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Research Paper

To Measure Short Term Financial Strength of Selected Steel Companies in India Based on Liquidity Ratio

Commerce

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ABSTRACT

Liquidity is a pre-requisite for the very survival of a business unit. Liquidity represents the ability to business concern to meet short term obligations when they fall due for payment. In this study Analysis of variance (ANOVA) carried out for liquidity ratios for the selected steel company in India for the period of 2009-10 to 2013-2014. In these, liquidity ratios include Current Ratio, Acid test ratio or Quick Ratio and Absolute Liquidity Ratio. The statistical tool ANOVA is used to test the hypothesis regarding Liquidity ratios which are based on a sample of five selected companies in steel industry. From the analysis concluded there is significant difference in all Liquidity Ratios of five selected steel Companies.

[1] INTRODUCTION

Ratio analysis is a widely used tool of financial analysis. It can be used to compare the risk and return relations of firm of different sizes. It is defined as the systematic use of ratio to interpret the financial statements so that the strength and weakness of a firm as well as its historical performance and current financial condition can be determined. A part from the creditors, both short-term and long term, also interested in the financial soundness of a firm is the owners and management or the company itself. Liquidity here refers to the ability of the business firm to generate cash internally from business operations or to raise cash externally from the financial institutions, so that it can meet all its cash requirement and discharge all its current obligations. It is not an exaggeration but a fact that liquidity is very essential for the very survival of the organization. Hence, there is a need for evaluating the liquidity position to find out whether the company is capable of paying all its current obligations. The ratios which are commonly used to measure liquidity that was Current Ratio, Quick Ratio and Absolute Liquidity Ratio. The ability of any business firm to meet its short term commitment is normally assessed by comparing current assets and current liability. As the working capital is equivalent to the difference between current assets and current liability, or as the working capital is the excess of Current Assets over current liability, this ratio is also called working capital ratio or current ratio.

Dr.S.S.Saravanan (2014), studied on "A Study on Liquidity Analysis of Selected Automobile Companies in India" Main purpose of the study is to analyze the liquidity efficiency of selected Automobile companies in India. Researcher covers the period from 1998-99 to 2012-13. Researcher conclude that the liquidity ratios concerned the performance of force motors is better and other companies are to improve their liquidity and turnover for the better performance.

Dr. Asha Sharma (2013) examined "A Comparative Analysis of Working Capital Management between Public & Private Sector Steel Companies In India" It is tried to find out correlation among working capital to find along with their liquidity, efficiency and profitability. We find that there is a significant negative relationship between liquidity and profitability. In this study researcher efforts are made to know is these ratios remained unchanged for any industry ovaries from one industry to another. Researcher covers the period of the study was 2008 to 2012.

Amalendu Bhunia & Sri Bidhan Brahma (2011), analyse "Importance of Liquidity Management on Profitability" The main object of the study is to examine the overall efficiency of the management of working capital in terms of short term liquidity in selected private sector steel companies. Researcher cover the period of the study spanning from 1997-98 to 2005-06. It can concluded Rapid growth has been noticed in the private sector steel companies during the period of the study.

[2] RESEARCH METHODOLOGY

The study is based mainly on secondary data which is collected from the books, magazine, in-house materials and websites of concerned company on steel industry. Quantitative approach is used. In this study five steel companies selected from top ten companies of India. All selected companies from same strata that are large cap segment. The size of the sample is five companies selected from large cap segment listed on BSE/NSE. The main objective of the study is find out the liquidity performance of the selected steel companies of India during the period of study spanning from 2009-10 to 2013-14 on the basis of liquidity ratios, we can also study the significance difference in financial performance among the five selected steel companies in India on the basis of values of the ratios of a selected company for the period of the study then one way ANOVA (Analysis of variance) apply on this values of the ratios will help us in studying the difference in performance of a liquidity ratios among the five companies for the period of the study.

[3] ANALYSIS AND RESULT

[3.1] CURRENT RATIO

Analysis of variance (ANOVA) for Current Ratio among the companies under study. In this part Analysis of variance (ANOVA) for Current Ratio of five selected steel companies under the study have been carried out on the basis of data on Current Ratio have been exhibited in Table No. 1. The summary of Analysis of variance (ANOVA) based on the data given in Table 2 is as follows. For this ANOVA the H_0 and H_1 are as follows.

H_0 = There is no significant difference in Current Ratio of 5 Companies.

H_1 = There is significant difference in Current Ratio of 5 Companies.

TABLE NO :- 1

Groups	Count	Sum	Average	Variance
TATA STEEL	5	5.01	1.002	0.12617
JSW STEEL	5	3.82	0.764	0.01268
SAIL	5	5.83	1.166	0.08973
VISA STEEL	5	2.24	0.448	0.02452
ESSAR STEEL	5	4.23	0.846	0.05068

TABLE NO :- 2 ANOVA

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	1.459304	4	0.364826	6.004773191	0.00242	2.866081
Within Groups	1.21512	20	0.060756			

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Total	**2.674424**	**24**				

Above the table no: 1 represents the detailed statistical data related to the Analysis of variance (ANOVA). Table no: 2 shows sum of square, degree of freedom and mean sum of square for between selected companies and within selected companies. For testing the hypothesis by ANOVA procedure, F test is applied. In ANOVA table find out the value of F - test with corresponding P - Value is given. F value is 6.0047 and P value is 0.00242. Here the P value is less than 0.05 hence the given hypothesis is rejected. So there is significant difference in Current Ratio of 5 selected steel Companies.

[3.2] Quick Ratio

Analysis of variance (ANOVA) for Quick Ratio among the companies under study. In this part Analysis of variance (ANOVA) for Quick Ratio of 5 selected steel companies under the study have been carried out on the basis of data on Quick Ratio have been exhibited in Table No. 3. The summary of Analysis of variance (ANOVA) based on the data given in Table 4 is as follows. For this ANOVA the H_0 and H_1 are as follows.

H_0 = There is no significant difference in Quick Ratio of 5 Companies.

H_1 = There is significant difference in Quick Ratio of 5 Companies.

TABLE NO :- 3				
Groups	**Count**	**Sum**	**Average**	**Variance**
TATA STEEL	**5**	**3.69**	**0.74**	**0.13027**
JSW STEEL	**5**	**2.74**	**0.55**	**0.02662**
SAIL	**5**	**5.00**	**1.00**	**0.17065**
VISA STEEL	**5**	**1.45**	**0.29**	**0.00665**
ESSAR STEEL	**5**	**3.21**	**0.64**	**0.04827**

TABLE NO :- 4	**ANOVA**					
Source of Variation	**SS**	**df**	**MS**	**F**	**P-value**	**F crit**
Between Groups	**1.350536**	**4**	**0.337634**	**4.413977932**	**0.010162**	**2.866081**
Within Groups	**1.52984**	**20**	**0.076492**			
Total	**2.880376**	**24**				

Above the table no: 3 represent the detailed statistical data related to the Analysis of variance (ANOVA). Table no: 4 shows sum of square, degree of freedom and mean sum of square for between selected companies and within selected companies. For testing the hypothesis by ANOVA procedure, F test is applied. In ANOVA table find out the value of F - test with corresponding P - Value is given. F value is 4.4139 and P value is 0.010. Here the P value is less than 0.05 hence the given hypothesis is rejected. So there is significant difference in Gross Profit Margin Ratio of 6 Companies.

[4] CONCLUSIONS

- From the analysis conclude that there is significant difference in liquidity performance of five selected steel Companies.
- In the séance of Current Ratio all the selected steel companies performance was unsatisfactory because this company Current ratio was very low than the ideal level that was 2 : 1.
- Industry current ratio was only 0.85 : 1.
- In terms of Industry ratio two company was lower than industry ratio that was JSW Steel and VISA Steel was 0.76 and 0.45 respectively. It clearly indicate this company liquidity condition was unsatisfactory and remaining three company performance was good in sense of industry ratio but in terms of ideal level of current ratio this company performance was very poor.
- Selected all five company only SAIL current ratio was higher compare to other four company that was 1.17.
- Regarding Quick Ratio all selected steel company was very lower except SAIL that was 1 : 1. SAIL Quick Ratio was at an ideal level, it is clearly indicate that the SAIL liquidity performance was satisfactory level and other four company performance was very poor.
- Industry Quick ratio was 0.64 : 1
- In terms of Ideal level ratio and Industry ratio that the liquidity performance of all selected steel company was unsatisfactory except one company that was SAIL
- From overall analysis only one company SAIL liquidity performance was good.

APPENDIX

CURRENT RATIO						
COMPANY NAME	**2013-14**	**2012-13**	**2011-12**	**2010-11**	**2009-10**	**AVERAGE**
TATA STEEL	**0.57**	**0.86**	**0.93**	**1.53**	**1.12**	**1.00**
JSW STEEL	**0.82**	**0.88**	**0.76**	**0.78**	**0.58**	**0.76**
SAIL	**0.79**	**1.01**	**1.22**	**1.21**	**1.6**	**1.17**
VISA STEEL	**0.33**	**0.46**	**0.29**	**0.47**	**0.69**	**0.45**
ESSAR STEEL	**0.71**	**0.67**	**0.77**	**0.85**	**1.23**	**0.85**
INDUSTRY AVERAGE	**0.64**	**0.78**	**0.79**	**0.97**	**1.04**	**0.85**
QUICK RATIO						
COMPANY NAME	**2013-14**	**2012-13**	**2011-12**	**2010-11**	**2009-10**	**AVERAGE**
TATA STEEL	**0.32**	**0.61**	**0.69**	**1.31**	**0.76**	**0.74**
JSW STEEL	**0.71**	**0.69**	**0.54**	**0.49**	**0.31**	**0.55**
SAIL	**0.62**	**0.68**	**0.82**	**1.35**	**1.53**	**1.00**
VISA STEEL	**0.27**	**0.4**	**0.19**	**0.25**	**0.34**	**0.29**
ESSAR STEEL	**0.62**	**0.41**	**0.45**	**0.9**	**0.83**	**0.64**
INDUSTRY AVERAGE	**0.51**	**0.56**	**0.54**	**0.86**	**0.75**	**0.64**

REFERENCE

1. Amalendu Bhunia & Sri Bidhan Brahma (2011), "Importance of Liquidity Management on Profitability", Asian Journal of Business Management Volume : 3, Issue : 2, May 2011 | 2. Dr. Asha Sharma (2013) "A Comparative Analysis of Working Capital Management between Public & Private Sector Steel Companies In India", International Journal of Management and Social Sciences Research (IJMSSR), Volume : 2, Issue : 4 April 2013 | 3. Dr.S.S.Saravanan (2014), studied on "A Study on Liquidity Analysis of Selected Automobile Companies in India" Indian Journal of Applied Research, Volume : 4, Issue : 2, Feb 2014 | 4. J. Made Gowda (2007) Accounting for Managers, Himalaya Publishing House, New Delhi, 1st edition, 2007, pp- 622 & 623