"A STUDY ON FINANCIAL PERFORMANCE OF STEEL INDUSTRY IN INDIA"

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ABSTRACT

Growth of any industries can be designated by the financial performance of indicators. It is true in the case of steel industry as well. The financial performance of any organization is influenced by several factors like capital structure, cost, revenue and the consequential profit margin. Financial performance of steel industry can be studied with many aspects like financial facts, financial ratios, financial health, financial strength and utilization of assets, etc. The financial performance can be influenced by the operational and financial efficiency of the steel industry, which are related to cost and the revenue aspects. The best indicators of the financial performance are return on assets, sales, equity and other financial variables. Thus, the problem related to the financial performance of the steel industry is interlinked to many aspects like cost, revenue, capital, assets and other related variables. If the analysis made on all the aspects related to the steel industry gives a clear cut picture about the financial performance, it can be used for policy decisions for its future development. In this connection, the researcher has analyzed the performance of steel industry in India on the parameters such as profitability, utilization of assets, growth of performance, financial strength and capital structure. The researcher has also attempted to identify the nature of relationship between the various aspects of financial performance.

Keyword : - *Small Tea Growers Satisfaction,Tea Growers Problems,Tea board promotion activities.*

1. INTRODUCTION

Steel is considered to be the backbone for the development of modern economy and human civilization. The level of consumption of steel is considered as a vital index to measure the socio-economic development and standard of life of people of the country. This product is the outcome of the large and technological complex industry poisoning in terms of material flows and incomes that are strong. The economic status of industries is strong ended by the existence of strong steel industry and the development of these industries at the initial stage is shaped by the steel industries. Industrial sector has made rapid steps with the help of steel industry using it as a vanguard. The latest technology used by the green field plant has increased the output and the industry has improved the global economy. The new plants have also brought a great regional dispersion in the western region and earned the domestic supply position. The domestic steel industry has faced new challenges and due to the high cost of commissioning of new projects, the developed markets face many problems. The domestic demand too has not improved to significant level. The litmus test of the steel industry will be to surmount these difficulties and remain globally competitive.

1.2 HISTORY OF STEEL

Even the period of Christ is termed as iron age as iron was broadly used in the nooks and corner of the world and in 202 BC steel was discovered by the Chinese under the reign of Han dynasty. People were able to find out a stronger and harder material than iron called steel with the changes of time and technology. The works that

iron could not, were achieved with steel which is in the combination of iron and corson. Steel was invented by the Chinese. Steel has many advantages providing ways to make weapons and sword, made of steel used by the emporen Han. The iron made of steel was spread to India and the high quality steel was produced in south India as early as 300 BC. About 9th century AD the smiths in the middle east developed techniques to produce strong and flexible steel. Steel and a big part of it was exported from Asics only. The new process of cementation of steel was popularized in Europe in 17th century and other new improved technologies were grandly developed and some become a vital factor in which the economy of the world started depending and growing.

1.3 OBJECTIVES OF THE STUDY

The article entitled "A Study on financial performance of Steel Industry in India" has the following objectives;

1. To study the growth of the steel industries in the world and in India.
2. To examine the short-term and long-term financial solvency, profitability and growth performance of the steel industries in India.

1.4 HYPOTHESES

In order to fulfill the above objectives the following hypothesis were formulated to analyse the financial performance of steel industry in India.

There is no significant variation in liquidity ratios of steel industry;

1.5 METHODOLOGY OF THE STUDY

The study is about financial performance so it deals with the secondary data. The required data were collected from the published and unpublished financial records of companies in steel industry in India and Capitaline database. The further information needed for the study was also gathered through the various magazines, books, journals and unpublished thesis.

India is one of the important steel producing countries in the world with more than 120 million tonnes production and annual growth rate of more than 8 percent. In India based on revenue earned by the companies, top 500 companies have been ranked by the Economics Times Magazine, from those 500 companies researcher has chosen the steel companies alone for the study. In the year, 2012 among top 500 companies, 26 steel companies are placed, and that companies have been taken as universe. Out of 26 steel companies due to the time constraints to the researcher only 10 companies have been chosen randomly for the study. Accordingly the following companies were chosen for the study;

- Steel Authority of India Limited (SAIL)
- Tata Steel Limited (TSL)
- Uttam Galva Steels Limited (UGSL)
- JSW Steel Limited (JSW)
- Jindal Stainless Limited (JSL)
- Essar Steel Company
- Bhushan Steel Ltd (BSL)
- Rhastrya Steel Company
- Sunflag Iron & Steel Company Limited
- Surya Roshni Limited

1.5.1 Frame Work of Analysis

The secondary data have been organized and presented in the form of tables which consist of various financial data and ratios. That is interpreted with help of multiple regressions

1.5.2 Multiple Regression Model

To study the impact of financial ratios on the financial performance of the steel industries in India, the log linear multiple regression model has been used. the fitted model is shown here;

$$\text{Log } Y = \beta_o + \beta_1 \log X_1 + \beta_2 \text{Log } X_2 + \beta_3 \log X_3 + \beta_4 \text{Log } X_4 + \beta_5 \log X_5 + \beta_6 \text{Log } X_6 + \beta_7 \text{Log } X_7 + \beta_8 \text{Log } X_8 + U \quad \ldots.(1)$$

Where;

Y – Net Profit/Return on Equity
X_1= Current Ratio
X_2= Quick Ratio
X_3= Current Assets to Total Assets Ratio
X_4 = Inventory Turnover Ratio
X_5= Debtors Turnover Ratio
X_6= Working Capital Ratio
X_7= Total Assets Turnover Ratio
X_8= Fixed Assets Turnover Ratio
b1, b2, ….b8 – Regression coefficients of predictor variables.
U= disturbance term and
A – Intercept

1.6 SCOPE OF THE STUDY

The present study was confined and Highlights the financial performance of the steel industry in India through facts of published financial data. The financial performance of the steel industry was evaluated on the parameters like profitability, utilization of assets, growth of performance, financial strength and financial health.

1.7 LIMITATIONS OF THE STUDY

The reliability of the study depends on the accuracy of data collected. The present study is based on the published secondary data, hence the limitations of the published financial statement limitations may be applicable to this study as well.

Proper management of working capital is most important for the success of any concern. Because the success of a concern at great magnitude is determined by how it manages the working capital or liquidity. Therefore now-a-day's most of the financial managers spend their time for managing current assets and liabilities. There are many aspects of liquidity which is an important function of the financial manager, on the one hand it maintains proper while on the other it helps in increasing the profitability of the concern.

The firm which has inadequate and improper managed working capital cannot achieve good operating result. Hence, Working capital should be sufficient to enable a firm to operate their business smoothly without any financial rigidity during normal business time as well as, unpredicted losses and financial catastrophe. Conversely excessive working capital may be unfavorable as in the earlier case because redundant funds earn nothing. For this reason, proper management of the working capital is most essential in order to ensure that the amount invested in working capital is neither too large nor too small. The current ratio of the selected steel companies in India has been presented in the Table No.1.1.

2.DATA ANALYSIS & INTERPRETATION

TABLE NO.1.1
CURRENT RATIO OF SELECTED STEEL COMPANIES IN INDIA
(in Times)

Year	Sail	Tata	Uttam Galva	JSW	Jindal	Essar	Bhusan	Rhastrya	Sunflag	Surya Roshni
2003-04	0.92	0.66	1.22	1.12	1.33	1.61	2.53	1.52	2.89	6.83
2004-05	1.41	0.78	1.26	1.18	1.51	2.39	2.69	2.13	2.85	7.41
2005-06	1.46	0.82	1.56	1.20	1.51	1.55	2.21	5.45	2.36	8.09
2006-07	1.85	2.09	1.26	1.08	1.26	1.26	2.15	5.17	2.05	8.58
2007-08	1.98	4.72	1.05	0.75	1.62	1.16	1.91	4.81	2.73	9.05

2008-09	2.01	1.08	1.02	0.61	1.08	1.70	1.53	3.55	2.89	7.51
2009-10	2.27	1.36	1.43	0.73	1.67	1.67	2.35	2.77	2.98	6.19
2010-11	2.62	1.63	1.08	0.90	1.69	2.19	2.98	2.18	4.42	6.55
2011-12	2.01	0.97	1.05	1.07	1.59	1.29	3.37	1.86	2.88	7.00
2012-13	1.91	0.88	1.09	1.08	1.55	0.83	4.42	1.83	2.29	5.52
Mean	1.84	1.50	1.20	0.97	1.48	1.56	2.61	3.13	2.83	7.27
SD	0.48	1.21	0.18	0.21	0.20	0.47	0.82	1.51	0.64	1.09

Source: Capitaline Data base

The current ratio of Surya Roshni steel company was better than all other companies throughout the period of study. The Current ratio of Surya Roshni steel Company has increased from 6.83 times in the year 2003-04 to 9.05 times in the year 2007-08 and then fell down to 5.52 times in the year 2012-13. It was 9.05 times in the year 2007-08 which was considered very high as compared to all the other years under the study. The average current ratio of Rhastrya steel company was 3.13 times which was considered second higher ratio among the selected Steel companies after Surya Roshni steel company. Rhastrya company maintained current ratio less than the standard rate (2:1) during the years 2003-04, 2011-12 and 2012-13. Sunflag steel company is maintaining the current ratio normally above standard current ratio in all the years under study. In the year 2007-08 and 2008-09 Bhusan steel company also maintains current ratio less than the standard ratio but its average current ratio is above the satisfactory level.

Among the selected ten companies except Surya Roshni, Rhastrya, Sunflag and Bhusan steel companies, all the other companies' current ratio is less than the standard rate of current ratio. But at the same time Surya Roshni steel company blocked their most of the financial resources as current assets, it is also the alarm for that company. It indicated that the overall situation regarding the current ratio was better in Rhastrya, Sunflag and Bhusan steel companies because the average current ratio of these companies were above the standard rate. This showed that the Rhastrya, Sunflag and Bhusan steel companies were good at current assets management and other companies need improvement in current assets management as these companies have not adopted effective current assets management programme during the period of the study. An attempt has been made to know whether any difference between the companies current ratio. For that ANOVA test has been used and results have been given in the Table No.1.2

Current ratio (ANOVA Test)

Null Hypothesis: There is no significant difference between current ratios of the selected steel companies

Alternative Hypothesis: There is a significant difference between current ratios of the selected steel companies

TABLE NO.1.2

SHOWING THE ANOVA (SINGLE FACTOR) OF CURRENT RATIO OF THE SELECTED STEEL COMPANIES

Company	Mean Ratio	SD	F Value	P value
SAIL	1.84	0.48	51.692	0.001
TATA	1.50	1.21		
Uttam Galva	1.20	0.18		
JSW	0.97	0.21		
Jindal	1.48	0.20		
Essar	1.56	0.47		
Bhusan	2.61	0.82		
Rhastrya	3.13	1.51		
Sunflag	2.83	0.64		
Surya Roshni	7.27	1.09		

Source: Computed Value

Since calculated P value is less than 0.01, so the null hypothesis is rejected and it is significant at 1 percent level. Hence, it is concluded that there is a significant difference between the mean current ratios of the selected steel companies.

Quick Ratio

Relationship between the quick assets and current liabilities is called quick ratio. This ratio is also termed as acid test ratio or liquid ratio. This ratio widely used as tool for finding true short-term solvency position of the company.

In other term it reflects the quality of current assets. This ratio excludes inventory from the current assets since its nature is slow moving. It may be expressed as:

$$\text{Liquid Ratio} = \frac{\text{Liquid Assets}}{\text{Current Liabilitie s}}$$

In general, a quick ratio of 1:1 is considered as satisfactory as firm can easily meet all the current liabilities[1]. The quick ratio is more accurate and insightful test of the liquidity position of a firm. The quick ratios of the selected steel Companies for the period under study were presented, company wise, in the Table No.1.3.

TABLE NO.1.3
QUICK RATIO
(in Times)

Year	Sail	Tata	Uttam Galva	JSW	Jindal	Essar	Bhusan	Rhastrya	Sunflag	Surya Roshni
2003-04	0.58	0.36	0.35	0.80	0.67	1.09	1.35	0.82	1.41	3.10
2004-05	0.99	0.42	0.63	0.72	0.93	1.46	1.23	1.53	1.39	3.05
2005-06	0.87	0.40	1.05	0.77	0.91	0.96	1.34	4.21	1.27	3.77
2006-07	1.24	1.73	0.79	0.64	0.72	0.60	1.23	4.34	1.11	4.24
2007-08	1.46	4.39	0.48	0.37	0.84	0.54	1.02	4.22	1.38	4.23
2008-09	1.42	0.73	0.70	0.34	0.58	0.90	0.85	2.97	1.78	3.59
2009-10	1.74	1.02	0.87	0.39	1.02	1.12	1.13	1.99	1.67	2.70
2010-11	1.80	1.20	0.49	0.47	0.90	1.00	0.80	1.59	1.99	3.27
2011-12	1.01	0.56	0.58	0.67	0.74	0.65	1.33	1.04	1.29	3.66
2012-13	0.80	0.47	0.71	0.72	0.73	0.45	1.85	1.10	1.17	3.15
Mean	1.19	1.13	0.67	0.59	0.80	0.88	1.21	2.38	1.45	3.48
SD	0.41	1.23	0.21	0.18	0.14	0.31	0.30	1.43	0.28	0.51

Source: Computed from annual report of the respective companies

The quick ratio of Surya Roshni steel company was better than all other companies throughout the period of study. The quick ratio of Surya Roshni steel Company has increased from 3.10 times in the year 2003-04 to 4.24 times in the year 2006-07 and then fell down to 3.15 times in the year 2012-13. It was very high (4.24) during 2006-07 as compared to all the other years under the study. The average quick ratio of Rhastrya steel company was 2.38 times which was considered second higher ratio among the selected steel companies after Surya Roshni steel company. Sunflag steel company is maintaining the quick ratio normally above the standard ratio in all the years under study. Among the selected ten companies except Surya Roshni, Rhastrya, Sunflag steel companies, the current ratio of other companies is less than the standard rate of quick ratio. But at the same time Surya Roshni steel company blocked their most of the financial resources as liquid assets. It indicated that the overall situation regarding the quick ratio was better in Rhastrya and Sunflag steel companies because the average quick ratio of these companies was above the standard rate (1:1). This showed that Rhastrya and Sunflag steel companies were good at liquid assets management and other companies were in need of improvement during the period of the study. An attempt has been made to know whether there was any difference between the companies quick ratios. For that ANOVA test has been used and results have been given in the Table No.1.3.

Quick Ratio (ANOVA Test)

Null Hypothesis: There is no significant difference between Quick Ratios of the selected steel companies
Alternative Hypothesis: There is a significant difference between Quick Ratios of the selected steel companies

[1] Maheswari, S.N. Management Accounting, New Delhi: Sultan Chand Publications.

TABLE NO.1.4
SHOWING THE ANOVA (SINGLE FACTOR) OF QUICK RATIO OF SELECTED STEEL COMPANIES

Company	Mean Ratio	SD	F Value	P value
SAIL	1.19	0.41	18.612	0.001
TATA	1.13	1.23		
Uttam Galva	0.67	0.21		
JSW	0.59	0.18		
Jindal	0.80	0.14		
Essar	0.88	0.31		
Bhusan	1.21	0.30		
Rhastrya	2.38	1.43		
Sunflag	1.45	0.28		
Surya Roshni	3.48	0.51		

Source: Computed Value

Since calculated P value is less than 0.01, the null hypothesis is rejected at 1 percent level. Hence it concludes that there is a significant difference between the mean quick ratios of the selected steel companies.

Analysis of Activity Ratios

Profitability of the firm is based on how efficiently the assets are being used by the firm. This activity ratio is also referred as turnover ratio or asset management ratios. Inventory turnover ratio, debtors turnover ratio, working capital turnover ratio, total assets turnover ratio and fixed assets turnover ratios are the important turnover ratio for measure the asset management efficiency of the business firm.

TABLE NO.1.5
INVENTORY TURNOVER RATIO
(in Times)

Year	Sail	Tata	Uttam Galva	JSW	Jindal	Essar	Bhusan	Rhastrya	Sunflag	Surya Roshni
2003-04	7.10	9.93	4.37	12.83	6.56	6.31	5.32	7.48	6.92	6.22
2004-05	8.80	10.17	6.22	13.02	7.03	8.03	5.80	7.42	8.27	7.41
2005-06	6.17	8.47	5.74	8.16	5.63	5.66	5.67	6.18	6.98	7.28
2006-07	5.99	8.77	6.25	9.61	5.91	4.68	6.79	7.00	6.04	7.71
2007-08	6.65	8.99	4.78	9.86	3.46	5.37	4.93	6.50	5.52	7.98
2008-09	5.62	8.82	6.72	8.43	2.73	5.96	4.57	3.95	6.31	8.23
2009-10	4.50	8.16	8.18	8.39	3.69	4.75	3.74	3.60	6.91	7.87
2010-11	4.61	9.07	5.29	7.54	3.93	3.40	2.95	3.96	6.09	7.41
2011-12	4.02	8.40	4.47	7.45	3.53	3.79	3.33	4.38	5.15	7.37
2012-13	3.32	8.37	5.89	7.79	3.72	4.14	2.66	5.58	4.84	8.38
Mean	5.68	8.92	5.79	9.31	4.62	5.21	4.58	5.61	6.30	7.59
SD	1.63	0.67	1.16	2.07	1.51	1.37	1.37	1.52	1.02	0.61

Source: Capitaline Data base

The above Table No.4.10 reveals that the inventory turnover ratio of the selected steel companies has fluctuated significantly over the years. The average inventory turnover ratio of the selected Steel companies during the study period was in the range between 4.58 times to 9.31 times. Among the selected Steel companies JSW Company had registered higher average inventory ratio with 9.31 times during the study period. This showed that the company was very efficient in converting the finished goods to sales very habitually as compared to other companies.

The Inventory turnover ratio of JSW steel Company had increased from 12.83 times in the year 2003-04 to 13.02 times in the year 2004-05 and then knocks down to 7.79 times in the year 2012-13. It was 13.02 times in the year 2004-05 which was considered very high as compared to all the other years under the study. The average Inventory turnover ratio of TATA steel company was 8.92 times which was considered second higher ratio among the selected Steel companies after JSW steel company. Bhusan steel company maintained Inventory turnover ratio very less comparing to its average inventory turnover ratio except during the period 2003-04 to 2006-07. Sunflag steel company is maintaining the Inventory turnover ratio normally around average Inventory turnover ratio.

Among the selected ten companies except Surya Roshni, Sunflag, JSW and TATA steel companies, the other companies' average Inventory turnover ratio is less than the 6 times. It indicated that the overall situation regarding

the Inventory turnover ratio was better in JSW, TATA and Surya Roshni steel companies because these companies' average Inventory turnover ratios were above the mean value in most of the year. This showed that the JSW, TATA and Surya Roshni steel companies were good at inventory management and other companies needed improvement in inventory management as these companies have not adopted effective inventory management programme during the period of the study.

IMPACT OF FINANCIAL RATIOS ON PROFITABILITY

The influence of selected financial ratios on return on sales (ROS) and return on equity (ROE) were separately analyzed with the help of log linear regression model. The result of regression coefficients with its statistical significance are presented in the following tables.

The results of SAIL steel company regression coefficient of with its statistical significance are presented in the Table No.1.6.

TABLE NO.1.6
IMPACT OF FINANCIAL RATIOS ON PROFITABILITY OF SAIL STEEL COMPANY

Independent Variables	Dependent Variables			
	Return on Sales		Return on Equity	
	Regression Coefficient	T	Regression Coefficient	T
Current Ratio	3.170	0.275	1.054	-0.270
Quick Ratio	6.698	0.696	1.126	0.047
Inventory Turnover Ratio	2.286	1.133	15.024	0.060
Debtors Turnover Ratio	1.563	1.524	-0.150	3.837
Fixed Assets Turnover Ratio	-2.851	-0.228	-33.717	-0.076
Constant	-24.850	-1.363	-9.565	-1.389
R^2	0.896*		0.982**	
F value	6.919		21.354	
DW	3.340		3.274	

Source: Computed data

** - Significant at 1% level

* - Significant at 5% level

The current ratio, quick ratio, inventory and debtors' turnover ratios were positively influenced the Return on Sales (ROS)/ net profit margin but fixed assets turnover ratio has negatively influenced the ROS. The coefficient of determination of performance variable of ROS was 0.896 at 5 percent significant level. It means a change in return on sales (ROS) was explained by independent variables to the extent of 89.6 percent.

The current ratio, quick ratio and inventory turnover ratios were positively influenced the Return on Equity (ROE) but debtors' and fixed assets turnover ratio has negatively influenced the ROE. The coefficient of determination of performance variable of ROE was 0.982 at 1 percent significant level. It means a change in return on equity (ROE) was explained by independent variables to the extent of 98.2 percent. The F statistics and Durbin Watson coefficient were 1 percent level of significant.

The resulted regression coefficients with its statistical significance of TATA steel company are presented in the Table No.1.7

TABLE NO.1.7
IMPACT OF FINANCIAL RATIOS ON PROFITABILITY OF TATA STEEL COMPANY

Independent Variables	Dependent Variables			
	Return on Sales		Return on Equity	
	Regression Coefficient	T	Regression Coefficient	T
Current Ratio	39.899	0.670	145.491	1.570
Quick Ratio	-37.333	-0.635	-144.766	-1.582

Inventory Turnover Ratio	3.078	0.951	13.199	2.620
Debtors Turnover Ratio	-0.031	-0.175	-0.719	-2.579
Fixed Assets Turnover Ratio	10.761	0.657	-4.649	-0.182
Constant	-23.266	-0.537	-107.926	-1.602
R^2	0.519		0.890*	
F value	0.862		6.503	
DW	1.017		1.221	

Source: Computed data * - Significant at 5% level

The current ratio and inventory ratio positively influenced the Return on Sales (ROS) and Return on Equity (ROE) but quick ratio and debtors turnover ratios were negatively influenced the ROS and ROE. Fixed assets turnover ratio has positively influenced ROS but it had negative influence on ROE.

The coefficient of determination of performance of variables namely returns on sales and returns on equity were 0.52 and 0.89 respectively. This conveyed that the change in performance variables, namely ROS and ROE were explained by independent variables to the magnitude of 52 percent and 89 percent respectively. The F statistics and Durbin Watson coefficient were not significant in ROS but it's significant at 5 percent in ROE.

The resulted regression coefficients with its statistical significance of Uttam Galva Steel Company are presented in the Table No.1.8

TABLE NO.1.8
IMPACT OF FINANCIAL RATIOS ON PROFITABILITY OF UTTAM GALVA STEEL COMPANY

Independent Variables	**Dependent Variables**			
	Return on Sales		**Return on Equity**	
	Regression Coefficient	**T**	**Regression Coefficient**	**T**
Current Ratio	6.787	1.286	24.117	1.677
Quick Ratio	-1.276	-0.265	-16.991	-1.297
Inventory Turnover Ratio	-0.365	-0.587	-1.427	-0.844
Debtors Turnover Ratio	-0.041	-0.350	0.806	2.521
Fixed Assets Turnover Ratio	1.782	0.891	9.474	1.738
Constant	-0.443	-0.077	-24.284	-1.542
R^2	0.537		0.952*	
F value	0.929		15.835	
DW	2.159		1.968	

Source: Computed data * - Significant at 5% level

The quick ratio, inventory and debtors' turnover ratios negatively influenced the Return on Sales (ROS)/ net profit margin but current ratio and fixed assets turnover ratio has a positive influence on the ROS. The coefficient of determination of performance variable of ROS was 0.537. It means a change in return on sales (ROS) was explained by independent variables to the extent of 54 percent.

The current ratio, debtors' and fixed assets turnover ratios positively influenced the Return on Equity (ROE) but quick ratio and inventory turnover ratio has negatively influenced the ROE. The coefficient of determination of performance variable of ROE was 0.952 at 5 percent significant level. It means a change in return on equity (ROE) was explained by independent variables to the extent of 95 percent. The F statistics and Durbin Watson coefficient were 5 percent level of significant in ROE but in ROS it was insignificant.

The resulted regression coefficients with its statistical significance of JSW Steel Company are presented in the Table No.1.9

TABLE NO.1.9
IMPACT OF FINANCIAL RATIOS ON PROFITABILITY OF JSW STEEL COMPANY

Independent Variables	Dependent Variables			
	Return on Sales		Return on Equity	
	Regression Coefficient	T	Regression Coefficient	T
Current Ratio	37.157	0.597	61.241	1.920
Quick Ratio	-10.207	-0.109	-65.391	-1.358
Inventory Turnover Ratio	3.504	1.822	4.764	4.831
Debtors Turnover Ratio	0.635	0.900	0.332	0.918
Fixed Assets Turnover Ratio	-4.681	-0.176	4.820	0.353
Constant	-59.311	-1.153	-59.834	-2.269
R^2	0.664*		0.926*	
F value	1.580		9.981	
DW	2.778		2.509	

Source: Computed data * - Significant at 5% level

The current ratio, inventory ratio and debtors' turnover ratios positively influenced the Return on Sales (ROS) and Return on Equity (ROE) but quick ratio were negatively influenced the ROS and ROE. Fixed assets turnover ratio has positively influenced ROE but it has a negative influence on ROS.

The coefficient of determination of performance of variables namely returns on sales and returns on equity were 0.664 and 0.926 respectively. This conveyed that the change in performance variables, such as ROS and ROE were explained by independent variables to the magnitude of 66 percent and 93 percent respectively. The F statistics and Durbin Watson coefficient were significant at 5 percent level in ROS and ROE. The resulted regression coefficients with its statistical significance of Jindal Steel Company are presented in the Table No.5.15.

3. FINDINGS & SUGGESTIONS

3.1. FINDINGS

The analysis indicated that the overall situation regarding the current ratio was better in Surya Roshni (7.27), Rhastrya (3.13), Sunflag (2.83) and Bhusan (2.61) steel companies because the average current ratio of these companies were above the standard rate. It is concluded from the ANOVA analysis, that there is a significant difference between the mean current ratios of the selected steel companies.

The analysis concluded that the quick ratio of Surya Roshni steel company (3.48) was better than all other companies throughout the period of study, followed by Rhastrya (2.38), Sunflag (1.45) and SAIL (1.19). From the ANOVA analysis, it is concluded that there is a significant difference between the mean quick ratios of the selected steel companies.

Inventory turnover ratio of selected companies showed better in JSW (9.31) followed by Tata Steel (8.92), Surya Roshni (7.59) and Sunflag (6.30). ANOVA analysis of Inventory turnover ratio concluded that there is a significant difference between the mean inventory turnover ratios of the selected steel companies.

From the analysis, it is concluded that the Debtors Turnover ratio of Rhastrya steel company (63.59) was better than all other companies throughout the period of study, followed by Tata (41.77), JSW (31.34) and Essar (22.68). From the ANOVA analysis, it is concluded that there is a significant difference between the mean debtors turnover ratios of the selected steel companies.

Fixed assets turnover ratio of selected steel companies showed better in Surya Roshni (2.26) followed by Uttam Galva Steel (2.21), Sunflag (1.61) and Jindal (1.47). ANOVA analysis of Inventory turnover ratio concluded that there is a significant difference between the mean inventory turnover ratios of the selected steel companies.

From the analysis, it is found that the Debt-Equity ratio of Essar steel company (3.18) was better than all other companies throughout the period of study, followed by Jindal (3.04), Bhusan (2.66) and Uttam Galva (2.06). From the ANOVA analysis, it is concluded that there is a significant difference between the mean debt-Equity ratios of the selected steel companies.

Assets to Equity Ratio of selected companies showed better in Jindal (4.06) followed by Bhusan (3.72), Essar Steel (3.66), Surya Roshni (3.16) and Uttam Galva (3.13). ANOVA analysis of Assets to equity ratio concluded that there is a significant difference between the mean Assets to Equity ratios of the selected steel companies.

Return on Shareholders Fund of steel Companies during the study period showed lesser average in Essar steel company with 8.62 percentages, whereas Surya Roshni Steel Company, Sunflag steel company and Jindal steel company were registered 11.81, 12.16 and 13.54 percentages respectively. SAIL achieved the highest average value of 34.37 followed by TATA steel company with a value of 28.38 percentages. The ANOVA analysis concluded that there is a significant difference between the mean Return on Net Worth ratios of the selected steel companies.

From the analysis, it is found that the Net profit margin ratio of Tata steel company (34.70) was higher than all other companies throughout the period of study, followed by SAIL (22.00), Rhastrya (21.20) and JSW (18.80). From the ANOVA analysis, it is concluded that there is a significant difference between the mean Net profit margin ratios of the selected steel companies.

3.2. SUGGESTIONS

- It was found that the total assets of the selected steel companies were increased considerably but turnover ratio of the total assets was reduced at mean time. It resulted that correlation between these was negative. As a result, that the selected companies utilized their assets during the study period. Hence, the selected Indian steel companies must use their assets in fruitful manner.
- In some of the selected steel companies, the current ratio, quick ratio and the inventory turnover ratio positively influenced the return on equity. Hence, all other steel companies have to take up initiative to increase these ratios.

3.3 CONCULSION

The present study has brought out the various facts about the financial performance of Indian steel industry. The suggestions made in the study are of immense use for the policy makers to make appropriate decision for mitigating the financial problems and to better financial performance. In order to compete with global economic scenario and to sustain its place, steel industry needs to monitor its financial performance continually and take financial decisions rationally.

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