



Measurement of Financial Performance of Selected Three Wheeler And Four Wheeler Automobile Companies in India

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Abstract: *Now-a -days The Indian Automobile industry has emerged as a ‘sunrise sector’ surrounded by the India economy. Automobile Industry in India is one of the largest in the world and one of the fastest growing industries in recent times. The Indian Auto Industry has a huge prospective for growth. In this paper, two types automobile companies are selected. Three wheeler and four wheeler companies are selected for this study. In three wheeler and four wheeler two samples each are selected for this study. The main objective of this paper is to analyze the financial position of the selected automobile companies for five years. This study is based on secondary data. Financial position is analyzed by using different ratios. From this study, position of Mahindra & Mahindra Ltd., Scooters India Ltd., Hindustan Motors Ltd. and Maruti Suzuki Ltd. are ascertained. Selected automobile companies are also showing rapid progression in this field.*

Key words: *Financial Performance, Hindustan Motors Ltd., Mahindra & Mahindra Ltd., Maruti Suzuki Ltd., Ratios, Scooters India Ltd.*

INTRODUCTION

The Indian automobile industry has emerged as a ‘Sunrise Sector’ surrounded by the Indian economy. Automobile Industry in India is one of the largest in the world and one of the fastest growing industries in recent times. The Indian Auto Industry has a huge potential for growth. The Automobile Industry in the country is one of the key sectors of the economy in terms of the employment opportunities that it offers. The process of reviewing a company’s financial performance makes it more effective for decision making. Financial performance means to evaluate the balance sheet and profit & loss account of companies. Evaluation of financial statements helps to managers, investors, share holders and other interested parties. Financial statements are needed to evaluate a company’s profitability, liquidity and solvency.

Three wheeler and four wheeler automobile companies which are manufacturing tractors, auto rickshaws, passenger cars, trucks, buses and other heavy vehicles.

REVIEW LITERATURE

Ashima (2008) evaluated on, “A Comparative and Analytical Study of the Financial Performance Evaluation of Automobile Industries in India.” This study period covered from the year 1998-99 to 2007-08. She examined modernization of selected Indian Automobile Companies and production of Fuel-efficient vehicles to conserve scarce resources. P/E ratio is directly related to market price per share and earning per share. The industry may perform well, several ratios like growth ratios, financial ratios properly analyzed with reference to the company. She had concluded that the financial performance of Maruti Udyog Ltd., Hyundai Motors India Ltd. was good,



whereas both companies have use new technology and new machinery in competitive market. **Ray (2012)** studied topic on, “Evaluate the performance of Indian automobile industry” in terms of various financial indicators, sales trend, production trend, export trend etc. for the period of 2003-04 to 2009-10. The result suggests that the automobile industry has been passing through turbulent phases characterized by enhanced debt burden, low utilization of assets, and above all, huge liquidity crunch. The key to success in the industry is to improve labour productivity, labour flexibility, and capital efficiency. **Repalle Vinod (2013)** presented topic on, “Evaluation of Working Capital Management on Profitability of Indian Automobile Industries” from the year 2009-2013. He found from the study that the working capital management of automobile industry is inefficient. So he concluded that the poor management of working capital is one of the important causes for poor performance or poor profitability position of selected automobiles under the study period. The result showed negative relationship between profitability and average payment period. Mahindra’s profitability is best among the four selected firms in respect of net profit. The liquidity position of the selected automobiles is not satisfactory due to poor turnover of Current Assets, Inventory, Debtors and Cash Balances. The collection of receivables is good due to credit and collection period. The automobiles should be cautious in formulating working capital policy.

RESEARCH GAP

By these related literatures, it is observed that a study on financial performance of Selected Automobile Companies in India is very few but recent financial performance measurements of selected automobile companies are also missing. So the researcher undertook this study to measure the financial performance in the automobile industry. Hence, the researcher has made an attempt to compare the financial performance of Selected Automobile Companies in India.

OBJECTIVE OF STUDY

- To analysis of financial performance of selected three wheeler and four wheeler Companies by determining various financial ratios.

RESEARCH METHODOLOGY

The main objective of this study is to know the financial position of selected automobile companies. The study is based on secondary data, collected through annual reports of selected automobile companies. Four samples are selected for this study. The study of the financial performance of Three Wheeler and Four Wheeler companies are the period of the five years from 2011-12 to 2015-16. There are two samples selected from three wheeler and four wheeler companies each, Which are as under:

1. Three Wheeler

- a. Mahindra & Mahindra Ltd.
- b. Scooters India Ltd.

2. Four Wheeler

- a. Hindustan Motors Ltd.
- b. Maruti Suzuki Ltd.

HYPOTHESIS OF THE STUDY

1. H_{01} : There is no significant difference in Return on Net Worth of selected three wheeler and four wheeler companies.



- 2. H₀₂: There is no significant difference in Net Profit Margin of selected three wheeler and four wheeler companies.
- 3. H₀₃: There is no significant difference in Return on Assets of selected three wheeler and four wheeler companies.
- 4. H₀₄: There is no significant difference in Return on Capital Employed of selected three wheeler and four wheeler companies.
- 5. H₀₅: There is no significant difference in Debt-Equity ratio of selected three wheeler and four wheeler companies.

MEASUREMENT OF FINANCIAL PERFORMANCE

1. Return on Net Worth

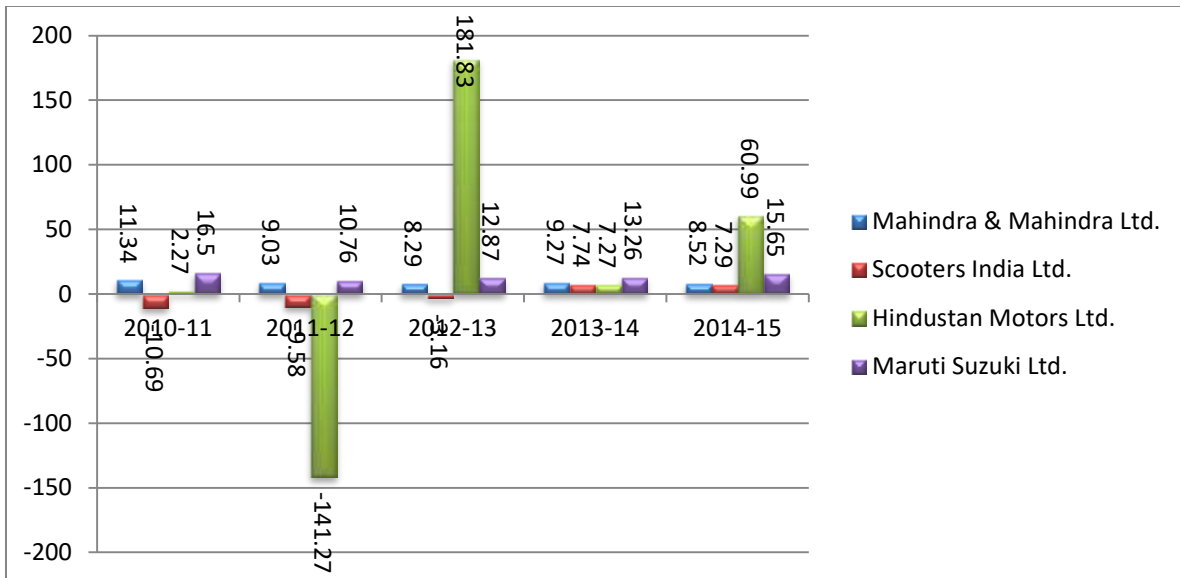
Table 1 Return on Net Worth of Selected Three Wheeler and Four Wheeler Automobile Companies during the Period from 2010-11 to 2014-15 (In Percentage)

Year	Three Wheeler			Four Wheeler		
	Mahindra & Mahindra Ltd	Scooters India Ltd.	Average	Hindustan Motors Ltd.	Maruti Suzuki Ltd.	Average
2010-11	26.46	29.23	27.85	2.27	16.5	9.39
2011-12	24.08	25.4	24.74	-141.27	10.76	-65.26
2012-13	22.88	-15.96	3.46	181.83	12.87	97.35
2013-14	22.39	16.37	19.38	7.27	13.26	10.27
2014-15	17.25	11.89	14.57	60.99	15.65	38.32
Average	22.61	13.39	17.99	22.22	13.81	18.02

(Sources: Calculated from the annual report of selected three wheeler and four wheeler Automobile companies)

Table 1 shows the Return on Net Worth of selected three wheeler and four wheeler automobile companies during the year 2010-11 to 2014-15. Return on net worth is in fluctuating trends. Return on net worth of three wheeler is higher than four wheeler companies. In four wheeler companies, average return on net worth of Hindustan Motors Ltd. is 22.22 i.e. higher than Maruti Suzuki Ltd. In three wheeler companies, Average return on net worth of Mahindra & Mahindra Ltd. is 22.61 i.e. higher than Scooters India Ltd. during the research period. Compare to year wise average of three wheeler and four wheeler average of four wheeler is 18.02. It is higher than three wheeler.

Figure 1 Return on Net Worth of selected two wheeler and four wheeler automobile companies during the period from 2010-11 to 2014-15



2. Net Profit Margin

Table 2 Net Profit Margin of Selected Three Wheeler and Four Wheeler Automobile Companies during the Period from 2010-11 to 2014-15

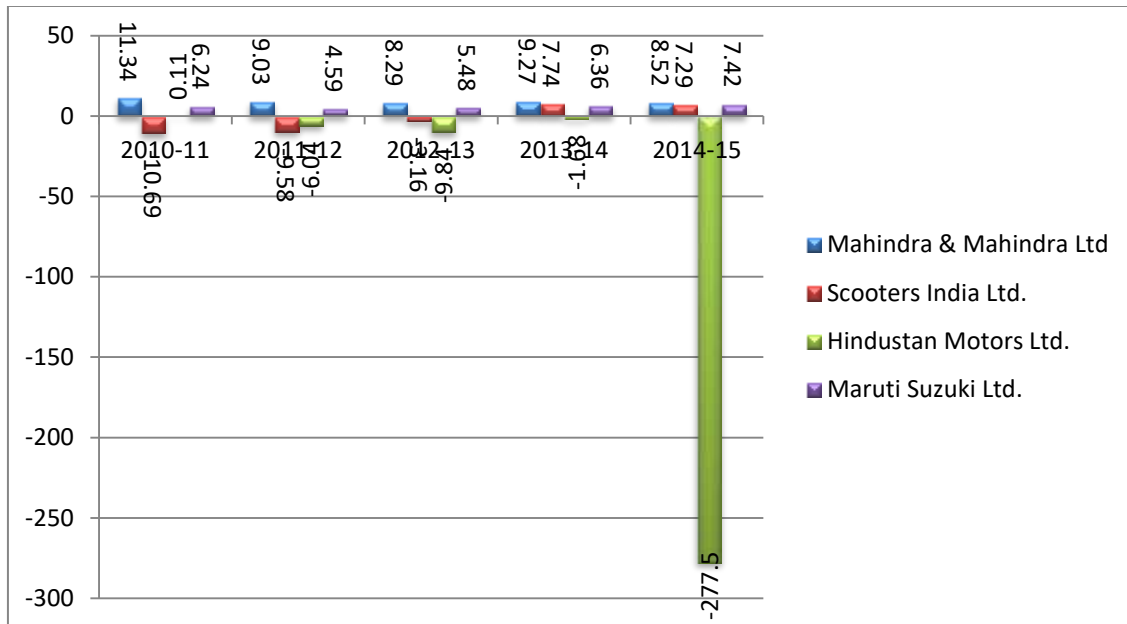
(In Percentage)

Year	Three Wheeler			Four Wheeler		
	Mahindra & Mahindra Ltd.	Scooters India Ltd.	Average	Hindustan Motors Ltd.	Maruti Suzuki Ltd.	Average
2010-11	11.34	-10.69	0.33	0.11	6.24	3.18
2011-12	9.03	-9.58	-0.28	-6.04	4.59	-0.73
2012-13	8.29	-3.16	2.57	-9.84	5.48	-2.18
2013-14	9.27	7.74	8.51	-1.68	6.36	2.34
2014-15	8.52	7.29	7.91	-277.5	7.42	-135.04
Average	9.29	-1.68	3.81	-58.99	6.09	-26.45

(Sources: calculated from the annual report of selected three wheeler and four wheeler Automobile companies)

Table 2 shows that Net Profit Margin of selected three wheeler and four wheeler companies during the year 2010 -11 to 2014 -15. Net profit margin is fluctuating trends. Net profit margin of three wheeler is higher than four wheeler companies. In four wheeler companies, average Net profit margin of Hindustan Motors Ltd. is -58.99. It is lower than Maruti Suzuki Ltd. In four wheeler companies, Average net profit margin of Mahindra & Mahindra Ltd. is 9.29 higher than Scooters India Ltd. Compare to year wise average of three wheeler and four wheeler, average of three wheeler is 3.81 higher than four wheeler.

Figure 2 Net Profit Margin of selected two wheeler and four wheeler automobile companies during the period from 2010-11 to 2014-15



3. Return on Assets

Table 3 Return on Assets of Selected Three Wheeler and Four Wheeler Automobile Companies during the Period from 2010-11 to 2014-15

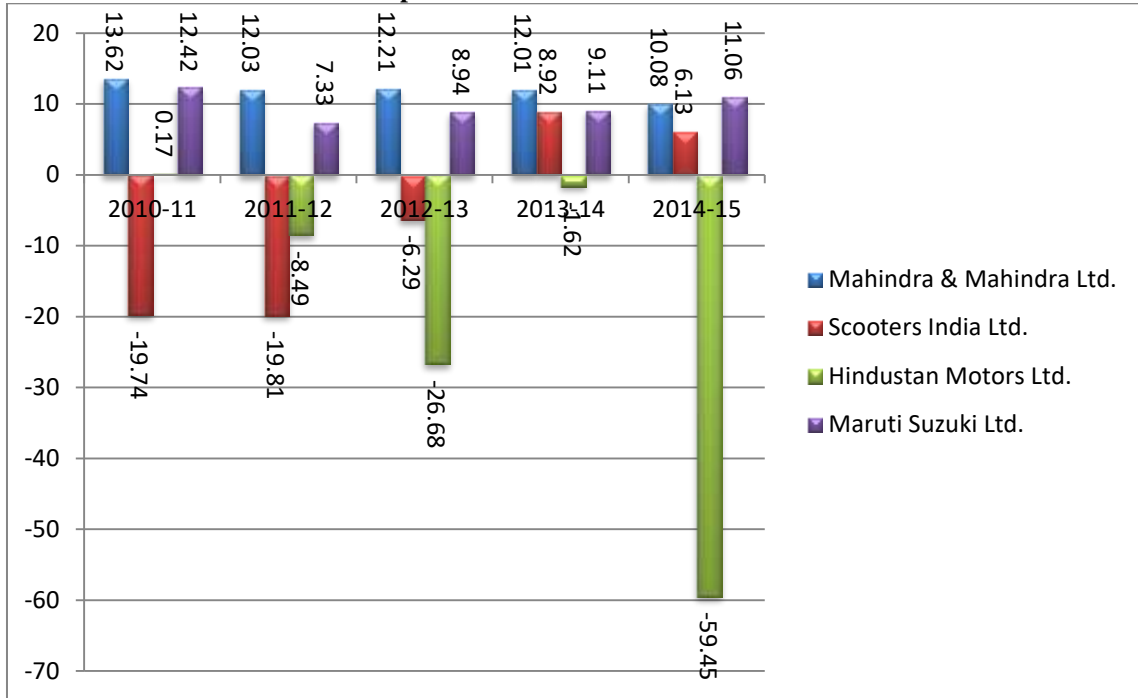
(In Percentage)

Year	Three Wheeler			Four Wheeler		
	Mahindra & Mahindra Ltd.	Scooters India Ltd.	Average	Hindustan Motors Ltd.	Maruti Suzuki Ltd.	Average
2010-11	13.62	-19.74	-3.06	0.17	12.42	6.3
2011-12	12.03	-19.81	-3.89	-8.49	7.33	-0.58
2012-13	12.21	-6.29	2.96	-26.68	8.94	-8.87
2013-14	12.01	8.92	10.47	-1.62	9.11	3.75
2014-15	10.08	6.13	8.11	-59.45	11.06	-24.2
Average	11.99	-6.16	2.92	-19.21	9.77	-4.72

(Sources: calculated from the annual report of selected three wheeler and four wheeler Automobile companies)

Table 3 shows that Return on Assets of selected three wheeler and four wheeler companies during the year 2010 - 11 to 2014 -15. Return on Assets is fluctuating trends. Return on Assets of three wheeler is higher than four wheeler companies. In three wheeler companies, average Return on Assets of Mahindra & Mahindra Ltd. is 11.99. It is higher than Maruti Suzuki Ltd. In four wheeler companies, Average net profit margin of Mahindra & Mahindra Ltd. is 9.77. It is higher than Scooters India Ltd. Compare to year wise average of three wheeler and four wheeler, average of three wheeler is maximum i.e. 2.92 than four wheeler.

Figure 3 Return on Assets of selected two wheeler and four wheeler automobile companies during the period from 2010-11 to 2014-15



4. Return on Capital Employed

Table 4 Return on Capital Employed of Selected Three Wheeler and Four Wheeler Automobile Companies during the Period from 2010-11 to 2014-15

(In Percentage)

Year	Three Wheeler			Four Wheeler		
	Mahindra & Mahindra Ltd.	Scooters India Ltd.	Average	Hindustan Motors Ltd.	Maruti Suzuki Ltd.	Average
2010-11	19.59	-327.12	-153.77	0.73	15.88	8.31
2011-12	17.39	85.52	51.46	-38.91	10.37	-14.27
2012-13	17.36	-14.43	1.47	691.24	11.95	351.6
2013-14	16.68	12.75	14.72	14.15	12.39	13.27
2014-15	13.85	8.99	11.42	108.11	15	61.56
Average	16.97	-46.86	-14.95	155.06	13.12	84.09

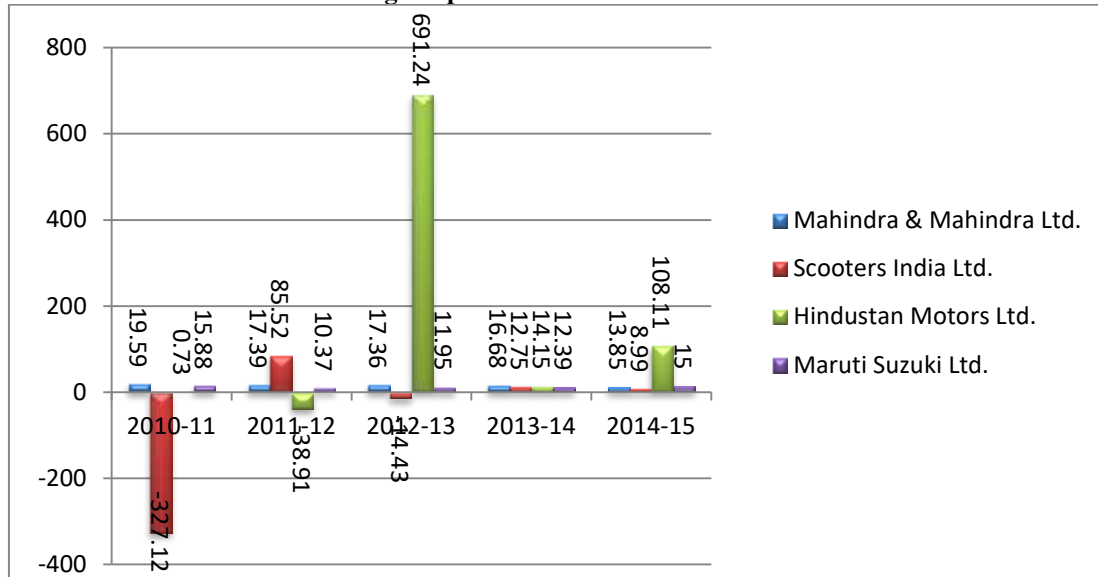
(Sources: calculated from the annual report of selected three wheeler and four wheeler Automobile companies)

Table 4 indicates that Return on capital employed of selected three wheeler and four wheeler automobile companies during the year 2010-11 to 2014-15. Return on capital employed is in fluctuating trend. Compare to



average of Return on Capital Employed, four wheeler is higher than three wheeler. During the research period, in four wheeler, Hindustan Motors Ltd. is 155.06 higher than Maruti Suzuki Ltd. and in three wheeler, Average of Mahindra and Mahindra Ltd. is higher i.e. 16.97 than Scooters India Ltd. Compare to year wise average of three wheeler and four wheeler, average of four wheeler is higher than three wheeler.

Figure 4 Return on Capital Employed of selected two wheeler and four wheeler automobile companies during the period from 2010-11 to 2014-15



5. Debt-Equity Ratio

Table 5 Debt-Equity Ratio of Selected Three Wheeler and Four Wheeler Automobile Companies during the Period from 2010-11 to 2014-15

(In Percentage)

Year	Three Wheeler			Four Wheeler		Average
	Mahindra & Mahindra Ltd.	Scooters India Ltd.	Average	Hindustan Motors Ltd.	Maruti Suzuki Ltd.	
2010-11	0.23	-0.94	-0.36	3.55	0.01	1.78
2011-12	0.27	-0.7	-0.22	6	0.07	3.04
2012-13	0.22	0.38	0.3	-1.83	0.07	-0.88
2013-14	0.22	0.28	0.25	-0.44	0.08	-0.18
2014-15	0.14	0.35	0.25	-0.23	0.01	-0.11
Average	0.22	-0.13	0.05	1.41	0.05	0.73

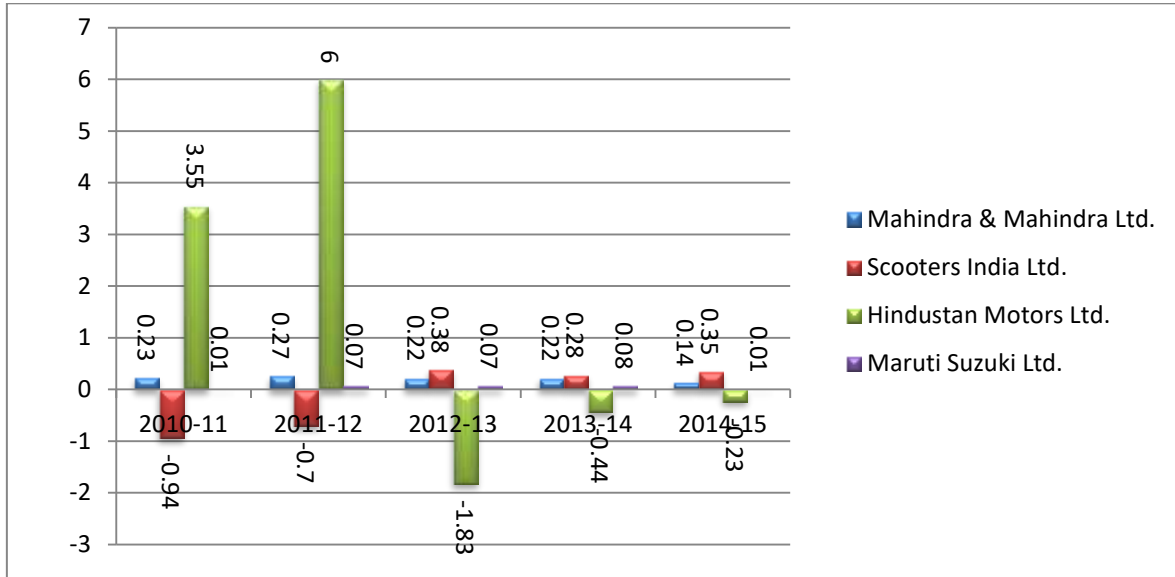
(Sources: calculated from the annual report of selected three wheeler and four wheeler Automobile companies)

Table 5 shows that Debt-Equity ratio of selected three wheeler and four wheeler automobile companies during the year 2010-11 to 2014-15. Debt-equity ratio is in fluctuating trend. Compare to average of debt-equity ratio, four



wheeler is higher than three wheeler companies during the research period. In three wheeler, average of Mahindra and Mahindra Ltd. is maximum i.e. 0.22 than Scooters India Ltd. In four wheeler, average of Hindustan Motors Ltd. is 1.41. It is higher than Maruti Suzuki Ltd. during the research period. Compare to year wise average, average of four wheeler is higher than three wheeler companies.

Figure 5 Debt-Equity Ratio of selected two wheeler and four wheeler automobile companies during the period from 2010-11 to 2014-15



HYPOTHESIS TESTING

1. RETURN ON NET WORTH

H_{01} : There is no significant difference in Return on Net Worth of selected three wheeler and four wheeler companies.

t-Test: Two-Sample Assuming Equal Variances		
	Three Wheeler	Four Wheeler
Mean	-14.94	84.094
Variance	6381.64555	23125.49283
Observations	5	5
Pooled Variance	14753.56919	
Hypothesized Mean Difference	0	
df	8	
t Stat	-1.289156896	
P(T<=t) one-tail	0.116683434	
t Critical one-tail	1.859548033	



P(T<=t) two-tail	0.233366869	
t Critical two-tail	2.306004133	

We can observe that t value is 2.30 and p value is 0.233 as p value is greater than 0.05, we cannot reject the null hypothesis. It means there is no significant difference in Return on Net Worth of selected companies.

2. Net Profit Margin

H₀₂: There is no significant difference in Net Profit Margin of selected three wheeler and four wheeler companies.

t-Test: Two-Sample Assuming Equal Variances		
	Three Wheeler	Four Wheeler
Mean	3.808	-26.486
Variance	17.31902	3687.28348
Observations	5	5
Pooled Variance	1852.30125	
Hypothesized Mean Difference	0	
df	8	
t Stat	1.112937601	
P(T<=t) one-tail	0.149027919	
t Critical one-tail	1.859548033	
P(T<=t) two-tail	0.298055838	
t Critical two-tail	2.306004133	

We can observe that t value is 2.30 and p value is 0.298 as p value is greater than 0.05, we cannot reject the null hypothesis. It means there is no significant difference in Net Profit Margin of selected companies.

3. Return on Assets

H₀₃: There is no significant difference in Return on Assets of selected three wheeler and four wheeler companies.

t-Test: Two-Sample Assuming Equal Variances		
	Three Wheeler	Four Wheeler
Mean	2.918	-4.72
Variance	41.51917	151.75345
Observations	5	5
Pooled Variance	96.63631	
Hypothesized Mean Difference	0	
df	8	
t Stat	1.22851244	
P(T<=t) one-tail	0.1270838	



t Critical one-tail	1.8595483	
P(T<=t) two-tail	0.2541666	
t Critical two-tail	2.3060043	

We can observe that t value is 2.30 and p value is 0.254 as p value is greater than 0.05, we cannot reject the null hypothesis. It means there is no significant difference in Return on Assets of selected companies.

4. Return on Capital Employed

H₀₄: There is no significant difference in Return on Capital Employed of selected three wheeler and four wheeler companies.

t-Test: Two-Sample Assuming Equal Variances		
	Three Wheeler	Four Wheeler
Mean	-14.94	84.094
Variance	6381.64555	23125.49283
Observations	5	5
Pooled Variance	14753.56919	
Hypothesized Mean Difference	0	
df	8	
t Stat	-1.289156896	
P(T<=t) one-tail	0.116683434	
t Critical one-tail	1.859548033	
P(T<=t) two-tail	0.233366869	
t Critical two-tail	2.306004133	

We can observe that t value is 2.30 and p value is 0.233 as p value is greater than 0.05, we cannot reject the null hypothesis. It means there is no significant difference in Return on Capital Employed of selected companies.

5. Debt-Equity ratio

H₀₅: There is no significant difference in Debt-Equity ratio of selected three wheeler and four wheeler companies.

t-Test: Two-Sample Assuming Equal Variances		
	Three Wheeler	Four wheeler
Mean	0.044	0.73
Variance	0.09583	2.6411
Observations	5	5
Pooled Variance	1.368465	
Hypothesized Mean Difference	0	
Df	8	
t Stat	-0.927208219	



P(T<=t) one-tail	0.19047045	
t Critical one-tail	1.859548033	
P(T<=t) two-tail	0.3809409	
t Critical two-tail	2.306004133	

We can observe that t value is 2.30 and p value is 0.380 as p value is greater than 0.05, we cannot reject the null hypothesis. It means there is no significant difference in Debt-Equity Ratio of selected companies.

Findings and Suggestions

Findings

From the above analysis and discussion it is found that the comparative picture of financial performance of three wheeler is better than four wheeler companies during the research period. Return on net worth of Mahindra & Mahindra Ltd. is higher i.e. 22.61 than other selected automobile companies for the study period. Net profit margin of Mahindra & Mahindra Ltd. is higher and Hindustan Motors Ltd. is lower than other selected automobile companies during the study period 2010-11 to 2014-15.

Comparison of ratios, like Return on Assets, Return on Capital Employed and Debt-Equity ratio of three wheeler and four wheeler shows that Mahindra & Mahindra Ltd. is higher than other selected companies during the research period. The present study highlights that the overall financial performance of selected automobile companies show the fluctuating trend during the study period.

It is also found that four wheeler companies are lower in selected financial ratios than three wheeler companies during the research period. However, profitability of the selected automobile companies in India during the study period is satisfactory. During the period of study there were a few high and low in the profitability but it did not affect the operations of the company. If the automobile Industry has to perform well, it has to invest more capital and all selected companies have to try to improve and take steps for better growth, only then company will improve its performance level.

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