

A Comparative Study on Working Capital Management of Tata Motors Limited and Maruti Suzuki India Limited

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ABSTRACT

The automobile industry in India is one of the speedily growing industry. Working Capital Management is important in this industry due to increasing demand and huge investment in this sector requires proper management. Working Capital Management perform a vital role in the success and failure of a business due to its effect on the performance and liquidity. Thereby this study has been undertaken to Comparative analyse working capital management of Tata Motors Limited and Maruti Suzuki India Limited for the period of seven years from 2013-14 to 2019-20. In this study three objectives are set for research. The first one was to assess the impact of working capital on sales, second was to assess the impact of working capital on profitability and third was to evaluate the working capital performance of the companies under study through the use of various financial ratios. The study reflects that the efficiency of working capital management of the companies is influenced by the Liquidity Ratios, Debtor Turnover Ratio, Inventory Turnover Ratio and profitability Ratio.

Keywords-- Working Capital Management, Automobile Industry, Sales, Profitability, Performance

I. INTRODUCTION

Every business has certain sources of income and its efficient management will help in smooth functioning of the business. Finance is an essential part of the business, without which the business cannot operate. Generally, finance is required mainly for two purposes i.e., for start-up and fixed assets which remain for longer period of time, and for the day-to-day running of business, for this purpose an efficient cash flow structure is essential. Funds are needed for short-term purposes for the purchase of raw materials, payment of direct and indirect expense and other day-to-day requirements are called working capital. Business firm require proper management of finances for smooth running and growth of firm, for this Working Capital management practices are adopted by the firms. Working Capital Management refers to the strategies companies adopt to manage the relationship between its Current assets and current liabilities with the objective to ensure that it continues with its operations and meet its current liabilities when they fall due. Working Capital Management performs a vital role in the success and

failure of a business due to its effect on the performance and liquidity. The management of working capital refers to the management of inventories, accounts receivable and payable, and cash.

The automobile industry in India is one of the speedily growing industry due to increase in the demand for cars, and other vehicles, powered by the increase in the income is the key growth driver of the Indian automobile industry. In 2020, Indian Automobile industry is the Fifth largest commercial vehicle manufacturer in the world. Working Capital Management is important in this industry due to increasing demand and huge investment in this sector requires proper management. This study has been undertaken to assess the impact of working capital on sales and profitability and comparative analysis of working capital components of companies.

II. OBJECTIVES OF THE STUDY

The present study aims at making a comparative study of Working Capital Management in selected automobile industries in India. The specific objectives of the study are: -

- To assess the impact of working capital on sales.
- To assess the impact of working capital on profitability.
- To evaluate the working capital performance of the companies under study through the use of various financial ratios.

III. REVIEW OF LITERATURE

Jafari and Rao (2015), The purpose of the study was to analyse the practice of working capital Management and Asset and liquidity ratios in six selected Indian auto manufacturing companies. For this aforementioned study a secondary data from the annual reports of the six companies was solicited. Both qualitative and quantitative paradigms were employed so as to analyse the research. The result has shown regarding the relationship between working capital and turnover analysis, index of inventory turnover, debtor's turnover ratio, total assets turnover ratio and fixed assets turnover ratio.

Manoharan and Paramasivam (2016), The study has been undertaken with the objective to study working capital management of selected automobile companies in India. The results of the study shows that Mahindra and Mahindra, Maruti and Bajaj Auto Ltd. had positive working capital during all the years of the study period, whereas Ashok Leyland and TVS had negative working capital in four years and Tata Motors had negative working capital in five years. Current ratio was found to be good in case of Bajaj Auto Ltd. and Maruti Suzuki India Ltd.

Kalaivani and Jothi (2017), The study has been based on the secondary data collected from the period 2007 to 2016 by using dynamic panel data analysis with an attempt to investigate the relationship between working capital management components and performance of the firms. For the analysis purpose Eight Automobile Companies of India are taken for analysis. The result has shown that the efficiency of working capital management of the companies covered in the study are influenced by the Debtor Turnover Ratio, Inventory Turnover Ratio and Current Asset Turnover Ratio.

Untwal (2020), This study was based on the Principal Component Analysis on the several variables expected to influence the working capital management of Tata Motors. The principal component analyses have identified the factors and are expected to assist to identify areas where they might improve financial performance of their operation. The variables CSR, CR ROA, DTO, ITO are having communalities greater than 0.5 are incorporated and each variable was loaded on a single component, thereby intensify the interpretability of the factors.

Nobanee, Abdulla, Azim, and Ismaili (2021), The report is about the working capital management of the two renowned companies Tesla and NIO. In order to do the analysis, ratio analysis has been done to compare the performance of both Tesla and NIO. For the analysis purpose the data was transformed into an understandable form, use of graphs. The study showed that the profits of the company has been noted to increase with time. NIO has also been able to improve its profits but it's low in

compare to Tesla. This shows that Tesla has been successfully able to manage its liquidity and profitability, however NIO has able to manage its profits.

IV. RESEARCH METHODOLOGY

Nature and Sources of the Data

The present study is analytical and descriptive in nature, correlation and analytical research has obtained to carry out the study. This study is based on secondary data collected from Annual reports of selected companies under, websites, journals, research paper and books.

Hypothesis

The Null Hypothesis formulated for the study are as follows:

- H₀**: There is no significant impact of gross working capital on sales of Tata Motors Limited.
- H₀**: There is no significant impact of Net working capital on sale of Tata Motors Limited.
- H₀**: There is no significant impact of gross working capital on sales of Maruti Suzuki India Limited.
- H₀**: There is no significant impact of Net working capital on sale of Maruti Suzuki India Limited.

V. IMPACT OF WORKING CAPITAL ON SALES

It has been observed that there is a direct link between the working capital and sales as the main purpose of any business is making profit and for its main activity is sales which requires working capital for current assets and other day to day expenses. Due to their link, working capital has impact on sales as a company requires funds to purchase raw materials, to produce any goods or service and to pay operating expenses. Therefore, an attempt is made in consistence with the objective of the study that is to assess the impact of working capital on sales of Tata Motors Limited and Maruti Suzuki India Limited are as follows:

Tata Motors Limited

Table 1.1: Table of Tata Motors Limited Showing Revenue from operation (sales), Current Assets, Current Liabilities and Net Working Capital

YEAR	TABLE OF TATA MOTORS LIMITED SHOWING REVENUE FROM OPERATION, CA(GROSS WORKING CAPITAL), CL AND NET WORKING CAPITAL IN CRORES (STANDALONE)											
	REVENUE FROM		CURRENT ASSETS			CURRENT LIABILITIES			NET WORKING CAPITAL			
	OPERATION AMOUNT	OPERATION INDICE	CA AMOUNT	CA INDICE	TREND VALUE	CL AMOUNT	CL INDICE	TREND VALUE	NWC AMOUNT	NWC INDICE	TREND VALUE	
2013-14	₹ 37,758.00	100	₹ 6,739.06	100	₹ 7,832.16	₹ 18,797.53	100	₹ 18,150.22	₹ -12,058.47	100	₹ -11,968.66	
2014-15	₹ 39,524.34	104.68	₹ 8,572.97	127.21	₹ 9,048.85	₹ 20,370.63	108.37	₹ 19,316.22	₹ -11,797.66	102.16	₹ -10,927.61	
2015-16	₹ 46,646.67	123.54	₹ 10,705.91	158.86	₹ 10,265.55	₹ 17,751.06	94.43	₹ 20,482.22	₹ -7,045.15	142.49	₹ -9,886.56	
2016-17	₹ 49,100.41	130.04	₹ 12,588.06	186.79	₹ 11,482.25	₹ 21,647.80	115.16	₹ 21,648.23	₹ -9,059.74	142.56	₹ -8,845.51	
2017-18	₹ 59,624.69	157.91	₹ 14,971.66	222.16	₹ 12,698.94	₹ 24,218.95	128.84	₹ 22,814.23	₹ -9,247.29	131.03	₹ -7,804.46	
2018-19	₹ 68,764.88	182.12	₹ 13,229.30	196.31	₹ 13,915.64	₹ 22,940.81	122.04	₹ 23,980.24	₹ -9,711.51	125.38	₹ -6,763.41	
2019-20	₹ 43,928.17	116.34	₹ 13,568.76	201.34	₹ 15,132.34	₹ 25,810.82	137.31	₹ 25,146.24	₹ -2,998.73	193.29	₹ -5,722.36	

Source: Researcher's Compilation from Annual reports of Tata motors limited (2013-14 to 2019-20)

Net Working Capital:**Chi- Square Test****Table 1.2:** Chi- Square Test of Net Working Capital and Revenue from Operation of Tata motors limited

CHI-SQUARE TEST OF NET WORKING CAPITAL AND REVENUE FROM OPERATION						
YEAR	NET WORKING CAPITAL			REVENUE FROM OPERATION		
	NWC ACTUAL AMOUNT(O)	NWC TREND AMOUNT (E)	(O-E) ² /E	REVENUE FROM OPERATION	REVENUE FROM OPERATION	(O-E) ² /E
2013-14	-12058.47	-11968.655	-0.673988366	37758	39695.7075	94.58731415
2014-15	-11797.66	-10927.60571	-69.27358837	39524.34	42908.90786	266.9678664
2015-16	-7045.15	-9886.556429	-816.6231135	46646.67	46122.10821	5.966012346
2016-17	-9059.74	-8845.507143	-5.188590811	49100.41	49335.30857	1.118414792
2017-18	-9247.29	-7804.457857	-266.7404489	59624.69	58974.90964	7.159222712
2018-19	-9711.51	-6763.408571	-1285.047612	68764.88	55761.70929	3032.232168
2019-20	-2998.73	-5722.359286	-1296.34581	43928.17	52548.50893	1414.126581
		$\Sigma(O-E)^2/E$	-3739.893152		$\Sigma(O-E)^2/E$	4822.157579
			CHI SQUARE	1082.26		
			DEGREE OF FREEDOM	6		

Source: Researcher's Compilation from Annual reports of Tata motors limited (2013-14 to 2019-20)

The trend values of the net working capital shows that average annual increase in net working capital comes to ₹1294.25 Cr. The difference in actual and trend values was negative in the years 2013-14, 2014-15, 2016-17, 2017-18 and 2018-19 while they were positive in the remaining years.

The value of Chi-square (X^2) with 6 degree of freedom is 1,082.26. Since 1,082.26 is greater than the probability of exceeding the critical value at 6 degrees of freedom i.e., 12.59, we reject the null hypothesis and hence it can be concluded that there is an impact of net working capital on revenue from operation (sales).

Correlation between Revenue from operation (sales) and Net working capital

Table 1.3: Correlation Co-efficient of Net Working capital and Revenue from operation of Tata motors limited

CORRELATION CO-EFFICIENT OF REVENUE FROM OPERATION AND NET WORKING CAPITAL			
REVENUE FROM OPERATION INDICE	NWC INDICE		
100.00	100.00	CORRELATION CO-EFFICIENT	
104.68	97.84	POSITIVE	-
123.54	58.42	NEGATIVE	-0.042381306
130.04	75.13	NONE	-
157.91	76.69		
182.12	80.54		
116.34	24.87		

Source: Researcher's compilation from Annual reports of Tata motors limited (2013-14 to 2019-20)

It is to be noted that Revenue from operation(sales) and Net Working Capital were negatively correlated with each other to a very low extent as the coefficient of correlation between them was

found to be -0.042 which is not significant as the critical value with 5 degrees of freedom at 5% level significance is between +0.754 and -0.754.

Maruti Suzuki India Limited

Table 1.4: Table of Maruti Suzuki India Limited Showing Revenue from operation (sales), Current Assets, Current Liabilities and Net Working Capital

TABLE OF MARUTI SUZUKI INDIA LIMITED SHOWING REVENUE FROM OPERATION, CA(GROSS WORKING CAPITAL), CL AND NET WORKING CAPITAL IN CRORES (STANDALONE)											
YEAR	REVENUE FROM OPERATION		CURRENT ASSETS			CURRENT LIABILITIES			NET WORKING CAPITAL		
	REVENUE FROM OPERATION AMOUNT	REVENUE FROM OPERATION INDICE	CA AMOUNT	CA INDICE	CA TREND VALUE	CL AMOUNT	CL INDICE	CL TREND VALUE	NWC AMOUNT	NWC INDICE	NWC TREND VALUE
2013-14	₹ 42,644.80	100	₹ 14,171.70	100	₹ 10,419.94	₹ 8,074.10	100	₹ 12,629.40	₹ 6,097.60	100.00	₹ 1,283.66
2014-15	₹ 48,605.50	113.98	₹ 8,197.90	57.85	₹ 10,129.46	₹ 8,823.00	109.28	₹ 12,338.91	₹ -625.10	-10.25	₹ 119.29
2015-16	₹ 56,350.40	132.14	₹ 7,149.50	50.45	₹ 9,838.97	₹ 11,290.00	139.83	₹ 12,048.43	₹ -4,140.50	-67.90	₹ -1,045.09
2016-17	₹ 77,266.20	181.19	₹ 8,609.90	60.75	₹ 9,548.49	₹ 13,231.30	163.87	₹ 11,757.94	₹ -4,621.40	-75.79	₹ -2,209.46
2017-18	₹ 81,994.40	192.27	₹ 7,921.40	55.90	₹ 9,258.00	₹ 15,442.10	191.25	₹ 11,467.46	₹ -7,520.70	-123.34	₹ -3,373.83
2018-19	₹ 86,020.30	201.71	₹ 12,361.60	87.23	₹ 8,967.51	₹ 14,150.30	175.26	₹ 11,176.97	₹ -1,788.70	-29.33	₹ -4,538.20
2019-20	₹ 75,610.60	177.30	₹ 8,427.40	59.47	₹ 8,677.03	₹ 11,294.80	139.89	₹ 10,886.49	₹ -2,867.40	-47.03	₹ -5,702.57

Source: Researcher's compilation from Annual reports of Maruti Suzuki India limited (2013-14 to 2019-20)

Net working capital

Chi- Square Test

Table 1.5: Chi-Square Test of Net Working Capital and Revenue from operation of Maruti Suzuki India Limited

CHI-SQUARE TEST OF NET WORKING CAPITAL AND REVENUE FROM OPERATION						
YEAR	NET WORKING CAPITAL			REVENUE FROM OPERATION		
	NWC ACTUAL AMOUNT(O)	NWC TREND VALUE (E)	(O-E) ² /E	REVENUE FROM OPERATION ACTUAL AMOUNT (O)	REVENUE FROM OPERATION TREND AMOUNT (E)	(O-E) ² /E
2013-14	₹ 6,097.60	₹ 1,283.66	18053.14	42644.8	45566.28	187.31
2014-15	₹ -625.10	₹ 119.29	4645.23	48605.5	52686.67	316.13
2015-16	₹ -4,140.50	₹ -1,045.09	-9168.23	56350.4	59807.06	199.78
2016-17	₹ -4,621.40	₹ -2,209.46	-2632.99	77266.2	66927.46	1597.10
2017-18	₹ -7,520.70	₹ -3,373.83	-5097.04	81994.4	74047.85	852.80
2018-19	₹ -1,788.70	₹ -4,538.20	-1665.80	86020.3	81168.24	290.05
2019-20	₹ -2,867.40	₹ -5,702.57	-1409.57	75610.6	88288.64	1820.54
		$\Sigma(O-E)^2/E$	2724.74		$\Sigma(O-E)^2/E$	5263.70
			CHI SQUARE	7988.44		
			DEGREE OF FREEDOM	6		

Source: Researcher's compilation from Annual reports of Maruti Suzuki India limited (2013-14 to 2019-20)

The trend values of the net working capital shows that average annual decrease in net working capital comes to ₹ ₹ 1,280.71 Cr. The difference in actual and trend values was negative in the years 2014-15 to 2017-18 while they were positive in the remaining years.

The value of Chi-square (X^2) with 6 degree of freedom is 7,988.44. Since 7,988.44 is greater than the probability of exceeding the critical value at 6 degrees of freedom i.e., 12.59, we reject the null hypothesis and it can be concluded that there is an impact of gross working capital on revenue from operation (sales).

Correlation between Revenue from Operation and Net Working Capital

Table 1.6: Co-efficient Correlation of Net Working Capital and Revenue from Operation of Maruti Suzuki India Limited

CORRELATION CO-EFFICIENT OF REVENUE FROM OPERATION AND NET WORKING CAPITAL (CA)			
REVENUE FROM OPERATION INDICE	NWC INDICE		
100.00	100.00	CORRELATION CO-EFFICIENT	
113.98	-10.25	POSITIVE	-
132.14	-67.90	NEGATIVE	-0.289653458
181.19	-75.79	NONE	-
192.27	-123.34		
201.71	-29.33		
177.30	175.79		

Source: Researcher's compilation from Annual reports of Maruti Suzuki India limited (2013-14 to 2019-20)

It is to be noted that both Revenue from Operation (Sales) and Net Working Capital were negatively correlated with each other to a very low extent as the coefficient of correlation between them was found to be -0.289 but not significant as the critical value with 5 degrees of freedom at 5% level significance is between +0.754 and -0.754.

VI. IMPACT OF WORKING CAPITAL ON PROFITABILITY

The Working capital management is implemented with the objective to increase profitability with optimum liquidity as the working capital has a significant impact on profitability of a business. An attempt is, therefore made in consistence with the objective of the study that is to assess the impact of working capital on Profitability of Tata Motors Limited and Maruti Suzuki India Limited are as follows:

Tata Motors Limited

The correlation co-efficient between working capital ratios and profitability ratio of Tata Motors Limited for the period from 2013-14 to 2019-20 are presented in the below table.

Table 1.7: Correlation Analysis Between Selected Ratios Relating to Working Capital Management and Profitability of Tata Motors Limited

CO-RELATION ANALYSIS BETWEEN SELECTED RATIOS RELATING TO WORKING CAPITAL MANAGEMENT AND PROFITABILITY						
YEAR	CURRENT RATIO	QUICK RATIO	RECEIVABLES TURNOVER RATIOS	INVENTORY TURNOVER RATIOS	WORKING CAPITAL RATIO	PROFITABILITY RATIO
2013-14	0.36	0.15	24.88	1.59	-0.32	0.01
2014-15	0.42	0.19	33.91	1.16	-0.30	-0.11
2015-16	0.60	0.33	34.77	1.08	-0.15	0.01
2016-17	0.58	0.33	26.57	1.44	-0.18	-0.05
2017-18	0.62	0.38	21.26	1.59	-0.16	-0.02
2018-19	0.58	0.37	20.43	1.32	-0.14	0.03
2019-20	0.53	0.38	16.80	2.07	-0.28	0.20
AVERAGE	0.53	0.30	25.52	1.46	-0.22	0.01
RELATIONSHIP WITH PROFIT	0.130	0.473	-0.704	0.779	-0.099	

Source: Researcher's Compilation from Annual report of Tata Motors Limited (2013-14 to 2019-20)

From table 1.7., It has been observed that the coefficient of correlation between profitability ratio and current ratio is 0.13. It indicated that there is a lower degree of positive association between the current ratio and profitability ratio of the company. The value of the

correlation coefficient is found to be not significant but there is a positive correlation between current ratio and profitability ratio. The correlation coefficient between profitability and quick ratio is 0.473. It indicated that there is a moderate degree of positive association

between the quick ratio and profitability ratio of the company. The value of the correlation coefficient is found to be not significant but there is a positive correlation between quick ratio and profitability ratio.

The coefficient of correlation between profitability ratio and Receivable's turnover ratio indicates negative association of -0.704. It shows high degree of negative correlation which is found not to be significant at 5 percent of level. The coefficient of correlation between profitability ratio and inventory turnover ratio is found to be 0.779, which is found to be significant at 5 percent of

level. It shows high degree of positive correlation between the variables.

The coefficient of correlation between profitability and working capital turnover ratio is -0.099. It shows low degree of negative correlation which is found to be insignificant.

Maruti Suzuki India Limited

The co-efficient correlation between working capital ratios and profitability ratio of Maruti Suzuki India Limited for the period from 2013-14 to 2019-20 are presented in the below table.

Table 1.8: Correlation Analysis Between Selected Ratios Relating to Working Capital Management and Profitability of Maruti Suzuki India Limited

CO-RELATION ANALYSIS BETWEEN SELECTED RATIOS RELATING TO WORKING CAPITAL MANAGEMENT AND PROFITABILITY						
YEAR	CURRENT RATIO	QUICK RATIO	RECEIVABLES TURNOVER RATIOS	INVENTORY TURNOVER RATIOS	WORKING CAPITAL RATIO	PROFITABILITY RATIO
2013-14	1.76	1.54	29.58	24.05	0.14	0.07
2014-15	0.93	0.63	39.14	22.50	-0.01	0.08
2015-16	0.63	0.36	47.59	19.61	-0.07	0.09
2016-17	0.65	0.40	61.87	24.17	-0.06	0.10
2017-18	0.51	0.31	61.63	25.53	-0.09	0.10
2018-19	0.87	0.64	45.61	26.52	-0.02	0.10
2019-20	0.75	0.46	34.08	23.12	-0.04	0.11
AVERAGE	0.87	0.62	45.64	23.64	-0.02	0.09
RELATIONSHIP WITH PROFIT	-0.787	-0.775	0.511	0.229	-0.752	

Source: Researcher's Compilation from Annual report of Maruti Suzuki India Limited (2013-14 to 2019-20)

From table 1.8., It has been observed that the coefficient of correlation between profitability ratio and current ratio is -0.787. It indicated that there is a high degree of negative association between the profitability and current ratio of the company. The value of the correlation coefficient is found to be significant at 5 percent level. The correlation coefficient between profitability and Quick ratio is -0.775 which is found to be significant at 5 percent level. It reveals that there is a high degree of negative correlation between these two variables.

The coefficient correlation between profitability ratio and Receivables turnover ratio indicates positive association of 0.511. It shows moderate degree of positive correlation which is insignificant. The coefficient of correlation between profitability ratio and inventory turnover ratio is found to be 0.229, which is found to be insignificant. It shows low degree of positive correlation between the variables.

The coefficient of correlation between profitability and working capital turnover ratio is -0.752

which is found to be significant at 5 percent level. It shows that there is a high degree of negative correlation between variables.

Working Capital Performance and Comparative Analysis

The working capital performance commonly means the functioning of company's financial assets that used for operating cycle of business. The Accounting ratios such as liquidity ratios, turnover ratios, working capital ratio and profitability ratio are commonly used to assess a company's financial performance. Therefore, an attempt is made in consistence with the objective of the study that is to evaluate the working capital performance of the companies under study through the use of various accounting ratios and to do comparative analysis of Tata Motors Limited and Maruti Suzuki India Limited are as follows:

Tata Motors Limited

The evaluation of working capital performance of Tata Motors Limited for the period from 2013-14 to 2019-20 with the help of ratio analysis.

Table 1.9: Evaluation of working capital performance of Tata Motors Limited

EVALUATION OF WORKING CAPITAL PERFORMANCE OF TATA MOTORS LIMITED									
YEAR	CURRENT RATIO	QUICK RATIO	RECEIVABLE'S TURNOVER RATIO		INVENTORY TURNOVER RATIO		WORKING CAPITAL TURNOVER RATIO	PROFITABILITY RATIO	
			DAYS	RATIOS	DAYS	RATIOS			
			2013-14	0.36	0.15	14			24.88
2014-15	0.42	0.19	11	33.91	39	9.12	-0.30	-0.11	
2015-16	0.60	0.33	10	34.77	37	9.61	-0.15	0.01	
2016-17	0.58	0.33	14	26.57	38	9.44	-0.18	-0.05	
2017-18	0.62	0.38	17	21.26	34	10.67	-0.16	-0.02	
2018-19	0.58	0.37	18	20.43	27	13.31	-0.14	0.03	
2019-20	0.53	0.38	21	16.80	35	10.34	-0.28	0.20	
AVERAGE	0.53	0.30	15	25.52	36	10.23	-0.22	0.01	

Source: Researcher's Compilation from Annual report of Tata Motors Limited (2013-14 to 2019-20)

Under Table 1.9., it has been observed that the average current ratio of Tata Motors Limited is 0.53:1 for the period from 2013-14 to 2019-20 which is below the ideal current ratio that is 2:1. It has been shown that the current ratio of Tata Motors Limited has been deteriorated over the period. The average quick ratio of Tata Motors Limited is 0.30:1 for the period from 2013-14 to 2019-20 which is below the ideal quick ratio that is 1.5:1. It has been shown that the quick ratio of Tata Motors Limited has been fluctuated over the period.

The average accounts receivable turnover ratio is 25.52:1 with average Receivable Turnover period is 15 days. It has been noticed that the receivable turnover ratio and period is fluctuating all over the period taken for study that is 2013-14 to 2019-20 but the ratio is highly efficient with the effective turnover period. The average inventory turnover ratio is 10.23:1 with average inventory turnover period is 36 days. It is observed that the turnover ratio of the companies is increasing over the

study period except in the year 2019-20. The average working capital ratio is -22:1 for the period from 2013-14 to 2019-20. The working capital of Tata motors limited is negative for all over the period of study which is result in negative working capital ratio. Which means that company has not sufficient short-term funds for fulfilling the Revenue from operation done for that period. The profitability ratio of the company is very low and negative for some period.

The average profitability ratio is 0.01:1 for the period from 2013-14 to 2019-20. The profitability ratio of Tata motors is negative for the period 2014-15, 2016-17 and 2017-18. It has been observed that the profitability ratio of the company is very low and almost negative.

Maruti Suzuki India Limited

The evaluation of working capital performance of Maruti Suzuki India Limited for the period from 2013-14 to 2019-20 with the help of ratio analysis.

Table 1.10: Evaluation of working capital performance of Maruti Suzuki India Limited

EVALUATION OF WORKING CAPITAL PERFORMANCE OF MARUTI SUZUKI INDIA LIMITED									
YEAR	CURRENT RATIO	QUICK RATIO	RECEIVABLES TURNOVER RATIO		INVENTORY TURNOVER RATIO		WORKING CAPITAL TURNOVER RATIO	PROFITABILITY RATIO	
			DAYS	RATIOS	DAYS	RATIOS			
			2013-14	1.76	1.54	12			29.58
2014-15	0.93	0.63	9	39.14	16	22.50	-0.01	0.08	
2015-16	0.63	0.36	8	47.59	18	19.61	-0.07	0.09	
2016-17	0.65	0.40	6	61.87	15	24.17	-0.06	0.10	
2017-18	0.51	0.31	6	61.63	14	25.53	-0.09	0.10	
2018-19	0.87	0.64	8	45.61	14	26.52	-0.02	0.10	
2019-20	0.75	0.46	11	34.08	16	23.12	-0.04	0.11	
AVERAGE	0.87	0.62	8	45.64	15	23.64	-0.02	0.09	

Source: Researcher's Compilation from Annual report of Maruti Suzuki India Limited (2013-14 to 2019-20)

Under Table 1.10., it has been observed that the average current ratio of Maruti Suzuki India Limited is

0.87:1 for the period from 2013-14 to 2019-20 which is below the ideal current ratio that is 2:1. It has been

shown that the current ratio of Maruti Suzuki India Limited has been deteriorated over the period. The average quick ratio of Maruti Suzuki India Limited is 0.62:1 for the period from 2013-14 to 2019-20 which is below the ideal quick ratio that is 1.5 :1. It has been shown that the quick ratio of Maruti Suzuki India Limited has been reducing over the period. The average accounts receivable turnover ratio is 45.64:1 with average receivable turnover period is 8 days. It has been noticed that the receivable turnover ratio and period is fluctuating all over the period taken for study that is 2013-14 to 2019-20 but the ratio is highly efficient with the effective turnover period.

The average Inventory Turnover ratio is 23.62:1 with average Inventory Turnover period is 15 days. The highest inventory turnover ratio is 26.52:1 with minimum Inventory Turnover period 14 days in the year 2018-19. It is observed that the inventory turnover ratio of the companies is fluctuating over the study period except. However, it has been noticed that the inventory turnover ratios are high for the Maruti Suzuki for all the year taken under study. The average working capital ratio is -0.02:1 for the period from 2013-14 to 2019-20. The working capital of Maruti Suzuki India Limited is negative for all over the period of study except 2013-14 which is result in negative average working capital ratio. It indicates that company has not sufficient short-term funds for fulfilling the sales done for that period.

The profitability ratio of the company is very low. The average profitability ratio is 0.09:1 for the period from 2013-14 to 2019-20. The highest profitability ratio is 0.11:1 in the year 2019-20 and lowest is 0.07:1 in the year 2013-14. It has been observed that the profitability ratio of the company is very low and reducing over the period, it almost deteriorated.

VII. COMPARATIVE STUDY OF WORKING CAPITAL PERFORMANCE OF COMPANIES UNDER STUDY

The comparative study of working capital performance of companies is done with analyses of table 1.9. and 1.10. i.e., for Evaluation of working capital performance of Tata Motors Limited and Maruti Suzuki India Limited with the use of financial ratios.

Current Ratio

Table 1.9. and table 1.10., presents the current ratios of both the companies. The results show that there is highly fluctuation in the current ratios of both the companies. The average current ratio of Tata Motors is 0.53:1 while Average current ratio of Maruti Suzuki is 0.87:1. However, it can be clear from the results that current ratios of Maruti Suzuki is better than Tata Motors but current ratio of both the companies are below the ideal current.

Quick Ratio

Table 1.9. and table 1.10., presents the Quick ratios of both the companies. The average Quick ratio of Tata Motors is 0.30:1 while Average Quick ratio of Maruti Suzuki is 0.62:1 However, it can be clear from the results that Quick ratios of Maruti Suzuki is much better than Tata Motors but Quick ratio of both the companies are below the ideal Quick. Succinctly, it can be deduced from the results that Maruti Suzuki has a more liquidity position in comparison to Tata motors but the ratios of both companies are not ideal and in doesn't have sound liquidity position as presented by Quick ratio in all years.

Receivables Turnover Ratio

Table 1.9. and table 1.10., presents the Account Receivables Turnover Ratio and periods of both the companies. The average Account Receivables Turnover Ratio of Tata Motors is 25.52:1 with 15 days of average Account Receivables Turnover periods while Average Account Receivables Turnover Ratio of Maruti Suzuki is 45.64:1 with 8 days of average Account Receivables Turnover Period. However, it can be clear from the results that Account Receivables Turnover Ratio and periods of Maruti Suzuki is better than Tata Motors. Both the companies have efficient and effective Receivable turnover period and ratio but Maruti Suzuki has more efficient and Aggressive turnover ratio.

Inventory Turnover Ratio

Table 1.9. and table 1.10., presents the Inventory Turnover Ratio and periods of both the companies. The average Inventory Turnover Ratio of Tata Motors is 10.23:1 with 36 days of average Inventory Turnover periods while Average Inventory Turnover Ratio of Maruti Suzuki is 23.64:1 with 15 days of average Inventory Turnover Period. However, it can be clear from the results that Inventory Turnover Ratio and periods of Maruti Suzuki is much better than Tata Motors.

Working Capital Ratio

Table 1.9. and table 1.10., presents the Working Capital ratios of both the companies. The results show that there is negative fluctuation in the Working capital ratios of both the companies. The average Working Capital ratio of Tata Motors is -0.22:1 while Average Working Capital ratio of Maruti Suzuki is -0.02:1. It can be clear from the results that Working Capital ratios of both the companies are negative and there is requirement to improve the working capital of the companies. However, in compare to Tata Motors, the working capital ratio of Maruti Suzuki is better.

Profitability Ratio

Table 1.9. and table 1.10., presents the Profitability ratios of both the companies. The results show that there is fluctuation in the Profitability ratios of both the companies, Where Tata motors has negative Profitability ratio in the year 2014-15, 2016-17 and 2017-18 and remaining's are positive and Maruti Suzuki has positive but very low Profitability ratio all over the years taken under study that is from 2013-14 to 2019-20.

The average Profitability ratio of Tata Motors is 0.01:1 while Average Profitability ratio of Maruti Suzuki is 0.09:1. It can be clear from the results that Profitability ratios of both the companies are negative and low and there is requirement to increase the profitability of the companies. However, in compare to Tata Motors, the Profitability ratio of Maruti Suzuki is better. It has been observed that the profitability ratios of the companies are very low and almost negative. It indicates that the excessive direct or indirect cost, inadequate revenue or a combination of both that the result of ineffective working capital management which cause the profitability ratio of the companies over the period of study.

VIII. RECOMMENDATIONS

From the study numerous issues have been identified with respect to the Working Capital Management of the Tata motors limited & Maruti Suzuki India Limited. In order to overcome these issues and excel in their business following recommendations has been suggested:

1. The chi-square test of both the companies has shown there is an impact of net working capital on revenue from operation but correlation coefficient between that has been found negative. It has been recommended to the companies under study to do proper analysis for the investment in current assets and maintain their current liabilities at optimum level.
2. The Current Ratio of both the companies is very low. They may face a serious problem while need to pay its current liabilities. So, both the companies should try to maintain its Current Ratio at ideal level so that they can pay its liabilities when required to pay it.
3. Quick Ratio of both the companies is very low than the standard ratio. They should try to increase the investment in accounts receivables and should make efficient use of cash balance.
4. The companies shall focus on the overall management of the working capital as it has been found that when the correlation between the current ratio and profitability ratio is positive, it also shows that the relationship is insignificant and when the correlation between the current ratio and profitability ratio is negative, it shows that the relationship is insignificant.
5. The companies shall implement the various techniques of inventory management which includes Economic order Quality, ABC Analysis, Inventory Turnover Ratio and many more as it has been shown that there is scope of improvement in the inventory maintenance.
6. The companies shall focus on the cash management to maintain the liquidity position

as the liquidity ratios of the companies has been shown negative ratios and below the ideal accepted ratios for the period of study.

7. The companies shall focus on the accounts receivable management and maintain the optimum level of accounts receivable.
8. The company shall evaluate credit policy by using various term periods, sales during that period and other factor to identify the credit period which gives the maximum benefits.
9. Profitability of both the companies are found to be low. Hence in order to increase their profitability, the companies may produce and sell wide range of products up to the expectation of customers.
10. The companies should try to element the unnecessary expenses as it affects the profitability ratios of the companies.

IX. CONCLUSION

Working capital management refers to all the strategies adopted by the company to manage the relationship between its short-term assets and short-term liabilities with the objective to ensure that it continues with its operations and meet its debt obligations when they fall due. From the present study of the working capital management of Tata Motors limited and Maruti Suzuki limited, it is observed that there is need of proper working capital management and its tools and techniques.

It has been found that there is a positive impact of working capital on sales and profitability of the companies. In the comparative study of working capital management of Tata Motors and Maruti Suzuki India limited has been found that the Maruti Suzuki has performed better compare to the tata motors limited. Hence it has been concluded the Maruti Suzuki is well better in compare to Tata Motors. However, there is wide scope for both the companies for the improvement in the working capital management.

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