

Working Capital Management of Indian Automobile Industry – With Special Reference to Selected Automobile Companies

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Abstract: The study has been undertaken to analyse working capital management of nine automobile companies in India for the study period of ten years from 2005-06 to 2014-15. 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, where as 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. It was at satisfactory level for Mahindra and Mahindra Ltd. Current ratio of Ashok Leyland and TVS Motor Company was satisfactory during first half of the study period. Current ratio of Tata Motors Ltd. was good during first two years, especially during last four years it was found to be poor. Liquid ratio of Maruti and Bajaj was good and it was at satisfactory level in case of Mahindra and Mahindra Ltd., in case of other companies liquid ratio was not good. Absolute ratio of was good in case of Maruti Suzuki India Ltd., Bajaj Auto Ltd. and Mahindra and Mahindra Ltd. Cash position ratios of TVS Motor Company Ltd., Ashok Leyland Ltd. and Tata Motors Ltd. were found to be poor during the study period.

Keywords: working capital, liquidity, cash position, current ratio and liquid ratio

INTRODUCTION

The automobile industry is one of the fastest growing industries in India. It also one of the largest in the world, It is the sixth largest in the world in terms of passenger car and commercial vehicle manufacturing. This industry also helps to raise foreign currency by exports averagely 1.5 million vehicles every year. There are many automobile companies in India, who are manufacturing two wheelers, four wheelers, light commercial vehicles, heavy commercial vehicles and passenger cars and producers of ancillaries. Efficient financial management is very important for long run and successful running of business, since finance is backbone of any business activity. Inefficient management of finance may lead even to bankruptcy. Generally financial management can be classified into two such as short-term financial management and long-term financial management. Short-term financial management is also known as working capital management. Working capital is the differences between current assets and current liabilities. Working capital is the composition of various current assets and current liabilities such as sundry debtors, inventories, cash, bank balance, loans and advances, sundry creditors and so on. So analyzing working capital at a whole and analyzing each components of working capital will be helpful to know efficiency of financial management of a company. Hence the study has been undertaken to analyse working capital management of selected automobile companies in India.

REVIEW OF LITERATURE

Nishi Sharma [1] found that financial performance of Mahindra & Mahindra Limited as well as Tata Motors was very satisfactory in terms of profitability as well as managerial efficiency to generate sales from the use of assets. But their liquidity positions were not so sound. Pasupathi [2] found that the size of net working capital in terms of monthly operational requirements appeared to be stronger than sales requirements in all the years. Velmathi and Ganesan [3] found that inventory of all units in the Indian commercial vehicle industry was very good in their management of inventory. Strong correlation was found between inventory and sales. Sanjay Hiran and Mahendra Sojatia [4] evidenced that there was negative and low degree of relationship between the variables under study. This implies that there were many other elements and factors apart from debt equity ratio (capital structure) which determine and affected the financial performance of the companies under study. Rakhi Hotwani [5] found that company's operating margins had always been in double digit after first year of study. Return on net worth was much higher than the reasonable expected return which is a promising factor for the investors. Ying Deng [6] found that the profitability of Chinese auto manufactures was higher than that of Indian auto manufactures.

STATEMENT OF THE PROBLEM

As a key sector, it is necessary to study performance of automobile industry. This industry is one of the growing industries in India and it provides number of employment opportunities to people directly and indirectly. Working capital is very important of a business concern, managing working capital is critical one, inefficient working capital management will lead even to bankruptcy. Hence study of working capital management of a business concern is very important. Hence the study has been undertaken to analyse working capital management of selected automobile companies in India.

OBJECTIVES

The study has been undertaken with the following objective.

- To study working capital management of selected automobile companies in India.

METHODOLOGY

The study has been undertaken to analyse working capital management of selected automobile companies in India. For this purpose the researcher selected six top automobile companies in India viz., Tata Motors Ltd. (TATA), Mahindra and Mahindra Ltd. (MM), Maruti Suzuki India Ltd. (MS), Bajaj Auto Ltd. (BA), Ashok Leyland Ltd.(AL) and TVS Motor Company Ltd. (TVS) under purposive sampling method. Period of the study was ten years from 2005-06 to 2014-15. The researcher applied ratio analysis, mean, standard deviation (SD), co-efficient of variation (CV) and compounded annual growth rate (CAGR) as tools of analysis. The study required secondary data (accounting data), they were collected from annual reports of respective companies.

RESULTS AND INTERPRETATION

Working Capital

Table 1 presents the results of working capital of selected automobile companies, their mean, SD and CV for the study period.

Table 1 shows that Working capital of the company was positive during the first four years and during 2010-11 and during other years it was negative. Working capital of Tata motors decreased drastically during the period from 2007-08 to 2011-12. Very wide deviation was found in the amount of working capital from its mean value as shown by the results of SD and CV. Negative working capital was caused by increase of current liabilities and decrease in current liabilities. Working capital of Mahindra and Mahindra Ltd. was found to be positive during all the years of the study period. It increased from Rs.1417.34 crore in 2005-06 to Rs.2615.38 crore in 2014-15. The result of CAGR

shows that working capital increased by 6.32 per cent during the study period. Working capital increased at high rates during the years 2006-07 on account of increase of current assets than current liabilities, 2009-10 on account of current assets and decrease in current liabilities and 2013-14 on account of current assets than current liabilities. Minimum level of variation was found in working capital from its mean value as shown by the results of SD and CV at Rs.774.79 crore and 32.16 per cent respectively. Working capital of Maruti Suzuki India Ltd. met fluctuations during the study period. There was major increase in working capital during 2008-09 and 2009-10, working capital of the company decreased at high rates during 2007-08 and 2014-15. The result of CAGR (-12.29 per cent) shows decrease in working capital of the company during the study period. There was moderate level of deviation in working capital of the company from its mean value as per the results of SD and CV. Working capital of Bajaj Auto Ltd. increased from Rs.1744.21 crore in 2005-06 to Rs.6959.05 crore in 2014-15, it accounted 14.84 per cent increase during the study period. The results of standard deviation was Rs.2474.18 crore and co-efficient of variation was 73.96 per cent, these results showed that working capital of the company had high level of deviation from its mean value. Working capital of the company met very high increase during 2008-09, 2011-12 and 2014-15, during these years their growth rate was more than 100 per cent over the previous years. Working capital of Ashok Leyland Ltd. was positive during the first six years and during last four years it was negative, due to high value of current liabilities than current assets. During 2010-11, current assets of the company was Rs.1329.30 crore, it suddenly turned to negative during the next year to -Rs.118.88 crore due to very high increase in current liabilities over the previous year (45.58 per cent) and slight decrease in current assets. Very high level deviation was found in working capital from its mean value as shown by the results of SD of Rs.613.37 crore and CV of 157.78 per cent. Working capital of TVS Motor Company Ltd. was positive during first six years and it was negative during last four years. There was high negative working capital during 2011-12 on account of high growth of current liabilities and decrease in current liabilities. The calculated values of SD and CV were Rs.183.22 crore and 148.96 per cent respectively, they showed high level of deviation in working capital from its mean value.

Liquidity Ratios

Table 1 presents the results of liquidity ratios namely, current ratio, liquid ratio and absolute liquid ratio of selected automobile companies for the study period.

Table 1: Working capital of Automobile Companies

| Year | Working Capital | | | | | |
|---------|-----------------|---------|---------|---------|---------|---------|
| | TATA | MM | MS | BA | AL | TVS |
| 2005-06 | 3986.61 | 1417.34 | 2729.30 | 1744.21 | 1352.29 | 234.38 |
| 2006-07 | 4278.06 | 2052.20 | 2695.40 | 2645.73 | 1162.09 | 349.15 |
| 2007-08 | 2570.09 | 1880.92 | 1736.30 | 695.39 | 1313.62 | 341.53 |
| 2008-09 | 1173.42 | 2125.84 | 3579.20 | 1455.23 | 1296.75 | 427.27 |
| 2009-10 | -2539.57 | 3344.53 | 6060.20 | 1203.40 | 1547.62 | 597.45 |
| 2010-11 | 1163.91 | 2323.06 | 5987.70 | 1017.32 | 1329.30 | 328.44 |
| 2011-12 | -5509.99 | 1993.16 | 5061.60 | 2610.07 | -118.88 | -213.01 |
| 2012-13 | -7697.39 | 2256.92 | 4866.70 | 3672.31 | -690.88 | -71.24 |
| 2013-14 | -10064.71 | 4085.82 | 6775.30 | 2739.09 | -971.74 | -52.48 |
| 2014-15 | -11164.35 | 2615.38 | 735.30 | 6959.05 | -86.48 | -109.33 |
| Mean | -2380.39 | 2409.52 | 4022.70 | 2474.18 | 613.37 | 183.22 |
| SD | 5858.23 | 774.79 | 2028.88 | 1830.00 | 967.78 | 272.91 |
| CV | -246.10 | 32.16 | 50.44 | 73.96 | 157.78 | 148.96 |
| CAGR | NA | 6.32 | -12.29 | 14.84 | NA | NA |

Source: Computed from Annual Reports.

Table 2 reports that current ratio of Tata Motors Ltd. was in decreasing trend during the study period. The ratio was high during first two years at, it started to decrease from 2007-08. Mean value of the ratio was 0.99:1, it is less than the standard norm. It was observed that current ratio of Tata Motors Ltd. was near the standard norm (2:1) during the first two years and during other years it was very poor, it indicated poor liquidity position of the company in terms of current ratio. Liquid ratio of Tata Motors Ltd. ranged between 0.18 and 1.33 during the study period. It was in decreasing trend. The ratio was about standard norm (1.5:1) during first two years of the study period. It seems to low and therefore liquidity position of the company in terms of liquid ratio was not good. Mean ratio of liquid ratio also was low at 0.72:1. Absolute liquid ratio of the company was low during the study period. It ranged from 0.02 to 0.38. It was very low during the last two years, mean value of the ratio was 0.17. These results show that cash position of the company in order to meet out their liquid liabilities was not good.

Current ratio of Mahindra and Mahindra Ltd. was at and nearby standard norm during the first five years of the study period (from 1.60 to 2.05), but during second half of the study period it went down and it was less than 1.5:1. Mean value of the ratio was found to be considerable (1.65:1). It was observed that liquidity position of the company in terms of current ratio was good during first half of the study period and it was not so during the second half. Liquid ratio of Mahindra and Mahindra Ltd. ranged from 0.94 to 1.63 during the study period. The ratio was found to be good during first five years and not so during rest of the period. Mean value of the ratio was 1.25:1. Cash position of Mahindra and Mahindra Ltd. was good during the study period. The ratio ranged between 0.33

and 0.81. It was more than the standard norm (0.5) during seven years out of ten years. Mean value of the ratio was also good at 0.56. These results indicated that their cash position to meet out their short term financial obligations was good.

Current ratio of Maruti Suzuki India Ltd. was good during the study period except during 2014-15, during such year the ratio was very low at 1.10:1, since drastic decrease of current assets. The ratio ranged between 1.10 and 3.06. Mean value of the ratio was 2.14, it is more than the standard norm, hence liquidity position of the company in terms of current ratio was good. Liquid ratio of Maruti Suzuki India Ltd. ranged from 0.75 to 2.65, mean value of the ratio was also high at 1.78:1. It was more than the standard norm (1.5:1) during eight years, it showed strong liquidity position of the company in terms of liquid ratio was good during the study period. Absolute liquid ratios of Maruti Suzuki were very high during the study period. It ranged from 0.40 to 1.81 and its mean value was 1.14:1. It indicated that the company held excessive cash balances, hence their liquidity position in terms of cash position ratio was good.

Table 2: Current Ratio, Liquid Ratio and Absolute Liquid Ratio of Selected Automobile Companies

| Year | TATA | | | MM | | | Maruti | | | Bajaj | | | Ashok | | | TVS | | |
|-------------|-------|-------|-------|-------|-------|-------|--------|-------|-------|-------|-------|-------|-------|-------|--------|-------|-------|--------|
| | CR | LR | ALR | CR | LR | ALR | CR | LR | ALR | CR | LR | ALR | CR | LR | ALR | CR | LR | ALR |
| 2005-06 | 1.68 | 1.33 | 0.23 | 1.93 | 1.35 | 0.60 | 2.81 | 2.23 | 1.25 | 2.42 | 2.20 | 0.16 | 2.18 | 1.39 | 0.76 | 1.45 | 0.76 | 0.24 |
| 2006-07 | 1.71 | 1.30 | 0.16 | 2.05 | 1.60 | 0.81 | 2.34 | 1.99 | 1.14 | 2.77 | 2.56 | 0.27 | 1.70 | 1.06 | 0.33 | 1.61 | 0.92 | 0.33 |
| 2007-08 | 1.30 | 1.02 | 0.38 | 1.82 | 1.35 | 0.60 | 1.71 | 1.29 | 0.58 | 1.67 | 1.33 | 0.14 | 1.68 | 1.05 | 0.42 | 1.68 | 0.87 | 0.15 |
| 2008-09 | 1.13 | 0.88 | 0.18 | 1.60 | 1.30 | 0.61 | 2.18 | 1.88 | 1.00 | 2.20 | 1.92 | 0.40 | 1.69 | 0.98 | 0.05 | 1.78 | 1.19 | 0.23 |
| 2009-10 | 0.83 | 0.63 | 0.16 | 1.98 | 1.63 | 0.72 | 3.06 | 2.65 | 1.81 | 1.59 | 1.37 | 0.86 | 1.60 | 0.97 | 0.20 | 1.90 | 1.46 | 0.60 |
| 2010-11 | 1.09 | 0.79 | 0.19 | 1.49 | 1.13 | 0.33 | 2.65 | 2.26 | 1.79 | 1.42 | 1.19 | 0.46 | 1.44 | 0.71 | 0.06 | 1.37 | 0.77 | 0.02 |
| 2011-12 | 0.71 | 0.47 | 0.23 | 1.33 | 0.94 | 0.37 | 1.84 | 1.54 | 1.19 | 2.02 | 1.75 | 1.07 | 0.97 | 0.47 | 0.01 | 0.83 | 0.37 | 0.01 |
| 2012-13 | 0.61 | 0.38 | 0.11 | 1.34 | 0.98 | 0.46 | 1.80 | 1.50 | 0.98 | 2.45 | 2.20 | 1.29 | 0.86 | 0.48 | 0.00 | 0.94 | 0.52 | 0.01 |
| 2013-14 | 0.40 | 0.18 | 0.02 | 1.57 | 1.18 | 0.63 | 1.92 | 1.69 | 1.28 | 1.95 | 1.73 | 0.97 | 0.78 | 0.52 | 0.09 | 0.96 | 0.59 | 0.06 |
| 2014-15 | 0.43 | 0.19 | 0.05 | 1.35 | 1.02 | 0.51 | 1.10 | 0.75 | 0.40 | 3.71 | 3.39 | 2.49 | 0.98 | 0.69 | 0.24 | 0.95 | 0.57 | 0.00 |
| Mean | 0.99 | 0.72 | 0.17 | 1.65 | 1.25 | 0.56 | 2.14 | 1.78 | 1.14 | 2.22 | 1.97 | 0.81 | 1.39 | 0.83 | 0.22 | 1.35 | 0.80 | 0.17 |
| SD | 0.47 | 0.42 | 0.10 | 0.28 | 0.24 | 0.15 | 0.59 | 0.55 | 0.45 | 0.67 | 0.66 | 0.71 | 0.46 | 0.31 | 0.24 | 0.40 | 0.33 | 0.19 |
| CV | 47.87 | 58.62 | 58.93 | 17.00 | 19.55 | 26.62 | 27.54 | 30.80 | 39.21 | 30.28 | 33.71 | 88.00 | 33.34 | 36.71 | 110.11 | 29.38 | 41.14 | 116.00 |

Source: Computed from Annual Reports

Current ratio of Baja Auto Ltd. was found to be good during the study period. Out of 10 years in seven years current ratio of the company was more than and about the standard norm (2:1), the mean value of the ratio was more than standard norm at 2.22:1. It shows good liquidity position of the company in terms of current ratio. Liquid ratio of Bajaj Auto Ltd. was more than the standard norm during eight years out of ten years and during two years it was near the standard and mean value of the ratio was also found to be high at 1.97:1. These results showed strong liquid position of the company in terms of liquid ratio. Cash position ratio of Bajaj Auto Ltd. was fluctuating during the study period. The ratio ranged from 0.16 to 1.29, mean value of the ratio was 0.81. Liquidity position of the company in terms of cash position ratio was good during the study period except during 2007-08 and 2006-07.

Current ratio of Ashok Leyland Ltd. was decreasing over the study period. The ratio ranged between 0.78 and 2.18. It was at more than standard norm during first year of the study period, it was at considerable level for the next five years. The ratio was less than 1 during last four years of the study period. It showed that liquidity position in terms of current ratio was not good during last four years of the study period. Liquid ratio of Ashok Leyland Ltd. was near the standard during first year of the study period, it was more than one during next two years and it was less than one during remaining years of the study period. Mean value of the ratio was also low at 0.83, these results showed that liquid position of the company was not good in terms of liquid ratio. Liquidity position in terms of absolute liquid ratio of Ashok Leyland Ltd. was very poor during the study period except during the first three years. The ratio ranged from zero to 0.76. Mean value of the ratio was 0.22.

Current ratio of TVS Motor Company Ltd. was at considerable level during the first six years of the study period, it was less than one during the last four years of the study period. Mean value of the ratio was 1.35:1. The results showed that liquidity position of the company in terms of current ratio was satisfactory during first six years and not so during last four years of the study period. TVS Motor Company Ltd. had very low level of liquid ratio during the study period except during 2009-10. Mean value of the ratio was also low at 0.80. It showed that ability of the company in terms of pay off its current liabilities using their liquid assets was not good. Absolute liquid ratio of TVS Motor Company Ltd. was also found to be poor during the study period, it did not have the ratio as per the standard norm (0.5) during nine years of the study period. The

ratio ranged from zero to 0.60. Mean value of the ratio was 0.17.

The results of SD and CV showed that there was low level of deviation in current ratio and liquid ratio from its mean value except Tata Motors Ltd., in that case the deviation was at moderate level. In case of absolute liquid ratio the deviation was high in case of TVS Motor Company Ltd., Ashok Leyland Ltd., and Bajaj Auto Ltd., in case of Tata Motors Ltd. it was moderate and it was low in other companies.

CONCLUSIONS

The study has been undertaken to analyse working capital management of nine automobile companies in India for the study period of ten years from 2005-06 to 2014-15. 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. It was at satisfactory level for Mahindra and Mahindra Ltd. Current ratio of Ashok Leyland and TVS Motor Company was satisfactory during first half of the study period. Current ratio of Tata Motors Ltd. was good during first two years, especially during last four years it was found to be poor. Liquid ratio of Maruti and Bajaj was good and it was at satisfactory level in case of Mahindra and Mahindra Ltd., in case of other companies liquid ratio was not good. Absolute ratio of was good in case of Maruti Suzuki India Ltd., Bajaj Auto Ltd. and Mahindra and Mahindra Ltd. Cash position ratios of TVS Motor Company Ltd., Ashok Leyland Ltd. and Tata Motors Ltd. were found to be poor during the study period.

REFERENCES

1. Sharma N. Financial Analysis of Indian Automobile Industry. 2011;1(9):112 – 116.
2. Pasupathi N. Operational Adequacy of Working Capital Management of Selected Indian Automobile Industry - A Bivariate Discriminant Analysis, International Journal of research In Commerce, Economics & Management. 2012;2(1):87 – 92.
3. Velmathi N, Ganesan R. Inventory Management of Commercial Vehicle Industry in India. 2010;2(1).
4. Hiran S, Sojatia M. Capital Structure and its Impact on Profitability of Automotive Industry: the Indian case, International Journal of Research in

Commerce, IT & Management. 2014;4(10):14 – 20.

5. Hotwani R. Profitability Analysis of Tata Motors. Journal of Research in Commerce & Management. 2015;2(12):1-8.
6. Deng Y. A Cross-Country Comparison of Performance of Chinese and Indian Automobile Companies. 2015;6(1):106 – 117.