IJCRT.ORG ISSN : 2320-2882

INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS (IJCRT)
An International Open Access, Peer-reviewed, Refereed Journal

ANALYSIS OF LIQUIDITY AND PROFITABILITY OF SELECTED COMPANIES OF AUTOMOBILE INDUSTRY

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ABSTRACT

Automobile industry plays a vital role to boost economic growth of developing countries like India. Currently, it is contributing more than 7% to GDP in India and approximately 320 lakhs of people are working in this sector. Thus it is indispensable to measure the financial performance of this business organisation. This research paper measures the financial performance of selected companies of automobile for the period of 10 years from 2009 to 2019 by using ratio analysis. The objective of this study is to measure and compare the financial performance of three selected companies to rate their financial performance. This research is conducted with the help of secondary data which is collected from the annual reports of selected companies. ANOVA and descriptive statistics are used to evaluate the implications of ratios on financial performance. It is revealed that there is significant difference both of the liquidity and profitability performance among the selected companies of automobile industry.

Key Words: *Automobile Industry, Financial Performance, Ratios.*

INTRODUCTION

Finance is considered as lifeblood of every business organization. Thus it is indispensable today to measure the financial performance of every business organization. Financial performance of every business organization can be measured with the help of financial statements. Financial statement analysis is used as a process to determining financial strength and weakness of business firm by establishing the relationship among the various financial factors such as Balance sheet, Profit & Loss account, fund flow statements and other operative data. The objective of financial statement analysis is to recognize the information involved in financial statements so as to judge the firm's positions and to make prediction about future outlook of the firm like future earnings, ability to pay interest and debt maturities etc. Financial Analyst measure the financial position and performance with widely used tools & techniques before commenting upon the financial strength and weakness of an organization. Ratio analysis is one of the most dominant tool of financial analysis. It is a technique of analysis and interpretation of financial statement for helping in making certain financial decisions. It provides better understanding of financial strength and weakness of a firm. One can reach conclusions about the true financial position of a firm with the help of ratios. In this research paper financial performance of selected companies of automobile is evaluated by liquidity and profitability ratios which is considered as financial performance parameters

Table-1
RATIO PARAMETERS

Liquidity Ratio	Profitability Ratio
• Current Ratio • Quick Ratio	• Return on Net worth • Return on Capital Employed

Liquidity Ratio: These are the ratios which analyses the short term financial position of an organization. These ratios are analyzed to comment upon the paying capacity of a business firm in a short period of time. These ratios are also helpful to measure that how efficiently an organization manages its short term (liquid) resources. These ratios are very useful for both short term creditors and business organization.

Profitability Ratio: These are the ratios which analyses the overall efficiency and performance of an organization. These ratios help in calculating profit earning capabilities of a business firm. Return on net worth, Return on capital employed, Return on assets etc. are used to calculate returns from various investments made by an organization.

AUTOMOBILE INDUSTRY IN INDIA

Indian Automobile industry is considered as a sunrise and growing industry in the world. The liberalisation of 1991 opened the flood gates of competitions and growth for automobile sector which is still in continuation in the Indian economy. The government of india has opened up of 100% FDI in automobile sector. Currently, it is contributing more than 7% to GDP in india. Now the government of India is planning to invest in various projects to boost this sector for the development of the economy. The Government has also taken various initiatives to uplift this sector for the development of the economy. It was recently declared that government aims to develop India as a global manufacturing centre, and a Research & Development hub etc. Automobile industry is divided into four segments i.e. Two Wheelers, Passenger Vehicles, Commercial Vehicles and Three Wheelers.

Table-2

Domestic Market Share for Automobile Industry 2018-19 (in percentage):

Passenger vehicles	13
Commercial vehicles	4
Two wheelers	80
Three wheelers	3
Total	100

Source: SIAM (Society of Indian Automobile Manufacture)

REVIEW OF LITERATURE

Kumara and Abhilasha (2015) evaluated a critical study of financial performance of an Indian Automobile industry. The study was conducted to know the performance of liquidity, profitability, solvency and efficiency with the help of ratio analysis. The study was primarily based on secondary sources of data adopted from top ten companies of ET 500 ranks. Data was collected from the annual reports of selected companies for the period of eight years (2007 to 2014). It was concluded that strategic thinkers should pay attention to apply latent and strong effect on their automobile performance and there is need to focus on important parameters like economic value added and refined economic value added to evaluate the overall financial performance of respective companies.

Jothi and Geethalakshmi (2016) studied liquidity and profitability position of selected companies in automobile industry. The study was conducted on the basis of secondary sources for the period of 5 year (2011-2012 to 2015-16). Data was collected from four selected companies i.e. Maruti Suzuki, Tata Motors, Mahindra & Mahindra and TVS Motors. It was found that higher level of consistency of liquidity was noticed in TVS Motor and higher level of consistency of profitability in TVS Motors and Tata Motors. It was concluded that there is a positive relationship between the liquidity and profitability position of selected companies of automobiles industry. It was suggested that Tata Motors and TVS Motor should maintain ideal current ratio and quick ratio in future.

Gowda and Kumara (2017) measured the financial performance of major selected automobile companies for the period of 5 year from 2012-2016 by using ratio analysis. The objective of this study to measure and compare the risk rate of return, future trends and their strength and weakness of selected companies to rate their financial performance. Data was collected from the secondary sources of top nine companies of automobiles sector which is selected according to their growth performance. It was concluded that there is positive strong relationship between current ratio and quick ratio. It was suggested that there should be effective inventory management and conversion period leads to higher liquidity. It was further concluded that there is no significant relationship in the terms of long term debt and dividend per share.

Kanagavalli and Devi (2018) studied financial performance of selected automobile companies for the period of 5 year from 2013-2017 by using ratio analysis. The objective of this study was to find out and compare liquidity, profitability and turnover ratio of selected 3 companies to rate their financial performances. The proposed study was entirely based on secondary data. It was found that there is a positive strong relationship of liquidity ratio. It was suggested that there should be effective inventory management and conversion period leads to higher liquidity power to the companies. It was also found that solvency ratio of selected companies of automobile have some fluctuation. Hero Molorcorp was ranked high among other automobile companies with respect to profitability and efficiency ratios.

Bhagyalakshmi and Saraswathi (2019) conducted a study on financial performance evaluation using DUPONT analysis through profitability ratios like ROE, ROA and ROCE. The study was conducted on 10 Automobile companies listed in the NSE and period of the study was 2013 to 2017. This study was mainly based on secondary data. Data was collected from published annual financial statements. Correlation and regression analysis was adopted to know the relationship among the variable and its impact of ROA and EM on ROE. It was found that there is a positive relationship among all the variable except EM and there exists significance difference in the financial performance with reference to ROE and ROA. It was suggested that analysts and investors should focus on changes in profit margin rather that changes in asset turnover, ROE, ROA to improve the profitability.

NEED OF THE STUDY

The present study mainly focus on examining the financial performance of selected companies of automobile industry by using ratio analysis. Both internal and external users of financial statements of different companies needs to analyse liquidity, efficiency, solvency and profitability to choose better investment decisions. This study will help to users to analyse the liquidity and profitability position of selected automobile companies for the period of ten years. It would also help to users regarding short term and long term investment decisions in these respective companies according to resulted financial position and performance. The result of the study may help the managers of selected companies in taking strategic and financial decisions for better performance in future.

OBJECTIVES OF THE STUDY

- To identify the descriptive status of liquidity and profitability of selected companies of automobile.
- To compare the liquidity position of selected companies.
- To compare the profitability position of selected companies.

HYPOTHESIS OF THE STUDY

The following hypothesis are framed to analysing the financial performance of selected companies of automobile.

- H_0: there is no significant difference between the Current ratios among the selected automobile companies.
- H_0: there is no significant difference between the Quick ratios among the selected automobile companies.
- H_0: there is no significant difference between the RONW among the selected companies.
- H_0: there is no significant difference between the ROCE among the selected companies.

RESEARCH METHODOLOGY

The research design of the present study is analytical in nature. This includes following sections;

Source of Data: The present study is based on secondary data. The data has been compiled from annual reports, journal, books and websites of the respective companies and necessary data also collected from moneycontrol.com database and society of Indian automobile manufacturers (SIAM).

Sampling: Three companies are selected out of top five companies (as per market share) of automobile industry on the basis of availability of data for the post 10 years. The following companies have been selected for this study a) Maruti Suzuki b) Tata Motors c) Mahindra & Mahindra Ltd.

Period of the Study: The period of this study has been taken 10 years i.e. from the financial year 2009-2010 to 2018-2019.

Statistical Tools: Several financial ratios are used to identify the status of financial performance in selected companies of automobile industry and all tabulated data are analysed with the help of statistical tools for proving and disproving the hypothesis. ANOVA, and descriptive statistics are used to evaluate the implications of ratios on financial performance.

DATA ANALYSIS AND INTERPRETATIONS

Liquidity and profitability ratios are used to compare the financial performance of selected companies of automobile industry and the mean are computed. The mean are compared to ascertain the statistical significance difference among the variables of selected companies with the help of statistical tools.

Table-3

LIQUIDITY STATUS OF SELECTED AUTOMOBILE COMPANIES

Year/ Company	Current Ratio			Quick Ratio		
	Maruti Suzuki	Tata Motors	Mahindra & Mahindra	Maruti Suzuki	Tata Motors	Mahindra & Mahindra
2010	0.95	0.52	1.16	0.65	0.39	0.93
2011	2.39	0.58	0.91	2.04	0.37	0.63
2012	1.69	0.62	1.08	1.42	0.41	0.76
2013	1.63	0.48	1.10	1.35	0.27	0.80
2014	1.76	0.36	1.29	1.54	0.15	0.97
2015	0.93	0.42	1.13	0.63	0.19	0.86
2016	0.71	0.63	1.18	0.43	0.36	0.91
2017	0.66	0.59	1.31	0.42	0.33	1.02
2018	0.51	0.62	1.24	0.31	0.38	1.03
2019	0.87	0.58	1.26	0.64	0.37	0.99
Mean	1.21	0.54	1.166	0.94	0.32	0.89
Median	0.94	0.58	1.17	0.645	0.365	0.92
S.D	0.615	0.093	0.120	0.593	0.089	0.128
Variance	0.378	0.009	0.014	0.352	0.008	0.016
Skewness	0.764	-1.006	-0.938	0.728	-1.187	-0.919

Source: www.moneycontrol.com

Interpretations:

In the above table current ratios resulted average 1.21 in Maruti, 0.54 in Tata Motors and 1.66 in Mahindra & Mahindra since past ten years which are less than the industry standards. So it is interpreted that short term financial position is not met properly and higher level of consistency is noticed in Mahindra & Mahindra. Quick ratios resulted average 0.94 in Maruti, 0.32 in Tata Motors and 0.89 in Mahindra & Mahindra which are less than the industry standards. So therefore they contain less current assest which are highly liquid and higher level of consistency is noticed in Maruti Suzuki.

Table-4

ANOVA Test of Current Ratio

Analysis of Variance- Current Ratio of selected companies

ANOVA						
Source of Variation	SS	Df	MS	F	P-value	F crit
Between Groups	2.80904	2	1.40452	10.49762	0.000424	3.354131
Within Groups	3.61244	27	0.133794			
Total	6.42148	29				

Source: Computed

The obtained F value is greater than the table value (F-critical) at 5% level of significance and P-value is 0.000424 which is less then alpha level 0.05. Therefore, the null hypothesis is rejected. Hence it can be interpreted that there is higher significant difference between the values of current ratio among the selected companies of automobile industry.

Table-5

ANOVA Test of Quick Ratio

Analysis of Variance- Quick Ratio of selected companies

ANOVA						
Source of Variation	*SS*	*Df*	*MS*	*F*	*P-value*	*F crit*
Between Groups	2.370246667	2	1.185123	9.45027	0.000774	3.354130829
Within Groups	3.38597	27	0.125406			
Total	5.756216667	29				

Source: Computed

The obtained F value is greater than the table value (F-critical) at 5% level of significance and P-value is 0.000774 which is less then alpha level 0.05. Therefore, the null hypothesis is rejected. Hence it can be interpreted that there is higher significant difference between the values of quick ratio among the selected companies of automobile industry.

Table-6

PROFITABILITY STATUS OF SELECTED AUTOMOBILE COMPANIES

Year/ Company	Return on Net worth (%)			Return on Capital Employed (%)		
	Maruti Suzuki	Tata Motors	Mahindra & Mahindra	Maruti Suzuki	Tata Motors	Mahindra & Mahindra
2010	21.10	15.15	26.72	20.01	7.75	18.75
2011	16.50	9.06	26.46	15.88	5.14	19.59
2012	10.76	6.33	24.08	10.37	3.84	17.39
2013	12.87	1.57	22.88	11.96	0.97	17.36
2014	13.26	1.74	22.39	12.39	2.75	16.68
2015	15.65	-31.93	17.25	15.00	-16.02	13.85
2016	17.95	-0.26	14.29	17.35	5.31	12.49
2017	20.17	-11.48	13.60	26.42	-1.19	14.28
2018	18.49	-5.13	14.37	25.83	5.04	16.95
2019	16.25	9.11	14.01	21.60	11.57	16.86
Mean	16.3	-0.58	19.60	17.68	2.51	16.42
Median	16.375	1.655	19.82	16.615	4.44	16.905
S.D	3.295	13.393	5.423	5.660	7.393	2.223
Variance	10.855	179.383	29.410	32.031	54.661	4.942
Skewness	-0.2143	-1.5106	0.1135	0.4061	-1.8831	-0.5181

Source: www.moneycontrol.com

Interpretation:

In the above table, Return on net worth resulted average 16.3 in Maruti,-0.58 in Tata Motor and 19.60 in Mahindra & Mahindra since past ten years. In all these three companies, higher ratio of return on net worth is noticed in Mahindra & Mahindra. Return on capital employed resulted average 17.68 in Maruti, 2.51 in Tata Motor and 16.42 in Mahindra & Mahindra since past ten years, higher ratio of return on capital employed is noticed in Maruti Suzuki. So as per these ratio, investor can invest only where the return is higher.

Table-7

ANOVA Test of Return on Net worth (%)

Analysis of Variance- Return on Net worth/Equity of selected companies

ANOVA						
Source of Variation	*SS*	*df*	*MS*	*F*	*P-value*	*F crit*
Between Groups	2345.294	2	1172.647	16.01625	2.59E-05	3.354131
Within Groups	1976.834	27	73.21606			
Total	4322.128	29				

Source: Computed

The obtained F value is greater than the table value (F-critical) at 5% level of significance. Therefore, the null hypothesis is rejected. Hence it can be interpreted that there is higher significant difference between the values of RONW (return on net worth) among the selected companies of automobile industry.

Table-8

ANOVA Test of Return on Capital Employed (%)

Analysis of Variance- Return on Capital Employed of selected companies

ANOVA						
Source of Variation	*SS*	*Df*	*MS*	*F*	*P-value*	*F crit*
Between Groups	1416.295	2	708.1476	23.18426	1.38E-06	3.354131
Within Groups	824.6967	27	30.54432			
Total	2240.992	29				

Source: Computed

The obtained F value is greater than the table value (F-critical) at 5% level of significance. Therefore, the null hypothesis is rejected. Hence it can be interpreted that there is higher significant difference between the values of ROCE (return on capital employed) among the selected companies of automobile industry.

CONCLUSION

The present research paper attempted to focus on the analysis of financial performance of the selected companies of automobile industry by using liquidity and profitability ratios like CR, QR, ROCE, and RONW. The study found that liquidity position of respective companies is not met properly, but higher level of consistency of current ratio is noticed in Mahindra & Mahindra and of quick ratio is noticed in Maruti Suzuki. Therefore, the study proves that there is significant change in current ratio and quick ratio among the selected companies. The study further found that higher ratio of return on net worth is noticed in Mahindra & Mahindra and of return on capital employed is noticed in Maruti Suzuki. So investor can invest only where the return is higher. Hence it is concluded that there is significant difference both of the liquidity and profitability performance among the selected companies of automobile industry.

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