IJARSCT
ISSN (Online) 2581-9429
International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)
Volume 3, Issue 2, January 2023
Impact Factor: 7.301

A Study of Liquidity Analysis of Selected Automobile Companies of India

Sandpa Saroj Bavanjibhai[1] and Dr. R. K. Dave[2]
Research Scholar, Jamnagar[1]
Principal, YMMM Arts & Commerce College, Dhari, Amreli, Gujarat, India[2]

Abstract: *The Auto industry, over the years, has adapted well to the changes in the policy & regulatory environment and the needs of its customers. In FY 14-15 the Indian auto-components industry bounced back growing at 11% and registered a turnover of USD 38.5 billion. Today, the industry contributes 46% to the Manufacturing GDP and 7% to National GDP, providing direct employment to 1.5 million people and is an important driver of growth for the Indian economy. Automobile exports too have grown despite the global slowdown, growing at 14.89% from April-March 2015 over the same period last year.*

Keywords: Automobile industry, Liquidity analysis

I. INTRODUCTION

The Auto & Auto Component industry's impact on the Indian economy currently is significant as it contributes 7% to the country's GDP and is expected to increase to 12% as per the Automotive Mission Plan.According to the Automotive Mission Plan 2016-26 (AMP 2026); a collective vision of the Government of India and the Indian Automotive Industry, the Indian Auto Industry will be in the global top three for engineering, manufacturing and export of vehicles, auto components; it will encompass safe, efficient and environment friendly conditions for affordable mobility by 2026.The industry is likely to grow from 80 Billion USD to 270 Billion USD by 2026 and generate an additional 65 Million jobs. The Automotive industry is key to the domestic Manufacturing Sector contributing over 40% and impacting the fortunes of several related manufacturing industries such as Iron and Steel, Aluminum, Rubber, Chemicals, Molds etc.

1.1 Liquidity

Liquidity management should be a priority for all companies. It gives a clear indication of financial health, and it provides visibility into how well a company can afford its current and future debts, short-term investments, obligations, and spend with its liquid cash and assets at hand. Optimal liquidity management enables complete visibility into financial resources, spend, cash, and liabilities at any point in time. So, you can make informed strategic decisions faster.

II. RELATED STUDY

Modi Vishakhaben (2020) attempted to assess the liquidity of a number of Indian automotive companies in his research. The data was analyzed using statistical methods such as Mean, Standard Deviation, and Coefficient of Variances, and the study discovered that few car companies have a poor liquidity position, while others have a good liquidity position, and only a few have a very strong liquidity position.**Krishna Reddy and Vijay Kumar Reddy (2019)** in their study explained that the in current marketing theory and practice, customer happiness is a crucial idea. The marketing concept stresses giving customer delight while also generating revenues.**Rahul Vaghela et al (2019)** found that liquidity is excellent and made an effort to achieve the optimal liquidity level because it is unable to fulfill its short-term obligations. In their research, **Jothi and Geethalakshmi, (2017)** found a positive correlation between profitability, short-term capital, and long-term capital. In their study, **Hariharan and Vedala Naga Sailaja (2017)** evaluated the effectiveness of credit risk management in the private sector. **Nagamalleswari et al. (2018)** investigate the relationship between reducing risk and completing a successful project while maintaining appropriate liquidity management and also Motivation is an important part of the management process (**Rajasekar and Premkumar,2017**)

IJARSCT
ISSN (Online) 2581-9429
International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)
Volume 3, Issue 2, January 2023
Impact Factor: 7.301

2.1 Objective of the Study

Present article is based on the Study of Liquidity of Selected Companies of Automobile Industry

2.2 Period of Study

The study period is to be converted 5 years; from 2017-18 to 2021-22.

2.3 No. of Sample

Researcher has selected 6 to 10 number's automobile companies from top 10 revenue generated automobile companies according to 2021-22 financial reports.

Table 1: Top 10 Gross Revenue of Automobile Companies of India in 2021-22

No.	Name of Company	Gross Revenue (Rs. in Crore)	No.	Name of Company	Gross Revenue (Rs. in Crore)
1	Tata Motors	296917	6	Ashok Leyland Ltd.	28476
2	Maruti Suzuki Ltd.	83281	7	TVS Motor Co. Ltd.	15129
3	M & M Ltd.	77077	8	Eicher Motor Ltd.	9266
4	Hero Moto Corp Ltd.	32871	9	Force Motors Ltd.	3487
5	Bajaj Auto Ltd.	30598	10	SML ISUZU Ltd.	1312

Source: bseindia.com

III. TOOLS AND TECHNIQUES

For the present study Current Ratio and Quick Ratio of Liquidity Analysis as an accounting tools and F-Test - ONE WAY ANOVA is used as tools of Statistics.

3.1 Current Ratio

The current ratio is a measure of a company's ability to pay off the obligations within the next twelve months. This ratio is used by creditors to evaluate whether a company can be offered short term debts. It also provides information about the company's operating cycle. It is also popularly known as Working capital ratio. It is obtained by dividing the current assets with current liabilities.

Table 2: Current Ratio for selected Automobile Companies of India for the Period from 2017-18 to 2021-22

Name of Companies	**Year**					
	2017-18	**2018-19**	**2019-20**	**2020-21**	**2021-22**	**Average**
Ashok Leyland	1.02	1.08	1.03	0.98	1	**1.02**
TVS Motors	0.81	1.02	0.97	0.97	0.93	**0.94**
Eicher Motors	1.12	2.1	3.15	3.35	1.88	**2.32**
Force Motors	1.65	1.67	1.13	1.01	0.8	**1.25**
SML ISUZU	1.36	1.27	1.2	0.82	0.71	**1.07**
Average	**1.19**	**1.43**	**1.50**	**1.43**	**1.06**	**1.32**

Source:www.nse.com

It is evident from the above table that Eicher motors is having highest Average 2.32 times current ratio during research period due to high liquidity in the year 2019-20 and 2020-21 while least average current ratio is founded in TVS motors during research period. According to year base highest average is shown in the year 2019-20 while least average is shown in the year 2021-22 during research period.

IJARSCT
ISSN (Online) 2581-9429
International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)
Volume 3, Issue 2, January 2023
Impact Factor: 7.301

A. Statistical Analysis

Table 3: "F"-Test Two Way ANOVA for Current Ratio of selected Automobile Companies of India for the period from 2017-18 to 2021-22

H_o: There is No Significant Different between Current Ratio of Selected Automobiles Companies of India for the period from 2017-18 to 2021-22					
H_1: There is Significant Different between Current Ratioof Selected Automobiles Companies of India for the period from 2017-18 to 2021-22					
Source of Variation	**Sum of Square**	**Degree of Freedom**	**Mean Sum of Square**	**F_c**	**F_t**
C.S.S.	0.678944	4	0.169736	0.332024	2.866081
W.S.S.	10.22432	20	0.511216		
T.S.S.	10.90326	24			

From the "F" test two way ANOVA Table as calculated above it shows that Calculated value of Fc = 0.332024 while tabular value of Ft = 2.866091 which show that calculated value Fc is smaller than tabular value Ft, Fc < Ft Hence Null Hypothesis is accepted and Alternative Hypothesis is rejected that there is no significant Difference for selected automobile industry for selected research unit during research period.

3.2 Quick Ratio

Quick ratio is also known as Acid test ratio is used to determine whether a company or a business has enough liquid assets which are able to be instantly converted into cash to meet short term dues. It is calculated by dividing the liquid current assets by the current liabilities

Table 4: Quick Ratio for selected Automobile Companies of India for the Period from 2017-18 to 2021-22

Name of Companies	**Year**					
	2017-18	**2018-19**	**2019-20**	**2020-21**	**2021-22**	**Average**
Ashok Leyland	0.86	0.88	0.93	0.83	0.86	**0.87**
TVS Motors	0.68	0.86	0.85	0.84	0.81	**0.81**
Eicher Motors	0.94	1.8	2.87	3.02	1.5	**2.03**
Force Motors	0.95	0.9	0.52	0.37	0.3	**0.61**
SML ISUZU	0.47	0.45	0.36	0.23	0.21	**0.34**
Average	**0.78**	**0.98**	**1.11**	**1.06**	**0.74**	**0.93**
Source:www.nse.com						

It is evident from the above table that Eicher motors is having highest Average 2.03 times quick ratio during research period due to high liquidity in the year 2019-20 and 2020-21 while least average quick ratio is founded in SML ISUZU during research period. According to year base highest average is shown in the year 2019-20 while least average is shown in the year 2021-22 during research period.

IJARSCT
ISSN (Online) 2581-9429
International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)
Volume 3, Issue 2, January 2023
Impact Factor: 7.301

A. Statistical Analysis

Table 5: "F"-Test Two Way ANOVA for Quick Ratio of selected Automobile Companies of India for the period from 2017-18 to 2021-22

H_o: There is No Significant Different between Quick Ratioof Selected Automobiles Companies of India for the period from 2017-18 to 2021-22					
H_1: There is Significant Different between Quick Ratioof Selected Automobiles Companies of India for the period from 2017-18 to 2021-22					
Source of Variation	**Sum of Square**	**Degree of Freedom**	**Mean Sum of Square**	**F_c**	**F_t**
C.S.S.	0.548936	4	0.137234	0.239953	2.866081
W.S.S.	11.4384	20	0.57192		
T.S.S.	11.98734	24			

From the "F" test two way ANOVA Table as calculated above it shows that Calculated value of Fc = 0.239953 while tabular value of Ft = 2.866091 which show that calculated value Fc is smaller than tabular value Ft, Fc < Ft Hence Null Hypothesis is accepted and Alternative Hypothesis is rejected that there is no significant Difference for selected automobile industry for selected research unit during research period.

IV. CONCLUSION

From the above analysis it shows that moderate liquidity for the selected research unit of automobile industry during research period.

REFERENCES

[1]. Sachdeva J.K., "Research Methodology, HimalayaPublishing House, 2008
[2]. Dhayagude M.G., "Statistical and quantitative Methods,
[3]. Everest Publishing House, 2009 ED-6
[4]. DattGaurav and MahajanAshwani, "Indian Economy", S. Chand & Company Pvt. Ltd. New Delhi, 2013.
[5]. WalmikKachruSarwad (April 2015): "Evolution and growth of Indian auto industry" published in Journal of Management Research and Analysis extracted from https://www.ipinnovative.com/journal-article-file/710
[6]. Dr. VaniMajumdar and Dr. PoojaSharma (2022): A Study on Liquidity Analysis of Select AutomobileCompanies in India published in Journal of Positive School Psychology 2022, Vol. 6, No. 3, 8941–8945http://journalppw.com extracted from https://www.journalppw.com/index.php/jpsp/article/download/5213/3417
[7]. https://www.cii.in/sectors.aspx?enc=prvePUj2bdMtgTmvPwvisYH+5EnGjyGXO9hLECvTuNspZMG2krVmNXVq1Qz72doM
[8]. https://www.nseindia.com
[9]. https://corporatefinanceinstitute.com
[10]. https://www.sesei.eu/wp-content/uploads/2018/12/Automotive-Sector-Report_-Final.pdf