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A Comparative Study Of Profitability Analysis Of Selected Steel Industries

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ABSTRACT

Steel Ministry, at present, has 12 public sector undertakings (PSUs) including the Steel Authority of India Limited (SAIL), National Mineral Development Corporation (NMDC), Kudramukh Iron Ore Company Limited (KIOCL), Rastriya Ispat Nigam Limited (RINL), Metallurgical and Engineering Consultants India Limited (MECON). these various steel companies are working in India. The profitability ratios are calculated to measure the operating efficiency of the business enterprise. Besides management of the company, creditors and owners are interested in the profitability of the firm. Investor wants to get reasonable return on their investments. This is only possible when the company is having satisfactory profit. For this purpose researcher would like to evaluate the profitability analysis with reference to various ratios like, PBDT to Gross Sales, PAT to Gross Sales, PAT to Net Sales, PAT to Shareholders fund and PAT to Total Assets to examined the financial result of selected steel industries in India. This research give us result of profitability with reference to study period from 2006-07 to 2010-11.

Keywords : Profitability Analysis, Steel Industry

Introduction

The history of Iron and Steel industry in India is nearly 4000 years old. The Iron pillars at the outskirts of Delhi prove that Indians were familiar with iron and steel even during the Vedic age. But the father of the modern Steel industry Sir Jamshedji Tata set up the Tata Iron and Steel Company (TISCO) in 1907. The first steel ingots were rolled in TISCO in 1911. This was followed by the establishment of the Mysore Iron and Steel Works in 1936, later renamed as Visveswaraya Iron and Steel Works. In 1939, Indian Iron and Steel Company (IISCO), now a subsidiary of Steel Authority of India Limited (SAIL) was started. At the time of Independence, India possessed a small but viable steel industry with an annual capacity of 1.3 million tones. In 1951, India produced 1.1 million tones of finished steel. In the era of planned economy, iron and steel - a core and basic sector - received the full attention of the government and with the foreign assistance and own resources, many new steel plants were set up.

Review of Literature

Few studies has been conducted in India are summarized here: Dr. Bhayani (2004) has conducted study on working capital and profitability of cement industry and found that profitability is highly influenced by working capital. Linkage between asset management and profitability of Indian Industry has been conducted by Narware P.C. (2004), Malik A.K. and Sur D . (1998 & 1999) has conducted to study the effect of working capital management on profitability with case study. Conducting a survey among 94 Japanese companies in USA, Suk et al.(1992) found that they differ in working capital management practices from in the US and 39 terms of lower level of inventory and higher levels of account receivable. The study revealed that while the US firms piled-up their inventories, Japanies firm had higher percentage of receivable to total assets. Purvi Tibrewalla (Kolkutta) Steel has facilitated our quality of life, underpinned humankind's development and even helped us to understand our planet

Research Methodology

The study is mainly based on secondary data. The relevant information in this regard is collected from various sources like annual reports of banks, speeches of chairman & websites. The reference books have been referred from libraries. Thus, various sources have used to collect the relevant data. The data has been collected from the annual report of Tata Steel, Goals, J.S.W. Steels, Sail, Jindal Steel, and Uttam Steel for the research year 2006-07 to 2010-11 to find out the better profitability of steel industry

Hypothesis of the Study

(1) The Size of Profitability Trend Value of PBDT (Net Operating Profit) to Gross Sales Ratio is uniform
(2) The Size of Profitability Trend Value of PAT to Gross Sales Ratio is uniform
(3) The size of Profitability Trend Value of PAT to Net Sales Ratio is Uniform
(4) The Size of Profitability Trend Value of PAT to Shareholders Fund Raito is Uniform
(5) The Size of Profitability Trend Value of PAT to Total Assets Ratio is Uniform

Technique of the Analysis

For the purpose of profitability Analysis of the various Steel Industries Ratios are selected and calculated through various Statistical Techniques and Tools like, Mean and ANOVA Test, For that SS = Sum of Square D.F = Degree of Freedom, MSS = Mean Sum of Square F cal = Calculated value of F crit = Critical Value of F Ratio at 5% Significant Level This Tools can be analyzed the profitability trend of Major players of steel industries.

Profitability Analysis

(1) Net Operating Profit Ratio / PBDT to Gross Sales:

This ratio explains the changes in the profit margin to sales. This ratio is computed by dividing operating expenses i.e. cost of goods sold plus selling expenses and general and administrative expenses including interest by sales.

Net Operating Profit = PBDT x 100

Gross sales

This ratio measures the efficiency of operations of the company. This ratio is designed to focus attention in the net profit margin arising from business operation before dep. and tax is deducted. This convention is to express profit before dep. and tax as a percentage of sales.

Table-1 Net Operating Profit to Gross Sales

Years	TATA	JSW	SAIL	JINDAL	UTTAM	Average
2007	35.83	25.96	27.14	32.86	6.06	25.57
2008	35.6	25.11	27.89	31.95	5.75	25.26
2009	30.88	9.92	21.96	28.89	4.29	19.188
2010	31.01	20.26	26.1	20.84	5.67	20.776
2011	34.24	16.56	21.84	24.62	4.37	20.326
Average	33.512	19.562	24.986	27.832	5.228	22.224

From the above table -1, it is revealed that as per the Company Average 22.224; Only Tata, Jindal and sail are maintaining the Ratio While JSW and Uttam shows below trend in the Average.

Table-2 One Way ANOVA result of selected Sample units

Sources of Variance	Sum of Squares	Degree of Freedom	MSS	Fc	Ft
BSS	2295.35	4	573.84	31.29	2.87
ESS	366.863	20	18.34		
TSS	2662.21				

Above table Shows The calculated value 'F' is 31.29 which is more than the table value of 'F' at 5% levels of significance which is 2.87. It indicates that there is significant difference in the net operating profit to sales ratio in the units undertaken for the study for the period of the study.

(2) PAT to Gross Sales:
This ratio is overall measure of the firm's ability to turn each rupee sales into net profit.

Net Profit Margin = PAT x 100

Gross Sales

Table-3 PAT to Gross Sales

Year	TATA	JSW	SAIL	JINDAL	UTTAM	Average
2007	21.36	13.90	15.83	18.03	4.02	14.628
2008	21.12	13.68	16.54	20.23	3.77	15.068
2009	19.38	3.02	12.68	18.23	2.22	11.106
2010	18.86	10.40	15.37	12.74	2.19	11.912
2011	21.52	8	10.43	14.76	1.44	11.23
Average	20.448	9.8	14.17	16.798	2.728	12.788

From the above table -3, it is revealed that as per the Company Average 12.788; Only Tata, Jindal and sail are maintaining the Ratio While JSW is nearest to average But Uttam shows below trend in the Average.

Table-4 One Way ANOVA result of selected Sample units

Sources of Variance	Sum of Squares	Degree of Freedom	MSS	Fc	Ft
BSS	933.99	4	233.50	30.23	2.87
ESS	154.48	20	7.724		
TSS	1088.46				

Above table shows, The calculated value 'F' is 30.23 which is more than the table value of 'F' at 5% levels of significance which is 2.87. It indicates that there is significant difference in the net operating profit to sales ratio in the units undertaken for the study for the period of the study.

(3) PAT to Net Sales
This ratio shows the relationship between net profits to net sales. The net profit is overall measure of a firm's ability to turn each rupee of sales into profit. It indicates the efficiency with which a business is managed

Net Profit Margin = PAT x 100

Net Sales

Table -5 Net Profit to Net Sales Ratio

YEAR	TATA	JSW	SAIL	JINDAL	UTTAM	AVERAGE
2007	24.06	14.93	18.28	19.81	4.39	16.30
2008	23.80	15.13	19.08	22.86	3.92	16.96
2009	21.39	3.27	14.31	20.08	2.29	12.27
2010	20.17	11.11	16.63	20.08	2.28	14.05
2011	23.35	8.68	11.48	21.56	1.52	13.32
AVERAGE	22.55	10.65	15.96	20.88	2.88	14.58

From the above table -5, it is revealed that as per the Company Average 14.58; Only Tata, Jindal and sail are maintaining the Ratio While JSW is nearest to average But it shows fluctuation trend in Net Profit Ratio. While Uttam shows decreasing trend in the Average.

Table-6 One Way ANOVA result of selected Sample units

Source of Variance	Sum of Square	D.f.	MSS	Fc	Ft
BSS	1291.69	4	322.92	42.88	2.87
ESS	150.532	20	7.53		
TSS	1442.22				

Above table shows, the calculated value 'F' is 42.88 which is more than the table value of 'F' at 5% levels of significance which is 2.87. It indicates that there is significant difference in the net operating profit to sales ratio in the units undertaken for the study for the period of the study.

(4) Profit After Tax to Shareholder's Fund:
This is known as shareholders' funds. Return on shareholders' fund is a very effective measure of the profitability of an enterprise. These ratios measure the return on the total equity of the shareholders. This ratio is one of the most important relationships in financial statement analysis.

Return on Shareholders' Fund = PAT x 100

Shareholders' Fund

Table-7 PAT to Shareholder's Fund Ratio

Year	TATA	JSW	SAIL	JINDAL	UTTAM	AVERAGE
2007	29.95	23.10	35.82	28.16	20.58	27.52
2008	17.17	22.51	32.68	32.93	17.41	24.54
2009	17.24	5.76	22.06	28.37	12.07	17.1
2010	13.65	20.84	20.27	21.93	11.41	17.62
2011	14.62	11.67	13.23	23.75	8.10	14.27
AVERAGE	18.53	16.78	24.81	27.03	13.91	20.21

From the above table -7, it is revealed that as per the Company Average 20.21; Only Jindal and sail are maintaining the Ratio While TATA is nearest to average But JSW and UTTAM Shows Lower trend in Shareholder's fund.

Table 8 One Way ANOVA result of selected Sample units

Sources of Variance	Sum of Squares	Degree of Freedom	MSS	Fc	Ft
BSS	609.66	4	152.415	3.28	2.87
ESS	930.05	20	46.50		
TSS	1539.71				

Above table shows, The calculated value 'F' is 3.28 which is more than the table value of 'F' at 5% levels of significance which is 2.87. It indicates that there is significant difference in the net operating profit to sales ratio in the units undertaken for the study for the period of the study.

(5) Profit After Tax to Total Asset Ratio
This ratio is computed to know the productivity of the total assets. This ratio is indicates the efficiency of utilization of assets in generating revenue.

PAT to Total Assets = PAT x 100

Total Assets

Table-9 PAT to Total Asset Ratio

Year	TATA	JSW	SAIL	JINDAL	UTTAM	Average
2007	16.49	11.98	27.08	10.95	7.38	14.78
2008	9.96	10.49	27.23	15.24	7.04	13.99
2009	8.85	2.22	16.75	14	4.47	9.26

2010	7.86	8.70	13.18	9.34	3.40	8.50
2011	8.74	6.38	8.35	9.52	2.42	7.08
Average	10.38	7.95	18.52	11.81	4.94	10.72

From the above table -9, it is revealed that as per the Company Average 10.72; Only sail and Jindal are maintaining the Ratio While TATA is nearest to average But JSW and UTTAM Shows Lower trend in Total Asset Ratio.

Table-10 One Way ANOVA result of selected Sample units

Sources of Variance	Sum of Squares	Degree of Freedom	MSS	Fc	Ft
BSS	515.74	4	128.93	5.86	2.87
ESS	439.61	20	21.98		
TSS	955.35				

Above table Shows, The calculated value 'F' is 5.86 which is more than the table value of 'F' at 5% levels of significance which is 2.87. It indicates that there is significant difference in the net operating profit to sales ratio in the units undertaken for the study for the period of the study.

Conclusion:

From the above tables It is revealed that the profitability of Tata Steel Company is better, JINDAL steel shows next to Tata Steel while major fluctuation in profitability shown in JSW and SAIL But Uttam shows decrease trend in profitability.

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