Vol 5 Issue 8 Sept 2015

ISSN No : 2230-7850

International Multidisciplinary Research Journal

Indian Streams Research Journal

Welcome to ISRJ

RNI MAHMUL/2011/38595 **ISSN No.2230-7850**

Indian Streams Research Journal is a multidisciplinary research journal, published monthly in English, Hindi & Marathi Language. All research papers submitted to the journal will be double - blind peer reviewed referred by members of the editorial board.Readers will include investigator in universities, research institutes government and industry with research interest in the general subjects.

International Advisory Board

Editorial Board

Address:-Ashok Yakkaldevi 258/34, Raviwar Peth, Solapur - 413 005 Maharashtra, India
Cell : 9595 359 435, Ph No: 02172372010 Email: ayisrj@yahoo.in Website: www.isrj.org

Indian Streams Research Journal
ISSN 2230-7850

Impact Factor : 3.1560(UIF)
Volume - 5 | Issue - 8 | Sept - 2015

FINANCIAL MANAGEMENT OF INDIAN STEEL INDUSTRY: CASE STUDY ON LIQUIDITY POSITION

Rooh Ollah Arab[1] , Mohsen Azizi[2] and Seyed Saadat Masoumi[3]
[1]Research Scholar in Commerce, University of Kerala, Trivandrum.
[2]Research Scholar in Commerce, University of Pune, Maharashtra.
[3]Research Scholar in Commerce, Bharatividyapeeth University, Pune, Maharashtra.

ABSTRACT

The present study deals with the Analysis on liquidity of steel industry in India, whichare mainly engaged in production of steel Products, This study is aimed at exploring analysisof liquidity performance of steel industry in India.In order to analysis the liquidity of the steel industry in India the study hascollected data from published accounting annual reports, some publications. Most usefulinformation has been gathered from the various journals reports, periodicals and dailynewspapers.A group companies listed in the stock exchanges in India namely, Tata Steel Ltd., Jindal Steel & Power Ltd., J S W Steel Ltd., Bhushan Steel Ltd., and Steel Authority of India Ltd. are selected for this study. The study period covers ten years ranging from 2003-04 to 2012-2013. ANOVA-Test is used to evaluate the impact of selected variables on the profitability of the steel industry.

KEYWORDS :*Financial Management , Indian Steel Industry , Liquidity Position , steel Products.*

INTRODUCTION:-

Steel is crucial to the development of any modern economy and is considered to be the backbone of human civilization. The level of per capita consumption of steel is treated as an important index of the level of socioeconomic development and living standards of the people in any country. It is a product of a large and technologically complex industry having strong forward and backward linkages in terms of material flows and income generation. All major industrial economies are characterized by the existence of a strong steel industry and the growth of many of these economies has been largely shaped by the strength of their steel industries in their initial stages of development. Steel industry was in the vanguard in the liberalization of the industrial Sector and has made rapid strides since then. The new Greenfield plants represent the latest in technology. Output has increased, the industry has moved up in the value chain and exports have raised consequent to a greater integration with the global economy. The new plants have also brought about a greater regional dispersion easing the domestic supply position notably in the western region. At the same time, the domestic steel industry faces new challenges. Some of these relate to the trade barriers in developed markets and certain

structural problems of the domestic industry notably due to the high cost of commissioning of new projects. The domestic demand too has not improved to significant levels. The litmus test of the steel industry will be to surmount these difficulties and remain globally competitive.

India is the fourth largest steel producer in the world after China, Japan and USA. At the time of independence, India had a small Iron and Steel industry with production of about a million tonnes (mt). In due course, the government was mainly focusing on developing basic steel industry, where crude steel constituted a major part of the total steel production. Many public sector units were established and thus public sector had a dominant share in the steel production till early 1990s. Mostly private players were in downstream production, which was mainly producing finished steel using crude steel products. Capacity ceiling measures were introduced. Basically, the steel industry was developing under a controlled regime, which established more public sector steel companies in various segments.

OBJECTIVES OF STUDY

The broad objective of this research paper is to analysis the liquidity of identified units in the steel industry in India.

HYPOTHESIS OF STUDY

H0: There is no significant difference in the liquidity of identified units in the steel industry in India.

RESEARCH METHODOLOGY

Source of Data:

The study is mainly based on the data collected from secondary source which is gathered from the Annual Reports of different steel companies, published materials in the form of books and reports, articles from journals, and from the websites. The study of steel industry covers a period of 10 years, commencing from 2003-04 to 2012-13.

Sampling:

The sample units have been selected by considering following factors: (1)The companies, which are engaged in production of steel Industry and data is available at least from 2003-04, (2)The company should be listed in Stock exchanges of India as A group companies. There are five companies which satisfy these two condition and all these five companies are selected for the purpose of study. Thus the companies selected for the study are Steel Authority of India Ltd., Tata Steel Ltd., J S W Steel Ltd., Jindal Steel & power Ltd. and Bhushan Steel Ltd.

Data Analysis:

Anova-Test analysis is conducted on three financial ratios (variables) selected from short-term solvency such as current ratio, quick ratio and absolute cash ratio.

Analysis of Liquidity

Liquidity refers to the ability of firm to meet its obligations in the short-run, usually one year. Liquidity ratios are generally based on the relationship between current assets (the sources for meeting short-term obligations) and current liabilities. The solvency position is indicated by the liquidity ratios and it is very critical for any firm. The important liquidity ratios are: (i) Current Ratio, (ii) Acid-Test Ratio or Quick Ratio and (iii) Absolute Liquidity Ratio or Cash Ratio.

Current Ratio

This ratio establishes a relationship between current assets and current liabilities. The objective of computing this ratio is to measure the ability of the firm to meet its short term obligations and to reflect the short term financial strength/solvency of a firm. In other words, the objective is to measure the safety margin available for short term creditors.

Higher the ratio, greater the margin of safety for short-term creditors and vice-versa. However, too high/too low ratio calls for further investigation since the too high ratio may indicate the presence of idle funds with the firm or the absence of investment opportunities with the firm and too low ratio may indicate the over trading/under capitalization if the capital turnover ratio is high.

This ratio is computed by dividing the current assets by the current liabilities. In the form of a formula, this ratio may be expressed as follow:

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

The standard current ratio is 2:1. The current ratio of selected companies of steel Industry from 2003-04 to 2012-13 has been presented in Table 1.1.

Table No. 1.1
Current Ratio in Steel Companies in India

Company	Year										Mean	SD	Max	Min
	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13				
Tata Steel Ltd.	1.02	1.10	1.11	2.51	5.46	1.15	1.36	2.20	0.69	0.67	1.73	1.44	5.46	0.67
Jindal Steel & Power Ltd.	1.59	1.87	1.66	1.53	2.04	1.49	1.39	1.72	0.70	0.84	1.48	0.42	2.04	0.70
J S W Steel Ltd.	1.12	1.18	1.18	1.09	0.75	0.61	0.73	1.01	0.81	0.91	0.94	0.21	1.18	0.61
Bhushan Steel Ltd.	2.53	2.69	2.22	2.15	1.91	1.96	2.35	2.43	0.73	1.06	2.00	0.64	2.69	0.73
Steel Authority of India Ltd.	0.92	1.41	1.40	1.86	1.99	2.02	2.28	2.19	1.52	1.23	1.68	0.45	2.28	0.92
Mean	1.44	1.65	1.52	1.83	2.43	1.45	1.62	1.91	0.89	0.94	1.57			

Sources: Annual Reports and Accounts of Steel Companies

The above table No 1.1 showed current ratio of Bhushan Steel Ltd.The ratioshowed decreasing and fluctuating growth during the study period.The ratio ranged between 2.69 in the year 2004-05 and 0.73 in the year 2011-12. The average ratio was 2.00which was above the average ratio of the steel industry and it was satisfactory. The ratio of J S W Steel Ltd.show the lower current ratio among the selected companies with average of 0.94 timeswhich was below the average ratio of the steel industry. In most of the years the company was not able to meet the current liabilities; the liquidity position of the company was not good. The ratio ranged between 1.18 in the year 2004-05 to 0.61 in the year 2008-09.

In Tata Steel Ltd.the current ratio ranged between 5.46 in 2007- 08 and 0.67 in 2012-13. The average ratio of the company was 1.73 which was above the average ratio of the steel industry. The standard deviation of the company is found to be highest (1.44) among the sample companies which indicates that fluctuation of current ratio is highest in this company compare to others. The liquidity position of the company was good but the standard was not maintained. The average ratio of Jindal

Steel & Power Ltd.was 1.48 which was below the average ratio of the steel industry. The ratio ranged between 2.04 times in 2007- 08 and 0.70 times in 2011-12. The ratio of Steel Authority of India Ltd. shows a minimal of 0.92 in 2003-04 and a maximum of 2.28 in 2009-10. The ratio showed highly fluctuated trend during the study period. The average ratio was 1.68 which was above the average ratio of the steel industry and the ratio was not maintaining the standard ratio of 2:1, but the company was able to pay the current liabilities.

The industry average of current ratio is 1.57 which is not up to the standard because the selected companies have not maintained the standard of 2:1. On comparing the average current ratio of the companies with the average ratio of steel industry, it can be seen that the performance of Tata Steel Ltd., Bhushan Steel Ltd. and Steel Authority of India Ltd. was better than the other two companies.

In order to check the differences in the current ratio of selected the companies the ANOVA-test is used, the result of which is shown below:

Table No.1.2
ANOVA Test of Current Ratio

Current Ratio					
Source of Variation	Sum of squares	Df	Mean Square	F	Sig.
Between Groups	6.309	4	1.577	2.715	0.042
Within Groups	26.147	45	0.581		
Total	32.456	49			

Source: Computed from the Annual Reports of the steel companies

As the significance level of one-way ANOVA test is less than 0.05, there exists significant difference in the financial performance of companies with regard to current ratio.

Quick Ratio

Thequick ratio establishes a relationship between quick assets and current liabilities. The objective of computing this ratio is to measure the ability of the firm to meet its short term obligations as and when due without relying upon the realization of stock.

The higher the quick ratio, the better the position of the company. The commonly acceptable current ratio is 1, but may vary from industry to industry. A company with a quick ratio of less than 1 cannot currently pay back its current liabilities; it's the bad sign for investors and partners.This ratio is computed by dividing the quick assets by the current liabilities. In the form of a formula, this ratio may be expressed as under:

$$\text{Acid} - \text{Test Ratio} = \frac{\text{Quick Assets}}{\text{Current Liabilities}}$$

The quick ratio of selected companies of steel Industry during 2003-4 to 2012-13 has been presented in the table No.1.3.

Table No -1.3
Quick Ratio in Steel Companies in India

Company	Year										Mean	SD	Max	Min
	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13				
Tata Steel Ltd.	0.71	0.60	0.54	2.08	5.08	0.76	1.02	1.84	0.47	0.38	1.35	1.43	5.08	0.38
Jindal Steel & Power Ltd.	1.11	1.40	1.03	1.14	1.43	1.14	1.07	1.25	0.47	0.58	1.06	0.31	1.43	0.47
J S W Steel Ltd.	0.80	0.72	0.78	0.64	0.37	0.34	0.39	0.61	0.53	0.38	0.56	0.18	0.80	0.34
Bhushan Steel Ltd.	1.35	1.23	1.34	1.23	1.02	1.08	1.13	0.89	0.29	0.45	1.00	0.36	1.35	0.29
Steel Authority of India Ltd.	0.57	0.99	0.90	1.25	1.47	1.42	1.75	1.54	3.35	3.03	1.63	0.89	3.35	0.57
Mean	0.91	0.99	0.92	1.27	1.88	0.95	1.07	1.23	1.02	0.96	1.12			

Sources: Annual Reports and Accounts of Steel Companies

The quick ratio of Steel Authority of India Ltd. varied from 0.57 in the year 2003-04 to 3.35 in the year 2011-12. The average ratio of the company had been 1.63 which isabove the average ratio of the steel industry and the ratio isabove the standard which showed the good liquidity position. In J S W Steel Ltd. the quick ratio of the company marked a fluctuating trend and varied from 0.34 in the year 2008-09 to 0.80 in the year 2003-04. On an average the quick ratio of the company was 0.56 times. The average ratio of the company was below the average of the steel industry. The picture of quick ratio was not good in the company, so the company is advised to maintain the standard norm of 1:1.

The quick ratio of Tata Steel Ltd. varied from 0.38 in the year 2012-13 to 5.08 in the year 2007-08. The average ratio of the company had been 1.35 which is above the average ratio of the steel industry and standardnorm that showed the good liquidity position. The above table showed fluctuating trend of the quick ratio in Bhushan Steel Ltd. The quick ratio of the company fluctuated from 0.29 in the year 2011-12 to 1.35 in the year 2003-04. The average ratio of the company was 1.00 which was below the average ratio of the steel industry.The quick ratio of the company maintained the standard norm and it can be said that the liquidity position of the company was good. In Jindal Steel & Power Ltd. quick ratio had been on an average of 1.06 during the span of the research period. It varied from 0.47 in the year 2011-12 to 1.43 in the year 2007-08. The company maintained the standard ratio of 1:1 and liquid position was good.

On the basis of the above analysis and the industry average of quick ratio of 1.12, it can be seen that the quick ratio of all companies are high and the liquidity position of the companies were good except J S W Steel Ltd. which did not hold a reasonable and satisfactory position of liquidity.

The result of ANOVA-test of the quick ratios of identified units in steel industry in India is shown below:

Table No.1.4
ANOVA Test of Quick Ratio

Quick Ratio					
	SS	df	MS	F	Sig.
Between Groups	6.473	4	1.618	2.597	0.049
Within Groups	28.034	45	0.623		
Total	34.507	49			

Source: Computed from the Annual Reports of the steel companies

As the significance level of one-way ANOVA test is less than 0.05, there exists significant difference in the financial performance of companies with regard to quick ratio.

Absolute Liquidity Ratio

Absolute liquidity ratio establishes a relationship between cash & marketable securities and current liabilities. The objective of computing this ratio is to measure the ability of the enterprise to meet its short term obligations as and when due without relying upon the realization of stock and debtors.

It indicates cash and marketable securities available for each rupee of current liability a very high absolute ratio indicates high liquidity at the cost of profitability since idle cash does not generate any return and marketable securities generate return at a rate lower than the rate of operating margin. This ratio is computed by dividing the cash & marketable securities by the current liabilities. In the form of a formula, this ratio may be expressed as under:

$$\textbf{Absolute Liquidity Ratio} = \frac{\textbf{Cash} \ \& \ \textit{Marketable Securities}}{\textbf{Current Liabilities}}$$

Absolute Liquidity Ratio of selected steel companies from 2003-04 to 2012-13 are shown in the table No 1.5.

Table No -1.5
Absolute Liquidity Ratio in Steel Companies in India

Company	Year										Mean	SD	Max	Min
	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13				
Tata Steel Ltd.	0.06	0.07	0.08	1.41	0.07	0.18	0.36	0.38	0.30	0.16	0.31	0.41	1.41	0.06
Jindal Steel & Power Ltd.	0.05	0.06	0.03	0.08	0.36	0.09	0.01	0.01	0.00	0.00	0.07	0.11	0.36	0.00
J S W Steel Ltd.	0.09	0.08	0.04	0.15	0.08	0.06	0.04	0.19	0.18	0.01	0.09	0.06	0.19	0.01
Bhushan Steel Ltd.	0.03	0.04	0.15	0.12	0.02	0.09	0.07	0.02	0.05	0.02	0.06	0.05	0.15	0.02
Steel Authority of India Ltd.	0.23	0.60	0.50	0.88	1.04	1.06	1.31	1.01	0.34	0.17	0.71	0.40	1.31	0.17
Mean	0.09	0.17	0.16	0.53	0.31	0.30	0.36	0.32	0.18	0.07	0.25			

Sources: Annual Reports and Accounts of Steel Companies

The absolute liquidity ratio of Steel Authority of India Ltd. ranged between 0.17 in the year 2012-13 to 1.31 in the year 2009-10. The average ratio of the company had been 0.71 times which isabove the average ratio of the steel industry. In Tata Steel Ltd. cash ratio had been on an average of 0.31 times during the research period. Cash ratio of company varied from 0.06 times in 2003-04 to 1.41 times in 2006-07. The average ratio of the company was above the average of the steel industry. Both of the companies canbe considered as acceptable.

The above table shows the absolute liquidity ratio of the companies.The ratio of Jindal Steel & Power Ltd., J S W Steel Ltd. and Bhushan Steel Ltd. shows a fluctuating trend throughout the study period with an average ratio of 0.07,0.09 and 0.06 timewhichthe average ratio of the companies were below the average of the steel industry. Hence the liquidity position of the companies was not good.

To find out the difference in the absolute liquidity ratio of steel companies ANOVA-test is used, the result of which is shown below:

Table No.1.6
ANOVA Test of Absolute Liquidity Ratio

Cash Ratio					
	SS	df	MS	F	Sig.
Between Groups	3.113	4	0.778	11.417	0.000
Within Groups	3.067	45	0.068		
Total	6.179	49			

Source: Computed from the Annual Reports of the steel companies

As the significance level of one-way ANOVA test is less than 0.05, there exists significant difference in the financial performance of companies with regard to absolute liquidity ratio.

Testing of Hypothesis:

H0. There is no significant difference in the financial performance of identified units in the steel industry in India with regard toliquidity position.

Table No 1.7. ANOVA Test of Liquidity Ratios

variables	Source of variation	Sum of Squares	df	Mean Square	F	Sig.
Current Ratio	Between Groups	6.309	4	1.577	2.715	0.042
	Within Groups	26.147	45	0.581		
	Total	32.456	49			
Quick Ratio	Between Groups	6.473	4	1.618	2.597	0.049
	Within Groups	28.034	45	0.623		
	Total	34.507	49			
Absolute liquidity Ratio	Between Groups	3.113	4	0.778	11.417	0.000
	Within Groups	3.067	45	0.068		
	Total	6.179	49			

Source: Computed from the Annual Reports of the steel companies

As the significance level of one-way ANOVA test is less than 0.05, there exists significant difference in the financial performance of companies with regard to Current Ratio, Quick Ratio and Absolute liquidity Ratio.

So the Null Hypothesis that there is no significant difference in the financial performance of identified units in the steel industry in India with regard to Liquidity Position is rejected and accepting the Alternative Hypothesis that there exists significant difference in the financial performance of identified units in the steel industry in India with regard to Liquidity Position.

CONCLUSION

The present chapter deals with the analysis of financial performance of selected units in the steel industry in India. The analysis of financial performance was carried out by analyzing their liquidity, solvency, efficiency/activity and profitability. In order to study the variation of financial performance of the sample units, one way ANOVA test was used to compare the financial ratios related to their liquidity,

solvency, efficiency/activity and profitability.

Current Ratio, Quick Ratio, Absolute Liquidity Ratio were used for analyzing liquidity. All ratios related to liquidity were found to be significantly different among the sample units.Hence the result rejected the first hypothesis that 'there is no significant difference in the financial performance of identified units in the steel industry in India with regard to liquidity'.

REFERENCE:

1.Annual report of Tata Steel Ltd. from 2003-04 to 2012-13
2.Annual report of J S W Steel Ltd. from 2003-04 to 2012-13
3.Annual report of Jindal Steel & Alloy Ltd. from 2003-04 to 2012-13
4.Annual report of Bhushan Steel Ltd. from 2003-04 to 2012-13
5.Annual report of Steel Authority of India Ltd. from 2003-04 to 2012-13
6.Chandra, P. (2011). "Financial Management", Theory and Practice. New Delhi:Tata McGraw Hill Education Private Ltd., 8th ed. p. 72.
7.Pandey, I.M. (1985).Management Accounting. New Delhi:Vikas Publishing House. P.89
8.Subramanian, T. (2009).Financial Performance of the Paper Mills in Tamil Nadu. Ph.D. Thesis, University of Periyar, India
9.Tulsian, P.C. (2009). Financial management. New Delhi: S. Chand & Company Ltd. P 14.

Rooh Ollah Arab
Research Scholar in Commerce, University of Kerala, Trivandrum.

Publish Research Article
International Level Multidisciplinary Research Journal
For All Subjects

Dear Sir/Mam,

We invite unpublished Research Paper,Summary of Research Project,Theses,Books and Book Review for publication,you will be pleased to know that our journals are

Associated and Indexed,India

- International Scientific Journal Consortium
- OPEN J-GATE

Associated and Indexed,USA

- Google Scholar
- EBSCO
- DOAJ
- Index Copernicus
- Publication Index
- Academic Journal Database
- Contemporary Research Index
- Academic Paper Databse
- Digital Journals Database
- Current Index to Scholarly Journals
- Elite Scientific Journal Archive
- Directory Of Academic Resources
- Scholar Journal Index
- Recent Science Index
- Scientific Resources Database
- Directory Of Research Journal Indexing

Indian Streams Research Journal
258/34 Raviwar Peth Solapur-413005,Maharashtra
Contact-9595359435
E-Mail-ayisrj@yahoo.in/ayisrj2011@gmail.com
Website : www.isrj.org