



A COMPARATIVE ANALYSIS OF PROFITABILITY OF SAIL AND RINL

Akhilesh Shukla

Academic Associate, Strategy Area, Indian School of Business, Hyderabad.

ABSTRACT

This paper makes a comparative analysis of profitability of selected two public sector units from Indian Steel Industry. India is among the top producers of all forms of steel in the world. Availability of low cost of human resource and preference of abundant referrers make India competitive in the global set up. Finance is needed for day to day operation. I can be considered as a life blood for business. Profitability is the profit earning capacity which is a crucial factor contributing for the survival of the firms. Here I have examined the adequacy of the Profitability of these two firms SAIL and RINL. The objective of this study was to make a comparative profitability analysis of SAIL and RINL through the profitability ratios. Profitability is a measure of efficiency and control it indicates the efficiency or effectiveness with which the operations of the business are carried on. These potential changes can be analyzed with a support of income statement and balance sheet. The study is purely based on secondary data. Profitability position is major determined by the direct and indirect expenses and F-test of ROI of selected steel company.

Key Words: *Indian Steel Industry, SAIL, RINL, Profit, Profitability, Gross profit Margin, Net Profit Margin, Mean, Return on Investment Ratio, Net profit, F-test, Creditors, Sales.*

INTRODUCTION

Public Sector Undertakings (PSUs) played an integral role in the country's economic development and industrialization in the pre-independence as well as the post-independence period. PSUs have been set up with the aim to achieve higher GDP growth, self-reliance in production of goods and services, long-term equilibrium in balance of payments, and low and stable prices.

In today's globalized economy, the main objective of every firm is to make profits and enhance shareholder's wealth. Profitability is the primary goal of all business ventures. Without profitability the business will not survive in the long run. So measuring current and past profitability and projecting future profitability is very important. Profitability is measured with income and expenses. In fact, efficiency of business is measured in terms of profits.

Iron and Steel Industry is an indispensable part of an economy and backbone of industrial development of any country. Iron and Steel Industry is a key sector as it meets the requirements of a wide range of important industries. In this present study the author has selected two public sector enterprises from steel industry and compared their profitability and capability to meet their debt obligation and try to forecast the profitability and effectiveness of management.

The principal objective of the present research work is to make a study on the comparative study of the Profitability of Steel Authority of India and Rashtriya Ispat Nigam Limited. Profitability refers to the ability of a concern to meet its obligations as and when these become due. A firm should ensure that it does not suffer from illiquidity and lack of sufficient liquidity to meet its current obligations that may result in bad credit ratings, and, finally, it may result in the closure of the company. Proper management of working capital, therefore, ensures sound liquidity and profitability positions.

PROBLEM STATEMENT

Poor performance has become a regular feature of the state-owned manufacturing enterprises in spite of their having experienced workforce, old brand reputation, etc. Most of them have fallen into a vicious cycle due to their prolonged poor performance. To study this, author would like to carry the comparative study of SAIL and RINL.

LITERATURE REVIEW

Review of literature is essential for every research to carry on investigation successfully. Hence the present study is also based on the following review. A significant portion of financial research is concerned with the management of Profitability. This issue has been extensively investigated at both conceptual and empirical levels.

1. Prasad (2001) conducted a research study on the working capital management in paper industry. His sample consisted of 21 paper mills from large, medium and small scale for a period of 10 years. He reported that the chief executives properly recognized the role of efficient use of working capital in liquidity and profitability, but in practice they could not achieve it.
2. B. Satish Kumar (2008), in his article on an evaluation of the financial performance of Indian private sector banks wrote Private sector banks play an important role in development of Indian economy. After liberalization the banking industry underwent major changes. The economic reforms totally have changed the banking sector. RBI permitted new banks to be started in the private sector as per the recommendation of Narashiman committee. The Indian banking industry was dominated by public sector banks. But now the situations have changed new generation banks with used of technology and professional management has gained a reasonable position in the banking industry.
3. The study also revealed that fifty percent of the executives followed budgetary method in planning working capital and working capital management was inefficient due to sub-optimum utilization of working capital. Sarvanan (2001) made a study on working capital management in ten selected non-banking financial companies. For this he employed several statistical tools on different ratios to examine the effective management of working capital. He concluded that the sample firms had placed more importance upon the liquidity aspect compared to that of the profitability.

STEEL INDUSTRY OF INDIA

The steel industry in India features both public sector companies with strong incumbent footing as well as rapidly developing private enterprises. The government owned Steel Authority of India with its 5 integrated plants and 3 special and allow plants is the biggest and most diverse in terms of production player. Rashhriya Ispat Nigam Limited is the corporate entity of Visakhapatnam Steel plant, the most modern and successful plant owned by the government. Although the public run enterprises are losing their dominating positions, they are still accounting for a quarter of the industry.

SAIL (Steel Authority of India)

The Steel Authority of India Limited (SAIL) is a company registered under the Indian Companies Act, 1956 and is an enterprise of the Government of India. It has five integrated steel plants at Bhilai (Chhattisgarh), Rourkela (Odisha), Durgapur (West Bengal), Bokaro (Jharkhand) and Burnpur (West Bengal). SAIL has three special and alloy steels plants viz. Alloy Steels Plant at Durgapur (West Bengal), Salem Steel Plant at Salem (Tamil Nadu) and Visveswaraya Iron and Steel Plant at Bhadravati (Karnataka). The authorised capital of SAIL is `5000 crores. The paid-up capital of the company was `4130.52 crores as on 31st March, 2012, out of which 85.82% is held by the Government of India and the balance 14.18% by the financial institutions/ olders/banks/employees/individuals etc.

Rashtriya Ispat Nigam Ltd. (RINL)

Rashtriya Ispat Nigam Limited (RINL), a Navratna PSE, is the corporate entity of Visakhapatnam Steel Plant – the country's first shore based integrated steel plant at Visakhapatnam, Andhra Pradesh. Visakhapatnam Steel Plant, which was fully commissioned in 1992 with a capacity of 3 Mtpa liquid steel, is now on the verge of completing and stabilizing its 6.3 Mtpa facilities. The Plant operates with a high level of Operational Efficiency exceeding its rated capacity for the 12th Year in succession by achieving 109% capacity utilization for Finished Steel and is making profits for the past 11 years. A pioneer in the steel industry in adoption of system standards, VSP is accredited for all three system standards i.e. ISO 9001:2008, ISO 14001:2004 and OHSAS 18001:2007 and is the first Indian integrated steel plant to be certified with ISO 50001 standards for Energy Management system. The company has emerged as a good corporate citizen and has contributed substantially for the development of the region.

OBJECTIVES OF THE STUDY

1. To analyze the firm's efficiency in Profitability management in the steel industry in India.
2. To analyze the relationship between Profitability of SAIL and RINL in the steel industry in India.

SCOPE OF STUDY

The study is about the comparative analysis of SAIL and RINL in India and how effectively profit has been managed by these companies. It is mainly dealt with the Profitability ratios show a company's overall efficiency and performance.

PERIOD OF STUDY

The study covers a period of 10 years from 2003- 2004 to 2012-2013 is taken for the study.

METHODOLOGY

Data Collection: The study is based on secondary data. Information required for the study has been collected from the annual report of SAIL and RINL & different books, journals, magazines & data collected from websites which related to the steel industry like

Statistical Tools: In this study various statistical tools are used (i.e.,) Mean, Standard deviation, F-test has been used for data analysis.

The F-test is designed to test if two population variances are equal. It does this by comparing the ratio of two variances. So, if the variances are equal, the ratio of the variances will be 1. If the null hypothesis is true, then the F test-statistic given above can be simplified (dramatically). This ratio of sample variances will be test statistic used. If the null hypothesis is false, then we will reject the null hypothesis that the ratio was equal to 1 and our assumption that they were equal.

Formula of the test

$$F = \frac{\frac{df_1 \cdot s_1^2}{\sigma_1^2} / df_1}{\frac{df_2 \cdot s_2^2}{\sigma_2^2} / df_2}$$

H0: There is no significant difference between profitability of SAIL and RINL.

H1: There is significant difference between profitability of SAIL and RINL.

DATA ANALYSIS AND INTERPRETATION

1. Gross Profit Ratio

The ratio of gross profit as a percentage of sales is an important indicator of your company's financial health. Without an adequate gross margin, a company will be unable to pay its operating and other expenses and build for the future. Company's gross margin is a very important measure of profitability, because it looks at your company's major inflows and outflows of money. The formula to compute the gross profit margin ratio:

Gross Margin Ratio	Gross Profit	X 100
	Revenue	

2. Net Profit Margin

Net profit margin is the percentage of revenue remaining after all operating expenses, interest, taxes and preferred stock dividends (but not common stock dividends) have been deducted from a company's total revenue.

Net profit margin	Net Profit	X 100
	Revenue	

Return on Capital Employed

The *return on capital employed* measures the proportion of adjusted earnings to the amount of capital and debt required for a business to function. For a company to remain in business over the long term, its

return on capital employed should be higher than its cost of capital; otherwise, continuing operations are gradually resulting in a reduction in the earnings available to shareholders. The measure should be tracked on at least an annual basis, to spot long-term changes in corporate performance.

Return on Capital Employed	Earnings Before Interest And Taxes	X 100
	Total assets - Current liabilities	

Return on Owners' Equity

The amount of net income returned as a percentage of shareholders equity. Return on equity measures a corporation's profitability by revealing how much profit a company generates with the money shareholders have invested. ROE is expressed as a percentage and calculated as:

Return on Owners' Equity	Net Income	X 100
	Shareholder's Equity	

Operating Expense Ratio

The *Operating Expense Ratio* is the ratio of production and administrative expenses to net sales. The measure excludes financing costs, non-operating expenses, and taxes. A lower operating ratio is a good indicator of operational efficiency, especially when the ratio is low in comparison to the same ratio for competitors and benchmark firms. The operating ratio is only useful for seeing if the core business is able to generate a profit. Since several potentially significant expenses are not included, it is not a good indicator of the overall performance of a business, and so can be misleading when used without any other performance metrics.

Operating Expense Ratio	Operating Expense (Cost) +Administrative Expense (Cost)	X 100
	Net Sales	

ANALYSIS AND INTERPRETATION

Table-1-5

Years	Gross Profit Margin		Net Operating Profit		Operating Expense		Return on Capital Employed		Return on Owners Equity	
	SAIL	RINL	SAIL	RINL	SAIL	RINL	SAIL	RINL	SAIL	RINL
Mar-04	22.14	37.64	28.25	11.82	86.70	73.44	26.11	32.39	0.53	0.07
Mar-05	39.01	44.57	27.53	23.86	68.15	71.26	62.31	30.44	0.86	0.15
Mar-06	26.28	31.82	17.05	14.29	86.30	78.27	36.53	22.05	1.19	0.13
Mar-07	32.17	33.05	17.18	18.19	78.56	77.42	45.38	21.73	1.64	0.16
Mar-08	32.58	38.62	21.43	18.95	77.91	72.87	44.89	25.41	1.49	0.27
Mar-09	25.35	25.47	14.43	14.29	89.62	84.10	27.05	15.76	1.82	0.40
Mar-10	29.30	16.16	8.02	16.67	80.47	91.43	21.14	9.41	1.50	0.28
Mar-11	21.14	13.38	6.23	11.33	90.07	91.39	12.63	7.66	0.97	0.26
Mar-12	16.62	12.43	5.68	7.65	92.39	90.73	10.06	7.74	1.65	0.41
Mar-13	12.09	8.86	2.91	4.87	99.89	94.45	5.86	4.95	0.61	0.32
Mean	27.18	28.13	16.20	15.23	83.35	81.21	31.79	19.18	1.30	0.26
Variance	46.99	140.34	72.84	23.17	59.76	69.85	289.76	90.68	0.17	0.01
Observations	9	9	9	9	9	9	9	9	9	9
df	8	8	8	8	8	8	8	8	8	8

F	0.33		3.14		0.86		3.20		16.97	
P(F<=f) one-tail	0.07		0.06		0.42		0.06		0.00	
F Critical one-tail	0.29		3.44		0.29		3.44		3.44	

The above table No.1 indicates the calculations of Gross Profit Margin Ratio (GPR), Net Operating Profit Ratio (NOP), Operating Expense Margin Ratio, Return on Capital Employed (ROCE), and Return on Owners Equity (ROE) of SAIL and RINL from the period of March, 2004 to March, 2013. Here, we can find that in GPR of SAIL and RINL in the year 2003-04 was 22.14 and 37.64 which is in 2012-13, GPR of SAIL and RINL is 12.09 and 8.86 there is decrease in GPR of SAIL and RINL. Compare to mean of SAIL and RINL as 27.18 and 28.13 there is decline of GPR at 46% and 35%. Analysis of F-test indicates that the value of F (0.33) > (0.29) F Critical which means which says that there is a significant difference between SAIL and RINL at the 5% of difference.

In Net Operating Profit Margin Ratio of SAIL and RINL we can find that compare to mean of SAIL and RINL 14.87 and 14.19, the NOP of SAIL and RINL in the year 2012-13 was 2.91 and 4.87 which is 19% of mean of SAIL and 34% of mean of RINL. Through the year of SAIL and RINL from 2004 to 2013 there is a declined trend in Net Operating Profit. F-test analysis indicates that the value of F-test is 3.14 where F critical in 3.44 where in can find F Test (3.14) < (3.44) F Critical, which indicates that there is no significant difference between NOP of SAIL and RINL.

In Operating Expense Ratio we can find the trend of increasing the expense of both companies. Compare to 86.70 in 2004 to 99.89 in 2013 there is a growth of 13% in Operating Expense Ratio of SAIL, where RINL operating expense in 2004 was 73.44 which increased 94.45 which indicates there is a growth of 20% in operating Expense which direct affect to Growth Profit as well as Net Operating Profit of both company, where internal difference between the operating expense of both the company is 7%. Analytical result of F test indicate that F test value of Operating Expense Ratio is 0.86 which is higher than the F critical 0.29 indicates there is a significant different between these two company.

In Return on Capital Employed Ratio the mean of SAIL and RINL is 31.79 and 19.18; compare with the result of 2012-13 the return on capital employed ratio is 5.86 and 4.95 which is less than the mean of SAIL and RINL. In RINL we can find that from 2004 to 2013 there is total decline trend of ROCE where in SAIL there is mix trend ups and down till March 2008, here we can assume that the effect of recession might be cause for the decline trends in SAIL after 2008. The F Value of ROCE is F (3.20) which is less than F Critical 3.44 indicates there is no significance difference between Operating Expense of SAIL and RINL.

Finally, in Return on Owner's Equity we can find the mix trends of result in Return on Owners' Equity, compare to 2004 0.53 to 0.61 in 2013 there is a growth of 0.08% but overall there is a mix trend in SAIL, where in RINL in the year 2004, 0.07 to 0.32 there is a growth of 0.25%, but we can also find the mix trend in this also. The result of F test in return of owners' equity, the F test (16.97) is higher than the F Critical 3.44 so there is a significant difference between SAIL and RINL.

LIMITATION OF THE STUDY

1. The study is related to a period of 10 years.
2. As the data are only secondary, i.e., they are collected from the published annual reports.
3. Due to limited span of time only profitability ratio is taken for the study.
4. Study solely depends on the published financial data, so it is subject to all limitations that are inherent in the condensed published financial statements.
5. We have selected two operating public sector Company form Iron and Steel industry but not considered all the operating units as sample, which may leave some grounds of error.

6. Also, in spite of being aware of the fact that inflation is so certain a factor, it could not be taken into consideration in the present study.
7. Study is purely based on public sector Iron and Steel Industry, we could not compare with the data and information of efficiently managed private sector companies for testing of liquidity position and its efficiency.

CONCLUSION AND FINDING

The problem starts with the operating expense which indicates increasing trends over the years which is the cause for the reduction in gross profit and net profit of both the companies, which might be because of leading to high raw material cost, labor cost, cost of technology and start-up new plants and other sales as well as administrative expenses.

The actual values of Profitability is depends upon other ratios also other indicators which related to the profit we should focus on that. The effect of Private sector players on profitability is also considered. Public Sector Units should improve their management efficiency and should focus to reduced their operating expenses which might be one of the big reason for their low profitability if both the companies under study high operating expense is one of the big reason for the declining the growth profit and net operating profit, where the paid up capital which is different for the both the companies are the reason for their low return of owner's equity position in case of both SAIL and RINL.

Chart-1

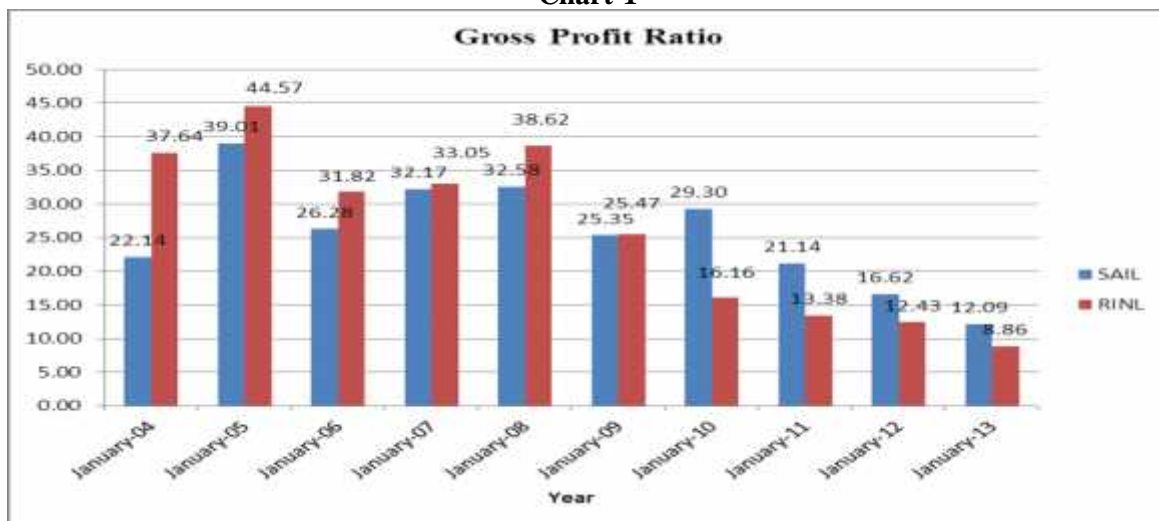


Chart-2

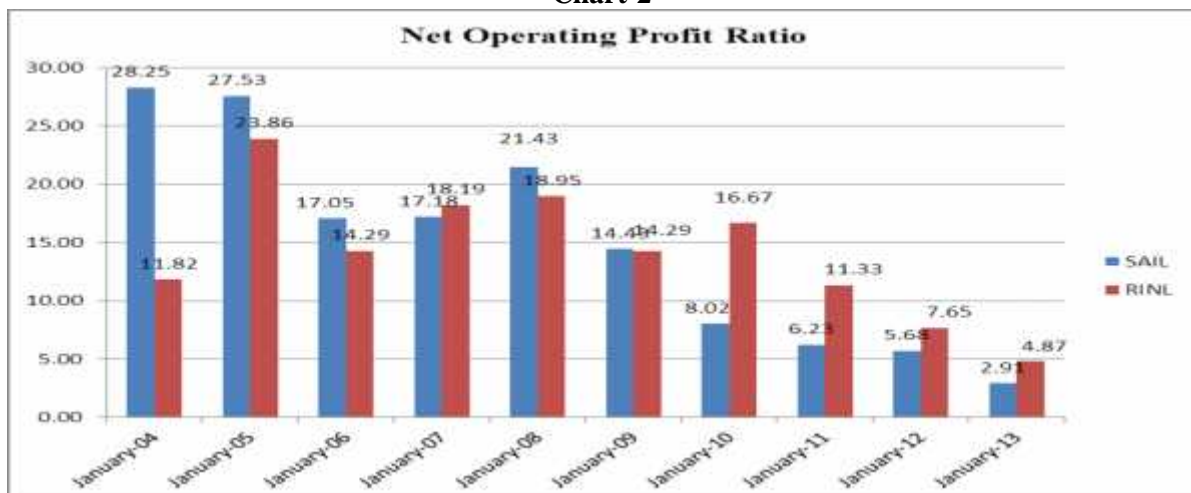


Chart-3

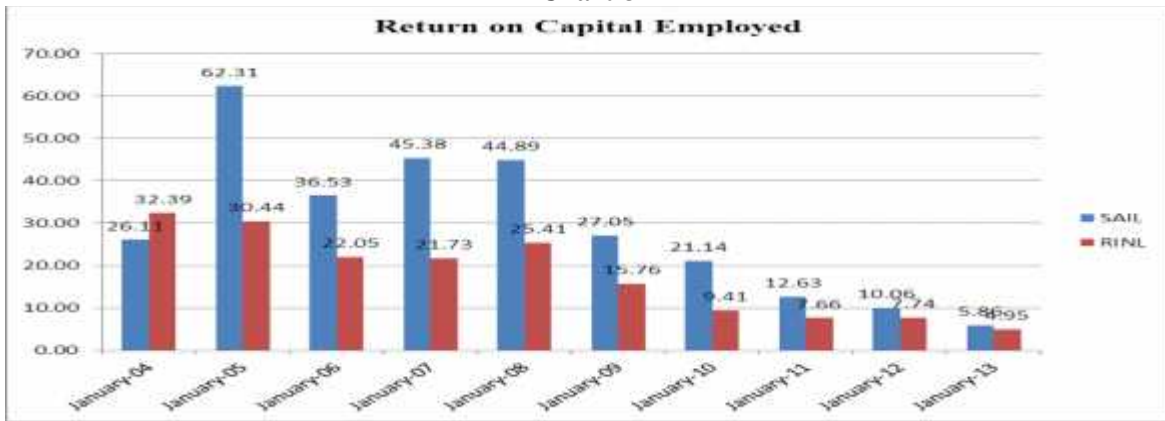


Chart-4



Chart-5



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