An Analytical Study On Financial Performance Of Selected Iron & Steel Companies Of India

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Abstract :

The growth and development of any company depends on its raw material and most of the raw materials and machineries are depends on iron and steel industry of a country. India is the second largest crude steel producer in the world with a total production of 103 MT in the financial year 2020-21. Due to importance of iron and steel industry in India, the researcher has planned to analyze the financial performance of selected companies of iron and steel industry in India. The researcher has selected top five iron and steel company based on net profit. The secondary data was collected by the researcher and the ratio analysis method was used. Moreover, as a statistical tool the one way ANOVA test has been applied to analyze the data. The study concludes that there is significance difference in selected iron and steel companies during the study period with regard to profitability, liquidity, activity and solvency ratios except EPS, Stock turnover ratio and Asset turnover ratio.

Key Words : Iron and steel companies, Profitability ratios, activity ratios, liquidity ratios and solvency ratios

Introduction :

The Iron and Steel industry in India is the most important industry of the country. The use of metals and steel is one of the primary forces behind the industrialization. The most of the raw materials and intermediary products are depends on iron and steel industry. therefore, it is the foundation of Indian economy. India produces 5 percent of world's total crude steel and 4 percent of finished steel. As of January 2019, India became the world's second largest producer of steel. The Iron and Steel Industry of India is divided into three categories : Primary Products, Secondary Products, and other major products.

Review of Literature :

(Rooh Ollah Arab, 2015) has presented a research paper of financial performance of selected steel industry in India. The researcher has selected companies like Tata Steel Ltd., Jindal Steel & Power Ltd., J S W Steel Ltd., Bhushan Steel Ltd. and Steel Authority of India Ltd. The researcher has used ANOVA test to analyze the data of selected companies.

(Dr.C.Balakrishnan, 2016) The research paper examines the financial performance of steel industry. The researcher has analyzed the performance of steel industry on the parameters such as profitability, growth of performance, financial strength, utilization of assets and capital structure. The researcher has analyzed the liquidity ratios of selected companies and used one way ANOVA and multiple regression test to know the impact of financial ratios on performance of steel industry.

(Reddy, 2019) The Researcher has written an article on performance analysis of Iron and Steel Companies using PBT Margin ratio. The study is based on Secondary data. The time period of 10 years from 2007-08 to 2016-17 was taken for the study. The study was descriptive and analytical in nature. The one - way ANOVA was used by the researcher to analyse the data. The researcher concludes that the sponge iron sector was leading in steel companies.

Research Methodology :

Objectives of the Study :

- To measure the financial performance of selected iron and steel companies of India during the study period.
- To make analysis of profitability, liquidity, solvency and activity ratios of selected companies during the study period.

Hypothesis of the Study :

The following hypothesis are framed and tested under the Study :

H_01 : There is no significant difference in the financial performance of selected Iron and steel companies of India with regard to profitability ratios during the Study period.

H_02 : There is no significant difference in the financial performance of selected Iron and steel companies of India with regard to liquidity ratios during the Study period.

H_03 : There is no significant difference in the financial performance of selected Iron and steel companies of India with regard to activity ratios during the Study period.

H_04 : There is no significant difference in the financial performance of selected Iron and steel companies of India with regard to solvency ratios during the Study period.

Data Collection :

The study is totally based on secondary data and the data is collected from the annual reports of various iron and steel companies, published materials in books and reports and different websites.

Period of the Study :

The researcher has carried out the research work on data from financial year 2018-19 to 2022-23.

Sample of the Study :

There are many companies are listed under the Bombay Stock Exchange of India (BSE). From these companies, the researcher has selected top five companies based on Net Profit of the year 2023 for the study. The selected sample companies for the study are as under :

1. Tata Steel LTD.

2. NMDC LTD.

3. JSW Steel LTD.

4. Hindalco Industries LTD.

5. Jindal Steel & Power LTD.

Statistical Tool :

The Researcher has used ratio analysis method and one way ANOVA (Analysis of Variance) as a statistical tool to analyze the financial performance of selected companies of India.

Analysis of Profitability:

Profit is the heart of any business or company. Every stakeholders, investors, creditors, customers, even employees and governments too are interested in the profit of the business. Because the growth of the business directly depends on the profitability of it. So, the researcher has analyzed following profitability ratios :

Gross Profit Ratio : The Gross Profit Ratio indicates how much profit the company generates from sale of goods and services after deducting direct costs.

Net Profit Ratio : The Net Profit ratios measures the profit after deduction of all costs from the sales.

Earning Per Share : Earnings per Share is also known as EPS. It can be calculated by dividing the profit or loss available to equity shareholders to equity shareholders.

ANOVA of Profitability :

ANOVA of profitability	Source of Variation	SS	df	MS	F	F Critical	Result of ANOVA
Gross Profit Ratio	Between Groups	4971.411	4	1242.853			H_0 is rejected
	Within Group	903.58	20	45.179			
	Total	5874.991	24		27.50952	2.866081	
Net Profit Ratio	Between Groups	3534.614	4	883.6534			H_0 is rejected
	Within Group	582.5916	20	29.12958			
	Total	4117.205	24		30.33526	2.866081	
EPS	Between Groups	22078.34	4	5519.584			H_0 is accepted
	Within Group	80635.07	20	4031.754			
	Total	102713.4	24		1.369028	2.866081	

Source : Computed

Analysis of Liquidity :

The Liquidity means the company's ability to pay its short term debt obligations. The researcher has used the following liquidity ratios to analyze the company's liquidity position.

Current ratio : It is the ratio which indicates company's ability to pay its short term debts within a year.

Quick ratio : It is also known as liquidity or acid test ratio. It measures company's ability to pay its debts without selling its inventories.

ANOVA of Liquidity :

ANOVA of Liquidity	Source of Variation	SS	df	MS	F	F Critical	Result of ANOVA
Current Ratio	Between Groups	11.14004	4	2.78501			H_0 is rejected
	Within Group	2.36796	20	0.118398			
	Total	13.508	24		23.52244	2.866081	
Quick Ratio	Between Groups	12.4993	4	3.124826			H_0 is rejected
	Within Group	1.4634	20	0.07317			
	Total	13.9627	24		42.70638	2.866081	

Source : Computed

Analysis of Activity Ratio :

Activity ratios measures the efficiency of firm in the utilisation of its assets for generating cash and revenue. The researcher has analyzed the following activity ratios of the selected companies.

Stock Turnover Ratio : It shows the relationship of stocks or inventory and the cost of goods sold in the business.

Asset Turnover Ratio : It is the ratio of Company's sales or revenue and the value of its assets.

ANOVA of Activity Ratio :

ANOVA of profitability	Source of Variation	SS	df	MS	F	F Critical	Result of ANOVA
Stock Turnover Ratio	Between Groups	171.7946	4	42.94865			H_0 is accepted
	Within Group	391.5405	20	19.57702			
	Total	563.3351	24		2.193829	2.866081	
Asset Turnover Ratio	Between Groups	534.6969	4	133.6742			H_0 is accepted
	Within Group	20880.31	20	1044.016			
	Total	21415.01	24		0.128039	2.866081	

Source : Computed

Analysis of Solvency Ratio :

The Solvency ratio is used to measure a company's capability to reach its long term debts. The following are solvency ratios selected by researcher :

Debt Equity Ratio : It is also known as D/E Ratio. It indicates how much debt a company has comparing to its total assets.

Interest Coverage Ratio : It can be calculated by dividing company's EBIT (Earnings before Interest and taxes) by its interest expense during a given period.

ANOVA of Solvency Ratio :

ANOVA of profitability	Source of Variation	SS	df	MS	F	F Critical	Result of ANOVA
Debt Equity Ratio	Between Groups	4.033304	4	1.008326			H_0 is rejected
	Within Group	1.415	20	0.07075			
	Total	5.448304	24		14.25196	2.866081	
Interest Coverage Ratio	Between Groups	488587.2	4	122146.8			H_0 is rejected
	Within Group	207199.3	20	10359.96	11.79027	2.866081	

	Total	695786.5	24				

Source : Computed

Findings :

From the data analysis, it is clear that the null hypotheses of EPS, Stock Turnover Ratio and Asset Turnover Ratio is accepted. It means that there is no significant difference in EPS, Stock Turnover Ratio and Asset Turnover Ratio during the study period of selected companies of India. While all the other null hypotheses of profitability, liquidity and solvency ratios are rejected which indicates that there is significant difference in such ratio of selected companies of India during the study period.

Conclusion :

In recent time, the iron and steel industry has become one of the fastest growing industry of India. The present study deals with the analysis of financial performance of selected iron and steel companies of India during a particular period. After the analysis of data, it can be concluded that there is significant difference in the profitability, liquidity and solvency ratios of selected companies of India. Only the analysis of EPS, Stock Turnover Ratio and Asset turnover ratio indicates that there is no significant difference in selected iron and steel companies of India.

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