# Evaluating Financial Strengths of Selected PSU Steel Companies

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## Abstract

Recent economic changes facilitated the Steel sector to ignore the Reserve quotation for PSU to get a wave from mandatory. The six major role players in Indian steel sector equally qualified to world class iron makers out of 36 in the world. In 2018, steel utility was about to grow at the rate of 5.7% year-on-year 9.2% Metric Tons. Our country anticipated to beat Japan to predominant in iron production at the earliest. But, few iron PSUs in India still struggle to sustain with Industry growth. With this aim, the financial performances of seven selected PSU companies are predicted through Altman's Z- score.

## Keywords

Steel Industry, PSU, Financial Strength.

## Introduction

The Global Steel industry has been revolving under the pressure of huge production. Government of India providing a platform to Indian Companies through the levy of antidumping duty and safeguard duties as well as less import prices which is being considered as noteworthy. With the help of Imposition Quality Control order, Apex authority supports to our domestic companies have been struggled because of less availability of raw material and regular supply on them along with recent closure of Goa iron producers. In spite of threat of imports, Indian steel companies invested highly into modernization and expansion of their existing units. According to the report of World Steel Dynamics in June 2017, 36 steel makers in the world out of 250 large steel makers is

declared as the best, within the list of 36, six companies from India, namely JSW steel, SAIL, TATA steel JSPL, RINL and ESSAR steel qualified as world class.

The six major role players in PSU of iron sector equally qualified as world class steel makers out of 36 steel makers in the world. (Secretary General, Indian Steel Association). Indian steel industry has consistently tried for technological up gradation of earlier setup plants at high grade energy at optimum level. Recent economic changes in our nation encouraged the role players to the best performer. This liberalized scenario encourages the private sectors to involve in steel production.

## Evidence of the Study

DeVancy (1993) has conducted a study to measure the changes of status in the families of United States of America by using financial ratios selected from different categories from the period 1983 - 1986. The research has found the result with support of financial ratios as indicators of progress to answer the question whether the households were able to improve their financial status during the study period.

Kolluru investigated key points on financial measurements of iron producers between 1999 -2003, with an aim of measuring the profit of each producer by aligning with overall composite index in the same field to get impact in EBIT margin.

Gallizo and Salvador (2003) have carried out a study on financial ratios of U.S manufacturing firms 8 years from 1993 to describe behaviour of asset performance with high effective generation of sales to be the best in industry.

Ramaratnam and Jayaraman (2010) used various financial performance ratios to determine the financial strength of selected companies during study period. It has been found that the sector facing a problem due to mass production and less demand, in turn, fixed less price.

Bhunia 2010, has found that the short-term liquidity and its related trend has been measured with help of financial ratios. Inventory and receivable management techniques have supported to the short term financial performance of the selected units. There has been suggestions to minimise the loans and advances to lower extent. An Adequate amount of working capital should be maintained for smooth running of an organisation. Minimization of liabilities with the simultaneous increase of assets will encourage the business to grow.

Shrabanti Pal (2013) Study has a stated the financial strengths of SAIL & RINL. Researcher has considered 2 decades of data to examine the financial performance of selected PSUs with the support of descriptive statistics and financial ratios analysis.

Paghadar Amala Anilbhai (2013) has analysed the financial viability of selected two PSUs namely SAIL and JSW for 5 years period. Management efficiency could be measured through financial ratios.

Kavitha, K.S., and Palanivelu. P. (2014) have investigated the financial performance of selected iron companies in Indian based on profitability model. it has been found that the high necessity of iron and steel from infrastructure, automobile and real estate sectors, which have encouraged the Exports to the extent of 12.15%.

Aritra Ranjan Das (2016) in her research paper applied parametric test like ANOVA to know the impact of financial performance of selected Steel companies viz., Tata, JSP, JSW and SAIL by using the financial ratios to measure the contribution of Company to the economic growth. It has been conducted with an intention to measure the difference between companies due to external factors.

Dr.C. Balakrishnan (2016) in his study "A study on financial performance of the steel industries in India" States that the growth of company influenced by externalities like a capital structure, expenditure, income, expected earnings and optimum utilization of assets. Financial efficiency are interlinked to the above said variables which significantly boost the financial status to the next milestone. All these rational factors are inseparable with the financial policy decision of an organisation.

## Aim of the Study

To analyse the fiscal performance of the selected PSU steel companies in India.

## Research Design and Methodology

Research is conducted with the help of financial statements which are secondary in nature. The data collected from the past five years annual reports published by the selected companies in their websites, government websites, journals and internet sources. The study mainly aims at measuring the performance of seven steel producers under public sector in India. Z-score is applied as model to interpret the result.

## Selection of Sample

Out of 235 companies from CBSE list, seven Steel PSUs are taken as a model to describe the financial strength. Those are SAIL, NMDC, RINL, MSTC, MECON, KICOL and EIL.

## Financial Strength

Financial strength his a scientific process help the organisation to measure the effective utilisation of firm's resources to maximize its earnings both horizontal and vertical analysis help to compare the performance between companies in the same industry during the study period.

Edward. I Altman's Bankruptcy Model uses to predict financial distress. According to this model the discriminate score called as 'Z' score predicts whether a firm, based on the financial performance would face financial crisis or not. Financial divergences can be critically examine through Altman score by using 5 different variables like net working capital, retained earnings, EBIT, market value of equity shares, turnover and total assets. The selected variables are subject to be constraints like X1, X2, X3, X4 and X5 respectively.

Bankruptcy can be ascertained through:
$$Z = 1.2X_1 + 1.4X_2 + 3.3X_3 + 0.6X_4 + 1.0X_5.$$

## Analysis and Understanding

### Table 1 SAIL (Steel Authority of India Limited)

| SAIL | 2013-14 | 2014-15 | 2015-16 | 2016-17 | 2017-18 |
|---|---|---|---|---|---|
| X1 | 0.954 | 0.833 | 0.589 | 0.554 | 0.684 |
| X2 | 0.023 | 0.024 | 0.034 | 0.042 | 0.031 |
| X3 | 0.052 | 0.055 | -0.021 | 0.005 | 0.044 |
| X4 | 0.113 | 0.101 | 0.064 | 0.085 | 0.091 |
| X5 | 0.491 | 0.446 | 0.382 | 0.407 | 0.492 |
| **Z Score** | 1.9074 | 1.7213 | 1.1055 | 1.1981 | 1.556 |

**Interpretation:** For the year 2013-14 the financial performance of the company, according to Z-score was 1.9074. But in the year 2014, 2015 and 2016 the score dropped down to 1.7213, 1.1055, and 1.1981 respectively. In the financial year 2017-2018 due to the intense increase in working capital and total sales of the company the score was increased to 1.556.

**Table 2 RINL (Rashtriya Ispat Nigam Ltd)**

| RINL | 2013-14 | 2014-15 | 2015-16 | 2016-17 | 2017-18 |
|------|---------|---------|---------|---------|---------|
| X1 | -0.073 | -0.194 | -0.179 | -0.236 | -0.241 |
| X2 | 0.042 | 0.031 | 0.029 | 0.038 | 0.052 |
| X3 | 0.004 | 0.019 | 0.062 | 0.058 | 0.061 |
| X4 | 0.232 | 0.186 | 0.17 | 0.295 | 0.287 |
| X5 | 0.546 | 0.419 | 0.426 | 0.44 | 0.552 |
| **Z Score** | 0.6696 | 0.4039 | 0.5584 | 0.5784 | 0.7091 |

## Interpretation

The company's financial performance in the year 2013-2015 was 0.6696 which later dropped to 0.4039 in the year 2014-2015 due to low working capital. The company raised its financial position to 0.5584 in the year 2015-2016 and managed to continue the growth to 0.5784 in the year 2016-2017. In the year 2017-18 due to the increase in sales of the company stood up to 0.7091 which indicated that the company is been performing well compared to previous years.

**Table 3 NMDC (National Mineral Development Corporation)**

| NMDC | 2013-14 | 2014-15 | 2015-16 | 2016-17 | 2017-18 |
|------|---------|---------|---------|---------|---------|
| X1 | 0.715 | 0.635 | 0.486 | 0.605 | 0.185 |
| X2 | 0.017 | 0.087 | 0.132 | 0.097 | 0.144 |
| X3 | 0.308 | 0.286 | 0.14 | 0.167 | 0.216 |
| X4 | 0.012 | 0.028 | 0.037 | 0.088 | 0.102 |
| X5 | 0.383 | 0.358 | 0.193 | 0.343 | 0.421 |
| **Z Score** | 2.2884 | 2.2024 | 1.4452 | 1.6186 | 1.8087 |

## Interpretation

According to Altman's Z-Score the company's financial position in 2013-2014 was 2.2884 due to high working capital ratio, high turnover ratio and decent market value of shares of the company. In 2014-2015 it came down to 2.2024 with little decrease in the sales and the working capital ratios. The score continued to drop down to 1.4452 in the year 2015-2016 due to low EBIT and sales but the company manged to cope-up with the sales in the year 2016-2017 as the result the financial performance of the company was increased to 1.6186. In the year 2017-2018 the score was 1.8087 which indicated the company's financial position is strong in the market.

**Table 4 MSTC Limited (Metal Scrap Trade Corporation Limited)**

| MSTC | 2013-14 | 2014-15 | 2015-16 | 2016-17 | 2017-18 |
|---|---|---|---|---|---|
| X1 | 0.068 | 0.033 | 0.041 | 0.036 | 0.064 |
| X2 | 0.022 | 0.015 | 0.058 | 0.037 | 0.052 |
| X3 | 0.02 | 0.022 | 0.022 | 0.027 | 0.023 |
| X4 | 0.112 | 0.101 | 0.083 | 0.074 | 0.102 |
| X5 | 0.338 | 0.453 | 0.566 | 0.781 | 0.785 |
| Z Score | 0.5836 | 0.6468 | 0.8188 | 1.0095 | 1.0717 |

## Interpretation

In the year 2013-2014 the score of the company was 0.5836 due to low EBIT and sales. But the score continued to increase to 0.6468 and 0.8188 in the year 2014-2015 and 2015-2016 respectively this was due to increase in the sales, working capital and EBIT. In 2016-2017 due to high sales the financial performance was hiked and the score moved up to 1.0095. in the year 2017-2018 the company continued to maintain its financial position with good sales and decent market share which resulted in the score of 1.0717.

**Table 5 MECON (Metallurgical & Engineering Consultants Limited)**

| MECON | 2013-14 | 2014-15 | 2015-16 | 2016-17 | 2017-18 |
|---|---|---|---|---|---|
| X1 | 0.286 | -0.28 | -0.301 | -0.282 | -0.51 |
| X2 | 0.075 | 0.082 | 0.091 | 0.106 | 0.098 |
| X3 | 0.056 | 0.027 | -0.15 | -0.076 | 0.038 |
| X4 | 0.238 | 0.326 | 0.489 | 0.426 | 0.418 |
| X5 | 0.448 | 0.439 | 0.446 | 0.398 | 0.412 |
| Z Score | 1.2238 | 0.5025 | 0.0106 | 0.2128 | 0.3134 |

## Interpretation

The company's financial performance in the year 2013-2015 was 01.2238 due to high sales and working capital ratio which later dropped to 0.5025 in the year 2014-2015 due to negative working capital ratio. The company again lost its financial position to 0.010, which was crucial, in the year 2015-2016 due t low sales and negative working capital ratio but it managed to continue the growth to 0.2128 in the year 2016-2017. In the year 2017-18 due to the increase in sales of the company managed to reach up to 0.3134.

**Table 6 KIOCL Limited, (Kudremukh Iron Ore Company Limited)**

| KIOCL | 2013-14 | 2014-15 | 2015-16 | 2016-17 | 2017-18 |
|---|---|---|---|---|---|
| X1 | 0.025 | 0.038 | 0.012 | -0.016 | -0.024 |
| X2 | 0.036 | 0.048 | 0.034 | 0.023 | 0.018 |
| X3 | 0.015 | 0.035 | 0.074 | 0.061 | 0.042 |
| X4 | 0.215 | 0.362 | 0.421 | 0.521 | 0.429 |
| X5 | 0.362 | 0.294 | 0.254 | 0.261 | 0.271 |
| Z Score | 0.6209 | 0.7395 | 0.8128 | 0.7879 | 0.6634 |

### Interpretation

In the year 2013-2014 the score of the company was 0.6209 due to low EBIT and sales. But the score continued to increase to 0.7395 and 0.8128 in the year 2014-2015 and 2015-2016 respectively this was due to increase in the sales, working capital and EBIT. In 2016-2017 due to low sales the financial performance was decreased and the score moved down to 0.7879. In the year 2017-2018 the company continued with the same drawback of low sales which resulted in the score of 0.6634.

**Table 7 EIL (Engineers India Limited)**

| EIL | 2013-14 | 2014-15 | 2015-16 | 2016-17 | 2017-18 |
|---|---|---|---|---|---|
| X1 | 0.064 | 0.068 | 0.057 | 0.061 | 0.065 |
| X2 | 0.321 | 0.295 | 0.319 | 0.324 | 0.338 |
| X3 | 0.012 | 0.019 | 0.026 | 0.031 | 0.038 |
| X4 | 0.142 | 0.149 | 0.152 | 0.163 | 0.214 |
| X5 | 0.246 | 0.215 | 0.236 | 0.248 | 0.264 |
| **Z Score** | 0.8617 | 0.8970 | 0.9280 | 0.9749 | 1.0690 |

### Interpretation

In the year 2013-2014 the score of the company was 0.8617 due to low EBIT and sales. But the score continued to increase to 0.8970 and 0.9280 in the year 2014-2015 and 2015-2016 respectively this was due to increase in the sales, working capital and EBIT. In 2016-2017 due to high sales the financial performance was hiked and the score moved up to 0.9749. in the year 2017-2018 the company continued to maintain its financial position with good sales and reasonable market share which resulted in the score of 1.0690.

### Findings & Conclusion

Composite liquidity score of SAIL, RINL, NMDC, MSTC and EIL is favour in research tenure. The other companies namely, MECON and KIOCL have less liquidity performances. SAIL, RINL, NMDC MSTC and EIL have low risk as they want to settle their short term obligations then and there. Debt equity ratio was satisfactory for SAIL, NMDC, MSTC and EIL. But RINL MECON and KIOCL where highly dependent on barrowings in the beginning leads to negative impact on leverage.

Overall repayment score has been good for all companies except MECON and KIOCL. Perpetual inventory system of companies had not been satisfactory due to short fall in demand in markets have high price fluctuations. Composite assets performance score has been satisfactory to all companies except MECON and KIOCL. Gross operating profit margin is not favour to MECON and KIOCL. Overall Z score was poor to MECON and

KIOCL during research tenure. The ROI has been extremely good to SAIL, RINL, NMDC, MSTC &EIL and satisfactory to MECON and KIOCL.

The present study has attempted to identify the real factors that account for the differences in the origination's performance and the possibility of the company's facing financial distress. The objective of the study has used Edward I Altman's multiple discriminant model to identify the cause of deteriorating performance of the firms and to take suitable measures to avert strengths and inefficiencies. Out of seven public sector companies, 5 companies RINL, MSTC, MECON, KIOCL &EIL had a threat of financial distress during the study period. Two companies have the immune to bankruptcy as its score has between 1.81 and 2.99. In general, the possibility of financial strength is remote. Among the five variables contribute to the Z score to assess the bankruptcy measurement in forth coming period, Gross current assets after paying liabilities has been the main cause for the low level of Z score. Companies which are found to be in financial distress don't have sufficient accumulated profits to plough back during the times of need. The management can apply Altman Z model on its financial details regularly and check if the company has any risk of financial distress, which will enhance the financial health of underperforming Companies and will boost up the companies which are already performing better, resulting in an important mark in the industry map.

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