# Opportunities and Challenges of Steel Authority of India Limited In The Changing Indian Scenario

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#### **Abstract**

The performance of an industry can be seen in its financial statement. In the changing scenario of the Indian economy may revise the existing practices and policies of the company to obviate the obstacles by modifying the financial operation. On the strength of the financial structure, the industry can take any financial decision on the future scenario. Hence analyzing the present and past trends of the financial structure is the very essential one to take any concrete steps for the changing climate. All the endeavors of the industry can be determined by the level of profit attained by the industry, liquidity condition and solvency capacity of the firm against the claims of its shareholders, creditors, investors and so on. Hence this is concentrated on analyzing the financial statement of the industry in terms of liquidity and solvency, profitability and efficiency. The soundness of the industry is on its profit that sets everything as good. Therefore to avail the opportunity and estimate the challenges the financial statement are considered to analyse the profitability, liquidity and efficiency ratios of the Steel Authority of India to test the financial health the Altman's Z-score model is applied.

Key words: Financial Statement Analysis, Profitability, Liquidity and Efficiency Ratios, Altman's Z-Score.

### 1. Introduction

Comparing with other industries, the steel industry is the base of the developing country like India to uplift the GDP and PPP in the Indian economy. It is considered a key industry deciding the infrastructure of the country and performing a major role in modernizing the business and human culture. India stands in the world as the third-largest country in the production of steel after the US and China. In India, the largest steel production company in the public sector is the Steel Authority of India Limited. It was honoured as a 'Maharatna Company' in 2010 by the government of India. It contributes a major portion to increase the growth rate of GDP and CAGR in the country. Therefore, the financial performance of SAIL is inevitable. On the basis of the financial performance, the management can take any decision which changes the trend of the company in the future period of time. The financial

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statement exposes the financial performance of the company in a specified period. So analyzing the profit, liquidity and efficiency position of the company is very important. It accelerates the company into a new altered or modernized method that may correlate with the objectives of the company, investors and bankers and so on.

### 2. Statement of the Problem

The present economical climate in India seems more critical and risk in attaining the objectives of the industry due to fluctuation of prices, demand and supply of raw material, changes in government rules and regulations and so on. In this characterized new economical condition, though there are more strategies followed by the company by implementing new policies and operational methods, there is a threat to forecast the trend of the profit and other major elements in determining the soundness of the company. Sustaining the profit and liquidity in the standard is really a crucial one in the changing scenario of the Indian economy. Hence this study is made as an attempt to analyze the profitability, liquidity, and efficiency of the company to examine the soundness of the company.

### 3. Objectives

- 1. To study the profitability position of the SAIL
- 2. To examine the overall profitability condition of the SAIL
- 3. To analyze the liquidity and solvency position of SAIL
- 4. To test the efficiency state of the SAIL
- 5. To measure the soundness of the SAIL

### **Hypothesis**

**H0**: There is no significant correlation between liquidity and profitability. **H1**: There is a significant correlation between liquidity and profitability.

### 4. Review of Literature

**Dr.Vijay H.Vuas** (2015) analyzed the financial health of Oil and Gas Industry in India and found that all the companies taken in the study are in a good position in earning profits and solving the claims. Dr.Vivek Singla studied the financial performance of TATA Steel and SAIL as a comparatively. From that analysis, it was observed that earning capacity of the TATA steel was so good that the SAIL due to high-profit margin and less operating expenses.

**Varun Kesavan** (2015) concluded from his comparative study on the financial performance of TATA and JSW steel Ltd that according to the liquidity position, management on inventory, fixed assets and gross profit and also net profit, the performance of TATA steel is better that JSW Ltd. It is also found that the factors for determining the profits and liquidity position play an effective role in the operation of the company.

**Dr.C.Balakrishnan(2016)** conducted a study on the financial performance of selected steel companies in India and found that the total assets were in increased that the turnover ratio. It was observed that if a company utilized its assets properly, it can earn returns in the future course of time and the rational financial decision was an essential one to monitor its financial performance.

Aritra Ranjan Das (2018) presented an article on the financial performance of the selected steel companies in India. It was analyzed and identified as due to the declining profitability position of the company, it may follow the National Company Law Tribunal for selling their assets or restructuring the capital position. Also, the study stressed the government for making better infrastructure for importing the iron ore for effective manufacturing.

### 5. Research Methodology

**Research Design:** Exploratory research is designed in this study to analyze and interpret the details collected from the financial statement of SAIL.

**Sources of Data:** Secondary data published in the annual report of SAIL are taken for analysis.

**Period of the Study:** For analyzing the ratios, the data from 2015 to 2019 are exercised in the analysis.

**Tools of analysis:** In this study, various financial ratios are used and statistical tools such as Mean, Standard Deviation, and Coefficient of variance, correlation analysis and Altman's Z-score to test the sound position of the company.

## 6. Limitation of the Study

- 1. The period of the study is limited to 5 years starting from 2015 to 2019.
- 2. The study is made with the availability of the secondary data issued in the annual report of SAIL.
- 3. Limited financial ratios covering profitability, liquidity, solvency, and efficiency of the company are used in this study.

### **Data Analysis and Interpretation**

**Table: 1: LIQUIDITY RATIO OF SAIL** 

Year	CR	QR	DER	LTDER
2014-15	0.68	0.55	0.65	0.32
2015-16	0.61	0.42	0.84	0.45
2016-17	0.6	0.38	1.08	0.53
2017-18	0.37	0.4	1.18	0.83
2018-19	0.64	0.41	1.09	0.81
AV	0.58	0.43	0.97	0.59
SD	0.12	0.07	0.22	0.22
CV	20.94	15.65	22.51	38.23

Source: Annual Report of SAIL

Table 1 shows the liquidity ratio of SAIL. The CR, QR, DER and LTDER are the variables taken to analyze the liquidity position of the SAIL. The CR was recorded 0.68 as a maximum in 204-15. The QR was higher as 0.55 in 2014-15 and lower in 2016-17 as 0.38. The DER 1.18 was the maximum in 2017-18, in 2014-15, 0.65 was recorded as the minimum. In the case of LTDER, 0.81 in the year 2018-19 was the maximum and 0.32 in 2014-15 was the minimum. Therefore, the CR and QR has been in a decreasing trend and then increased afterward. But DER and LTDER was in increasing trend from the year 2014-

15. Though the liquidity position in all the years, overall, was below the ideal ratio 1:1, from the year 2018-19, except DER and LTDER CR, QR was in increasing trend.

Table: 2: PROFITABILITY RATIO OF SAIL

Year	GPR	OPR	NR	EPS
2014-15	6.3	10.18	4.57	5.07
2015-16	-13.57	-7.42	-10.29	-9.74
2016-17	-5.94	0.08	-6.37	-6.86
2017-18	2.69	8.02	-0.83	-1.17
2018-19	9.48	14.53	3.25	5.27
AV	-0.21	5.08	-1.93	-1.49
SD	9.43	8.74	6.32	6.81
CV	-4535.62	172.02	-326.91	-458.56

Source: Annual Report of SAIL

The above table 2 depicts the profitability ratio of SAIL. The GPR and OPR showed that 9.48 and 14.53 were the maximum ratio is 2018-19 while -13.57 and -7.42 in 2015-16 was the minimum respectively. The NPR was higher in 2014-15 (4.57) and lower in 2015-16(10.29). The maximum of EPS was entered in 2018-19 (5.27) and minimum in 2015-16 (9.74). Totally the profitability position of the SAIL from this table is in increasing trend from the year 2016-17.

Table: 3: LONG - TERM SOLVENCY RATIO OF SAIL

Year	ROA	ROCE	RONW	EBIT	ROLTF
2014-15	105.33	5.43	4.81	6.16	6.78
2015-16	94.89	-6.51	-10.25	-13.37	-8.3
2016-17	87.18	-2.81	-7.86	-5.87	-3.82
2017-18	86.46	2.62	-1.34	2.67	3.11
2018-19	92.36	8.64	5.71	9.40	9.98
Av	93.24	1.47	-1.79	-0.20	1.55
SD	7.62	6.13	7.22	9.31	7.53
CV	8.17	416.02	-404.17	-4607.18	485.71

Source: Annual Report of SAIL

Table 3 describes the long-term solvency ratio of SAIL. The maximum ROA was recorded in 2014-15 as 105.33 but it was minimum in 2017-18(86.46). The ROCE, RONW, EBIT, and ROLTF were maximum in the year 2018-19 and minimum in the year 2015-16. The average of the solvency ratio was higher in ROA than for others. Therefore, the long-term solvency position of the SAIL is good from the year 2018-19 as the rate of the solvency ratio in 2018-19 was higher than the previous year.

**Table: 4: CORRELATION MATRIX** 

	CR	QR	GPR	OPR	NPR	EPS	ROA	ROCE	RONW
CR	1.000	0.481	0.024	-0.004	0.127	0.193	0.677	0.087	0.183
QR	0.481	1.000	0.361	0.301	0.555	0.539	0.950	0.356	0.521
GPR	0.024	0.361	1.000	0.998	0.976	0.973	0.220	0.993	0.972
OPR	-0.004	0.301	0.998	1.000	0.960	0.959	0.162	0.992	0.959

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NPR	0.127	0.555	0.976	0.960	1.000	0.991	0.413	0.966	0.986
EPS	0.193	0.539	0.973	0.959	0.991	1.000	0.434	0.979	0.999
ROA	0.677	0.95	0.22	0.162	0.413	0.434	1.000	0.249	0.422
ROCE	0.087	0.356	0.993	0.992	0.996	0.979	0.249	1.000	0.982
RONW	0.183	0.521	0.972	0.959	0.986	0.999	0.422	0.982	1.000

The above table 4 describes the correlation matrix of CR, QR, GPR, OPR, NPR, EPS, ROA, ROCE, and RONW. The main aim of this tool is to analyse whether there is positive or negative correlation between the variables chosen in this table. The CR is positively correlated with others except for OPR and very weak with NPR, ROCE, and RONW. The QR is also positive with all. It is moderate with CR, NPR, EPS, and RONW and very strongly related to ROA. The GPR and NPR are very strongly correlated with OPR, EPS. ROCE and RONW. The OPR is very strongly related to all except QR but negative with CR. ROA is very strongly related to QR but weak with OPR. ROCE except for CR, QR and ROA is in very strong correlation. In the case of RONW, it is very strong with GPR, OPR, NPR, EPS, and ROCE but weak only with CR. There is a very weak correlation between variables such as CR with NPR, OPR with EPS and ROA with OPR. Therefore, overall, there is a positive correlation among variables taken in the study except for OPR.

**Table: 5: ELEMENTS of Z-SCORE** 

Year	NW	TA	RE	EBIT	NS	BVE	BVD
2014-15	17621	99327	39374	5675	45711	43505	28221
2015-16	13849	100340	35065	-2400	39052	39196	33071
2016-17	13439	106539	31879	0.29	44452	36009	38901
2017-18	13354	114190	31583	5306	57558	35714	42021
2018-19	16747	116438	34021	10092	66967	38152	41434

Source: Annual Report of SAIL

Table 5 shows the elements of Z-Score. NW, TA, RE, EBIT, NS, BVE and BVD are considered as the elements for calculating Z-Score. On the basis of the formula of the model, every variable are to be multiplied by its weight to determine the score. According to the value obtained, the score is analyzed.

Table: 6: RATIOS of Z-SCORE ANALYSIS

Variables	Ratios	2014-15	2015-16	2016-17	2017-18	2018-19
$X_1$	Net Worth to Total Assets	0.18	0.14	0.13	0.12	0.14
$X_2$	RE to Total Assets	0.4	0.35	0.3	0.28	0.29
$X_3$	EBIT to Total Assets	0.06	-0.02	0	0.05	0.09
$X_4$	Book Value of Equity to Book	1.54	1.19	0.93	0.85	0.92
	Value of Debt					
$X_5$	Net Sales to Total Assets	0.46	0.39	0.42	0.5	0.58

Table: 6. Shows the ratios taken for analyzing the Z-Score. Totally 5 ratios have been taken to estimate the score. The Net Worth to Total Assets considered as X1, Retained Earnings to Total Assets considered as X2, EBIT to Total Assets considered as X3, Book Value of Equity to Book value of Debt considered as X4 and Net sales to Total Assets considered as X5 are calculated and placed in the table for all the study period.

Table: 7. Z-SCORE VALUE

Year	1.2 X <sub>1</sub>	1.4 X <sub>2</sub>	$3.3 X_3$	0.6 X <sub>4</sub>	1.0 X <sub>5</sub>	Z-Score
2014-15	0.213	0.555	0.189	0.925	0.460	2.802
2015-16	0.166	0.489	-0.079	0.711	0.389	2.065
2016-17	0.515	0.419	0	0.555	0.417	2.323
2017-18	0.141	0.387	0.153	0.51	0.504	2.199
2018-19	0.173	0.409	0.286	0.552	0.575	2.570

The table 7 shows the value of Z-Score obtained from the elements taken in this study. In the year 2014-15, the score is higher as the maximum and minimum in the year 2015-16 (2.065). From the year 2015-16 to 2018-19, the Z-score is in fluctuating trend. While comparing with 2016-17 and 2018-19, the rate of increase of Z-score is just higher in 2018-19. Though the score has been in the fluctuating move, there will be a scope to increase in the next year than the rate of increase recorded so far. Hence the score value indicates that the current financial position of the SAIL is safe.

### 7. Findings of the Study

- Though the liquidity position in all the years, overall, was below the ideal ratio 1:1, from the year 2018-19, except DER and LTDER CR, QR is in increasing trend.
- ➤ The profitability position of the SAIL from the analysis is in increasing trend from the year 2016-17.
- ➤ The long-term solvency position of the SAIL is good from the year 2018-19 as the rate of the solvency ratio in 2018-19 was higher than the previous year.
- There is a positive correlation among variables taken in the study except OPR and very strong correlation between QR and ROA, GPR with OPR, NPR and EPS, OPR with OPR, NPR, ROCE and RONW, NPR with GPR, OPR, EPS, ROCE and RONEW, EPS with GPR, NPR, ROCE and RONW, ROA with QR, ROCE with GPR, OPR, NPR, EPS, RONEW and RONW with GPR, OPR, NPR, EPS, ROCE.
- ➤ In the year 2014-15, the Z- score is calculated as the maximum and minimum in the year 2015-16 (2.065). From the year 2015-16 to 2018-19, the Z-score is in fluctuating trend. While comparing with 2016-17 and 2018-19, the rate of increase of Z-score is just higher in 2018-19.

Though the score has been in the fluctuating move, there will be a scope to increase in the next year than the rate of increase, recorded so far. Hence the score value indicates that the current financial position of the SAIL is safe.

#### 8. Conclusion

The financial position of a company cannot be fixed for all the years due to alterations of regulations and policies of the government, lack of financial assistance from the banker, changing nature of expectations of the investors, irregular supply of raw materials by importing from another country, uncontrollable operating cost and so on. The maintenance of profitability and liquidity position of the company among these struggles is really a complicated one. But if the company keeps a constant view on the returns, investment and sales turnover it can at a certain level, manage the position to its favor. Hence the financial ratios are playing a vital role in determining the past trend and future. As a result of the analysis conducted in this study, the company reaches now in a better position than that of the

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previous years. The profitability, liquidity and solvency position of the company is good and there is a correlation between profitability and liquidity position of the company.

### 8.1 Scope for Further Study

There are wider opportunities for the further study. The further study may be in analysing the managerial efficiency of the company by applying the efficiency ratio. The comparative study may possible selected private sector. To observe the progress of the SAIL after the demonetization, the study may conduct by comparing financial performance post and pre demonetization.

#### 9. References

- 1. Aritra Ranjan Das, Financial Performance of Steel Industry in India, International Journal of Management Studies, ISSN(Print)2249-0302, ISSN(Online): 2231-2528. vol.-V, Issue-3(2), July 2018.
- 2. Dr.C.Balakrishnan, A Study on Financial Performance of Steel Industry In India, www.ijariie.com252, Vol-2, Issue-4, 2016, IJARIIE ISSN(O)-2395-4396287.
- 3. Varun Kesavan, A Comparative Study on Financial Performance of TATA Steel Ltd and JSW Steels Ltd, Vol. IV, Issue V, June 2015, International Journal of Latest Technology in Engineering, Management and Applied Science, ISSN 2278 2540, www. ijltemas. in page 14.
- 4. Dr.Vijay, H.Vuas, Dr.Vijay and H.Vyas, A Study of Financial Health of Oil and Gas Industry in India, South Asian Academic Research Journals ACADEMICIA, Vol.5,Issue 6, June 2015, pp 174 186, ISSN: 2249-7137.
- 5. Dr.Vivek Singla, A Comparative study on Financial Performance of TATA and SAIL, International Journal of Reviews, Surveys and Research(IJRSR), ISSN(print): 2321 3280, ISSN (online): 2319-