MEASUREMENT OF FINANCIAL LITERACY OF SELECTED AUTOMOBILES COMPANIES

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Abstract:
Today’s Indian automobile industry is a growing sector in India. The Indian automobile industry launched the first car in 1898. There are more than 14,000 automobile companies in India, which gives good job opportunities in India and over 99,000 manufacturing companies in the United States. According to this growth, we have required to measure the financial performance of Force Motors, Hindustan Motors, Mahendra & Mahendra Ltd., Maruti Suzuki and TATA Motors, such automobile companies, on the basis of liquidity for academic purposes. So, we used the liquidity ratio for measuring the liquidity. For the study, secondary data are used from 2016-17 to 2023-24. As per the study, we found that Mahendra & Mahendra Ltd. acquired first position and Hindustan Motors acquired last position on the basis of average ratios in current ratio, liquid ratio, quick ratio and net working capital ratio over the study period. As well as on the cash ratio, Tata Motors held first place and Maruti Suzuki held last position.

Introduction:
The first automobile was imported almost a century ago and import taxes on automobiles were instituted. It was decided to build the Indian Great Royal Road (predecessor of the Grand Trunk Road). A royal monarch from India brought the first car to the country in 1898. In 1840, Simpson & Co. was founded. They were the first in India to construct a steam automobile and a steam bus, attempt to make a motor vehicle, construct and run a passenger service powered by petrol and import American chassis. When the war ended in 1919, there were many more military vehicles on the roadways. The Hindustan Motors Ltd. was established in 1942 and their first vehicle was produced in 1950. Premier Automobiles Ltd. was founded in 1944 and their first vehicle was created in 1947. The Bajaj Auto plan to replace the cycle rickshaw with an automobile was approved by the Bombay government in 1947 and manufacturing operations began a few years later with a Piaggio licence. Scooters, motorcycles, mopeds and cars had already been manufactured since 1955 by Automobile Products of India (API) and Enfield India. Financial statement is important documents used by stakeholders such as managers, owners or potential owners, to assess the effectiveness of the organization Numerous studies have demonstrated the importance of the annual report as the primary source for institutional investors for evaluating corporate performance. Financial analysis is a process of selection, relation and evaluation that provides insight into a company's operational activities. Financial ratio based analysis is done by financial statements.

REVIEW OF LITERATURE

Rohitkumar R. Barot (2020) study on “Analysis of Financial Performance of selected Pharmaceutical Companies of India”. For the study, 10 companies were selected. The study covers the period from 2010-11 to 2019-20. He discussed the structural and economic growth of the Indian pharmaceutical industry. He uses various types of financial ratios to determine the efficiency and profitability of the industries. For the study he used ANOVA and SPSS statistical tools. He concluded that selected companies’ liquidity positions were low. So, companies have to maintain working capital and balanced capital structure.

Trusha Gajjar (2021) researched on the financial performance & comparative study of selected automobile companies from the years of 2011 to 2020. The main objective of the study to evaluate and analysed the financial performance of the selected automobile company through the different accounting ratios such as profitability, liquidity, efficiency and statistical tools such as ANOVA, Regression, Correlation and Mann Kendall test. The study identified that the nature of relationship among the various aspects of financial soundness of Automobile industry. The study found that over the study period only Maruti Suzuki and M&M reflect a good position. The study concluded that automobiles companies have changed their habits of all members of modern society.

Sharma Nishi (2011) analyzed the financial performance of the passenger and commercial vehicle segments of the automobile sector using four financial criteria: liquidity, profitability, leverage and managerial efficiency analysis over the ten-year period from 2001-02 to 2010-11. The analysis concluded that Tata Motors and Mahindra & Mahindra Ltd.'s profitability and managerial effectiveness are good but their liquidity position is not good. Commercial vehicle segment's liquidity condition is substantially stronger than that of the passenger vehicle segment.

OBJECTIVE OF THE STUDY

1. To evaluate the liquidity position of selected Automobiles companies with Current ratio, Liquidity ratio, Quick ratio Cash ratio and Net Working Capital Ratio.

METHODOLOGY

1.4.1 **Period of the Study:** The study covers the seven-year period from 1st April, 2017 to 31st March, 2024.

1.4.2. **Sample Size:** Secondary data are used for this study. For the study necessary data has been used form the annual report of the selected automobile companies.

1.4.3. **Tools & Techniques:** Accounting Liquidity ratio has been used such as Current Ratio, Liquid Ratio, Quick Ratio, Cash Ratio and Net Working Capital Ratio.

1.4.3.1 **Current Ratio:** This ratio measures the short-term financial strength of the business and shows whether the business will be meet its current liabilities, as and when they mature. The ideal current ratio is 2:1. Higher current ratio indicated that company has good capacity to pay its bills and grow operations.

$$\text{Current Ratio} = \frac{\text{Current Asset}}{\text{Current Liabilities}}$$

1.4.3.2 **Liquid Ratio:** Liquid ratio is designed to show the amount of cash available to meet immediate payments. Liquid assets are obtained by deducting inventories. The ideal liquid ratio is 1:1. More than 1 liquid ratio indicate the company condition is not satisfactory.

$$\text{Liquid Ratio} = \frac{\text{Liquid Asset}}{\text{Current Liabilities}}$$

1.4.3.3.**Quick Ratio:** This ratio measures how sufficient a company's short-term assets are to cover its current liabilities. Quick assets do not include inventories and trade receivables(debtor). The ideal quick ratio is 0.5:1. If quick ratio between 0.5 to 1, means it is satisfactory.

$$\text{Quick Ratio} = \frac{\text{Quick Asset}}{\text{Current Liabilities}}$$

1.4.3.4.**Cash Ratio:** This ratio measure that showed a company's ability to cover its short-term obligations using only cash and cash equivalents. A cash ratio is showed as an amount, larger or smaller than 1. If the cash ratio is equal to 1, the corporation has exactly the same sum of current liabilities as assets and cash equivalents are paying off those debts. The value of cash ratio is low; it proves that liquidity is potential.

$$\text{Cash Ratio} = \frac{\text{Cash and Cash Equivalents}}{\text{Current Liabilities}} \times 100$$

1.4.3.5.**Net Working Capital Ratio:** This ratio statistic shows if a company has enough cash on hand to cover its short-term working capital requirements or if it has cash locked up for internal activities. Here, Net Working Capital = (Current Assets – Cash & Cash Equivalents) – (Current Liabilities – Current Borrowings). The ideal Net Working Capital Ratio between 1.5 and 2.

$$\text{Net Working Capital Ratio} = \frac{\text{Net Working Capital}}{\text{Revenue}}$$

Positive NWC = More cash is on hand to cover its short term working capital and indicated less free cash flows.

Negative NWC = Less cash is on hand to cover its short term working capital and indicated more free cash flows.

RESULT AND DISCUSSION

1.5.1 To evaluate the liquidity position of selected Automobiles companies through Current ratio.

Table 1: Current Ratio of selected Automobile Companies

Current Ratio					
Year	**Force Motors**	**Hindustan Motors**	**Mahendra & Mahendra Ltd.**	**Maruti Suzuki**	**Tata Motors**
2017	1.54	0.06	1.22	0.66	1.00
2018	1.65	0.24	1.20	0.51	0.95
2019	1.67	0.14	1.18	0.87	0.85
2020	1.13	0.09	1.19	0.75	0.85
2021	1.01	0.19	1.40	1.15	0.93
2022	0.80	0.34	1.34	0.99	0.98
2023	1.04	0.30	1.29	0.58	0.98
2024	1.25	1.19	1.30	0.87	0.97
Avg.	1.26	0.32	1.27	0.80	0.94
S. D.	0.33	0.37	0.08	0.21	0.06
Max	1.67	1.19	1.40	1.15	1.00
Min	0.80	0.06	1.18	0.51	0.85

Force Motors has highest current ratio was 1.67 in the year 2018-19 and its lowest current ratio was 0.80 in the year 2021–2022. The company’s average current ratio was 1.26 and the standard deviation was 0.33. So, it implies that Force Motors has the highest average current ratio compared to other selected automobile companies. Mahendra & Mahendra Ltd. would maintain a continuous 1.18 to 1.40 current ratio during the year from 2017–2018 to 2023–2024. It indicates that during these years, the company had almost unstable current assets and current liabilities. Mahendra & Mahendra Ltd. has the 0.08 standard deviation of the current ratio, as do other selected automobile companies, which show that Mahendra & Mahendra Ltd. current ratio is the least volatile. that Mahendra & Mahendra Ltd. has the lowest 1.18 current ratio in 2018-19 and it continued to increase after two years, reaching 1.40 in 2020-2021. Over the study period, such a company current ratio is very up and down. Maruti Suzuki has 0.66 current ratio during the 2016-17 and up to 2021-22 its current ratio was decreasing. Hindustan Motors has an average current ratio of 0.32, which is very lowest compare to other selected automobiles companies. It implies that the company should pay attention to improving its liquidity.

Table 2: Liquid Ratio of selected Automobile Companies

Liquid Ratio					
Year	**Force Motors**	**Hindustan Motors**	**Mahendra & Mahendra Ltd.**	**Maruti Suzuki**	**Tata Motors**
2017	1.06	0.04	1.00	0.42	0.70
2018	0.95	0.23	1.01	0.31	0.66
2019	0.90	0.13	0.98	0.64	0.58
2020	0.52	0.09	0.98	0.46	0.58
2021	0.37	0.19	1.22	0.96	0.70
2022	0.30	0.34	1.13	0.78	0.74
2023	0.49	0.30	1.06	0.36	0.71
2024	0.54	1.19	1.05	0.67	0.69
Avg.	0.64	0.32	1.05	0.58	0.67
S. D.	0.29	0.37	0.08	0.23	0.06
Max	1.06	1.19	1.22	0.96	0.74
Min	0.30	0.04	0.98	0.31	0.58

Force Motors has highest liquid ratio was 1.06 in 2016–17. So, it indicates that the company's liquid condition is not satisfactory. From 2017–18 to 2023–24, the Force Motors liquid ratio has been reduced. Hence, the company’s liquid condition improved and it better maintained its liquid assets against its current liabilities. From 2016-17 to 2022-23, Hindustan Motors continues to record an ideal liquid ratio, but during the 2023-24 it has 1.19 liquid ratio. It indicted that during the 2016-17 to 2022-23 company liquid position was satisfied and in 2023-24 company liquid position was not satisfied. Over the period of the study, Mahendra & Mahendra Ltd has mostly more than 1 liquid ratio. So, Mahendra & Mahendra Ltd had not immediate to pay their current liabilities. Maruti Suzuki and Tata Motors had less than 1 liquid ratio during the 2016-17 and 2023-24, compared to other selected automobile companies. So, over the study period, both companies had a good liquid position. So, it indicates that the Maruti Suzuki and TATA motors had satisfactory liquid position and immediate pay to their current liabilities.

Table 3: Quick Ratio of selected Automobile Companies

Quick Ratio					
Year	**Force Motors**	**Hindustan Motors**	**Mahendra & Mahendra Ltd.**	**Maruti Suzuki**	**Tata Motors**
2017	0.93	0.03	0.82	0.33	0.58
2018	0.60	0.23	0.84	0.21	0.52
2019	0.65	0.13	0.83	0.48	0.45
2020	0.34	0.09	0.85	0.27	0.51

2021	0.23	0.19	1.10	0.88	0.62
2022	0.16	0.34	1.02	0.66	0.66
2023	0.36	0.30	0.96	0.20	0.61
2024	0.48	1.19	0.96	0.49	0.60
Avg.	0.47	0.31	0.92	0.44	0.57
S. D.	0.25	0.37	0.10	0.24	0.07
Max	0.93	1.19	1.10	0.88	0.66
Min	0.16	0.03	0.82	0.20	0.45

During the years 2016-17 to 2018-19 and 2023-24, Force Motors had a quick ratio of between 0.5 to 1 and other periods had a quick ratio of less than 0.5. So, it shows that from 2016-17 to 2018-19 and 2023-24, Force Motors had a satisfactory liquid position. From 2016-17 to 2022-23, Hindustan Motors had recorded below 0.5 quick ratio, so the company should pay attention to improving its liquidity. Mahendra & Mahendra Ltd. had a maximum quick ratio of 1.10 and 1.02 in 2020-21, 2022-23. So, it showed over liquid position and in 2016-17 it had a minimum quick ratio of 0.82. Hence, it shows that the company's achieved an ideal quick ratio. During the 2020-21 to 2021-22, Maruti Suzuki maintained a contentious quick ratio between 0.5 and 1. So, it implies that Maruti Suzuki had a good market reputation to pay their liquid payment. While other periods Maruti Suzuki had below 0.5 quick ratio, it proves that company's liquid position is poor for the payment of liquid liabilities. TATA Motors had a quick ratio between 0.5 and 1, except for the period of 2018-19. So, except for the period of 2018-19, TATA Motors was able to maximum pay their current liabilities immediate.

Table 4: Cash Ratio of selected Automobile Companies

Cash Ratio (%)					
Year	**Force Motors**	**Hindustan Motors**	**Mahendra & Mahendra Ltd.**	**Maruti Suzuki**	**Tata Motors**
2017	0.096	0.000	0.074	0.002	0.121
2018	0.058	0.159	0.091	0.005	0.103
2019	0.007	0.046	0.105	0.013	0.148
2020	0.073	0.026	0.088	0.003	0.131
2021	0.040	0.137	0.066	0.003	0.201
2022	0.056	0.132	0.062	0.002	0.253
2023	0.093	0.221	0.049	0.002	0.206
2024	0.274	0.639	0.060	0.102	0.230
Avg.	0.087	0.170	0.074	0.016	0.174
S. D.	0.081	0.204	0.019	0.035	0.055
Max	0.274	0.639	0.105	0.102	0.253
Min	0.007	0.000	0.049	0.002	0.103

In the case of Force Motors, the highest cash ratio was 0.274% in the year 2023-2024 and the lowest cash ratio was 0.007% in the year 2018-19. The average cash ratio is 0.087%, which shows the company's solvency is poor. As per the above table, Hindustan Motors and TATA

Motors had the highest cash ratio at 0.639% and 0.253% in the year 2023-2024 and 2021-2022, respectively, while for these two companies the lowest cash ratio were at 0.00% and 0.103% in the year 2016-17 and 2017-18. The average cash ratio of Hindustan Motors and TATA Motors is more than 0.17%, which is highest among the selected automobile industry and its shows the solvency of these two companies because the average cash ratio shows a satisfactory ratio during the study period. From 2016-17 to 2018-19, Mahendra & Mahendra Ltd. cash ratio was continuing in an upward mode, which shows the solvency of this company is good, while from 2019-20 to 2023-24, the cash ratio of Mahendra & Mahendra Ltd. was fluctuation, which indicated that company's cash payment position is poor. Over the study period, Maruti Suzuki cash ratio was between 0.002% and 0.102%, and it was found that such a company's cash ratio was very lowest among the selected automobiles companies. It shows Maruti Suzuki has not had a satisfactory cash ratio during the study period.

Table 5: Net Working Capital Ratio of selected Automobile Companies

Net Working Capital Ratio					
Year	**Force Motors**	**Hindustan Motors**	**Mahendra & Mahendra Ltd.**	**Maruti Suzuki**	**Tata Motors**
2017	16.69	-6043.45	17.98	-5.00	0.13
2018	11.25	-1014.19	21.57	-9.02	-1.74
2019	12.98	-145.64	14.36	-2.06	-7.69
2020	3.10	-822.75	16.11	-3.53	-8.70
2021	0.17	-408.41	29.16	3.92	-8.28
2022	4.27	-196.43	45.46	0.13	0.02
2023	5.41	-799.56	41.63	-6.11	0.45
2024	1.49	-50.06	38.00	-4.07	-2.00
Avg.	6.92	-1185.06	28.04	-3.22	-3.48
S. D.	5.97	1995.07	12.31	3.95	4.03
Max	16.69	-50.06	45.46	3.92	0.45
Min	0.17	-6043.45	14.36	-9.02	-8.70

In the case of Force Motors and Mahendra & Mahendra Ltd., the net working capital ratio between 0.17 to 16.69 and 14.36 to 45.46 during the study periods. It indicated that the both company's performance is good compared to other selected automobiles companies, which proves that both companies had more cash on hand to cover their short term working capital and indicated less free cash flows.

From the above table, we can show that Hindustan Motors, Maruti Suzuki and Tata Motors had average net working capital ratio in negative positions. It indicated that these three companies do not properly manage their current assets and current liabilities and companies have less cash to cover their working capital during the study period.

Finding:

Liquidity is an important tool to run business properly. We can say that liquidity is the blood of running business. Liquidity ratio measures how well a company manages its organisation and pays off its liabilities in the short term. From the above analysis we found that on the basis of current ratio, Mahendra & Mahendra Ltd. is acquired first position with an average of 1.27%. It describes company have ability to pay their short-term obligation. As per the Liquid ratio, Hindustan Motors was on last position among the selected automobile companies during the study period 2016- to 2024. The Mahendra & Mahendra Ltd. and TATA Motors held good position over the study period because both companies are an average quick ratio between ideal quick ratio. It means both companies have enough cash to pay liabilities. So, Mahindra and Mahindra and TATA Motors have more availability of cash among the selected automobile company. Hindustan Motors on first position and Tata Motors acquired second position in cash ratio with an average of 0.1701% and 0.1742 in respectively. It means company's most liquid asset cash is highest among the selected companies and both companies have ability to pay liability without selling inventory. In case of Mahendra & Mahendra Ltd., Net Working Capital Ratio was highest an average of 28.04, which presents that company had more cash is on hand to cover its short term working capital and indicated less free cash flows. While Hindustan Motors, Maruti Suzuki and Tata Motors had average net working capital ratio was negative position. It indicated that these three companies have less cash to cover their working capital during the study period.

Conclusion:

As per the above analysis, we concluded that Mahendra & Mahendra Ltd. acquired first position and Hindustan Motors acquired last position on the basis of average ratio in current ratio, liquid ratio, quick ratio and net working capital ratio over the study period. As well as on the cash ratio, TATA Motors held first place and Maruti Suzuki held last position. So, over the analysis, we concluded that investors must invest in Mahendra & Mahendra Ltd. based on its liquid ratios performance. While risky and speculators investors should invest in Hindustan Motors on its ratios performance on their own risk.

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