1. Review of Literature

Some important research works undertaken in recent years which are very closely connected with the present study are reviewed.

- **Shinde Govind P. & Dubey Manisha (2011)** the study has been conducted considering the segments such as passenger vehicle, commercial vehicle, utility vehicle, two and three wheeler vehicle of key players performance and also analyze SWOT analysis and key factors influencing growth of automobile industry.

- **Sharma Nishi (2011)** studied the financial performance of passenger and commercial vehicle segment of the automobile industry in the terms of four financial parameters namely liquidity, profitability, leverage and managerial efficiency analysis for the period of decade from 2001-02 to 2010-11. The study concludes that profitability and managerial efficiency of Tata motors as well as Mahindra & Mahindra ltd are satisfactory but their liquidity position is not satisfactory. The liquidity position of commercial vehicle is much better than passenger vehicle segment.

- **Singh Amarjit & Gupta Vinod (2012)** explored an overview of automobile industry. Indian automobile industry itself as a manufacturing hub and many joint ventures have been setup in India with foreign collaboration. SWOT analysis done there are some challenges by the virtue of witch automobile industry faces lot of problems and some innovative key features are keyless entry, electrically controlled mechanisms enhanced driving control, soft feel interiors and also need to focus in future on like fuel efficiency, emission reduction safety and durability.

- **Zafar S.M.Tariq & Khalid S.M (2012)** the study explored that ratios are calculated from financial statements which are prepared as desired policies adopted on depreciation and stock valuation by the management. Ratio is simple comparison of numerator and a denominator that cannot produce complete and authentic picture of business. Results are
manipulated and also may not highlight other factors which affect performance of firm by promoters.

- **Ray Sabapriya (2012)** studied the sample of automobile companies to evaluate the performance of industry through indicators namely sales, production and export trend etc for period of 2003-04 to 2009-10. The study finds that automobile industry has been passing through disruptive phases by over debt burden, under utilization of assets and liquidity instability. The researcher suggested to improving the labour productivity, labour flexibility and capital efficiency for success of industry in future.

- **Dawar Varun (2012)** Study to analyze the effect of various fundamental corporate policy variables like dividend, debit, capital expenditure on stock prices of automobile companies of India. The study tends that dividend & investment policy are relevant and capital structure irrelevant to stock prices.

- **Mistry Dharmendra S. (2012)** understood a study to analyze the effect of various determinants on the profitability of the selected companies. It concluded that debt equity ratio, inventory ratio, total assets were important determinants which effect positive or negative effect on the profitability. It suggested to improve solvency as to reduce fixed financial burden on the company profit & give the benefit of trading on equity to the shareholders.

- **Murlidhar, A. Lok Hande & Rana Vishal S. (2013)** the author tries to evaluate the performance of Hyundai Motors Company with respect to export, Domestic Sales, productions and profit after tax. For this purpose, the pie chart and bar graph are used to show the performance of company various years.

- **Dharmaraj, A.and Kathirvel N. (2013)** explored an overview of new industrial policy act 1991, which allow 100 percent foreign direct investment. An attempt is made to find
out the effect of FDI on financial performance of automobile industry. It is concluded that the liquidity ratios shows minor changes and profitability shows an increasing trend during post FDI when compared to pre FDI. Post FDI efficiency ratio shows that companies are efficiently utilizing the available resources.

- **Rapheal Nisha (2013)** the author tries to evaluate the financial performance of Indian tyre industry. The study was conducted for period 2003-04 to 2011-12 to analyze the performance with financial indicators, sales trend, export trend, production trend etc. The result suggests the key to success in industry is to improve labour productivity and flexibility and capital efficiency.

- **Hotwani Rakhi (2013)** the author examines the profitability position and growth of company in light of sales and profitability of Tata Motors for past ten years. Data is analyzed through rations, standard deviations and coefficient of variance. The study reveals that there not exists a strong relationship between sales & profitability of company.

- **Sharma Rashmi, Pande Neeraj & Singh Avinash (2013)** for understanding how social media monitoring can help diving the consumer decision & also study. The functions of social media i.e. monitor, responses amplify and lead at maruti Suzuki India ltd. The researcher had discussion with social media team median managers for collecting data & also visited the official social media sites of MSIL.

- **Daniel A. Moses Joshunar (2013)** the study has been conducted to identify the financial strength and weakness of the Tata motors Ltd. using past 5 year financial statements. Trend analysis & ratio analysis used to comment of financial status of company. Financial performance of company is satisfactory and also suggested to increase the loan levels of company for the better performance.

- **Dhole Madhavi (2013)** investing the impact of price movement of share on selected company performance. It advise due investors consider various factors before choosing
the better portfolio. Sentimental factors do play a role in price movement only in short term but in long run annual performance is sole factor responsible for price movement.

- **Shende Vikram (2014)** this research will be helpful for the new entrants and existing car manufacturing companies in India to find out the customer expectations and their market offerings. The objective of study is the identification of factors influencing customers performance for particular segment of cars.

- **Azhagaiah R. & Gounasegaran (2014)** recognized India’s per capita real GDP growth as one of key drivers of growth for country’s automobile industry. The central government would be set up various task forces on issue related to taxation, land acquisitions, labour reform and skill development for auto industry.

- **Buvaneswari .R & Kanimozhip (2014)** to study the credit worthiness of selected firms in Indian car industry, tiruchy. Professor Edward Altman of New York University developed method Z score analysis to predict the company failure or bankruptcy. To measure the fiscal fitness of a company combined a set of five financial ratios.

- **Idhayajothi, R et al (2014)** the main idea behind this study is to analyze the financial performance of Ashoka Leyland ltd. at Chennai. The result shows that financial performance is sound and also suggested to improve financial performance by reducing the various expenses.

- **Huda Salhe Meften & Manish Roy Tirkey (2014)** have studied the financial analysis of Hindustan petroleum corporation ltd. The study is based on secondary data. The company has got excellent gross profit ratio and trend is rising in with is appreciable indicating efficiency in production cost. The net profit for the year 2010-11 is excellent & it is 8 times past year indicating reduction in operating reduction in operating expenses and large proportion of net sales available to the shareholders of company.
• **Srivastava Anubha (2014)** Data analysis has been done using the top down approach, i.e. Economic analysis, industry analysis, company and technical analysis to find relationship between automobile sector index with market index. Mahindra and Mahindra have a great position on the stock market and will attract investor and this could lead to expansion and growth. Thus Tata motors and Maruti Suzuki need to take care of their stock and expansion.

• **Sarangi Pradeepta K et al (2014)** undertook a study to forecast the future trend of automobile industry. The study highlighted the six different experiments have been carried out for period of 12 years data to estimate values for next 3 years. In each experiment graph has been plotted using spreadsheet and then linear trend has been drawn and expanded to calculate future values.

• **Kumar Sumesh & Kaur Gurbachan (2014)** Automobile sector is the dominant player in economy of world. After liberalization Indian automobile industry has emerged as a major contributor to India’s GDP. The study identified that there is no significant in the means score of various financial ratios of Maruti Suzuki and Tata motors but in meeting their long term obligations and efficacy of utilizing the assets show the significant difference in the efficiency of both the firms.

• **Krishnaveni, M. & Vidya, R. (2015)** find that Indian automobile industry is a high flying sector these days and emerging as an export hub in wake of liberalisation and globalization. This paper revises the category wise production, sales and exports of automobile industry in India. Industry growth can be viewed in term of pre and post liberalization. As government allows 100 percent FDI, increase 15% in customs duty on cars and MUVs to encourage local manufacturer and concessional import duty on specified parts of hybrid vehicles.

• **Sarwade Walmik Kachru (2015)** analyzed the effects of liberalization, government de-licensing and liberal trade policies on the growth of Indian automobile industry. The
study recommends that investing four-wheeler is going to be smart potion not only in India but all around the world.

- **Becker Dieter (2015)** the report shows about the current state and future prospects of the worldwide automobile industry. This survey report the manufacturer, executive and consumer views about four aspects, mobility culture, technological fit, business model readiness and market share.

- **Surekha B. & Krishnalah K.Rama (2015)** this study reveals the prosperity of Tata motors company. It can be concluded that inner strength of company is remarkable. Company can further improve its profitability by optimum capital gearing, reduction in administration and financial expenses for the growth of company.

- **Anu B. (2015)** made an attempt to examine the relationship between capital structure indicators, market price per shares and also to test relationship between debt-equity and market price per share of selected companies in industry. The study concludes that all three companies support the hypothesis that there is relation between debt-equity and MPS.

- **Maheswari, V. (2015)** made an attempt to analyze the financial soundness of the Hero Honda motors limited have identified three factors, namely liquidity position, solvency position and profitability position based on the study of period 2002 to 2010 using ratio analysis.

- **Agarwal, Nidhi (2015)** the study focus on the comparative financial performance of Maruti Suzuki and Tata motors ltd. The financial data and information required for the study are drawn from the various annual reports of companies. The liquidity and leverage analysis of both the firms are done. To analyze the leverage position four ratios are considered namely, capital gearing, debt-equity, total debt and proprietary ratio. The result shows that Tata motors ltd has to increase the portion of proprietor’s fund in business to improve long term solvency position.
• **Nandhini, M. & Sivasalthi, V.(2015)** have studied the impact of both financial leverage as well as operating language on the profitability of TVS motor company. The result shows that company suffers from certain weakness & suggested to control fixed cost as well as variable cost to gain adequate profits.

• **Jothi, K. & Kalaivani, P. (2015)** studied the comparative performance of Honda Motors and Toyota Motor that both companies have satisfactory short term liquidity position. As for as cash ratio concerned Honda company has upper hand upper hand in sound cash management practice during the study period. In case of profitability it is rising from the both of companies but remained much higher earning potential in Honda motor ltd.

• **Krishnaveni , M. & Vidya, R (2015)** author has selected 87 companies out of 242 companies in capital line database to discuss the standard current ratio of automobile industry is matched with tractor and four sectors like engine parts, lamps, gears and ancillaries with standard norms. The study concludes that current and liquidity ratio of automobile industry is matched with tractor and the four sectors but other sectors have to improve the repaying capacity to strengthen the financial aspects.

• **Takeh Ata & Navaprabha Jubiliy (2015)** Author has made conceptual model to outline the impact of capital structure on the financial performance i.e. capital structure is independent variable that value is measured by using four ratios namely, financial debt, total debt equity, total asset debt and interest coverage ratio where as financial performance is dependent variable that value is measured by using four ratios as return on assets, return on equity , operating profit margin and return on capital employed. Researcher has selected 13 major steel industries and applied various statistical tools like standard deviation, correlation matrix, anova etc are employed for testing hypothesis with help of SPSS22.

• **Kumar Rakesh Rasiklalajani & Bhatt Satyaki J. (2015)** the proposed research is intended to examine the trend and pattern of financing the capital structure of Indian
companies. The study is to analyze the determinants of total debt ratios as well as determinants of short term and long term ratios.

- **Kumar Neeraj & Kaur Kuldip (2016)** made an attempt to test the size and profitability relationship in the Indian automobile industry. To analyze the relationship linear regression model as well as cross-sectional has been employed for the year 1998 to 2014. For profitability analysis two different measures have been used (i) ratio of net profit to total sales turnover (ii) ratio of net income to net assets plus working capital and for form size two indicators used namely, total sales turn over and net assets. The time series analysis showed the positive relationship between firm size and profitability but cross-sectional show no relationship between firm size and profitability.

- **Ravichandran, M. & Subramanium M Venkata (2016)** the main idea behind this study is to assessment of viability, stability and profitability of Force motors limited. Operating position of the company can be measured by using various financial tools such as profitability ratio, solvency ratio, comparative statement & graphs etc. This study finds that company has got enough funds to meet its debts & liabilities. Company can further improve financial performance by reducing the administrative, selling & operating expenses.

- **Mathur Shivam & Agarwal Krati (2016)** Ratio’s are an excellent and scientific way to analyze the financial performance of any firm. The company has received many awards and achievements due to its new innovations and technological advancement. These indicators help the investors to invest the right company for expected profits. The study shows that Maruti Suzuki limited is better than Tata motors limited.

- **Jothi, K. & Geethalakshmi, A. (2016)** this study tries to evaluate the profitability & financial position of selected companies of Indian automobile industry using statistical tools like, ratio analysis, mean, standard deviation, correlation. The study reveals the positive relationship between profitability, short term and long term capital.
• **Kumar Mohan M.S, Vasu. V. and Narayana T. (2016)** the study has been made through using different ratios, mean, standard deviation and Altman’s Z score approach to study the financial health of the company. The study reveals there is a positive correlation between liquidity and profitability ratios except return on total assets as well as Z score value indicate good health of the company.

• **Kaur Harpreet (2016)** the author tries to examine the qualities & quantities performer of maruti Suzuki co. & how had both impact on its market share in India, For this study secondary data has been collected from annual reports, journals, report automobile sites. Result shows that MSL has been successfully leading automobile sector in India for last few years.