## CHAPTER-2

**REVIEW OF LITERATURE**

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2.1 INTRODUCTION

The review of literature guides the researchers for getting better understanding of methodology used, limitation of various available estimation procedures and database, and logical interpretation and reconciliation of the conflicting results. Besides this, the review of empirical studies explores the avenues for future and present research efforts related to the subject matter. In case of conflicting and unexpected results, the research can take the advantage of knowledge of their researchers simply through the medium of their published works. A number of research studies have been carried out on different aspects of performance appraisal by the researchers, economists and academicians in India and abroad also. Different authors have analysed performance in different perspectives. A review of these analyses is important in order to develop an approach that can be employed in the context of the study of Indian automobile industry. Therefore, the present chapter reviews the empirical studies related with different aspects of financial performance analysis.

2.2 REVIEWS ON FINANCIAL PERFORMANCE

This part represents the review of those studies that have been carried out in the financial performance.

Rao (1993) discussed in his research about ‘Financial appraisal of Indian Automotive Tyre Industry’. Main objective of study was intended to probe into the financial condition-financial strength and weakness-of the Indian tyre industry. He has been measured and evaluates the financial performance through inter-company and inter-sector analysis for the period of 1981-1988. He has found that the fixed assets utilisation in many of the tyre undertakings was not as productive as expected and inventory was managed fairly well. He has considered that the tyre industry's overall profit performance was subjected to inconsistency and ineffective. He has suggested some recommendations to improve financial performance.

Rao (1993) has made a study about inter-company financial analysis of tea industry-retrospect and prospect. He wished to analyses the important variables of tea industry and projected future trends regarding sales and profit for the
next 10 year periods, with a view to help the policy makers to take appropriate
decisions. He have been calculated various financial ratios for analyzing the
financial health of the industry. After the comparison of ratios, he has
concluded that the forecast of sales and profits of tea manufacturing companies
showed that the Indian tea industry has bright prospects. He has also revealed
that the recent changes in the Indian economic policies may boost up the
foreign exchange earnings, which may benefit those companies, which are
exporting to hard currency areas.

Pai, Vadivel & Kamala (1995) have studied about the diversified companies
and financial performance. Main purpose of research was found out the
relationship between diversified firms and their financial performance. For the
purpose of research, they have selected seven large firms and analysed those
firm which having different products-both related and otherwise-in their
portfolio and operating in diverse industries. In this study, a set of performance
measures / ratios was employed to determine the level of financial performance
and variation in performance from one firm to another has been observed and
statistically established. They revealed that the diversified firms studied have
been healthy financial performance.

Vijayakumar A. (1996) has studied about ‘Assessment of Corporate
Liquidity - a discriminate analysis approach’ in this research he has revealed
that the growth rate of sales, leverage, current ratio, operating expenses to sales
and vertical integration was the important variables which determine the
profitability of companies in the sugar industry. Also he has studied the short-
term liquidity position in twenty-eight selected sugar factories in co-operative
and private sectors. In research a discriminate analysis has been used by the
researcher, to undertaken to distinguish the good risk companies from poor risk
companies based on current and liquidity ratios. In this study discriminating
‘Z’ scores have been calculated with the help of discriminate function and
according to the ‘Z’ scores the companies are ranked in the order of liquidity.

Loundes (1998) studied on his research paper regarding “performance of
Australian Government Trading Enterprises: An overview”. He has provided
an overview of GTE performance over the 5 years to 1996 using the IBIS Enterprise Database, following the method of analyzing firm performance as outlined by the steering committee (1998). He has made comparative analysis and its results indicate that there are large differences in performance across firms, and more particularly, across the industries. Assessing the performance of Government Trading Enterprises (GTEs) has become increasingly important in the context of the push towards privatisation.

**Dhankar (1998)** has studied about the criteria of performance measurement for business enterprises in India study of public sector undertakings. The author gives a new model for measuring the performance of a business enterprise in India, wherein, the basis is to compare its actual rate of return with its expected risk adjusted rate of return. Realizing the importance and controversy of public sector in India, an attempt was made to measure the performance of all public sector undertakings, which were started up to 1964 and were in operation until 1983. It is shocking to know that half of them on an average want to talk of making excess returns, have not been able to earn equal to their cost of capital.

**Sengupta (1998)** studied concerning the performance of the fertilizers industry in India. By Analysing of cost functions and cobb-douglas production function have been made to check the performance of the industry. Analysis of shifting cost functions further highlight that the firms belonging to this industry expand capacities, even before fully exploiting the existing capacity conforming to the oligopolistic behavioural tendency of the firms belonging to the fertilizers industry. The results showed that the industry was subject to the law of increasing costs. He founded that, to get further support from the examination of the production function, which revealed that the average productivity of labour exceeds its marginal productivity..

**D’Souza & Megginson (1999)** have studied concerning the financial and operating performance of privatized firms during the 1990s. They made comparison about the pre and post privatization financial and operating performance of 85 companies from 28 industrialized countries that were
privatized through public share offerings for the period from 1990 to 1996. They have noticed that the significant increases in profitability, output, operating efficiency, dividend payments and significant decreases in leverage ratios for the full sample of firms after privatization. They have also concluded that the capital expenditures increase significantly in absolute terms, but not relative to sales and Employment declines, but insignificantly. As per findings, they strongly recommended that privatization yields significant performance improvements.

**Raghunathan & Das (1999)** have discussed in their paper regarding corporate performance of post-Liberalization. They analysed the performance of Indian Manufacturing sector in the last 8 years since liberalization on the parameters of profitability, liquidity, leverage and solvency. They also observed that the solvency and profitability ratios were encouraging till 1996 they have been gradually diminishing after that and this problem gets more pronounced when the EVA was calculated which showed that the Indian Manufacturing sector has destroyed wealth, while the MNCs have generated wealth for their shareholders. They have pointed out after the analysis; the poor corporate performance has led to an economic slowdown and not the other way round and corporate raised funds during the blacken days of equity markets and ended up investing these funds at below their cost of capital. In short, the outcome has been a prolonged economic slowdown.

**Nitsure & Joseph (1999)** have studied about, “Liberalisation and the Behaviour of Indian Industry (A Corporate - Sector Analysis based on Capacity Utilisation), and examined the impact of economic reform on productive capacity creation and utilization across various industries in the nineties. They analyzed the determinants of capacity use such as credit flows, import liberalization, fiscal consolidation and demand conditions, using panel 35 data for 802 firms for the period 1993-98 to suggest an optimum combination of policies that is critical for realizing the unused capacity. They suggested that although substantial achievements occurred initially in creation
and utilization of capacities in the various industries, there was significant room for further improvement in utilization.

**Rajeswari (2000)** studied about the Liquidity Management of Tamil Nadu Cement Corporation Ltd. Alangulam-A Case Study. She concluded from the analysis; the liquidity position of TANCEM was not stable. After the comparative analysis regarding liquidity ratios, she has found there was too much of liquidity in the first two years of the study period and also a very high degree of liquidity was also bad as idle assets earn nothing and affects profitability. In short, she concluded that the liquidity management of TANCEM is poor and is not satisfactory.

**Aggarwal & Singla (2001)** have studied about developed a single index of financial performance through the technique of Multiple Discriminate Analysis (MDA), by selecting 11 ratios and selected ratios used as inputs. For the purpose of analysis they selected only those ratios, which was relevant in distinguish between profit making units and loss making units in Indian paper industry. They concluded that, the model has correctly classified 82.14 percent of units selected as profit making and loss marking. They mentioned in their study the inventory turnover ratio, interest coverage ratio, net profit to total assets and earnings per share are the most important indicators of financial performance. Also they suggested suggests that the results of Multiple Discriminate Analysis could be used as predictor of future profitability / sickness.

**Sur (2001)** studied in his paper about the Liquidity Management: An overview of four companies in Indian Power Sector using the data for the period of 1987-1988 to 1996-1997. He had applied accounting techniques of comparative analysis regarding the liquidity management in Electricity generation and distribution industry. He revealed that the overall liquidity should be managed in such a way that not only it should not hamper profitability but also its contribution towards increase in profitability should be positive.
Sur, Biswas & Ganguly (2001) have studied about the Liquidity Management in Indian Private Sector Enterprises - A case study of Indian Primary Aluminium industry. From the analysis, they had summarized that the overall performance regarding liquidity management at INDAL was better in terms of efficient utilization of short term funds, whereas HINDALCO was unable to do so. They found that a very high degree of positive correlation between liquidity and profitability in case of both the companies was a notable feature, reflecting the favourable effect of liquidity on profitability.

Loundes (2001) analyzed ‘The Financial performance of Australian Government Trading Enterprises Pre &Post-Reform’ revealed that during the 1990’s. Main objectives of the study was to discover whether there had been any change in the financial performance of government trading enterprises operating in electricity, gas, water, railways and ports industries as a result of these changes. He had concluded that that it did not appear to have been a noticeable enhancement in the financial performance of most of this business, although railways have improved slightly, from a low base. He has suggested several measures introduced to improve the efficiency and financial performance of government trading enterprises in Australia.

Rogers (2001) studied in his research about the effect of diversification on firm performance analyses the association between diversification and firm performance by using a sample of up to 1449 large Australian firms for the period of 1994 to 1997. He has analysed the firm performance by measuring profitability and, for quoted firms, market value. From the comparative analysis of selected sample, the results showed that all the selected firms have more focused to maintain higher profitability and also controls for firm specific effects and other determinants of profitability. However, this association was not found in sub-sample regressions for listed firms. He concluded that for measuring the performance of the firm, firm select either profitability or market value. The results indicated that listed firms may be under closer scrutiny and competitive pressures that ensure, on average, that these firms are at their optimal degree of diversification.
Bosworth & Loundes (2002) have studied about the Dynamic performance of Australian Enterprises investigate the interaction of discretionary investments, innovation, productivity and profitability within a dynamic framework of firm performance. They have set up a dynamic and closed model for firm performance and the result empirical model was tested as a series of recursive equations by using a four-year balanced panel data set of Australian firms drawn from the Business Longitudinal Survey. After comparatively analysis, they found that the current economic profit has an important role to play in enabling firms to invest. They mentioned in the findings regarding investments complements and also substitutes. They concluded from analysis the impact of these discretionary investments on innovation and total factor productivity performance. Finally, the impact of past discretionary investments both directly and indirectly (that is, via innovation and productivity performance) on current profitability was examined. They also revealed that the past values of these investments have a significant influence on current profit, effectively closing the model.

Mulla (2002) discussed in his paper about the ‘Use of ‘Z’ score analysis for evaluation of financial health of textile mills - A case study’ has been made an insight into the financial health of ShriVenkatesh Co-operative Textile Mills Ltd., Arunageri of Dharwad District. For the purpose of analysis, the ‘Z’ score analysis has been applied to evaluate the general trend in financial health of a firm over a period by using many of the accounting ratios. From the analysis he was concluded that the textiles mill under study was just on the verge of financial falls down and on the one hand, current assets declined because of the negative profitability performance, whereas on the other hand, the current liabilities were on the increase because of poor liquidity performance of the mill.

Wolfgang Aussenegg & Jelic (2002) examined about operating performance of 154 Polish, Hungarian and Czech companies that were fully or partially privatized between January 1990 and December 1998. They have revealed that privatized firms in the sample did not manage to increase profitability, and
considerably reduced efficiency and output in the post privatization period. They concluded that the enterprises privatized through mass privatization programs (Czech SOEs) achieved lower profitability in the post-privatization period compared to their counterparts privatized through case-by-case method. After comparative analysis they came to know the Czech companies have also maintained much higher bank borrowings after privatizations than their polish and Hungarian counterparts. The study further revealed that private sector IPOs underperforms their privatization complements in terms of profitability, efficiency, capital investments and output. Finally, they concluded that firm’s size did not seem to influence key performance measures in selected countries.

Kakani, Saha & Reddy (2003) have studied about an empirical validation of the widely held existing theories on the determinants of firm performance in the Indian context. In their study they have used financial statements and capital market data of 566 large Indian firms over a time frame of eight years divided into two sub-periods (1992-96 and 1996-2000) and to analyse Indian firm’s financial performance across various dimensions viz., shareholder value, accounting profitability and its components, growth and risk of the sample firms. They have found that size, marketing expenditure and international diversification had a positive relation with a firm’s market evaluation. They have also concluded that a firm’s ownership compositions, particularly the level of equity ownership by domestic financial institution and dispersed public shareholders, and the leverage of the firm were important factors affecting its financial performance.

Petia (2004) discussed in his study about performance of India’s non-financial corporate sector since 1989, by using firm level data and evaluated its financial vulnerabilities. He has found that promising trends in liquidity, profitability and leverage of the sector emerged in the early 1990s; he has experienced a reversal after 1996. Nevertheless, most indicators were still at comfortable levels, and there was evidence of improvement in 2002. The study also revealed that a number of firms still face problems servicing their debt obligations, posing a risk to lenders. He has concluded that aggregate interest
coverage of the corporate sector indicated that potential non-performing loans of the corporate sector remain high and this underscores the need of the corporate sector remain high. He suggested this underscores the need for close monitoring of the corporate sector in the future.

**Weill (2004)** discussed in his paper about comparison of leverage and corporate performance-a frontier efficiency analysis provides new empirical evidence on a major corporate governance issue and also the relationship between leverage and corporate performance. To analyse the leverage and corporate performance, he has applied frontier efficiency techniques to obtain performance measures for companies from several countries (France, Germany and Italy). This study proceeds to regressions of corporate performance on a various set of variables including leverage. He has found mixed evidence depending on the country; while significantly negative in Italy, the relationship between leverage and corporate performance was significantly positive in France and Germany.

**Patra (2005)** has studied about the impact of liquidity on profitability by using current ratio, acid test ratio. Current assets to total assets ratio, inventory turnover ratio, working capital ratio, receivable turnover ratio, cash turnover ratio of selected two company’s viz., Tata Iron & Steel Company Limited for the period 1999 to 2005. Using mean, standard deviation, co-efficient variation, correlation and co-efficient of relation. He has concluded that Out of seven liquidity ratios selected for this study, four ratios namely current ratio, acid test ratio, current assets to total assets ratio and inventory turnover ratio showed negative correlation with profitability ratio. Whereas The remaining three ratios namely working capital turnover ratio, receivable turnover ratio and cash turnover ratio have shown positive association with the profitability ratio, all of which are statistically significant at 5% level of significance. He found that the impact of liquidity ratios on profitability showed both negative and positive association. However, these correlation co-efficient were not statistically significant. The result showed that all the correlation co-efficient is as desirable except correlation co-efficient between inventory turnover ratio
and ROI while undesirable sign between ITR and ROI was not supported by
the multiple regression analysis, which indicated the positive association
between these two variables. He mentioned that growing of profitability which
was depends upon many factors including liquidity.

**RBI Bulletin (2005)** Finance of Foreign Direct Investment companies has
made studied on financial performance analysis using profit margin ratio,
return on net worth ratio of selected 490 non-governments non-financial
foreign direct investment (FDI) companies for the period 2000 -2003 based on
their audited annual accounts. This study concluded that the financial results of
the selected company should improve performance in terms of higher growth
in sales, value of production, manufacturing expenses and gross profit during
2002-03 compared with the respective growth rates in the previous year. It also
revealed that profitability ratios like profit margin return on network increased
during the year under Review Company having major portion of FDF from
UK, USA, Switzerland and Mauritius registered net flow of foreign companies
in all the three years.

**Reddy & Padma (2005)** have been made discussed about the impact of
mergers on corporate performance. They have compared the pre and post-
merger operating performance of the corporations involved in merger to
identify their financial characteristics. They explained their views on based of
empirical research on share price performance and suggested that acquiring
firm generally earns positive returns previous to declaration, but less than the
market portfolio in the post liberalisations period in general and analysis of the
pre and post-merger operating performance of the acquiring firm.

**Singh (2006)** has studied about the performance of sugar mills in Uttar
Pradesh by ownership, size and location. He has mentioned that in his paper
performance assessment of the sugar industry and setting targets for the
relatively inefficient mill to improve their efficiency and productivity is
crucial, as the interests of various stakeholders are largely dependent on its
performance. On the base of analysis he has found that the performance of the
mills was differ significantly across sector, plant size and region and the
private sector mills achieved the highest efficiency scores, followed by the cooperative sector. He has also been observed that the mills with bigger plant size attain relatively higher efficiency scores, moreover, the mills located in the WK found better performer as compared to their counter parts of other regions. Labour and energy inputs are found highly underutilized in almost all the inefficient mills.

**Sur & Chakraborty (2006)** have discussed about financial performance of Indian Pharmaceutical industry. They have been made the comparative analysis the financial performance of Indian Pharmaceutical industry for the period 1993 to 2002 by selecting six notable companies of the industry. They explained that the Indian Pharmaceutical industry has been playing a very significant role in increasing the life expectancy and in decreasing the mortality rate and it is the 5th largest in terms of volume and the 14th largest in value terms in the world. The comparison has been made from almost all points of view regarding financial performance using relevant mathematical programming methodology tool DEA (Data envelopment analysis). For measuring the efficiency in performance they have been used DEA model and DEA Model included two things one was the input ratio like total assets to total debt ratio, total assets to long-term debts ratio and output ratio like current ratio, total assets to net working capital ratio, total assets to net profit ratio, total debt to cash flow and profit margin ratio. They have mentioned in these studies; scale based measures of performance are highly correlated with the firm’s to increase factor of production and sale and growth of physical inputs and it means that the firms endowment of fixed assets. The significant correlation has been observed by the efficiency based ratio with intangible assets and their related activities that means highly related to store of production related engineering and technical skills, and firm’s ability to leading new products. After analyzing the seven ratios, they indicated the areas in which inefficient member companies were lagging behind and how they could improve their performance to bring them to a suitable competitive level. They suggested that inefficient companies should make policy changes to
manage their financial ratios and development of a family of DEA models using principal component analysis facilitated analysis of the impact of variables, such as long-term debt to total. The data envelopment analysis is a powerful technique for performance measurement.

Choudhary (2007) has studied in relation to performance of the common stocks under alternative investment strategies by examining the relationship between investment performance of equity securities and alternative investment strategies based on their market capitalization, P/E ratio and earnings per share for the period January 1997 to December 2005. He has concluded the analysis, the low market capitalization, P/E ratio, and earnings per share portfolios on average earned higher absolute rate of return than the high market capitalization, P/V ratio, and earnings per share portfolios respectively. He has observed that among the three investment strategies the low market capitalization investment strategy was found superior to both low P/E ratio and low earning per share investment strategies in terms of absolute and risk adjusted rate of return. He has mentioned in the study the efficient market hypothesis denies the possibility of earning abnormal returns, the fundamental analysts assert that investment strategies based on the accounting numbers may be indicators of feature investment performance.

Gaabalwe (2007) has done descriptive studies on “financial performance measurement of South Africa’s top companies: an exploratory investigation” he has made study on the base of empirical, he applied accounting tools like ratio and applied statistical tools like mean, standard deviation, and z test. For the purpose of analysis he has facilitated the analysis and interpretation; the Z-Scores of the sampled companies were expediently used to classify the companies into three categories like high, medium and low. Results also implied significant differences for the current ratio, liquidity ratio, return on capital employed ratio, debts-equity ratio, whereas insignificant differences for inventory ratio, debtors ratio, total assets turnover ratio, current assets turnover ratio, gross profit margin ratio, net profit ratio. For the practice of analysis and
interpretation he has included a critical look at the financial performance measures highlighted by the Top Companies in their accounting data.

Jhala (2007) discussed in her Ph. D thesis about “An Analytical Study of Financial Performance of Refinery Industry of India” and for the purpose of analysis, seven units have taken for the period 1998-2003 for the analytical study of performance of the selected units. In this research, she has covered the financial aspects of these 7 units and has been analyzed by performance analysis. She had tried to get most significant and viscous finance related data of the selected units and Z-score, Anova test, various ratio analysis, correlation matrix trend analysis, as well as multivariable analysis method have been used to analyse the data of the units. She has concluded from the liquidity test, it can be said that CPCL has average liquidity position, it has better liquidity position but however it was also below standard level. BPCL, IOC, MRP has very poor liquidity position and seeing to working level efficiency, KRL has very good inventory turnover performance but it was poor in debtors’ turnover performance as well as BPCL was good to debtors’ turnover but not in inventory turnover efficiency. On the basis of analysis she recommended that, company should to make efficient use of net fixed assets as well as current assets, try to maintain liquidity level, decrease the external funds, change the policy of credit and reduce the cost.

Ramudu & Rao (2007) discussed about the Receivables management in the commercial vehicles industry in India. Main purpose of study was to examine the efficiency of receivables management of the Indian commercial vehicles industry. In this study, they have revealed that the industry as a whole had managed receivables efficiently, whereas a few individual companies had for less satisfactory scores in this respect. They concluded that the level of investment in receivables as a percentage of sales across the industry was reasonable less. They concluded after comparative analysis of selected companies, the Tata Motors, Bajaj Tempo, and Eicher Motors, had recorded sound performance in receivable management whereas Ashok Leyland and
Swaraj Mazda had recorded poor performance in the receivables management benchmarked against the industry average.

Samuel & Vanniarajan (2007) discussed about financial performance of bank by applying Du-Pont analysis. They concluded that the liberalization of the finance sector in India has divulged Indian banks to a new economic environment that is considered by increased competition and new regulatory requirements. They also revealed that Indian and foreign banks need to explore development opportunities in India by initiating new products for different customer segment, and many of which were not conservatively viewed as customer for the banking industry. They suggested all banks should to evaluate their performance and compare with the others. In the last they depicted from the analysis the performance of the banks may be viewed on the base of three dimensions like structural, functioning and efficiency factors which was suggested by the India Bank Association.

Singhania (2007) has analysed the study concerning the Dividend policy of India companies. From the analysis he has revealed that the percentage of companies declaring dividend declined over the years, the average dividend per share increased by nearly eight times. He has found that if companies imply to declare dividend, increasingly per higher dividends over the years. He considered that the average dividend pay-out ratio ranged between 25% and 68% during 1992-2004. However, he has mentioned that average dividend yield showed a consistent upward trend throughout the period of study-increasing from 0.75% in 1992 to 10% in 2004 and found the one possible reason for the increase in dividend pay-out and it may be happen due to the change in tax regime. He suggested that according to tax preference or trade-off theory, favourable dividends tax should lead to higher pay-outs.

Srivastava (2007) has studied on “Role of Organizational management and managerial Effectiveness in promoting performance and production”. He has included in his study, Management is a universal Phenomenon and it is practically required in all walks of life presently. He has identified some problem like Lack of proper management in variable results in chaos, wastage
of time, money and effort. Although management is needed in various activities, it has special significance with respect to business enterprises in the public as well as private sectors. He suggested that the productive efficiency of business firm depends a great deal on the Quality of management and also effectiveness of management is a major factor formative the growth and prosperity of a business on which rests the process of economic growth. He has explained that the management is not confined merely to a factory or an office. Skilful management is needed in clubs, families, Schools, Sports, teams and social functions like marriages, Picnics parties and so on.

Toby (2007) did research on “Financial management modelling of the performance of Nigerian Quoted Small and medium-sized Enterprises. He has concluded that the sustained growth, adequate liquidity and requisite profitability in the Small and Medium sized Enterprise sector is significantly related to their investment and financing decisions. The experiential results showed that there was not significant different between current ratio and the gross profit margin ratio and found the working capital gap constant. He has also observed that the citation SMES current assets ratio, liquidity ratio, cash reserve requirement and loan deposits ratio was significantly perceptive to commercial Banks. Overall, he concluded over model results confirm that the Small and Medium sized Enterprise in Nigeria is still limited by the liquidity as well as profitability quandary, efficiency limitations, Pecking order reversals, stringent monetary policy regimes and a risk-over banking system.

2.3 REVIEW OF EMPIRICAL STUDIES ON PROFITABILITY,

INVESTMENT CAPITAL STRUCTURE ANALYSIS

Rao (1985) in his discussed regarding ‘Impact of Debt-Equity Ratio on Profitability-An Exploratory Study of Engineering Industry’, in this study he observed that if the earning ability i.e., profitability, has any impact on the debt-equity ratio in engineering companies. This study was based on the impact of profitability on the debt-equity ratio and he has revealed a negative association i.e., high debt-equity ratios meant low profitability due to large
interest payments, whereas low debt-equity ratio caused high profitability because of low interest payments. He concluded that the operating efficiency of the firm and reasonable rate of return on owner’s capital ultimately depend on the profits earned by it and thus, profits are necessary to run the firm in a healthy atmosphere of present day cut throat competitions and also defend it from business rivalry.

Burthwal (1990) in their research, they discussed about “profitability and structure: A firm level study of Indian Pharmaceutical Industry”, intensively examined the relationship between profitability and structure, by using as a sample of thirty-eight pharmaceutical firms in India for the period 1970-1982. They were selected two measures of profitability i.e., ratio of net profit to total sales revenue and the ratio of net profits to total assets have been used to find out the determination of profitability. Their analysis demonstrated that under the condition of price the most controls significant determinant of the profitability of the firms in this industry was vertical integration. While size and advertising intensity did not appear to be major determinants. This was perhaps due to the inability of firms to translate their market power into prices, because of controls. They concluded that the coefficient of growth rate of sales was positive and significant, and suggested that factors on the demand side of a firm had a greater impact on profitability than on the supply side.

Krishnaveni (1991) in her study evaluated the impact of policy changes since 1982-92 on profitability and growth of firms in the industry using Tobin’s q as a measure of profitability. In this study, she found that there was no evidence to show that firms have made supernormal profits. Profitability was found to be explained mainly by age of the firms, vertical integration, diversification and industry policy dummy variables. Important determinants of the growth of firms were found as diversification, industry policy dummy variable, gross retained profits and expansion of capacities. Results also reveal differences in performance between car and non-car sectors as well as within the sectors of the industry.
Ballantine, Cleveland & Timothy Koelle (1993) studied about ‘Profitability, Uncertainty and Firm Size’, examined the associations between dissimilarity in profit and loss rates among firms in small-firm and large-firm size classes as reflections of uncertainty. They found that, within industries, such dissimilarities were particularly great for firms in small-firm size classes, leading to operating policies for small firms best characterized as entrepreneurial. Large firms, in contrast, faced with less uncertainty in earning profit, appeared to adopt policies that manifest an emphasis on strategic planning.

Chandrasekaran (1993) discussed concerning ‘Determinants of profitability in Cement Industry’ and the objective of this study was to examine determinants of profitability in cement industry. The study aimed at drawing inference on impact of policy measures which led to change in price and distribution polices relevant for cement industry. Determinants of profitability were analysed using the technique of ordinary least squares. Based on existing theories and relevant econometric empirical works, variables were selected. He has concluded that efficiency in inventory management and efficient management of current assets were important to improve profitability.

Vijayakumar & Venkatachalam (1995) have discussed about ‘Working Capital and Profitability - An Empirical Analysis’ for the purpose of study, the impact of working capital on profitability in sugar industry of Tamil Nadu by selecting a sample of 13 companies; 6 companies in co-operative sector and 7 companies in private sector for the period 1982-83 to 1991-92. For the purpose of analysis they applied simple correlation and multiple regression analysis on working capital and profitability ratios. They also concluded through correlation and regression analysis that liquid ratio, inventory turnover ratio, receivables turnover ratio and cash turnover ratio had influenced the profitability of sugar industry in Tamil Nadu.

McDonald (1997) studied about ‘The Determinants of Firm Profitability in Australian Manufacturing’, in this study he has tried to provide new evidence on the determinants of the profitability of Australian manufacturing firms by
analyzing a unique firm level data set of firm presentation over the period for the 1983-1993. From estimations based on an adaptation of a standard oligopoly model, econometric results suggested that lagged profitability is a significant determinant of current profit margins, and that industry concentration was positively related to firm profit margin. As well, both union density and real wage inflation were found to be negatively associated with firm profits. Finally, he concluded that the cyclicality of profit margins depends on industry concentration - firm margins were pro-cyclical in concentrated industries and are counter-cyclical in less concentrated industries.

Brahmbhatt & Desai (1998) studied the financial performance. For the purpose of analysis they selected sample as pharmaceutical and chemical units in India. In this research they used some sophisticated computer software as tools of analysis. They selected seven important financial ratios for the study and also the techniques of correspondence analysis (CA) as well as ASYMOFACE were employed to study the association between ratios, among companies and also amid companies. All sample units were ranked using computer-aided techniques.

Glancey (1998) studied about determinants of growth and profitability in small entrepreneurial firm investigates the relationship between company characteristics including size, age, location and industry group, and profitability and growth. The trade-off between the possibly conflicting objectives of profit and growth were considered primarily from the entrepreneurial rather than the managerial standpoint which previous econometric studies of small firm performance have concentrated on. He has found that a firm size measure based on employment were more appropriate than one based on sales or assets which previous studies have used. Firm characteristics found to be of limited value in explaining profitability. However, larger firms were found to grow faster than smaller, and younger firms found to grow faster than older. There was also some evidence that growth was stronger in urban than in suburban or rural locations.
Parmar (1998) has made empirical study on “Profitability Analysis of Cement Industry in Gujarat state” for the period of 1998-89 to 1994-95. He wished to analyse the financial strength, liquidity, profitability, cost and sales trend and social welfare trend by using various ratios analysis, common size analysis and value added analysis. On the basis of comparative analysis, he has given several suggestions for the improvement of profitability of industry. He also concluded that various reasons for higher cost, low profitability, and inefficient use of internal resources.

Purohit (1998) discussed concerning ‘Profitability in Indian Industries: An analysis of firm size and profitability’, he examined the relation between size and profitability in Indian industries and also highlights the following two common conclusions. He concluded that Firstly, though the average profitability of firms did not seem to vary considerably with their size and the inconsistency of profit rates declines with size and secondly, the average growth rates of firms did not seem to vary considerably with their size but the inconsistency of growth rates only. He has additionally explored the factors that determine profitability. Besides the size, he has tested the model to check the impact of age of the firm and growth in sales on profitability at both micro and macro levels. He concludes that the selected industries and firms have made efforts to increase profitability through various means including increase in size through diversification and moving into higher technology.

Shin & Soenan (1998) studied to test the efficiency of working capital management to create profitability. For the purpose of analysis they used 58,985 samples of firms and selected the period 1975 – 1994. On the basis of research, they have given some facts like relationship between the length of net trading cycle, corporate profitability and risk-adjusted stock return was observed.

Sidhu & Bhatia (1998) studied the factors affecting profitability in Indian textile industry. In this study, they tried to identify the major determinants of profitability in Indian textile industry with the help of empirical data taken from Bombay Stock Exchange Directory for the year 1983. To find out the
affecting factors of profitability, regression analysis had been applied by them. From the analysis, they concluded that there was no clear-cut relationship between current profitability and capital intensity. They also revealed that the age of the firm was having generally negative but statistically insignificant relationship with current profitability which points towards the fact firms in Indian textile industry were absolute and need modernization.

Mallick & Sur (1998) examined about the Working capital and profitability: a case study in interrelation. In this study, they explored the correlation between ROI and several ratios relating to working capital management. In this study an effort has been made to make an empirical study of AFT industries Ltd., a tea producing enterprise in Assam for assessing the impact of working capital on profitability by computing simple correlation co-efficient between ROI and each of some selected important ratios relating to working capital management and to test the significance of such coefficients. In this study, they concluded that the inter relation between the selected ratios in the areas of working capital management and profitability of the company revealed both negative and positive association.

Agarwal (1999) studied about the profitability and growth in Indian Automobile manufacturing industry. The objective of this study was to examine if firms have been making super normal profits since 1975 when price controls were removed. He has also evaluated the impact of policy changes since 1981-82 on profitability and growth of firms in the industry using Tobin’s Square as a measure of profitability. He has found that the there was no evidence to show that firms have made super normal profits. Profitability was found to be explained mainly by the age of the firms, vertical integration, diversification and industry policy dummy variable. In this study the important determinants of the growth of firms were found as diversification, industry policy dummy variables, gross retained profits and development of capacities. Results also revealed that the differences in performance between car and non-car sectors as well as within the sectors of the industry.
Feeny & Rogers (1999) have discussed in their research about ‘Market Share, Concentration and Diversification in Firm Profitability’. In this research paper they reviewed the role of market share, concentration and diversification in firm performance. An empirical analysis, they selected 722 Large Australian firms for the period 1993 to 1996 and using simple regression techniques. On the basis of analysis suggested that the industry concentration (as proxies by the 4-firm concentration ratio) has a positive influence on profitability. The market share of a firm did not appear to have any significant linear association with profitability; however, non-monotonic relationships were found to be very important.

Rao & Rao (1999) discussed about ‘Impact of working capital on profitability in cement industry - A Correlation Analysis’, analyse the impact of profitability on the working capital in cement industrial units in India. For the purpose of analysis they selected and analysed ten variables on working capital ratios which may closely related with profitability like current ratio, debt equity ratio, cash position ratio, working capital turnover ratio, inventory turnover ratio, debtors turnover ratio, cash turnover ratio, current assets turnover ratio and average collection period. The inter-relationship were to be studied with the help of Karl-Pearson’s co-efficient of correlation technique, by arranging the correlation of one variable with each other variable in the form of matrices which were a triangular and balanced about the principal diagonal. On the basis of analysis they concluded that the overall basis out of 10 variables with PBDIT, 3 variables showed a significant co-efficient and seven exhibited insignificant relationships and also out of the 10 variables, 5 variables showed negative association while the others showed positive relationships.

Feeny (2000) in his research study, he discussed about determinants of profitability: an empirical investigation using Australian tax entities. He has used simple regression techniques for analysis. He suggested that size of entity was positively related to profitability but industry characteristics have limited significance in explaining entity profitability and concentration, defined at a 4
digit level, was positively and significantly related to entity profitability in 27 per cent of Australian 3 digit industries, while a significant negative association was found in 8 per cent of the industries. There was some evidence that barriers to entry have the positive relationship with entity profitability as dictated by theory when proxies by the industry capital intensity but not when proxies by the least well-organized scale or industry trademark intensity. There was strong evidence that the market share of an entity has a U-shaped relationship with profitability.

Mohammed Rafiqul Islam (2000) studied the profitability of Fertilizer Industry in Bangladesh for the period of 1985-86 to 1994-95. For the purpose of analysis he has selected five fertilizer enterprises of the seven fertilizer enterprises in Bangladesh under the control of Bangladesh Chemical Industries Corporation (BCIC). In this study he has indicated that none of the selected units were consistent and all the units were plagued with declining profits. On the basis of comparative analysis he has concluded with suggestions for enhancement of the profitability of fertilizer industry in Bangladesh.

Rei & Sur (2001) studied about profitability analysis of Indian food products industry: A case study of Cadbury India Ltd. They tried to attempt the measurement of profitability scenario of Cadbury India Ltd. and they analysed the relationship among various profitability ratios and their joint impact using multiple correlation co-efficient and multiple regression method. They studied on the inter-relation between the selected ratios on the subject of the company’s position and performance and profitability of the company. On the basis of analysis, they revealed both negative and positive association.

Vijayakumar (2002) has discussed on ‘Financial appraisal of Salem Co-operative Sugar Mills Ltd, Mohanur’ and he analysed the various aspects of the working of Salem Co-operative Sugar Mills Ltd, Mohanur. In this study, he has been with respect to profitability, capital structure, fixed assets and working capital for measuring the financial performance selected sugar mills. He gave main finding about the Mill’s over dependence on external funds which results in interest burden and it may create difficulty for Mills. On the
basis of findings he has given suggestion like, it is sure that the Mill will have better scope to function in an efficient manner if the owner's funds are increased and the borrowings can be reduced.

Vijayakumar (2002) has studied on “Determinants of Profitability-A firm level study of the Sugar Industry of Tamil Nadu”, in this study he has investigated the various determinants of profitability viz., growth rate of sales, vertical integration and leverage. For the purpose of analysis he had selected three variables like, current ratio, operating expenses to sales ratio and inventory turnover ratio and also econometric models were used to test the various hypotheses relating to profitability with other variables. In this study, he has concluded that the efficient inventory management and current assets management should make carefully because it is affect the profitability.

Vijayakumar & Kadirvel (2003) have studied about the determinants of profitability of Indian Public Sector Manufacturing Industries-An Econometrical analysis. They concluded the results about age was the strongest determinant of profitability followed by the variables vertical integration, leverage, size, current ratio, inventory turnover ratio, operating expenses to sales ratio and growth rate. They selected variables have both positive and negative contribution in variation of profit rate. They concluded that firms should consider all these possible determinants while considering its profitability on the basis of analysis and findings.

Wei, Varela, D'Souza & Hassan (2003) have discussed in their study about ‘The financial and operating performance of China's newly privatized firms’, and examined the pre- and post-privatization financial and operating performance of 208 firms privatized in China for the period 1990-97. The full sample results showed that the significant improvements in real output, real assets and sales efficiency, and significant declines in leverage following privatization, but no significant change in profitability. Additional analysis showed that privatized firms experience significant improvements in profitability compared to fully state-owned enterprises during the same period. They concluded that the firms in which more than 50 per cent voting control
was conveyed to private investors via privatization experience significantly greater improvements in profitability, employment, and sales efficiency measured up to those that remain under the state's control. Privatization seemed to work in China; especially the more private firms become successful operators.

Bhayani (2004) has conducted descriptive study concerning working capital and profitability of cement industry. After the comparative analysis he has found that profitability was highly influenced by working capital. In this research paper he has concluded the Linkage between asset-liabilities management as well as profitability analysis of Indian Industry.

Glen, Lee & Singh (2004) have discussed in their study about time-series analyses of corporate profitability in seven leading Developing Countries (DCS), by using the general methodology as the perseverance of profitability (PP) studies and methodically compare the results with those for Advanced Countries (ACS). In this paper they discussed about two raise important general issues of economic interpretation for perseverance of profitability (pp) studies, which was outlined. Astonishingly, they found that both short and long term perseverance of profitability for DCS was found to be lower than those for ACS. This paper concerted on economic explanation for these findings. It also reported the results on the perseverance of the two components as profitability-capital-output ratios and profit margins.

Lima & Resende (2004) have discussed in their study regarding work entitled profit margins and business cycles in the Brazilian industry: they used a panel data to investigate the relationship between profit margins and business cycle in the Brazilian industry during the 1992-1998 period. On basis of analysis, they were taking as reference a dynamic panel data model founded around a conjectural variation framework. On the basis of analysis the empirical results indicated that the pro- cyclical behaviour of profit margins for the aggregate business cycle but were less clear in the case of sector-specific business cycle variables. They concluded that among the most robust results, one can
highlight the roles of lagged profitability and import intensity and the negligible role of union density.

**Sarkaria & Shergil (2004)** aimed to test how market structure may affect performance. The study has employed model consulting determinants of both structure and profits. They tried to analyses market affect in the performance and In order to decompose the variation performance variables like industry effect, seller concentration, market share, capacity utilization, size, leverage, skill, risk, age and capital intensity have been included in the regression models as the determinants as performance. The study results suggested that market share was positively and concentration was negatively related to performance. The industry membership has turned up to be an important determinant of firm growth.

**Anand & Malhotra (2007)** have discussed in his study about Working Capital performance of corporate in India: by selecting the develop quantitative benchmarks at the firm and the industry level, so they was able to evaluate the working capital management performance of corporate India from time to time. They analysed that Corporate India has achieved a compound Annual growth Rate (CAGR) of 26.30% in net sales and 1.60 % in the three- year average cash operating margins during the period of study. They also observed that the length of the operating cycle and cash conversion cycle has reduced by 10. 2% and 12.7% respectively on compounded annual basis. They found in their paper, a very little evidence on the positive relationship between working capital management and firm profitability. They also concluded that the dynamics of risk-return trade off, which will help the performance evaluation of working capital management of corporate India.

**Ghosh & Sinha (2007)** have discussed about Firm’s capital structure Decision help an Investor (A Risk Averter or Risk Taker) A case study on Automobile Industry in India. In this research, the question of relevance of the capital structure in the context of Shareholder’s value maximization remains unsolved as yet. In this paper they analysed, hypothesis was leverage variable could explain firm’s value maximization and the same have been tested in the
context of the Automobile industries in India. The results revealed that shareholder’s returns very significantly with significant variance in firm’s debt levels. Firm were more conventional in maintenance of long-term debt to equity ratio than that of total debt to equity ratio. Increase in debt levels did not contain always good news to the investors and risk takers act differently.

Manor, Selvi & Vijayakumar (2007) has discussed in their research paper about the structure of profit rates in India automobile industries. The main objective of study was examining the trends of profit of selected Indian automobile Industries by making comparison for the period from 1991-92 to 2003-04. Their study showed a declining trend in profitability of ten out of eighteen industries (55.55 percent) when India automobile industries studied here was a very big cause of concern. They concluded that the falling tendency of profit rates of these industries was a proof of adverse effect of various controls on prices, output, expansion and investment etc., extended by government on these industries over time.

Chakraborty (2008) in his research tried to evaluate the relationship between working capital and profitability by 25 selecting companies in the Indian pharmaceutical industry for the period 1996-97 to 2007-08. For purpose of analysis, he has found out the important ratios related working capital and profitability, regression, coefficient variation, coefficient relation and multiple regressions also. On the basis of analysis he has noticed that the inadequacy of working capital may lead to the firm to insolvency, whereas excessive working capital implies an idle fund which earns no profits. Therefore, efficient management of working capital was an integral part of the overall corporate strategy to improve corporate profitability. The results also showed that the partial regression coefficients shown in the multiple regression equation of ROCE on CR, ITR and DTR fitted in this study revealed that the liquidity management, inventory management and credit management made positive contribution towards improvement of the corporate profitability.

Pandey & Singh (2008) in their research, they have studied about working capital management by analysing current assets and current liabilities. They
have concluded, by maintaining high inventory levels reduce the cost of possible interruption in the production process or of loss of business due to the scarcity of products, reduces supply costs and protects against price fluctuations. They mentioned in their study, granting trade credit favours the firm’s sales in various ways and also trade credit can act as an effective price cut and incentives to customers to acquire merchandise at times of low demands. Thus, they found that greater the investment in current assets, lower is the risk, and profitability obtained and equally trade credit was a Spontaneous source of financing that reduces that amount required to finance the sums tied up in the inventory and account receivables. They have concluded that the profitability and liquidity comprises the salient and all too often conflicting goals of working capital management. They also revealed that the conflicts arise because the maximum of firm’s returns could seriously threaten liquidity and on the other hand, the pursuit of liquidity has a tendency to dilute returns.

Singla (2008) has examined in his study about how financial management plays a crucial role industrialists growth of banking. His study concerned with examining the profitability position of the selected sixteen banks of banker index for a period of six years 2001-2006. He has revealed that the profitability position was reasonably maintaining by the selected banks during the period of study when compared with the earlier years. He concluded in his study, the strong capital position and balance sheet place and banks were in better position to deal with and absorb the economic constant over a period of time.

Keshwara (2009) has studied about “A Study of Financial Performance of Aluminium Industry in India”. In this research he has selected five aluminium industries and for analysing the performance of aluminium industries, he has been made Inter-firm comparison by using ratios, cash-flow analysis, break-even analysis, trend analysis, average, index number, standard deviation, correlation, regression, and time series analysis, and for the better understanding of some important matter was to be presented by graph,
and percentage. On the basis findings, he has given some suggestion for improvement of performance like company should try to increase the production, control the cost of goods sold, adoption cost control techniques, and efficient use of funds as well investors, financial managers, and workers for taking decision related to their own regards of interest.

**Trivedi (2010)** has done her Ph.D on “An analysis of financial performance of State Road Transport Corporation in Gujarat” using the period of 1996-1997 to 2005-2006 by using percentage, average, dispersion, correlation and association and a number of measure are suggested and most of the measures are aimed at increasing revenue, controlling cost, and improving service quality.

**Karaduman, Akbas & Caliskan (2011)** they have discussed about empirical relationship between efficiency of working capital management and corporate profitability of selected companies in the Istanbul Stock Exchange for the period of 2005-2009. In this study, they concluded that the companies should focus on working capital management in order to increase their profitability by seriously and efficiently considering the issues on their cash renovation cycle which was derived from the number of day’s accounts payable, the number of day’s accounts receivable and the number of days of inventories. On the basis of findings, they suggested that it may be possible to increase profitability by improving efficiency of working capital.

**Nandi (2011)** discussed about the influence of working capital management on corporate profitability. For assessing impact of working capital management on profitability, he has selected the National Thermal Power Corporation Ltd. for the period of 10 years i.e., from 1999-2000 to 2008-09. For the purpose of analysis, he has computed and applied Pearson’s coefficient of correlation and multiple regression analysis, and ratios. He has made analysis between some ratios relating to working capital management and the impact measure relating to profitability ratio (ROI). He also revealed that, for measuring the sensitivity of return of investment (ROI) to changes in the level of working capital leverage (WCL) of the studying company.
Pandya (2011) has done his Ph.D on “A comparative analysis of liquidity and profitability of Indian car industry”. In this research he has selected four units of auto sector and for analysing the performance of selected units, he has been made Inter-firm comparison by using ratios, trend analysis, ANOVA test and for the better understanding of some important matter was to be presented by graph. On the basis findings, he has given some suggestion for improvement of performance like company should try to increase the profitability by control operating expenses, other steps and company should also try to introduce small car for common man etc....

Muthumoni (2012) has studied about “A study on the performance appraisal of Indian automobile industry”. The main objective of the study was to analysed production trend, sales trend, profitability analysis, financial structure, financial performance, assessment of financial health, Economic Value Added (EVA) and Market Value Added (MVA). This study covered three sectors of Indian automobile industry, viz., commercial vehicles, passenger cars and multi-utility vehicles and two and three wheelers. The period covered under 244 the study extends over 11 year from 1995-96 to 2005-06. With the help of statistical techniques used in the study were correlations, multiple regressions, analysis of variance, F-test, arithmetic mean, co-efficient of variation and compound annual growth rate besides simple percentages, ratios and graphs and concluded findings and offered useful suggestions for the growth of Indian automobile industry.

Sharma (2012) studied in his research concerning “Comparing and Analyzing Financial Statements to Make an Investment Decision: Case Study of Automotive Industry. In this research study, he has selected four automotive companies like Toyota, Nissan, Ford and General Motors for comparative study for the period of 2008 to 2011. For the purpose of analysis he used qualitative and quantitative techniques and the other major outcome of this research has been the assessment of risk and gain of an investment. They have also concluded that the Indian automotive industry’s performance has significant difference in terms of their profit levels using ANOVA. It has also been
depicted from the analysis about existence of some relationship between Ford & General Motors in terms of profitability. Toyota and Nissan has performed very well with the use of new technology and skilled manpower. General Motors has been poor performer due to increased manufacturing overheads and cut throat competition.

2.4 REVIEW OF ARTICLE & RESEARCH PAPER

In this Part represent the review of article and review research paper related to financial performance, profitability and capital structure based which already published in reputed journals.

Ram Mohan (2003) discussed in his paper ‘Long run performance of public and private sector bank stocks” as well as to compare the three categories of banks—Public, Private and Foreign—using physical quantities of inputs and outputs, and comparing the revenue maximization efficiency of banks for the period of 1992-2000. He has found that the PSBs performed significantly better than private sector banks but not differently from foreign banks. He has concluded the various points to a convergence in performance between public and private sector banks in the post-reform era, using financial measures of performance.

Singh (2003) discussed in his paper regarding Profitability management in banks under deregulate environment, and in this paper he has analysed profitability management of banks under the deregulated environment with some financial parameters of the major four bank groups i.e. public sector banks, old private sector banks, new private sector banks and foreign banks, profitability has declined in the deregulated environment. He emphasized to make the banking sector competitive in the deregulated environment and also concluded that they should prefer non-interest income sources.

Bhunia, Mukhuti & Roy (2011) have discussed about “Financial Performance Analysis—A Case Study”. The main aim of study was to identify the financial strengths and weaknesses by covering two public sector drug & pharmaceutical enterprises listed on BSE. For study purpose, they have been selected twelve years from 1997-98 to 2008-09. They analysed the data by
using ratios, and statistical tools like A.M., S.D., C.V., linear multiple regression analysis and test of hypothesis t-test. They used SWOT analysis to overcome the weakness and grab the opportunities available in public sector drug & pharmaceutical enterprises in consideration of strengths and threats. They concluded that growth during last decade was noteworthy and market trend was growing at a faster rate. They suggested that the opportunities can be grabbed through the diversification of export basket in untouched foreign destinations. They also revealed that strict quality standards, services and use of latest technology can provide an edge over competitors across the globe.

**Goswami & Sarkar (2011)** have studied on “Analysis of Financial Performance of Tata Steel – A Case Study”, They emphasized to measure & analyze the operating risk, financial risk, and total risk by way of computing the Degree of Operating Leverage, Degree of Financial Leverage, and Degree Of Total Leverage of the selected company of Tata Steel for the accounting period from 2000-01 to 2009-10. On the basis of findings, they have suggested that to cover the fixed operating costs the firm should have to improve its net sales so company able to maintaining the operating risk within the manageable limit in the years to come. They concluded that the company should be maintaining a sound short-term debts paying capacity in future because the use of more amount of external funds may lead to short-term insolvency.

**Lee (2011)** discussed in his research paper about “The Rise of Korean Automobile Industry: Analysis and Suggestions”, in this research paper, he has covered huge impact of Korean automobile industry on the global market by analyzing key areas of its operations, such as product diversification, new car development, and manufacturing process, marketing strategies, economic and social significance, in addition to SWOT analysis for the comprehensive strategic assessment of the overall conditions around the industry. He had been made competitive analysis of the Korean auto parts industry by using the Porter’s Five Forces model. He concluded that it just needs to make sure that it has a strategic plan, which was developed by reflecting all competitive
advantages and edges from the SWOT analysis as well as the competitive analysis, to allow the Korean industry to keep succeeding continuously.

Sharma (2011) discussed about financial performance of Indian Automobile Industry by using data of seven automobile companies for the period 2001-02 to 2010-11. The financial performance of Mahindra & Mahindra Limited as well as Tata Motors seemed very satisfactory in terms of profitability as well as managerial efficiency to generate sales from the use of assets. But their liquidity positions did not seem sound. The liquidity position of commercial vehicle manufacture was better than passenger vehicle manufacturers. The trend of profitability of selected units, particularly that of passenger vehicle manufacturers showed a downward slope which was a consequent of rapid rise in the price of petrol as well as increment in the price of components used for production and growing incidence of interest rate. He also suggested that for mitigating the involved risk and volatility of performance, government should initiate immediate steps to control the price of petrol, components and interest rates.

Shinde1 & Dubey (2011) discussed in their paper about performance of key players, current and future trends as well as growth of Indian Automobile industry using the period of 2005 to 2010 and segments like passenger vehicles, commercial vehicles, utility vehicles, multipurpose, two wheelers and three wheelers. Industry analysis was based on various micro and macro-economic factors, sector and industry specific databases. Consumers’ sentiment index, Domestic goods price of metal, iron and steel, Import and Export Duties/ Motor Vehicles Tariffs, World Price of Energy/ crude oils were considered as key factors influencing the automobile industry. They used SWOT analysis to overcome the weakness and grab the opportunities available in automobile industries in consideration of strengths and threats. They concluded that growth during last decade was noteworthy and market trend was growing at a faster rate. They suggested that the opportunities can be grabbed through the diversification of export basket in untouched foreign
destinations. They also revealed that strict quality standards, services and use of latest technology can provide an edge over competitors across the globe.

**Khanifar, Jamshidi & Mohammadinejad (2012)** has discussed in his paper about factors affecting investor’s decision by performing fundamental analysis. In this research paper finding the true situation he has covered economy, industry and then firm. The population included in the study was broking firms at Tehram Stock exchange. His study showed that EPS, profit margin, P/E ratio, sales have highest importance in analysts’ decision followed by economy related factor and industry related factor.

**Tariq Zafar & Khalid (2012)** have discussed about “A Comparative Evaluation of Financial Performance and Market Value of Maruti & Tata Company”. For the purpose of analysis, they have been selected two most preferred companies like Maruti Suzuki Ltd. and Tata Motors Ltd., and for the using period of 2006-2010. They tried to analyse qualitative and quantitative performance of both companies and to investigated their risk and returns factors, their market position, their collective impact on profitability and to come up with the best and worst performing company by using modern performance evaluating techniques and later ranking them according to their achieved performance. They concluded from the ratio analysis there was a lack authenticity in data, in calculation which may manipulating presentation by the promoters. They have also found that different firms follow different accounting policies like depreciation allowance; valuation of inventory etc. and often management ignore these differences while making inter-firm comparison. They revealed that the change in price levels due to inflation is also not properly considered by management.

**Dhole (2013)** has discussed about “Analytical Study of Four Automobile Sector Companies in Price Movement of Shares”. The main objective of research paper was to analyse of role of company performance in price movement of shares and to study the various factors affecting the price movement of shares and company performance. For the research paper she has been selected 30 companies of BSE’s SENSEX having different sectors and
selected for the period of 2003 to 2009. She has covered fundamental analysis of four companies which includes economic analysis, industry analysis and company analysis. For analysing the performance of the company’s quarterly financial reports were analysed by using variables such as EPS, P/E, and Quality of Earnings ratio. Sample was chosen from the Automobile sector and which was listed companies with BSE. She has found that the correlation between price movement of the shares and the performance of their respective companies. She has concluded that there were extremely wide day-to-day changes in the price quote on most of the stock exchanges and not possible to say whether it was economic or psychological realities which were the major causes of the price fluctuations in the stock markets. She revealed that an important issue, as it brought into an account the analyzing the annual performance of companies and the price movements of the shares of that particular companies to the investors.

Dharmaraj & Kathirvel (2013) analyzed financial performance of automobile industries using the data for the period of 1998-1999 to 2011-12 of fifteen Automobile industries. They applied statistical tools like mean, median, minimum, maximum, S.D. and ANOVA to analyse different ratios. They revealed that automobile industry had huge scope in India. They found that considered automobile companies were financially strong and were growing at the rate of 17% per annum. Results also implied significant differences for the current ratio, fixed asset turnover ratio and debt turnover ratio whereas insignificant differences for inventory turnover ratio, debt equity ratio, long term debt equity ratio, return on net worth ratio and interest coverage ratio for considered automobile industries.

Jain & Mehta (2013) have studied about profitability analysis using profitability ratios such as gross profit ratio, net profit ratio, operating profit ratio, return on capital employed ratio, and return on net worth ratio of selected five automobile companies viz., Tata Motors, Maruti Suzuki, Ashok Leyland, Hero MotoCorp, Mahindra and Mahindra for the period 2009 to 2013. Using mean, standard deviation and coefficient of variation, they have revealed about
average position of companies. They have also concluded that the Indian automobile industry’s performance has significant difference in terms of their profit levels using ANOVA. It has also been depicted from the analysis about existence of some relationship between Maruti Suzuki & Tata Motors in terms of profitability. Hero MotoCorp has performed very well with the use of new technology and skilled manpower. Tata Motors has been poor performer due to increased manufacturing overheads and cut throat competition.

Selvarani (2013) has discussed in the research article about “Financial Analysis on Sundaram Clayton Limited”. This paper main objective was to review the financial performance of Sundaram Clayton Limited which was a market leader in the field of air and assisted Brake actuation system for a wide range of commercial and earth moving vehicles in India. This study was based on secondary data collected from the annual reports of the company for the last 5 years 2006-2010 by tabulating, analyzing and interpreting with the help of different financial ratios, Multivariate Discriminate Analysis (MDA as developed by Prof. Altman) and trend analysis. In this research paper, she has concluded that the company was performing well. On the basis of analysis, she has suggested about the use of debt which was very low currently and also concluded that the company has to take steps to improve the profitability.

Singla (2013) has discussed in his paper about comparison of financial performance between Steel Authority of India and TATA Steel Ltd for the period 2008 to 2012. To analyse the financial performance, he has included the analysis of working capital, analysis of fixed assets and analysis of profitability. He has concluded after comparative analysis of both the firms that performance of TATA STEEL LTD. was better than the SAIL because the Net profit of TATA STEEL LTD. was greater than the SAIL as well as the inventory management of the TATA STEEL LTD. was better than the SAIL.

Chauhan (2014) discussed in his paper about A Study on Fundamental Analysis of Indian Automobile Industry using the period of 2009 to 2013 and selected companies like Tata Motors and Maruti Suzuki. Industry analysis was based on economic analysis (GDP) and industry analysis. They used SWOT
analysis to overcome the weakness and grab the opportunities available in automobile industries in consideration of strengths and threats. They concluded that Fundamental analysis is an important technique to find the value of stock as it considers all past information about country, industry and company. This paper revealed that although the GDP of India is declining still the automobile sector is shining as there is continuous increase in the production of total no of vehicles in the Industry. SWOT analysis presents that major strength of Indian automobile industry is large domestic market and availability of cheap labour and raising demand from rural areas of India is acting as the opportunity in expansion of the market. Maruti Suzuki India’s performance is comparatively better than Tata Motors Ltd in terms of earning per share, return on capital employed and current ratio. They suggested that the Fundamental analysis is helpful when the investing amount is huge and investment is to be made for long time.

Shende (2014) has discussed in research paper about “Analysis of Research in Consumer Behaviour of Automobile passenger Car Customer”. The main objective of study was to examine the identification of factors influencing customer’s preferences for particular segment of cars. For the purpose of research he has selected areas like small car, Hatch back, Sedan Class, premium Sedan, SUV & MUV and Luxury Car. In this paper, he has consolidated findings & suggestions to overcome present scenario of stagnancy in sales and cultivate future demand for automobile car market.

2.5 Published Research Books

This part represents the published research book related to financial statement analysis, financial performance analysis and profitability analysis.

Dr. Kumar Bar Das (1987) he has published a comprehensive book and covered period from 1970 to 1980. He concluded various aspects like factor productivity, location degree of competition capacity utilization, size efficiency financial performance, Distribution pattern and government policies with respect to pricing and distribution in his book. Especially he has mentioned about profitability because all profitability ratios were indicated that
in decrease trend gradually and became negative for 1973-74 and 1974-75 but improved gradually thereafter.

**Panda & Satapathy (1988)** they have published their book on the topic of “working capital structure of private enterprises”. In this book they covered a 10 private sectors Company engaged in production of cement. In this book, they have discussed the various aspects of working capital period from 1965 to 1985. They have analyzed that the working capital position of selected units as a whole and as well as individual analysis. Finally they have made suggestions for the better utilization of various components of working capital.

**Dr. Pramod Kumar (1991)** published his book on “Analysis of Financial statements of Indian industries.” The book covered the 17 private, 5 state owned and 1 central public sector companies. He discussed various topics in his book like how to analyse activities and how management all the activities with less cost, assessment of profitability, return on capital investment, financial structure, and analysis of fixed assets and working capital.

**Bhayani (2003)** he has published the book on the subject of “Practical financial statement analysis”. He has covered 16 public limited cement companies in private sector in this book. In this book, he has given the detail idea about analysis of profitability, working capital, capital structure and activity of Indian cement industry. In this book, he has revealed that the various problems related to cement industries. On the basis of analysis, and problems, he has suggested some points for the improving in the profitability, well management for working capital, techniques for the cost control strategy regarding activity, and assets-liabilities management.

From the above review of empirical works it is clear that different authors have approached financial performance appraisal in different ways in varying level of analysis. These different approaches helped in the emergence of more and more literature on the subject over time. It gives an idea on extensive and diverse works on performance appraisal. It has been noticed that the studies on financial performance in various sectors provide divergent results over the study period. The main reason for the divergence in the results is the different
in the method used for the measurement of factors specially profitability, solvency, liquidity, asset productivity, capital structure and growth rate in the operating performance and social performance all the studies aimed to analyse the financial performance in Indian industries with number of factors.

It has been noticed that review of empirical works on profitability gives an idea on extensive and diverse works on profitability. It facilitates to understand the various structural and non-structural variables that determine profitability. It has been noticed that studies on the profitability analysis in various industries used the variables like seller’s concentration advertising intensity, economics of scale, leverage, profit variability, firm growth and size. In the late 1990’s few studies appeared which used the quantum of sales, return on investment and appropriation of profits to explore the profit variation of the manufacturing industries. Researchers have verified and extended the results over the years.

The survey of the existing literature indicates that so far no specific work has been carried out to examine the financial appraisal of Indian automobile industry in the manufacturing sector, although the performance of such a study can’t be under estimated, the present study is an attempt in this direction and therefore, aims to enrich the literature of financial performance relating to Indian automobile industry. Further, this study is intended to employ different sophisticated statistical and economic techniques before qualifying any aspects of performance appraisal for wider acceptability and appreciation. The present study is a humble attempt in this regard.

From the above discussion, it is clear that the different authors including economists, financial theorists, management scientists and practicing business executives have approached performance appraisal in different ways and at varying level of analysis. Though there are various approaches, only a few of them can be considered in this study. The approaches that are included in the study cover analysis of important profitability ratios, analysis of profitability trends, determinants of profitability, analysis of financial position, measuring the long-term and short-term solvency and economic value added analysis in the Indian automobile industry.
2.6 Scope of Research

A gap in literature provides areas of compelling research into financial practice in various company. There is a scope to study the profile of impact of financial performance analysis in each industry, comparing and constructing different industries. Also research can be done to delineate major issues that are faced by contemporary Indian companies going for implementation of financial position in their management. Studies are required to be done to throw light on the effect and the potential benefits of the financial performance, which will help the banking take faster decision regarding profitability, working capital as well liquidity maintaining based investment management. Such studies may also motivate automobile industry to undertake activities towards enhancing their financial performance initiative. The potential research in the area will act as a guideline to the other auto-mobile industry for leveraging financial performance analysis for the successful management of the company.

Set of studies can be dedicated to study the impact of financial performance and utilization of funds on improving the overall competitiveness of auto-mobile company and another. Set of studies can be done in the area of auto-mobile company design keeping in mind the latest development in field of financial management.

2.7 Conclusion

Financial performance is redefining the way of how to manage the funds supply and financial position as well as liquidity position. Indian auto-mobile company is also accepting financial performance analysis as tools for effective funds management. However, financial management embraced by the Indian auto-mobile industry with same vigor as their counterparts analysis in US and Europe. The academia should concentrate on the area of auto-mobile company financial and liquidity management in order to come out with ways to benefit the auto-mobile company.