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An Empirical Analysis of Liquidity of Selected Tyres Companies in India

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ABSTRACT

In this paper researcher has tried to examine the liquidity position of four selected tye firms in India. Name of the four selected firms are Balkrishna Industries ltd, TVS Srichakra ltd, Goving Rubber Ltd and JK Tyres Ltd. The study period was (5) years period from 2014 to 2018. Current ratio, quick ratio, debt equity ratio and long term debt equity were analytical tools. ANOVA test, mean, standard deviation and coefficient were used as statistical tools. Current ratio shows very bad liquidity position of all four selected firms. Whereas quick ratio shows very good liquidity position of three firms out of four selected firms. Debt equity ratio and long term debt equity ratio shows that proportion of debt in capital structure is excess over equity share capital. Thus solvency position is very weak because huge amount of debt creates technical risk in firms. Result of anova test for current ratio, quick ratio and long term debt equity shows significance difference. The result of anova test for debt equity ratio indicates insignificance difference.

1. Introduction

The Indian Tire Industry is an indispensable piece of the Auto Sector – It adds to ~3% of the assembling GDP of India and ~0.5% of the all out GDP straightforwardly. Along these lines, how about we comprehend the elements of the Tire Industry in India. Indian tire industry has nearly multiplied from ~Rs 30,000 crores in 2010-11 to ~Rs 59,500 crores in 2017-18 of which 90-95% originated from the household markets. The best three organizations – MRF, Apollo Tires and JK Tires have ~60% of the piece of the overall industry regarding income. As far as division tires can be isolated in two different ways – in view of end advertise and dependent on item

Liquidity analysis:-working capital is very important for management because good management of working has positive impact on profitability. Liquidity is maintained through proper management of working capital. Different ratios are used to examine the liquidity position. Ratios like current ratio, quick ratio, acid test ratio, working capital turnover ratio, inventory turnover ratio, debt equity ratio, and long term debt equity ratio. Researcher has also used liquidity ratio to examine the liquidity position of the selected tyre companies.

2. Review of literature

Researcher has reviewed research paper and articles related to the selected research topic and brief overview of review of literature is presented below.

S.S saravanan, J. abarna, under this study, a five companies have been selected , the analysis has been done with the help of the fifteen years data of all companies and a ratio analysis for liquidity measurement has been performed by the researcher through the one way variance test (One Way Anova), the researcher has found that the current ratio and quick ratio were uniform in all selected companies during the study period, whereas an absolute liquid ratio was not uniform in all selected companies during the study period.

Ashok Kumar Panigrahi and et al. (2017) worked on liquidity analysis on pharmaceutical industry during the study period of from 2012 to 2016. They have studied current ratio, quick ratio and absolute ratio to examine the liquidity position of five selected pharmaceutical companies. Ajanta Pharma has very good liquidity. Quick ratio of Ajanta pharma is also very good. Whereas Biocon and Ajanta Pharma are having higher liquidity.

N. M. Baki Billah (2015) researched on liquidity analysis of public listed companies in Malaysia for the period of 2010 to 2012. The sample size was of 923 companies. Researcher used current ratio, quick ratio, total assets to total liabilities ratio and interest coverage ratio. Result of correlation shows that there is significant and positive relation between traditional ratio and cash flow ratio. t test shows significant difference between traditional ratio and cash flow ratio.

Chnar Abdullah Rashid (2018) worked on liquidity of UK retail companies for the period of 2012 to 2016. The researcher has used current ratio, inventory turnover ratio, receivables turnover ratio and trade payables ratio, quick ratio, cash interest coverage ratio and quality earnings and cash to profit ratio. The analysis shows that the company does not have liquidity problem but it has tough time during the year of 2012, 2013 and 2016.

Rafiq Ahmad (2016) studied on relationship between liquidity and profitability of standard chartered bank of Pakistan for the period of 2004 to 2013. The researcher has used current ratio, quick ratio and networking and for profitability, researcher used gross profit, net profit and return on capital employed. The result of the test shows that there is positive relationship between profitability and liquidity.

P. Megaladevi (2018) studied on effect of liquidity on profitability of selected Indian firms for the period of 2008 to 2017. The result of the research indicates that current ratio and quick ratio have significant relationship with return on capital employed. Final result indicates that the liquidity and profitability are closely related to each others.Felix Asete and James N. Kung (2018) worked on impact of liquidity on

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profitability of Kenyan manufacturing firms for the period of 2010 to 2015. The researcher used current ratio, quick ratio, cash ratio, cash conversion and return on assets. There is significant insignificant effect of current ratio, quick ratio, cash ratio and cash ratio and cash conversion on profit. In short, current ratio, quick ratio and cash ratio did not have significant effect on profitability of Kenyan firm.

Georgeta Vintila and Elena Alexandra Nenu (2016) worked on liquidity and profitability of Romanian firm for the period of 2015 to 2014. The researcher used return on assets ratio, return on equity, quick ratio, current ratio, debt to equity ratio, total assets to equity ratio, cash conversion cycle, working capital to growth ratio, effective tax rate. The result of the research indicates that liquidity has significance relationship with profitability.

Mohd Yameen and Asif Pervez (2016) did research on effect of liquidity solvency and efficiency on profitability of SAIL for the period of 2005 to 2014. Debt to equity ratio and inventory turnover ratio has significant effect on return on capital employed. Whereas current ratio, debt equity ratio and inventory turnover ratio have significant effect on return on assets. Khalidazia Ibnu Khaldun and Iskandar Muda (2014) worked on effect of profitability and liquidity on the growth of profit of manufacturing firms for the period of 2010 to 2012. The researchers have concluded that current ratio, quick ratio, cash ratio,gross profit ratio, return on assets and return on equity have affected to groth of profit which is stastically significant.

3. Objectives of the study

The objectives of the research papers are as below

1. To examine the liquidity position of selected tyre companies in India during the study period.

4. Hypothesis of the study

- Ho- There is no any significant different among the liquidity ratios of the selected tyre companies during the study period.

5. Methodology of the Study

- **Source of data: -** The entire study is based on secondary type of data; the researcher has collected secondary relevant data from the money control website.
- **Period of study: -** The study covers a five (5) years period from 2014 to 2018.
- **Sample of study: -** The universe of the study is all tyre companies in India, and the study Sample is selected four (4) companies out of all tyre companies in India on the basis of availability of relevant data on website, the list of selected companies are Balkrishna Industries ltd, TVS Shrichakra Ltd, Govind Rubber Ltd, JK Tyres ltd.
- **Research tools: -** One way analysis of variance test (ANOVA) is used for measuring the liquidity position of selected tyre companies in India with the help of liquidity ratios

6. Data Analysis, Findings and their Interpretation

Table-1. Liquidity ratios of selected tyre companies in India.

Ratio	Current Ratio in Times				Quick Ratio in Times			
Companies /years	Balkrishna Industries ltd	TVS Srichakra ltd	Goving Rubber Ltd	JK Tyres Ltd	Balkrishna Industries ltd	TVS Srichakra ltd	Goving Rubber Ltd	JK Tyres Ltd
2014	0.94	0.91	0.78	0.65	1.72	0.98	1.3	0.89
2015	0.95	0.87	0.74	0.65	1.39	0.78	0.98	0.83
2016	0.72	0.78	0.74	0.67	0.91	0.61	1.17	0.82
2017	0.64	0.73	0.64	0.6	0.69	0.71	1.45	0.98
2018	0.89	0.7	0.51	0.53	1.04	0.86	1.3	0.76
AVG	0.83	0.80	0.68	0.62	1.15	0.79	1.24	0.86
SD	0.14	0.09	0.11	0.06	0.41	0.14	0.18	0.08
CV	5.92	8.88	6.25	10.96	2.82	5.58	7.05	10.28

(Source: - Moneycontrol.com).

Table-1 shows the liquidity ratio of selected tyre companies in India. Current ratio of Balkrishna Industries ltd shows creasing trend with an average of 0.83 the standard deviation was 0.14 which shows less percentage of variance. However the current ratio is not up to ideal ratio 2:1. The current ratio of TVS Srichakra ltd is also showing downward trend with an average of 0.80. The standard deviation is 0.09 which indicates less fluctuation during the study period. Current ratio of Goving Rubber Ltd is not up to ideal ratio 2:1 whereas standard deviation shows less fluctuation during the study period. The current ratio of JK tyres is showing highly fluctuated trend during the study period with an average of 0.62..In all four selected companies current ratios are less the ideal ratio of 2;1. The liquidity position is not good as compared to ideal ratio.

Table-1 shows quick ratio of Balkrishna Industries ltd which is showing fluctuated trend during the study period. The average ratio was 1.15 which is above to ideal ratio 1:1. Quick ratio of TVS Srichakra ltd also indicated very fluctuated trend with an average of 0.79. The standard deviation was 0.14. The quick ratio of Goving Rubber Ltd indicates average ratio more than ideal ratio manifesting very good position. Quick ratio of JK Tyres Ltd is very weak because the average ratio is less than ideal ratio.

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Table-2 Debt Equity Ratio in Times and Long Term Debt Equity Ratio in Times

Ratio	Debt Equity Ratio in Times				Long Term Debt Equity Ratio in Times			
Companies /years	Balkrishna Industries ltd	TVS Srichakra ltd	Goving Rubber Ltd	JK Tyres Ltd	Balkrishna Industries ltd	TVS Srichakra ltd	Goving Rubber Ltd	JK Tyres Ltd
2014	1.24	1.3	3.36	2.64	0.88	0.55	0.89	1.39
2015	0.87	0.64	3.14	2.18	0.59	0.27	0.58	1.3
2016	0.46	0.28	3	1.68	0.3	0.07	0.6	1.06
2017	0.22	0.52	5.68	1.87	0.06	0.04	0.84	0.98
2018	0.15	0.46	5.78	1.81	0	0.01	0.87	0.89
AVG	0.59	0.64	4.19	2.04	0.37	0.19	0.76	1.12
SD	0.46	0.39	1.41	0.38	0.37	0.23	0.15	0.21
CV	1.28	1.64	2.97	5.30	0.99	0.83	4.95	5.28

(Source: - Moneycontrol.com)

Table- 2 indicates debt equity ratio of Balkrishna Industries ltd. Debt equity ratio is showing downward trend wit average of 0.59 which means that the amount debt is more than amount of equity capital. The debt equity ratio of TVS Srichakra ltd shows that the ratio is showing regressive trend with average of 0.64 indicating more amount of debt. Average Debt equity ratio of Goving Rubber Ltd is 4.19 which show that amount of debt four times more than equity. This company has had the benefits of leverage to accelerate the earning of shareholders. Table-2 shows Long Term Debt Equity Ratio in Times of Balkrishna Industries ltd.The ratio shows very fluctuating trend with an average of 0.37 times .the standard deviation of ratio is 0.37. The long term debt equity ratio of TVS Srichakra ltd is 0.19 with standard deviation of 0.23. It is understood that the portion of debt is more than equity in the firm. The long term debt–equity ratio of Goving Rubber Ltd shows that the up down trend during the study period. The average ratio is 0.76 which means that the amount equity is more than amount of debt. The equity base of this company is very sound. Average The debt-equity ratio of JK Tyres Ltd is 1.12 which means that the more than two times debt in the firm. There is an excess amount of debt indicating technical risk.

Table-3. One way ANOVA of Current Ratio of selected tyre companies in India.

Variable	Source of Variation	Sum of squares	Df	Means of Square	F	F Crit
Current Ratio	**Between Groups**	0.143	3	0.048	4.461	3.239
	Within Groups	0.171	16	0.011		
	Total	0.314	19			

As per the able table-3, it is concluded that the null hypothesis is rejected and alternative hypothesis is selected, because F-value is 4.461 which is greater than F-critical vale 3.239,so it indicates, there is a different between the current ratio as a liquidity measure of selected tyre companies in India during the analysis period.

Table-4. One way ANOVA of Quick Ratio of selected tyre companies in India.

Variable	Source of Variation	Sum of squares	Df	Means of Squares	F	F crit
Quick Ratio	**Between Groups**	**0.727**	**3**	**0.242**	**4.334**	**3.239**
	Within Groups	**0.895**	**16**	**0.056**		
	Total	**1.623**	**19**			

As per the able table-4, it is concluded that the null hypothesis is rejected and alternative hypothesis is selected, because F-value is 4.334 which is greater than F-critical vale 3.239,so it indicates, there is a different between the Quick ratios as a liquidity measure of selected tyre companies in India during the analysis period.

Table-5. One way Anova of Debt Equity Ratio of selected tyre companies in India.

variable	Source of Variation	Sum of squares	Df	Means of Square	F	F crit
Debt Equity ratio	**Between Groups**	42.878	3	14.29253	22.85	3.239
	Within Groups	10.007	16	0.62543		
	Total	52.884	19			

As per the able table-4, it is concluded that the null hypothesis is rejected and alternative hypothesis is selected, because F-value is 22.85 which is greater than F-critical vale 3.239,so it indicates, there is a different between the Debt

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Equity Ratio as a liquidity measure of selected tyre companies in India during the analysis period.

Table-6. One way Anova of Long Term Debt Equity Ratio Of selected tyre companies in India.

Variable	Source of Variation	Sum of squares	Df	Means of Squares	F	F crit
Long Term Debt to Equity ratio	Between Groups	2.616	3	0.872	13.59	3.239
	Within Groups	1.026	16	0.064		
	Total	3.642	19			

As per the able table-4, it is concluded that the null hypothesis is rejected and alternative hypothesis is selected, because F-value is 13.59which is greater than F-critical vale 3.239, so it indicates, there is a different between the long terms Debt Equity Ratio as a liquidity measure of selected tyre companies in India during the analysis period.

7. Conclusion

Liquidity is significant ingredients of any organization. Maintenance of liquidity at appropriate level indicates good sign of management. In order to examine the liquidity and solvency position, researcher has used current ratio, quick ratio, debt equity ratio and long term debt equity ratio. Out of sour selected firms, current ratio of none is good because none has the current ratio closure to ideal ratio. The quick ratio of all four selected companies is Balkrishna Industries ltd, Goving rubber ltd. And JK tyre Ltd. The debt equity ratio of all four selected firms indicates amount debt over equity. The long term debt equity ratio also indicates the same position. Researcher has run ANOVA test to test hypothesis for all four ratios of selected firm. ANOVA test of current ratio all firms shows significant difference. ANOAVA test of quick ratio of all four selected firms also significant difference. Debt equity ratios of four selected firms have the insignificant difference. Long term debt equity ratio shows significant difference.

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