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# A STUDY ON WORKING CAPITAL MANAGEMENT AND PROFITABILITY ANALYSIS OF STEEL AUTHORITY OF INDIA LIMITED

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#### Abstract

Working capital management is one of the most important factors impacting the performance of the firm. Efficient management of working capital is crucial for sustaining the business in the long run. A study of working capital is of major importance to internal and external analysis because of its close relationship with the current day-to-day operations of a business. Every business needs funds for two purposes for its establishment and to carry out its day-to-day operations. Long-term funds are required to create production facilities through a purchase of fixed assets such as plant and machinery, land, building, furniture. Funds are also needed for the short-term purpose for the purchase of raw materials, payment of wages and other day-to-day expenses. Easy availability of low-cost manpower and preference of ample refers make India competitive in the global set up. Finance is needed for day to day operation. Working capital may be regarded as the lifeblood of a business. Its effective provision can do much to ensure the success of the business. Its inefficient management can lead not only to the loss of profits but also to the downfall of a business. In several units, there is adequate working capital but the mismanagement of working capital increases the costs and reduces the rate of return. The efficient management of working capital minimizes the cost and can do much more for the success of the business. Financial liquidity analysis of Steel Authority of India Limited (SAIL) is analyzed and it concludes that the financial liquidity management occupies a significant place in financial management.

Keywords: Working Capital Management, Current Assets, Current Liabilities, Current Ratio..

# Introduction

The World economic recovery is on track and a pickup in global growth presents a healthy sign for industrial and manufacturing activities across the globe. With Global output, as projected by IMF, to grow by 3.5% in 2017 and 3.6% in 2018 on the back of better

performing emerging economies, we expect more stability in the steel industry worldwide. Meanwhile, India is projected to become the world's fifth largest economy in 2017, surpassing UK and France and the world's third largest economy by 2023, surpassing Japan and Germany. India's GDP is projected to rise from

USD 2.2 trillion in 2016 to USD 3.6 trillion by 2020. This predicts well for businesses that are focused on domestic growth in the future. With suitable trade measures put in place by the Government of India for providing a level playing field to the domestic steel producers, the Indian steel industry could perform as per its potential and India became a net exporter of steel in FY 2016-17.

Given the current stage of development of the Indian economy and the likely growth path for the Country's economy in the next decade, the steel demand in India will witness significant growth in future. India with its stable government, strong reforms, rising infrastructure spend & robust consumption demand will provide a platform to reach per capita steel consumption of 160 kg & total steel capacity of 300 Million tonnes by 2030-31 as envisaged by National Steel Policy 2017.

SAIL achieved a turnover of ₹49,180 crore during 2016-17, which is higher by 14% over the previous year due to increase in both sales volumes (8%) as well as Net Sales Realization (NSR) of Saleable Steel of five Integrated Steel Plants by about 6%. The increase in NSR was partly due to an overall improvement in price levels and partly due to measures in enriching Company's product mix. Company's intensive focus on improving operational parameters resulted in positive EBITDA (Earnings before interest, tax, depreciation and amortization) in all four quarters of FY 2016-17 and Company trimmed losses by 30% by recording an overall improvement in production, sales efficiency.

As far as production performance is concerned, SAIL achieved highest ever Hot Metal production at 15.73 Million Tonnes (MT), Crude Steel production at 14.50 MT and Saleable Steel production at 13.87 MT during FY 2016-17. There were all-around improvements in the major techno-economic parameters.

The unprecedented increase in coal prices during FY2016-17 however, adversely impacted the cost of production and overall margins. During the year, there was an additional impact of around 4,300 crores as compared to FY 2015-16 on account of increase in prices of both imported and domestic coal. This increase in coal prices neutralized the significant improvement in Net Sales

Realization (NSR). Notwithstanding the increase in coal price, your Company could reduce its operational expenditure per ton of saleable steel by 2% during the fiscal.

SAIL has almost completed its Modernization and Expansion Programme (MEP). The state-of-the-art New Universal Rail Mill at Bhilai Steel Plant (BSP) was inaugurated by Hon'ble Steel Minister in January'17. This mill produces World's longest single piece rail of 130 meters length and supplies welded 260 mts rail panels to the Indian Railways. With this capacity addition, BSP has the record of being the single largest rail producing facility at one location in the World.

The already operational new facilities under the Modernization and Expansion plan were ramped up during the year. New Blast Furnace at Rourkela Steel Plant (RSP) achieved about 100% of its capacity, whereas, other facilities like the New Plate Mill also produced near to their rated capacities. The New 3 MTPA Hot Strip Mill at RSP is also scheduled to be installed by 2018 and this will enlarge the basket of the value-added products. The new facilities at IISCO (Indian Iron & Steel Company) Steel Plant (ISP) have also been ramped up significantly. The Wire Rod Mill of ISP will be soon producing world-class Wire rods in special grades to meet the requirement of the Indian and Global Steel industries.

There has been significant value addition in the product mix of the Company, with higher grades of steel like API X-70 from RSP's New Plate Mill for the oil & gas sector, SAIL HT-600 for the automotive sector and high strength LPG steel grade from Bokaro Steel Plant, etc. Continuous product development efforts are being made with intensive R&D efforts especially from the new state of the art mills commissioned under the Modernization and Expansion Plan. Amongst the Indian steel producers, SAIL continues to be in the forefront of R&D with the highest spending.

The products being manufactured by our new rolling mills have been received well by the customers and it is our constant endeavor to add more and more value-added grades from these mills. Products from the RSP NPM and BSL CRM-3 are being well received in export markets too. In conjunction with the increased production, the focus is being given to efficient

and strategic marketing for improving sales and realizations. More emphasis is being given on last mile connectivity with the end users, marketing in regions where we have natural freight advantage, increasing retail & rural sales and leveraging the brand image of SAIL.SAIL launched a Companywide initiative with the help of Boston Consulting Group (BCG) named 'SAIL Uday' for improving our all-around performance. Cross-functional teams across plants, units and marketing have been formed and both short and long-term action plans have been formulated. Implementation of various initiatives is already underway and many benefits are expected to come in this fiscal itself.

SAIL continued its efforts of conducting operations in an environmentally responsible manner. These have resulted in a reduction of emissions and discharge levels, increase in utilization of solid wastes and green cover.

#### REVIEW OF THE LITERATURE

Many researchers have considered working capital from different interpretations and in different situations. The following studies were very stimulating and useful for research:

Jyoti Nair (2018) A Study on Working Capital Management in Distressed and Non -Distressed Companies in Indian Steel Sector for the period of 2012 to 2017. This study attempted to find out whether these ratios are different for distressed and non-distressed Discriminant Analysis companies. identified three ratios which are very significant in differentiating a distressed company from a non -distressed one. Debtors Turnover Ratio (DTO), Current Ratio (CR) and the Quick ratio (OR) are strong discriminators. Current ratio and Quick ratio shows the total investment in current assets in relation to current liabilities. It means that if a company has adequate current assets in relation to its current liabilities, it has more short-term solvency. Though Inventory turnover is not observed to be a significant variable, the fact that quick ratio is a significant variable indicates the relevance of inventory levels. The higher level of inventory reduces the quick ratio. Hence distressed firms are reportedly carrying a larger amount of inventories as compared to non-distressed firms. This is also seen by the mean Inventory turnover ratio. The average inventory turnover

of distressed firms is very low as compared to non-distressed firms. Also receivable turnover in distressed firms is very low, indicating slow recovery from debtors. Thus debtors and inventory management have emerged important factors to prevent distress in companies. Managers should focus on debtors' management as it can reduce the probability of distress. Also, the inventory levels should be optimized to keep the company solvent. Lenders can continuously review and monitor debtors and inventory levels of borrowers and determine the solvency position and thereby determine the probability of financial distress. These early warning signals can help them devise strategies to mitigate distress and thereby reduce losses on account of bad loans.

Simranjeet Singh and Harwinder (**2017**) this study enquired the Kaur relationship between Working Capital Management and the profitability of steel manufacturing companies during the tenure, 2004-2016. From the findings, it was inferred that working capital variables have a significant impact on both the dependent variables, namely Net Profit (NP) and Return on Assets (ROA). The outcome of study is being supported by literature such as (Deloof, 2003), (Raheman& Nasr, 2007) who had found a strong intense negative relationship between the components of Working Capital Management including the number of days' accounts receivables, number of days' inventories and Cash Conversion Cycle with organizations profitability. So it is recommended that steel manufacturing reduce their companies should Cash Conversion Cycle keeping working capital components at an optimum level since cash significant conversion has a negative relationship with net profit. This can be done by shortening the receivable collection period and expediting the process of converting the inventory into a sale.

Anil K. Bhatt, Nirmala Shrotriya (2016) Study on Does Working Capital has an Implication on Profitability of Indian Steel Industry 2009 - 10 to 2013 - 2014. It was found in the study that there is a significant and high degree of positive correlation between the profitability and working capital. Thus it is essential for the steel companies to maintain the desired level of the working capital. Maximum respondents revealed that their company has adopted an aggressive policy for WC

management thus their WC was found to be desired or less than the desired level of the company. From the findings, it is also clear that The Company's financial officers and top management are aware of the desired level of working capital and satisfied with the level Cash management of their company. The satisfactions were majorly significant in case of Centralization of cash management decisions. Thus it is important for the companies to manage their WC in a better way.

S. Pramila& K. Kumar A Study on "Working Capital Management in Tata Steel Limited" for the period from 2010-2011to2014-2015. The study concludes that the Lower fixed assets ratio of Tata Steel Limited is satisfactory. But, Cash ratio is less than the standard and not encouraging for the entire study period i.e. 2010-11 to 2014-15. Though the additional funds raised are invested in fixed assets instead of providing necessary working capital, the Working Capital turnover ratio is not satisfactory. Accordingly, the management may resort to effective utilization of cash and bank balances in attractive investments or to pay back in short-term liabilities (current ratio).

T.Venkatesan and S.K.Nagarajan (2013) "A Study on Working Capital Management and Profitability Analysis of Select Steel Companies in India" covering period of 2008 - 2012. After the analysis of various data, related to selected steel companies in India founded in theoretical statement, it clear that working capital and profitability more or less depends upon the better utilization of resources, cut-off expenses and quality of management function in the products, customer services and to manpower and goodwill and market share. It is worthwhile to increase production capacity and use advanced technology to cut down the cost of production and wage cost in order to increase profitability, not only against the investment but also for investor's return point of view. These programs are helpful to increase profitability of selected steel companies in India in future prospects. If the management or government does not look into it seriously, it can result in loss of jobs and the company will become a sick unit.

#### **OBJECTIVES OF THE STUDY**

- To study the liquidity position of the Steel Authority of India Limited.
- To review the profitability position of the Steel Authority of India Limited.

- To compare the financial performance and find the growth trend of the Steel Authority of India Limited.
- To evaluate profitability related to sales of Steel Authority of India Limited.

## METHODOLOGY

In this present study, the secondary data has been collected wherever required; the secondary data has been collected from various sources like internet, journals, books and industries report. The following are the sources of collecting information and methodology used in this study.

- Obtaining material from the various reports available by the company specifically related to the Steel Authority of India Limited.
- ➤ Collecting material from the internet.
- ➤ Relevant books and business journals.

# SCOPE OF THE STUDY

In this study an attempt is made of choosing the sources of funds, dividend policy, capital budgeting, cost of volume profit analysis of the Steel Authority of India Limited for the period of 2012 – 2013 to 2016 -2017 as relevant from annual reports and balance sheets of the companies.

### LIMITATIONS OF THE STUDY

This study mainly depends on the secondary data i.e., a balance sheet of Steel Authority of India Limited. Operating and financial performance of the companies is analyzed using 5years data alone. The validity of analysis and suggestion depends on the financial statements and reports alone, provided by the company.

## **Ratio Analysis**

Ratio Analysis is a powerful tool of financial analysis. Analysis of financial statements with the assistance of ratios helps the management in decision making and control. Ratio analysis is used by creditors, banks, financial institutions investors and shareholders. It helps them in making a decision concerning the granting of credit and making investments in the firm. Thus, ratio analysis is of enormous use and has wide application.

#### **Current Ratio**

The statistical data relating to calculation of current ratio was computed through the financial statements referred in their respective annual reports of Steel Authority of India Limited for the study period from 2012-13to 2016-17 is depicted in table 1.

Table 1
Current Assets of Steel Authority of India Limited (Rs. In Crore)

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Years	2012-13	2013-14	2014-15	2015-16	2016-17
<b>Current Investments</b>	-	-	-	48.31	-
Inventories	16008.21	15200.82	17736.37	15363.61	15711.35
Trade Receivables	4424.18	5481.98	3192.00	2825.21	2921.69
Cash and Bank Balances	3850.35	2855.95	2305.24	692.76	289.09
Short – Term Loans and Advances	990.69	1160.51	3056.33	2113.85	61.47
Other Current Assets	2342.55	2191.49	2192.35	1839.24	6578.95
Total	27597.98	26890.75	28482.29	22882.98	25562.55

<sup>\*</sup> Source: Annual Reports of SAIL

Current liabilities of Steel Authority of India Limited are presented in table 2.

Table 2
Current Liabilities of Steel Authority of India Limited (Rs. In Crore)

Years	2012-13	2013-14	2014-15	2015-16	2016-17
<b>Short-Term Borrowings</b>	8015.02	10634.48	14195.16	15891.76	19813.04
Trade Payables	3322.04	3205.34	3606.38	4301.57	5219.20
Other Current Liabilities	8654.70	12478.51	14016.53	16006.79	18372.88
<b>Short-Term Provision</b>	2512.70	2021.95	2638.71	2604.54	2914.77
<b>Current Tax Liabilities</b>	-	-	-	-	4.52
Total	22504.46	28340.28	34456.78	38804.66	46324.41

<sup>\*</sup> Source: Annual Reports of SAIL

The above two tables show that the current assets decreased from ₹27597.98 crores in 2012-13 to ₹26890.75 crores in 2013-14, it is gradually increased with ₹28482.29 crores in 2014-15, after it was decreased continued from ₹22882.98 crores in 2015-16 & ₹25562.55 crore in 2016-17. When coming to current liabilities continuously five years it is increased form ₹22504.46 crores in 2012-13 to ₹46324.41. Current assets and current liabilities of SAIL are presented in table 3.

Table 3 Current Assets and Current Liabilities of Steel Authority of India Limited (Rs. In Crore)

Year	Current	Current	Current	
	Assets	Liabilities	Ratio	
2012-13	27597.98	22504.46	1.22:1	
2013-14	26890.75	28340.28	0.95:1	
2014-15	28482.29	34456.78	0.83:1	
2015-16	22882.98	38804.66	0.59:1	
2016-17	25562.55	46324.41	0.55:1	

<sup>\*</sup> Source: Annual Reports of SAIL

As a conventional rule, a current ratio of 2:1 is considered satisfactory. This ratio is below the accepted standard norm in Steel Authority of India Limited in the entire study period. It clearly indicates, the normal general accepted solvency to meet their current obligations in time is not satisfactory during 2012-13 to 2016-17. The management of Steel

Authority of India limited must initiate necessary steps to utilize its idle cash and bank balances in attractive investments or to pay back its short-term liabilities.

## **Quick Ratio or Liquid Ratio**

The quick ratio is also called Acid-test ratio because it is the acid test of a concern's financial soundness. It is the relationship between quick assets and quick liabilities. Quick assets are those assets which are readily converted into cash. They include cash and bank balances, bills receivable, debtors, and short-term investments. Quick liabilities include creditors, bills payable, outstanding expenses. It is used as a complementary ratio to the current ratio. Quick assets and current liabilities of SAIL is presented in table 4.

Table 4
Quick Assets and Current Liabilities of
Steel Authority of India Limited (Rs. In
Crore)

21010)				
Year	Quick	Current	Quick	
	Assets	Liabilities	Ratio	
2012-13	11589.77	22504.46	0.51	
2013-14	11689.93	28340.28	0.41	
2014-15	10745.92	34456.78	0.31	
2015-16	15363.61	38804.66	0.40	
2016-17	9851.20	46324.41	0.21	

<sup>\*</sup> Source: Annual Reports of SAIL

A quick ratio of 1:1 is considered to represent a satisfactory current financial

condition. A quick ratio of 1:1 doesnot necessarily mean satisfactory liquidity position if all debtors cannot be realized and cash is immediately needed to meet current obligations. A low quick ratio does not necessarily mean a bad liquidity position as inventories is not an absolutely non-liquid. It is observed from the above data the quick ratio is less than the accepted norm from 2012-13 to 2016-17. The quick ratio is very poor so it will increase their liquidity position, it will help to meet day to day expenses.

### **Cash Ratio (Absolute Liquid Ratio)**

Cash is the most liquid asset. The relationship between cash including cash at bank and short-term marketable securities with current liabilities is examined to know the immediate solvency. Cash & Bank Balance and current liabilities of SAIL is presented in table 5.

Table 5
Cash & Bank Balanceand Current
Liabilities of Steel Authority of India
Limited (Rs. In Crore)

Cash & Current **Ouick** Year Bank Liabilities Ratio Balance 22504.46 0.17 2012-13 3850.35 2013-14 2855.95 28340.28 0.10 2305.24 34456.78 2014-15 0.06 2015-16 692.76 38804.66 0.02 2016-17 289.09 46324.41 0.00

The acceptable norm for cash ratio is 1:2 or 0.5 or 50 percent. This ratio is less than the standard and not heartening for the entire study period i.e. 2012-13 to 2016-17.

# **Working Capital Turnover Ratio**

This ratio indicates whether or not working capital has been efficiently utilized in making sales. It can be calculated by Net sales/Net Working capital.

# Net Working Capital = Current Assets -Current Liabilities

Current assets and current liabilities and Net Working capital of SAIL are presented in table 6.

Table 6 Current Assets, Current Liabilities and Net Working Capital of Steel Authority of India Limited (Rs. In Crore)

Year Current		Current	Net Sales	Net Working	Working
1 ear	Assets	Liabilities	Net Sales	Capital	<b>Turnover Ratio</b>
2012-13	27597.98	22504.46	49350	5093.52	9.69
2013-14	26890.75	28340.28	51866	-1449.53	-35.78
2014-15	28482.29	34456.78	50627	-5974.49	-8.47
2015-16	22882.98	38804.66	43294	-15921.68	-2.72
2016-17	25562.55	46324.41	49180	-20761.86	-2.37

<sup>\*</sup> Source: Annual Reports of SAIL

Working Capital turnover ratio indicates the velocity of the utilization of net working capital. This ratio indicates the number of times the working capital is turned over in the course of a year. A higher ratio indicates the efficient utilization of working capital and a low ratio indicates otherwise. But a very high working capital turnover ratio is not a good situation for any firm and hence care must be taken while interpreting the ratio. Working Capital turnover ratio is not satisfactory. Additional funds raised are invested in fixed asset instead of providing necessary working capital. The company may not be in a position to meet its obligations on time.

#### **CONCLUSION**

The current ratio, Cash ratio of Steel Authority of India Limited is less than the standard norm and not encouraging for the entire study period i.e. 2012-13 to 2016-17. Working Capital turnover ratio is not satisfactory. Though the additional funds raised are invested in fixed assets instead of providing necessary working capital, the management may resort to the operative utilization of cash and bank balances in attractive investments or to pay back in short-term liabilities. Proper control over various expenses like Labour cost, material cost and other overheads are reduced so as to improve the profitability of the company. The purchase of raw material at lower cost will reduce the cost of material. The company can reduce the cost of production and try to improve its profitability. The company has to give importance to maintenance and consumption of raw materials which would

<sup>\*</sup> Source: Annual Reports of SAIL

otherwise result in the overstocking and leads to obsolescence.

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