmetric volatility models i.e. EGARCH and TGARCH models were used. The BSE500 returns series were found to react to the good and bad news asymmetrically. The presence of the leverage effect would imply that a negative innovation (news) has a greater impact on volatility than a positive innovation (news). Findings of the study indicate that the sign of the innovation has a significant influence on the volatility of returns and more than good news, it is the arrival of bad news in the market that results in an increase of the volatility.

Kenneth et al. (2011) carried out a research to investigate the use of the stochastic approach in forming a stock price index and contribute in three aspects. In the first section they set out the basics of index-number theory and relate it to conventional indexes of stock prices. Second they apply the stochastic approach to share price. Finally they apply the framework to the issue of portfolio tracking and investigated whether it is possible to ignore certain stock on the basis of their contribution to the index. They used daily data underlying the S&P/ASX20 index, so that n=20, for the period from 02-01-2003 to 28-12-2008 and split this into 12 sub-periods. They could estimate the n equations in (15) jointly as a system of using all n*T observation, with T being the number of days, but this is identical to estimating each equation separately. To test the null hypothesis that the error terms and homoscadastic, they were apply the Breusch and Pagan (1979) test. The result shows that for each day in the sample, homoscedasticity is not rejected.

Hasan et al (2011) carried out a research to examine the volatility and the liquidity effect on the underlying stock after the introduction of index option. They investigated the volatility and liquidity effect by collecting sample data from the stock markets of India, Korea, Taiwan, Hong Kong, Japan, Thailand, Malaysia and Singapore, the only markets that are offering index options in Asia. They applied the generalized autoregressive conditional heterosecedasticity (GARCH) models that helped to examine the conditional volatility of intraday (high frequency) returns for each stock market, before and after the introduction of index options. They also examined the liquidity effect through t-test and Wilcoxon Signed Rank Test. They used t-test to determine the mean difference between the trading volume of pre-index and post-index option periods. By comparing the estimated parameters and the co efficient of conditional volatility in pre and post period of index option introduction, they found out that the derivatives of trading dramatically increased the persistence of the conditional volatility for all the selected stock markets. They also observed mixed evidence in context to liquidity effect. In the stock exchanges of Hong Kong, Japan, Korea, Taiwan and Thailand, markets become more liquid in the post index option periods in contrast to pre index options period. In these markets trading volume increases significantly after the introduction of index options. On the other hand, India, Malaysia and Singapore

stock markets shows no liquidity effect in the post-index option period. Finally they conclude that the introduction of index option on the selected Asian stock markets have increased in stock return volatility and liquidity on the underlying stocks.

Dhiraj Jains and NakulDashora (2012) studied the Impact of Market Movements on Investment Decision with Respect to Investors in Udaipur and Rajasthan. The objectives of this study was to identify the decisive factors which influenced the market movements and to examine the perceptions, preferences and various investment strategies adopted by investors in the Indian stock market; this was weighed on the basis of a survey taken from110 respondents, who are based in Udaipur and investors in the stock market during September 2011-January 2012.A finding of the study reveals that investors prefer investing in both primary and secondary market instruments. Most of the decisions are rational and influenced by the various information available in the market. It was also found that investors preferred the 'wait and watch' policy for taking their decision and are very cautious; their decisions are influenced by various psychological factors and behavioral dimensions.

Gunathilaka (2014) conducted a study to examine the factors influencing the equity selection decision and also examine the influence of emotions, cognitive and demographics differences on the decision making process of the Sri Lankan individual investors. The questionnaire was distributed among 200 shareholders who regularly invested in the share market, and who were also employed either in public sector or private sector. They all are retail investors in Colombo stock Exchange. The sample data were collected during the first quarter of 2014. The analysis was carried out using t-test for variance comparisons, factor analysis using principal components, Kaiser- Meyer-Olkin (KMO) test is used to measure of sampling adequacy and the Bartlett's test of Sphericity is used in determining the volatility thereon. The finding of the study was that the investors do not aim abnormal returns by investing in equity market. Social status of the investors was not associated with stock selection decision. The main influencing factors do not show demographic differences: Gender, Age, Education, and Employment.

FeyyazZeren and Mustafa Koc (2016) carried outa research with the objective to find the relationship between exchange rates and stock market indices in Turkey, Japan and England and analyzed by using the time varying causality test. The study considers monthly data spanning the period of January 1990 to April 2013. Two way causality for the three countries applied during when local and global crises were occurred. First, by the Kapetanios unit root test that allows determining structural breaks endogenously and more than two breaks, stationary levels and break numbers of series were identified. Second, based on the belief that the result of especially long-term causality can have different consequences in different periods due to economic and political crises, a time-varying causality test was used. Using a time-varying bootstrap causality test, the most significant result was gained in the study on Turkey, England and Japan during the study period. The study reveals that local and global crises strengthens the causality relationship between the exchange rate and the stock market index as two-way causality.

2.2 STUDIES ON RISK- RETURN ASSESSMENT

Nicolas Bollen (1998) has conducted a research study which aims to reveal the impact of option introductions on the return variance of underlying stocks. The sample includes 745 NYSE-AMEX and Nasdaq stocks, all without any missing observations of returns. The researcher has carefully constructed the control group exhibits that match changes in the variance of optioned stocks. At-test has failed to reject the null hypothesis that the two groups have equal average change in variance. This evidence supports the hypothesis that option listings have no significant effect on stock return variance. The findings of the study include concerns that the regulatory agencies and the investing public have about derivatives trading. There are many issues in the regulation of derivatives that demand attention, such as the corporation, use and abuse of derivatives, the systemic risk in derivatives markets and proper accounting and disclosure rules, and the researcher has provided evidence that regulators need not be concerned about the impact of option on underlying stocks. Finally the researcher concludes that introduction of options does not significantly affect stock return variance.

AmitaBatra (2004) carried out a research on Stock Return Volatility Patterns in India. The object of the study was to give economic significance to changes in the pattern of stock market volatility in India during 1979-2003. The sample of the data for this research purpose was two stock market indices- the BSE Sensex and the International Finance Corporation, IFC Global (IFCG) index. Sensex based stock returns are therefore the mainstay of the paper. US dollar returns as in the IFCG index are also used for analysis. Data have been used at monthly and daily frequency. Monthly data is therefore the mainstay of this paper. The daily closing prices of the Sensex are used as the source data to arrive at the monthly data. The sample time period for sensex: 1979:04-2003:03 and for IFCG: 1988:01-2001:12. Original data – published and unpublished from official sources such as Securities and Exchange Board of India(SEBI), Reserve Bank of India (RBI), Bombay Stock Exchange (BSE) and IFS(IMF), RBI monthly bulletin and the handbook of statistics on the Indian economyhas been used for the analysis. Monthly Stock returns and asymmetric GARCH methodology were used for analysis. For the characterization of the stock market cycles, the Pagan and Sussoumov (2003) methodology has been adopted. The study revealed that the post liberalization period in India, the bull phases were longer, the amplitude of bull phases was higher and the volatility in bull phases was also higher than in the bear phases. In comparison with its pre liberalization character, the bull phases are more stable in the post liberalization.

Elke Weber et al. (2005) conducted an experiment, and examined how the type and presentation format of information about investment option affected investors' expectations about asset risk, returns and volatility and how these expectations were related to asset choice. Their research participants were business students from the United States (Ohio university, n=120) and Germany (University Mannheim, n=120) who were asked to respond to a series of judgment and decision tasks related to financial investing, in return for a payment of $10 in the United states or 15 DM in Germany. The respondents were provided with the names of 16 domestic and foreign investment options, with ten year historical return information for these options, or with both. Their data allowed testing whether investor's expectations of return were related to the expected value of

historical returns and whether they were influenced by (i) the format in which information about historical returns was provided, and (ii) by having information about the name and type of available assets, above and beyond their historical returns. Historical returns were presented either as a bar graph of returns per year or as a continuous density distribution. Regression analyses were used to assess the respondents' estimates of the expected return, volatility and risk respectively of the 16 assets. Expected returns closely resembled historical expected values. Risk and volatility perception both varied significantly as a function of the type and as a format of information, but in different ways.

Turan Bali and Nusret Cakici (2008) carried out a study on the cross-sectional tests used two different measures of monthly idiosyncratic volatility. One measure (denoted by IVOL) is the monthly realized idiosyncratic volatility obtained from daily returns over the previous month and the other measure (denoted by IVOL) is also the monthly realized idiosyncratic volatility, but it is based on the previous 24 to 60 monthly returns (as available). The study has been undertaken with the objective to examine the cross-sectional relation between idiosyncratic volatility and expected stock returns. The sample data included all NYSE, AMEX, and NASDAQ financial and nonfinancial firms from the CRSP for the period from July 1958 through December 2004. They used both daily and monthly stock returns to generate the idiosyncratic volatility measures. It was revealed that the data frequency (daily versus monthly) used to estimate idiosyncratic volatility, weighting schemes were used to compute average portfolio returns, breakpoints were utilized to sort stocks into quintile portfolios, and exclusion of the smallest, lowest priced, and least liquid stocks from the sample have played an important role in deciding the existence and significance of a cross-sectional relation between idiosyncratic risk and expected returns.

Yigit Atilgan et al. (2010) have done a research to investigate the inter-temporal relation between implied volatility spreads and expected returns on the aggregate stock market. The study was carried out by using the data for implied volatility variation between OTM put options and ATM call options. The data on the implied volatilities of S&P 500 index options are used in this study too. The result shows a significantly negative link between expected future returns and the

spread between the implied volatilities of out-of-the-money put and at-the -money call options written on the S&P 500 index. The inter-temporal relation between volatility spreads and expected market returns remains strongly negative after controlling for various measures of conditional volatility, a large set of macroeconomic variables, small sample biases, and distributional assumptions.

Mohammad Reza Tavakoli Baghdadabad et al (2011) made a study to investigate small investors' behaviour in choosing stock in the Kuala-Lumpur stock market. A purposive sampling technique was used to enlist 12 small investors based on a desired range of demographic characteristics (for example sex and age), experience levels in purchasing stock and value of purchasing per time in unit. Descriptive statistics was used to evaluate the data. The research found thirteen effective factors in choosing stock which could influence small investors' decisions for stock selection. They are financial statements of companies, accounting instruments, past stock price (return), firms' public information, profitability variables, consult with anybody, financial ratios, past trading volume of stocks, second-hand information resources, discounted cash-flow tools, government policies, calculation of risk and economic variables.

Aurangzeb (2012) studied the factors affecting performance of stock market, with evidence from South Asian countries. The aim of the study is to identify the factors influencing the performance of stock market in South Asia from 1997 to 2012, involving three South Asian countries such as Pakistan, India and Sri Lanka. The regression results indicate that the foreign direct investment and exchange rate have significant positive impact while the interest rate has a significant negative impact on the performance of stock market in South Asia.

Kolani Pamane and Anani Ekoue Vikpossi (2014) examined the Capital Asset Pricing Model (CAPM) and test its validity for the WAEMU space stock market called BRVM (BOURSE REGIONALE DES VALEURS MOBILIERES). The researcher considered monthly stock returns from 17 listed companies on the stock exchange from January 2000 to December 2008. The tests conducted to examine the non-linearity of the relationship between return and return. The beta supports the hypothesis that the expected return-beta relationship is linear. Additionally, this paper investigates whether the CAPM adequately captures all-

important determinants of returns including the residual variance of stocks. The results revealed that residual risk has no effect on the expected returns of stocks for the whole period and the entire sub –periods except for the last period of 2003-2008 which shows that returns are affected by non-systematic risks during that specific period. The result states that operating activities of the firms have an impact on their stock returns.

Narayanasamy and Thirugnanasoundari (2016) conducted a study to test the relation between risk and return on equity shares in India, the period covered is from January 2015 to December 2015 and the sample shares were randomly selected from amongst five equity shares included in the NSE 500 index. The analysis revealed that all the different risk variables considered in the study, the distributional risk variables, variance, skewness and kurtosis of the return distribution, confirm the working of risk-return trade-off in the Indian context. Also, a positive association was there between the security market return and the average rate of return during the period of study. It also exposes the relation between systematic risk and rate of return on equities in India. The presence of randomness of the return series of both monthly market and monthly security returns in India has proved that the Indian stock market is weakly competent. It is noteworthy to express that the Indian capital market exhibits a positive risk-return relationship.

2.3 STUDIES ON SHARE TRADING VOLUME AND STOCK DELIVERY POSITION

Tero Tuominen (2005) has carried a research concentrated on the short-term stock price effect of Finnish corporate layoff announcements. It also examined layoff announcements under different cross-sectional analyses in order to analyze whether there exist distinct firm related characteristics which could help to explain the rationality behind observed investors reaction and also discussed about the company reporting of layoffs and the financial layoff environment. The data was collected from 83 publicly disclosed layoff announcements for Finnish exchange-listed companies and gathered for the five years from June 2000 to June 2005. Standard event study methodology was used to examine the share price response to layoffs. The results of the study revealed that the investors see layoffs as negative news for the value of the announcing company. Pre- announcement reaction to layoff was negative, supporting the U.S andU.K findings. Evidence was

also found for the four studied factors that explained the market reactions on assets, business cycle, corporate governance and firm and management reputation.

Totok Sugiharto et al. (2007) conducted a research study to provide the results of a survey of investment practices and perceptions by major portfolio investment (fund managers) currently active at the Jakarta Stock Exchange (JSX) in Indonesia. This research study also provided some initial interpretation and analysis of their perceptions of the most important metrics used in valuation and their observation on SPERTEL (S-social, P-political, E-economic, R-regulatory, T-technological, environmental and legal) factors that influence the fundamental factors (EM metric) and values of equity shares (EV) of LQ45 firms quoted at JSX. The survey used a questionnaire, which was distributed in the first quarter of 2006, mailed to 100 investors, both global and local investors located in Jakarta that were identified as having investment concern at JSX. Identification of the relevant portfolio investors indicates based on the reference to various data source. The finding of the study indicates favorable trading conditions in the JSK and the attraction to the stock markets of foreign institutional investors after its revival following the success of democratic presidential election. They found inter-relationship among SPERTEL, EM metric and value of equity shares of LQ45, as a basic analysis to support the needs of investors to predict the future value of their investments.

Angela et al. (2011) conducted the study to identify traits of Taiwanese investors that deviate from the typical rationale governing financial decisions, through the analysis of their asset preferences and investment criteria. The time period of the study was between late 2007 and 2008, being a period of considerable volatility in the Taiwanese market during a major political campaign and a downturn of the economy. They considered the factors of market environment, investment amount, expected return rate, risk tolerance and investment type to investigate the relationship between these factors and investors preference when selecting assets such as mutual funds, stocks, bonds and foreign currency. The analytical hierarchy process (AHP) method was used to analyze the data. The finding of the study was that the risk tolerance is the most important factor for Taiwanese

investors when they design their asset portfolios. They preferred stocks to other assets. When market environment and risk tolerance are considered, mutual funds are chosen over and above stocks.

Justice Tei Mensah et al. (2012) have framed the objective of the study to find the impact of the automation on the efficiency of the GSE within the framework of the weak-form Efficient Market Hypothesis (EMH) using daily market returns from the Ghana Stock Exchange All-share index from 2006 to 2011. The Unit root Random walk and the GARCH models were used to analyze the efficiency of the GSE in the pre and post automation sample periods. The findings of the study was that the GSE was weakly inefficient in both pre and post automation periods, suggesting that the automation of the GSE have not yielded the needed impact towards improving the efficiency of the exchange.

Ebenezer Bennet (2012) analyzed the objective of the study to identify the individual investor's sentiment and also to know the influence of market specific factors on investor's sentiment. The required data was collected from the retail investor's living in Ghana through interview schedule. The research was conducted during the period from July to September 2011. A sample of 100 retail investors who were in three different investment centers in Ghana was taken for this study. The following hypotheses were formulated and tested - that the investor's optimism is influenced by Herd Behaviour of Investor's (HB), Internet Led Access to Information and Trading (ILA), Macro Economic Factors (MEF), Risk and Cost Factor (RCF), Performance Factor and Confidence Level of Institutional Investors, Best Game in Town and Investor's optimism and were tested by using the Bootstrapping method. Some market-specific factors had a significant impact on the investor's sentiment in Ghana**.**

Ahmad salem Alkhazali (2014) conducted a study with the objective to identify the nature of the relationship between trading volume and stock price Index in Amman stock exchange during the period 2000-2014; the result was that there was no statistically significant relationship between trading volume and stock price Index at selected sector and also casual relationship one-way between each of the trading volume and stock price Index. The result found that the volume of trading is causing the stock price Index.

2.4 STUDIES ON ECONOMIC VALUE ADDED AND MARKET VALUE ADDED

Thenmozhi (2000) analyzed the study to examine the relationship between share price and Market Value Added in relation to other performance measures like Return on Investment, Return of Net Worth and Earnings per share with particular reference to BSE Sensex companies. The MVAPS performance measure seems to be a very strong measure influencing share prices and hence attempt should be taken by companies to improve MVAPS to improve the stock prices.

Madan Lal Bhasin (2013). Made an attempt to analyze whether the sample companies have been able to generate value for its shareholders, analyzed the effectiveness of EVA over the conventional measures of corporate performance, and also indicates whether the significant differences exist between the actual values of EVACE and time factor of the sampled companies. The study examined the value-creation strategies of selected Indian companies by analyzing whether EVA better represents the market-value of companies in comparison to conventional performance measures. Based on the objectives, various statistical tools like ANOVA, trend analysis and regression analysis were used and the result of the study indicates that, there is no strong evidence to support Stern Stewart‘s claim that EVA is superior to the traditional performance measures in its association with MVA.

Shipra Pruthy (2013) made an attempt to calculate the important metric of financial performance i.e. EVA and MVA of power sector companies listed in NSE under the head of CNX energy for the period 2009-11. To rank the companies on the basis of EVA and MVA generated for the year (2009-11) and also measure the correlation between EVA and MVA of the sample companies for the period (2009-11). The study also examines the trend of EVA and MVA by taking year 2009 as base for year (2010-2011). The finding of the study indicates that the reason for negative economic value added is high cost of equity.

Bhargav Pandya (2016) evaluated to empirically analyze the association between operating cycle ratios and an MVA in the context of “A” group companies listed in the Bombay stock Exchange using the secondary data of 197 companies which covers the period of 2010-2014. Multiple regression analysis used to

analyze the association between operating cycle ratios and market value added with selected companies. It is revealed from the study that none of the operating cycle ratios was significantly related to market value added. Finally, the study concludes that managing operating cycle ratios need not necessarily result into the augmentation of shareholder wealth.

Nu fazil Altaf (2016) analyzed the objective of the study to empirically test the claim made by Stern Stewart &Company that economic value added is a better metric that traditional earnings based measures in explaining market value by using a sample of 325 Indian firms divided into two parts – 170 firms belonging to Indian manufacturing company and 155 companies belonging to Indian service sector. The study examined whether EVA or earning-based performance metrics are best for explaining MVA in Indian firms. The result found that traditional earnings-based performance measures better explain MVA among selected sector and all the performance matrices have a significant positive relationship with MVA.

Kiran Kumar et al. (2017) made a study focused on the impact of the EVA and MVA in relation to stock market returns. It also identified the superior measure among these two through stepwise multiple regression model for creating value to the share-holders. The study ranked the correlation between the companies based on the EVA and MVA. It can be stated that both EVA and MVA played significant roles in the financial performance of the select cement companies.

2.5 STUDIES ON POOLED REGRESSION, FACTOR AND PATH ANALYSIS

Majed Abdel Majid Kabajeh (2012) tried to examine the relationship between the ROA, ROE and ROI ratios together and separately with Jordanian insurance public companies share prices during the period 2002-2007. This study examined the relationship between the ROA, ROE and ROI ratios together and separately with Jordanian insurance public companies share prices during the period 2002-2007. Four regression models were used to test the hypotheses of the study. Based on the results of the study, the following conclusions can be made: First, the pooled analysis of the three ratios of ROA, ROE and ROI together showed a strong and positive relationship with share prices, and a strong explanatory power. Second, the separated pooled analysis showed a positive but

low relationship between each of ROA and ROI ratios with market share prices of Jordanian insurance public companies. However, the separated pooled analysis showed no relationship between the ROE ratio with market share prices of Jordanian insurance public companies.

Sunita Sukhija (2014) analyzed the combined effect of key variables on equity share prices of Indian companies that are listed in BSE 200. To study the impact of independent variables on stock prices, multiple regression model are used in hypothesis testing and analyzing the data. Eight key variables such as: Book Value per Share (BV), Dividend Per Share (DPS), Earnings Per Share (EPS), Cover (C), Payout Ratio (P), Price Earnings Ratio (P/E), Return on Capital Employed (ROCE) and Growth (G) have been included in the study. It can be concluded that Earning per Share is emerged as significant determinant with the positive sign in three years out of seven years while Dividend per Share is significantly negative in two years. Book Value per Share has influenced the market price of share significantly in five out of seven years. Price Earnings Ratio has emerged a significant positive determinant in two years out of seven years. Dividend Payout Ratio has emerged as significant determinant of market price of share with the negative sign in two out of the seven years of study.

Taimur Sharif et al. (2015) made an attempt to analyze the determinants of market price of shares of companies listed in the Bahrain stock exchange. A panel data for 41 companies were constructed resulting in 167 observations for the period 2006-2010. The estimation method is based on POLS regression with robust standard errors, and FE and RE models. The study mainly tried to establish a relationship between market price of shares (MPS) and eight other variables namely return on equity (ROE), book value of share (BVS), earnings per share (EPS), dividend per share (DPS), price earnings (PE), dividend yield (DY) , debt to total asset (DA) and firm size (Log MCAP). The empirical findings reveal a positive and significant relationship between ROE, BVS, DPS, PE and Log MCAP suggesting that these factors act as active determinants in shaping the market price of shares. However a significant negative relationship was found between dividend yield and MPS.A high R^2 (0.80) revealed under both the applied models further documents the significant impact of these variables on the market price of shares. This suggests that investors can make optimum investment decisions and

be assured fair returns if they consider these determinants which have evolved to be the significant contributors to the market price of shares in Bahrain.

Muhammad Anhar (2015) conducted a study to identify, select and determine the proper indicators for company's performance (CP), IE (Investor's Expectation) on the price return and Investment risk (IR) factors in the SEM analysis which can be used to predict future capital gain. The research study designed to obtain sufficient indicators for CP, IE AND IR that will be used to predict SR with SEM. This analysis was designed as ex post facto, associative, cross-sectional quantitative research to explain the relationship between variables CP, IE and IR with its each indicator respectively in SEM models. The sample of the study is all share listed on the stock exchange in June 2012 that is 425 companies of nine Industries. The conclusion of the study was, to measure Company's performance only three indicators are good enough to use that is ROA, ROE, and NPM. Secondly, to measure the investor's expectation there is two variables that are superior to be used are PT and AR. Finally to measure the investment risks there are two variables to use that is SD of return and beta co-efficiency.

Adnan Ali et al. (2015) carried out a study to find out any relation between dividend policy factors and stock prices, by using the sample composed of Non-financial companies listed at – KSE- 100 for the period 2001-2012 which have a positive net income and made dividend payments. Pooled regression, fixed and random effect results are focused after applying Hausman's test. They found positive as well as some negative relationship between the selected variables. They concluded that profit retention by firms will result in a decrease in the value of the stock market price.

Samuel Tabot and Enow, Pradeep Brijlal (2016) investigated the determinants of share prices using fourteen companies listed on the Johannesburg stock exchange from 2009-2013. Using a multiple regression analysis, the result revealed that dividend per share, earnings per share, and price-earnings ratio account for 57.8 per cent of share prices movements. Furthermore, earnings per share and price earnings are significantly positively correlated to share prices although dividend per share was not. This finding implies that, managers can

create value for their shareholders by increasing dividend per share, earnings per share and price earnings.

Summary

From the literature review the researcher has found that a combined study of the performance of Index and Non-Index stocks is not available. Hence the researcher intends to investigate the performance analysis of Index and Non-Index stocks in the banking and IT sectors. The stock market field is extensively studied by many researchers in different perspectives. Sector–wise Indexing is the recent innovation in the stock exchange market, which provides a useful insight in analyzing the stock performance.