

PROFITABILITY ANALYSIS OF SELECTED STEEL COMPANIES IN INDIA

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ABSTRACT

India was the world's third largest Steel producer in 2016. The growth in the Indian Steel sector has been driven by domestic availability of raw materials such as iron ore and cost effective labour. Consequently the Steel sector has been a major contributor to India's manufacturing output.

This study tries to find out the profitability of selected Steel companies in India. Five Steel companies have been selected for the study. The period of study 2011-12 to 2015-2016. Various tools like Mean, Variance, Correlation, Standard Deviation and t-test were used for analysis. It is concluded that Bhushan Steel and Visa Steel may give attention in the area of direct expenses to reduce it, because effective and efficiency performance of company can be measured in terms of profitability. Expenses are the major direct impact on the profitability of every enterprise.

Key Words: Financial statement, Steel Companies, Profitability Analysis, Correlation, Standard Deviation

INTRODUCTION

Profitability (P) is the profit earning capacity which is a crucial factor contributing to the survival of the firms. The perpetual existence of the firms depends on the profit earning capacity of the firm, which is also considered to be the main factor in influencing the reputation of the firm. The borrowing capacity of the firm is also determined by Profit. Thus, it is considered as the main factor in determining the capital structure of the firm. Profit consists of two words, profit and ability. Therefore, it is necessary to differentiate between profit and profitability at this juncture. Profit, from the accounting point of view, is arrived at by deducting from the total revenue of an enterprise all amount expended in earning that income whereas profitability can be measured in terms of profit shown as a percentage of sales known as profit margin.

ACCOUNTING TOOLS AND TECHNIQUES USED

Ratio Analysis

The general profitability ratios used are Net Profit Ratio, Gross Profit Ratio, Operating Profit Ratio, Return on Net worth Ratio and Operating Expenses Ratio.

STATEMENT OF THE PROBLEM

The primary objective of a business undertaking is to earn profits. Profit earning is considered essential for the survival of the business. A business needs profits not only for its existence, but also for expansion and diversification the investors want an adequate return on their investment as well as workers, creditors. And a business enterprise can discharge its obligation to various segments of the society only through earning of profit.

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OBJECTIVES OT THE STUDY

- To evaluate the profitability related to sales of selected Steel companies.
- To analyse the profitability related to equity share of selected Steel companies.

METHODOLOGY TO STUDY

For this Empirical analysis, Data has been collected from the official website of NSE and selected Steel company's financial reports. The Steel Companies which satisfied the following criteria

- Shareholders population should be greater than 6000
- Availability of data for at least for the period of 5 years
- Total debt is more than 100 cr.

Companies that meet the above conditions are

SAIL, TATA STEEL, BHUSHAN STEEL, VISA STEEL and JSW STEEL

STATISTICAL TOOLS USED

Mean, SD and CV used to find out the average position of accounting ratios related to Profitability analysis. Correlation analysis and T Test is used for to identify the relationship between short term Profitability analyses of the companies.

REVIEW OF THE LITERATURE

Arab, Atmasoumi and Barati (2015) examined the financial performance of identified units in the Steel industry in India in terms of financial ratios under Liquidity, Solvency, Activity and Profitability. A group of companies listed in the stock exchanges in India namely, Tata Steel Ltd., Jindal Steel and Power Ltd., JSW Steel Ltd., Bhushan Steel Ltd. and Steel Authority of India Ltd. were selected for the study. ANOVA was used to evaluate the impact of selected variables on the financial performance of identified units in the Steel industry. Finally, it was concluded that there was significant difference in financial performance of identified units in the Steel industry in India with regard to Liquidity, Solvency, Activity and Profitability Position. Anil bhai (2013) made an attempt to study financial performance of two selected Steel companies of India, SAIL and JSW. The study covered a period of five years from 2008 to 2012. Various financial tools and techniques were used to analyze profitability, liquidity and management efficiency of both the units and t-test was used to test the hypothesis. It was concluded that SAIL has been better than JSW in terms of profitability, liquidity and management efficiency during the period under study. Researcher recommended that JSW should control its cost of goods sold and operating expenses. It was also suggested that JSW should try to utilize its full production capacity and should properly utilize its fixed assets in order to improve its performance. Venkateshan and Nagarajan (2012) analyzed profitability of selected Steel companies of India over a period of six years from 2005-06 to 2010-11. A sample of five Steel companies, naming SAIL, TATA Steel, Bhusan, VISA and JSW, were selected for the study. The basis for sample selection was shareholder's population, availability of data, total debt etc. Different profitability and operating ratios were used to analyze the profitability position of the companies. Correlation analysis revealed positive correlation between Operating Profit of Bhusan and JSW while positive correlation was found between Net Profit of SAIL and TATA. Two way ANOVA test was conducted on return on investment (ROI) of selected companies which revealed that there was no significant difference between the ROI of selected companies. The study indicated that profitability depends upon better utilization of resources, cut-off expenses and quality management. Finally, it was concluded that SAIL and TATA have performed better than Bhusan and JSW while VISA was in unsatisfactory financial position during the study period. Comparing profit earning capacity of selected Steel companies in India, **Popat (2012)** analyzed profitability ratios of selected companies in Indian Steel industry. Findings of that study indicated that TATA Steel's profitability was better than



other selected companies while JINDAL Steel's profitability was next to TATA Steel. It was also found that JSW and SAIL showed fluctuation in their profitability while UTTAM had a decreasing trend in the profitability during the period of study. **Varghese (2011)** they found the profitability more or less depends upon the better utilization of resources and to manpower. It is worthwhile to increase production capacity and use advance technology to cut down cost of production and wage cost in order to increase profitability, not only against the investment, but also for investor's return points of view. **Asha Sharma and R.B. Sharma (2011)** made attempts identify and study the movement of key financial parameters and their relationship with profitability of textile industry. It is an attempt to and the study whether the key identified parameters move in a synchronous way going up and coming down with basic profitability parameters. All three comparably profit-making companies have been taken as the sample for the study for the period of 2006 to 2010.

DATA ANALYSIS AND INTERPRETATION

Profitability Ratios

TABLE NO: 1

MEAN, SD,CV OF NET PROFIT RATIO FOR SELECTED STEEL COMPANIES IN INDIA						
Company/year	SAIL	TATA	BHUSHAN	VISA	JSW	
2012	7.65	19.73	10.30	7.00	5.06	
2013	4.88	13.25	8.46	-8.63	5.08	
2014	5.60	15.37	0.64	-14.81	2.95	
2015	4.58	15.41	-11.78	-26.18	4.70	
2016	-10.58	12.83	-24.06	-57.71	-9.53	
TOTAL	12.13	76.60	-16.44	-100.33	8.25	
MEAN	2.43	15.32	-3.29	-20.07	1.65	
SD	6.59	2.45	12.97	21.65	5.65	
CV	271.74	15.99	-394.46	-107.90	342.30	

Source: Secondary Data

Interpretation:

The above table shows that the mean, SD, and CV Values to Net profit Ratio of selected Steel companies, the highest mean value is 15.32 for TATA STEEL and the lowest mean value of Net Profit Ratio is(-20.07) for VISA STEEL, and other companies are maintaining Average levelSAIL-2.43, JSW STEEL – 1.65 and BHUSHAN STEEL – (-3.29) respectively. The highest variability of 21.65 was observed in Net profit Ratio of VISA STEEL, Which means a higher degree of variability and lowest variability of 2.45 was observed in Net Profit Ratio of TATA STEEL. The CV of Net Profit Ratio of JSW STEEL was highest with 342.30 and the lowest variability of (-394.46) in Net Profit Ratio of Bhushan Steel.

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Table No: 2

MEAN, SD,CV OF GROSS PROFIT RATIO FOR SELECTED STEEL COMPANIES IN						
INDIA						
Company/year	SAIL	TATA	BHUSHAN	VISA	JSW	
2012	16.53	36.61	30.22	20.12	18.09	
2013	12.65	31.49	30.85	-5.50	18.51	
2014	10.39	32.62	27.84	6.44	20.12	
2015	12.22	25.35	20.42	2.91	20.26	
2016	-7.81	29.06	17.67	1.18	16.43	
TOTAL	43.98	155.12	127.00	25.15	93.41	
MEAN	8.80	31.02	25.40	5.03	18.68	
SD	8.53	3.74	5.35	8.48	1.414	
CV	96.98	12.06	21.06	168.56	7.57	

Source: Secondary Data

Interpretation:

The above table shows that the mean, SD, and CV Values to Gross profit Ratio of selected Steel companies, the highest mean value is 31.02 for TATA STEEL and the lowest mean value of Gross Profit Ratio is5.03 for VISA STEEL, and other companies are maintaining Average level SAIL-8.80, JSW STEEL – 18.68and BHUSHAN STEEL – 25.40 respectively. The highest variability of 8.53 was observed in Gross profit Ratio of SAIL which means a higher degree of variability and lowest variability of 1.414 was observed in Gross Profit Ratio of JSW STEEL. The CV of Gross Profit Ratio of VISA STEEL was highest with 168.56 and the lowest variability of 7.57 in Gross Profit Ratio of JSW Steel.

Table No: 3

MEAN, SD,CV OF OPERATING PROFIT RATIO FOR SELECTED STEEL COMPANIES					
IN INDIA					
Company/year	SAIL	TATA	BHUSHAN	VISA	JSW
2012	11.12	29.05	13.73	-2.77	6.52
2013	7.29	20.51	11.30	-8.63	7.06
2014	6.91	23.29	0.99	-14.81	4.32
2015	5.16	20.36	-11.79	-25.68	7.05
2016	-18.42	16.03	-30.28	-54.99	-13.80
TOTAL	12.06	109.25	-16.05	-106.88	11.14
MEAN	2.41	21.85	-3.21	-21.38	2.23
SD	10.59	4.28	16.25	18.44	8.08
CV	439.14	19.59	-506.19	-86.27	362.68

Source: Secondary Data

Interpretation:

The above table shows that the mean, SD, and CV Values to OP Ratio of selected Steel companies, the highest mean value is 21.85 for TATA STEEL and the lowest mean value of OP Ratio is (-21.38) for VISA STEEL, and other companies are maintaining Average level SAIL-2.41, JSW STEEL 2.23and BHUSHAN STEEL – (-3.21) respectively. The highest variability of 18.44 was observed in OP Ratio of VISA which means a higher degree of variability and lowest variability of 4.28 was observed in OP Ratio of TATA STEEL. The CV of OP Ratio of SAIL was highest with 439.14 and the lowest variability of (-506.17) in OP Ratio of Bhushan Steel.

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Table No: 4

MEAN, SD,CV OF OPERATING EXPENSES RATIO FOR SELECTED STEEL COMPANIES					
IN INDIA					
Company/year	SAIL	TATA	BHUSHAN	VISA	JSW
2012	86.99	66.30	69.78	82.56	82.47
2013	89.89	71.22	69.15	107.63	82.22
2014	91.86	69.43	72.16	96.28	80.61
2015	90.02	76.23	79.58	100.22	81.07
2016	109.41	81.13	82.33	101.51	85.65
TOTAL	468.18	364.31	373.00	488.20	412.02
MEAN	93.64	72.86	74.60	97.64	82.40
SD	8.04	5.24	5.35	8.38	1.76
CV	8.59	7.19	7.17	8.58	2.14

Source: Secondary Data

Interpretation:

The above table shows that the mean, SD, and CV Values to OE Ratio of selected Steel companies, the highest mean value is 97.64 for VISA STEEL and the lowest mean value of OE Ratio is 72.86 for TATA STEEL, and other companies are maintaining Average level SAIL-93.64, JSW STEEL 82.40 and BHUSHAN STEEL – 74.60 respectively. The highest variability of 8.38 was observed in OE Ratio of VISA which means a higher degree of variability and lowest variability of 1.76 was observed in OE Ratio of JSW STEEL. The CV of OE Ratio of SAIL was highest with 8.59 and the lowest variability of 2.14 in OE Ratio of JSW Steel.

Table No: 5

MEAN, SD,CV OF RETURN ON NETWORTH RATIO FOR SELECTED STEEL COMPANIES IN INDIA

Company/year	SAIL	TATA	BHUSHAN	VISA	JSW
2012	8.90	12.20	13.16	23.73	8.79
2013	5.29	8.75	10.05	-8.66	9.03
2014	6.13	10.07	0.68	-41.55	5.50
2015	4.81	9.34	-15.91	-197.21	8.42
2016	-10.53	6.74	-60.09	126.55	-16.08
TOTAL	14.60	47.09	-52.13	-97.14	15.66
MEAN	2.92	9.42	-10.43	-19.43	3.13
SD	6.87	1.78	26.81	105.24	9.69
CV	235.28	18.90	-257.16	-541.70	309.40

Source: Secondary Data

Interpretation:

The above table shows that the mean, SD, and CV Values to RONW Ratio of selected Steel companies, the highest mean value is 9.42 for TATA STEEL and the lowest mean value of RONW Ratio is (-19.43) for VISA STEEL, and other companies are maintaining Average level SAIL-2.92, JSW STEEL 3.13and BHUSHAN STEEL – (-10.43) respectively. The highest variability of 105.24 was observed in RONW Ratio of VISA which means a higher degree of variability and lowest variability of 1.78 was observed in RONW Ratio of TATASTEEL. The CV of RONW Ratio of JSW was highest with 309.40 and the lowest variability of (-257.16) in RONW Ratio of Bhushan Steel.

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SIGNIFICANCE OF COEFFICIENT OF CORRELATION and STUDENTS T – TEST

Coefficient of correlation (r) is a mathematical method of measuring correlation. It gives the degree of relationship between two variables. The values of r lie between +1 and -1. When r = 1, means perfect positive correlation, r = -1 means perfect negative correlation, r = 0 means no relationship between variables.

T – Distribution is a test used for testing of hypothesis of sample size less than 30. If the calculated value of t is less than the table value, the null hypothesis will be accepted and vice versa; for a given significant level. It can be calculated as:

$$t = \frac{r}{\sqrt{1 - r^2}} x \sqrt{n - 2}$$

Where r = coefficient of correlation n = no of observations

Table No: 6

SIGNIFICANCE OF COEFFICIENT OF CORRELATION AND T TEST						
PARTICULARS	NP RATIO	NP RATIO	OP RATIO	OP RATIO		
		VISA TO	SAIL TO	VISA TO		
	SAIL TO BHUSHAN	JSW	BHUSHAN	JSW		
CORRELATION	0.8521	0.8844	0.9032	0.9042		
CALCULATED						
VALUE OF	3.11	4.06	4.90	4.96		
T – TEST						
TABLE VALUE	5.84	5.84	5.84	5.84		
OF T						
SIGNIFICANT	YES	YES	YES	YES		
LEVEL	1%	1%	1%	1%		

Source: Secondary Data

Interpretation:

The above table indicates the correlation and students t-test value to SAIL, VISA, BHUSHAN and JSW STEEL companies in India. The highest positive correlation of 0.9042 between VISA OP of VISA and JSW STEEL and least positive correlation of 0.8521 is observed between NP Ratio of SAIL to BHUSHAN. When t-test was applied at 1% of significant level, the calculated value was less than table value that is null hypothesis was accepted.

FINDINGS FROM THE STUDY

GP Ratio of selected Steel companies was positive and showed both decreasing and increasing trend throughout the study period. Among the selected Steel company it was found that the GP Ratio was sound of TATA, BHUSHAN and JSW STEEL. An average GP Ratio of 31.02%, 25.40% and 18.68% respectively. It indicates that the company was able to control the direct expenses of the business because the major impact of GP is direct expenses.

Bhushan and VISHA'S Net Profit ratio is not satisfactory for the business, because its average is negative values of (-3.29) and (-20.07) respectively. The Net Profit Ratio of TATA STEEL 15.32% is indicated the better performance. The increase in production cost had a major impact on the Net Profit Ratio of the company the Net profit position of selected Steel company were found good except Bhushan's and VISHA STEEL companies, due to proper controlled on indirect expenses like power and fuel, repair and maintenance etc.,

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Bhushan and VISHA'S OP ratio is not satisfactory for the business, because its average is negative values of (-3.21) and (-21.38) respectively. The OP Ratio of TATA STEEL 21.85% is indicated the better performance.

The operating expenses ratio of selected Steel companies in India is good, because operating expenses ratio of mean range from 72.86% to 97.64%. VISA Steel operating expenses ratio is satisfactory. However, they may give attention to control the selling and administration expenses.

Bhushan and VISHA'S Return on Net worth Ratio is not satisfactory for the business, because its average is negative values of (-10.43) and (-19.43) respectively.

SUGGESTIONS

Bhushan's Steel and Visa Steel may give attention in the area of direct expenses to reduction it, because effective and efficiency performance of company can be measured in terms of profitability. Expenses are the major direct impact on the profitability of every enterprise.

CONCULUSION

The profitability analysis of the Steel companies during the study period of TATA STEEL was quite satisfactory. The research findings are practical and logical. The results of the research may be useful for its future policy decision for every manufacturing concern.

REFERENCES

JOURNAL

- 1. Anilbhai, P. A. (2013), "A Comparative Analysis of Financial Performance of SAIL and JSW" Indian Journal of Applied Research, 3(4), 290-292
- 2. Arab, Atmasoumi and Azadehbarati (2015). Liquidity And efficiency Position of Steel Industry in India. ZENITH International Journal of Business Economics & Management Research, 5 (1), 12-19.
- **3.** Popat, K. H. (2012), "A Comparative Study of Profitability Analysis of Selected Steel Industries" Indian Journal of Applied Research, 1(12), 35-37.
- 4. Venkatesan and Nagarajan, "An Empircial Study of Profitability Analysis of Selected Steel Companies in India" International Journal of Marketing, Financial Services and Management Research. Volume 1 Issue 10, October 2012. Page No: 84-100

ONLINE REFERENCES

- 1. www.moneycontrol.com
- 2. www.ndtvprofit.com
- 3. www.indiaSteelexpo.in