

## ANALYSIS OF LIQUIDITY RATIOS OF STEEL AUTHORITY OF INDIA LIMITED: A MAHARATNA

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### ABSTRACT

*Effective liquidity management is essential for the smooth functioning of businesses. This study focuses on analysing the liquidity ratios of Steel Authority of India Limited (SAIL), one of India's leading state-owned steel manufacturers, over a five-year period from 2019 to 2023. The research explores the company's ability to meet short-term financial obligations through the examination of its current assets and liabilities. By calculating and interpreting key liquidity ratios such as the current ratio, quick ratio, and super quick ratio, the study sheds light on SAIL's liquidity position and short-term financial health. The findings reveal concerning trends, including a declining current ratio and consistently low quick and super quick ratios, indicating potential challenges in meeting immediate liabilities. The paper underscores the need for SAIL to address these issues and suggests strategies such as optimizing working capital and reducing reliance on external borrowings. A comprehensive analysis of industry benchmarks and economic factors is recommended to gain a holistic understanding of SAIL's financial standing. This research contributes to a deeper insight into liquidity management practices and their impact on a large-scale manufacturing company's operational efficiency and financial stability.*

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**Keywords:** *Liquidity Management, Liquidity Ratios, Current Assets & Liabilities, Economic Factors.*

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### Introduction

Any business must have liquidity to operate successfully. A business entity engages in a variety of economic activities to fulfil its goal of making a profit. The company uses a variety of assets in this course, some of which fall under the categories of fixed assets and current assets. The company creates some current liabilities as well while purchasing or using these assets. The current assets are anticipated to be used to settle these current liabilities. Although not all current assets can be converted into cash right away, they are nonetheless regarded as the business's liquid assets. Cash on hand, bank balance, demand drafts and checks, marketable securities, any pre-paid liabilities, short-term investments are only a few examples of current assets. Cash on hand, bank balance, demand drafts, checks, marketable securities, any pre-paid liabilities, short-term investments, receivables, all kinds of inventories, etc. are a few examples of current assets. Current assets are utilized to finance the company's daily activities. It is common knowledge that the business's existing assets should be used to cover its current liabilities. Even with the lack of present assets, operations can go on. Fixed assets may only be combined with current assets. For instance, although machines rely on raw materials, buildings are used for production. Utilizing current assets results in the creation of current liabilities. Most of these go to vendors and retailers. Any payments that the company must make during a fiscal year or throughout its current operational cycle are considered other current liabilities. Everyone knows that the company's present liabilities should be covered by its existing assets. Operations can still be carried out despite the lack of current assets. Fixed assets may only be combined with current assets.

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\* M.Com. (IGNOU), UGC Net (December, 2018).

Steel Authority of India Limited (SAIL) is one of the largest state-owned steel-making companies in India. SAIL was established in 1973 as a government-owned company. It was formed by consolidating various steel plants in India to promote self-sufficiency in steel production and cater to the growing industrial needs of the country. SAIL operates multiple integrated steel plants and special steel plants across different regions of India. Some of its major steel plants include Bhilai Steel Plant (Chhattisgarh), Bokaro Steel Plant (Jharkhand), Rourkela Steel Plant (Odisha), Durgapur Steel Plant (West Bengal), and IISCO Steel Plant (West Bengal). SAIL produces a wide range of steel products, including hot-rolled coils, cold-rolled coils, plates, sheets, rails, and structural steel. It caters to various industries such as construction, infrastructure, manufacturing, and transportation. SAIL has a dedicated In-house R&D centre, centre for engineering & technology and captive engineering shops. SAIL is committed to corporate social responsibility (CSR) and undertakes various initiatives for the welfare of communities around its plants. It invests in education, healthcare, infrastructure, and other social development projects. The Government of India owns about 65% of SAIL's equity and retains voting control of the Company. However, SAIL, by virtue of its 'Maharatna' status, enjoys significant operational and financial autonomy. SAIL not only serves the domestic market but also exports its steel products to various countries, contributing to India's presence in the global steel market. SAIL is one of India's top steel producing businesses, which is why it was chosen for the current study. SAIL must effectively manage its liquid assets as a large manufacturing firm in order to fulfil its current liabilities on schedule.

### **Objectives of the Study**

The goal of research is to use scientific techniques and methodologies to methodically study and solve particular topics or problems. Conducting experiments or surveys, acquiring and analyzing pertinent data, and coming to conclusions based on empirical evidence are all part of the research process. The scientific methods applied in research are created to guarantee the objectivity, validity, and dependability of the results. Having distinct and well-defined objectives is crucial for every research endeavour. The study's guiding principles and the researchers' clear sense of direction are provided by the research objectives. The current study is being conducted with the following objectives in mind:

- To understand the liquidity ratios.
- To calculate the liquidity ratios of SAIL.
- To analyse the liquidity ratios of SAIL.
- To interpret the liquidity ratios of SAIL.

### **Research Methodology**

The methodology used to conduct research is of utmost importance because it directly impacts the study's validity, reliability, and credibility. Even if the research question is appropriate and relevant, conducting the study through the wrong method can lead to erroneous or inconclusive results, ultimately resulting in failure. Secondary sources of data were used for the current investigation. From the website and yearly reports covering the years 2019 through 2023, the necessary information has been gathered. The methodology uses both the average of the obtained data as well as mathematical techniques to calculate ratios and percentages. The gathered information is then presented in a table together with the estimated liquidity ratios.

### **Scope of the Study**

The current study's research of SAIL's liquidity ratios spans five accounting years, from 2019 to 2023. Steel Authority of India Ltd. is the only company included in the study.

### **Calculation of Liquidity Ratios**

Liquidity ratios are financial metrics used to assess a company's ability to meet its short-term financial obligations. These ratios help gauge the company's liquidity position and the ease with which it can convert its current assets into cash to cover its current liabilities. Liquidity ratios are important for investors, creditors, and management as they provide insights into the company's short-term solvency and financial health.

Some common liquidity ratios include:

- **Current Ratio:** It is calculated by dividing current assets by current liabilities.  $\text{Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}}$ . A current ratio above 1 indicates that a company has enough current assets to cover its current liabilities. Generally, a higher current ratio is considered more favourable as it suggests better short-term solvency.

- **Quick Ratio (Acid-Test Ratio):** This ratio is a more stringent measure of liquidity as it excludes inventory from current assets, focusing on the most liquid assets. Quick Ratio = (Current Assets - Inventory) / Current Liabilities. A quick ratio above 1 indicates that a company can meet its short-term obligations without relying on inventory sales. It provides a more conservative view of a company's liquidity.
- **Cash Ratio (Super Quick Ratio):** This ratio is the most conservative liquidity measure as it considers only cash and cash equivalents in relation to current liabilities. Cash Ratio = Cash and Cash Equivalents / Current Liabilities. A cash ratio above 1 suggests that a company has enough cash on hand to pay off its short-term debts.

The SAIL liquidity ratios are computed and shown in Table 1.

Table 1: Liquidity ratios of SAIL

(Rs. In Crore)

Particulars/Year	2023	2022	2021	2020	2019	Average
Cash and cash equivalents	397.95	647.83	680.52	363.25	219.42	461.794
<b>Super quick* assets</b>	397.95	647.83	680.52	363.25	219.42	461.794
Trade Receivables	5362.48	4736.83	7124.00	8812.39	4495.05	6106.15
<b>Quick assets**</b>	5362.48	4736.83	7124.00	8812.39	4495.05	6106.15
Inventories	27716.27	24128.47	19508.30	23747	19441.80	22908.368
Short Term Loans and Advances	35.29	43.10	50.47	49.67	53.24	46.354
Other Current Assets	4251.28	3676.67	8849.09	7945.94	8039.76	6552.548
<b>Total Current Assets</b>	37763.27	33232.90	36212.38	40918.25	32249.27	36075.21
Short Term Borrowings	19549.20	5249.84	15850.24	16640.78	10631.22	13584.26
Trade Payables	14338.87	16918.01	7014.41	6320.38	7257.99	10369.93
Other Current Liabilities	14038.12	15979.41	21584.24	19635.75	21399.48	18527.4
Short Term Provisions	1379.28	1170.47	2039.84	2354.93	2308.77	1850.658
<b>Total Current Liabilities</b>	49305.47	39317.73	46488.73	44951.84	41597.46	44332.25
<b>Current ratio</b>	0.775	0.910	0.779	0.845	0.766	0.815
<b>Quick ratio</b>	0.308	0.382	0.359	0.231	0.204	0.2968
<b>Super quick ratio</b>	0.005	0.008	0.015	0.016	0.008	0.0104

#### Analysis of Liquidity Ratios of SAIL

Table 1 displays various elements of total current assets, total current liabilities, and estimated liquidity ratios. While the company has significant total current assets, a closer look at the quick and super quick ratios indicates that its ability to meet short-term liabilities using highly liquid assets is relatively lower. This suggests that the company relies more on inventory and other current assets to cover its obligations. It's important to compare these ratios with industry standards and consider other financial indicators for a comprehensive analysis of the company's liquidity position. Both the "Cash and Cash Equivalents" and "Super Quick Assets" are the same in each year, which is expected since the super quick ratio considers only cash and cash equivalents. The average value for these assets is approximately Rs. 461.794 Crores. "Trade Receivables" and "Quick Assets" are the same for each year, indicating that no adjustments are needed for inventory. These assets represent amounts owed to the company by its customers and are readily available to cover short-term obligations. "Inventories" represent the goods and materials held by the company. They are the largest component of current assets, reflecting the value of goods that need to be converted into cash through sales. The average value of inventories is approximately Rs. 22,908.368 Crores. "Short Term Loans and Advances" are relatively small in comparison to other current assets. These assets are amounts loaned out by the company and are expected to be repaid in the short term. "Other Current Assets" include various short-term assets not classified under the previous categories. The average value of other current assets is approximately Rs. 6,552.548 Crores. The "Total Current Assets" represent the sum of all the above components and indicate the company's ability to meet its short-term obligations. The average value of total current assets is approximately Rs. 36,075.21 Crores. Short Term Borrowings, Trade Payables, Other Current Liabilities, and Short Term Provisions: These components represent the company's current liabilities, including short-term borrowings, amounts owed to suppliers, other short-term obligations, and provisions set aside for anticipated liabilities. The average current ratio over the years is approximately

0.815, indicating that for every Rupee of short-term liabilities, the company has Rs. 0.815 of short-term assets to cover those obligations. The average quick ratio is approximately 0.2968, suggesting that the company's liquidity position is less robust when considering only highly liquid assets. The average super quick ratio is approximately 0.0104, indicating a very limited ability to cover liabilities using only the most liquid assets.

#### **Interpretation of Liquidity Ratios of SAIL**

Table 1 displays the total current assets and total current liabilities of SAIL as well as the computed liquidity ratios. The organizations' idle current ratio is 2:1. The current ratio measures the company's ability to cover short-term liabilities with its short-term assets. The declining trend from 2022 (0.910) to 2023 (0.775) suggests that the company's liquidity position might be weakening. A current ratio below 1.0 indicates that the company may have difficulty covering its short-term obligations with its current assets alone. The decreasing ratio over the years raises concerns about the company's short-term financial health. The quick ratio assesses the company's ability to cover immediate liabilities without relying on inventory. While the ratio fluctuates, it remains consistently below 1.0 in all years. A quick ratio below 1.0 indicates that the company might struggle to pay off its short-term liabilities using its most liquid assets (cash and receivables) without relying on inventory sales. The consistently low ratio suggests potential limitations in the company's ability to meet immediate financial obligations. The super quick ratio focuses solely on cash and cash equivalents in relation to liabilities. It remains extremely low in all years. A super quick ratio near or at 0 indicates a heavy reliance on short-term borrowings and other liabilities to meet immediate obligations. The company's inability to cover even a fraction of its liabilities with its most liquid assets (cash) raises concerns about its financial stability and ability to manage short-term cash needs. The liquidity ratios collectively paint a concerning picture of the company's short-term financial health. The declining trend in the current ratio and consistently low quick and super quick ratios suggest that the company's ability to cover short-term obligations is weakening over time. The very low super quick ratio indicates a significant reliance on external sources of funds, such as short-term borrowings, to manage immediate financial needs. The fact that all three ratios are consistently below their respective ideal thresholds (1.0 for current ratio and quick ratio) indicates a potential lack of margin of safety in covering short-term obligations. The company might face challenges in generating sufficient cash flow from its current assets to meet its short-term liabilities, which could impact its day-to-day operations and financial stability. Considering the averages, the average current ratio of 0.815 indicates that, on average over the years, the company's current assets were able to cover only about 81.5% of its short-term liabilities. While this ratio is above 0.5 (indicating some capacity to meet short-term obligations), it's important to note that a ratio below 1.0 suggests potential challenges in covering liabilities with current assets alone. The declining trend over the years also raises concerns about the company's ability to manage short-term financial obligations effectively. The average quick ratio of 0.2968 highlights the company's limited ability to meet immediate liabilities without relying on inventory sales. This ratio indicates that, on average, the company's most liquid assets (cash and receivables) could cover only about 29.68% of its immediate liabilities. The consistently low average quick ratio reinforces the concern that the company might face difficulties in addressing short-term financial obligations. The super quick ratio focuses solely on cash and cash equivalents in relation to liabilities. The extremely low average super quick ratio of 0.0104 indicates that, on average, the company's cash and equivalents were able to cover only about 1.04% of its liabilities. This signifies a heavy reliance on short-term borrowings and other liabilities to manage its short-term financial needs. So, the average current ratio being below 1.0 suggests that, on average, the company might not have been able to comfortably cover its short-term liabilities with its current assets. The consistently low average quick and super quick ratios highlight limited liquidity and the company's reliance on external funding sources to meet immediate obligations. The declining trend in these ratios indicates potential difficulties in managing cash flow and meeting short-term financial commitments effectively.

#### **Conclusion**

The financial data spanning from 2019 to 2023 paints a comprehensive picture of SAIL's liquidity and short-term financial health. A close examination of the data reveals several noteworthy trends and concerns. The company's liquidity position appears to be a concern, as indicated by the declining trend in the current ratio over the years. The decreasing current ratio suggests potential challenges in covering short-term liabilities with available short-term assets. The consistently low quick ratio and super quick ratio throughout the years indicate that the SAIL might have difficulties meeting immediate liabilities without relying on inventory sales and external borrowings. This raises immediate liquidity issues that need to be addressed. The substantial increase in short-term borrowings in 2023

compared to previous years suggests a higher reliance on external funding sources. This could indicate a potential need for additional financing to manage day-to-day operations or invest in the business. The increasing trend in inventory levels should be closely monitored. While higher inventories might be necessary for sales or production, excess inventory can tie up capital and increase holding costs. Fluctuations in other current assets and liabilities indicate changes in the company's working capital management. Further insights are needed to determine the underlying causes and their impact on the company's financial health. The consistently low liquidity ratios, especially the super quick ratio, suggest that the company should take immediate steps to improve its short-term financial health. This could involve optimizing working capital, managing payables and receivables more effectively, and exploring strategies to reduce reliance on borrowings. In conclusion, SAIL faces challenges in maintaining a strong liquidity position, and its ability to cover short-term obligations with available resources is a concern. Addressing these challenges will be crucial to ensure the company's financial stability and sustainability in the short term. Additionally, a comprehensive analysis considering industry benchmarks and broader economic factors would provide a more complete understanding of the company's financial standing.

#### References

1. Brigham, E.F., Houston, J.F. 14th edition, Fundamentals of Financial Management, Cengage Learning India Private Limited, Noida Uttar Pradesh, 86-88.
2. Chandra, P. Financial Management: Theory and Practice, 10th edition, Tata McGraw-Hill Education Private Limited, Noida, Uttar Pradesh, 74-76.
3. Chawla, D., & Sondhi, N., 2nd edition, Research Methodology: Concepts and Cases, Vikas Publishing House Private Limited, New Delhi, 3-6.
4. Khan, M.Y., & Jain, P.K., 8th edition, Financial Management: Text, Problems, and Cases. Tata McGraw-Hill Education Private Limited, Noida, Uttar Pradesh, 6.-6.10.
5. Kishore, R.M., 8th edition, Financial Management, Taxmann Publications Private Limited, New Rohtak Road, New Delhi, 62-6.
6. Kothari C. R., 4th edition, Research Methodology: Methods and Techniques, New Age International Publishers, New Delhi, 2-7.
7. Pandey, I.M. Financial Management, 11th Edition, Vikas Publishing House Private Limited., Noida, 584-586.
8. Panneerselvam, R., 2nd edition, Research Methodology: Methods and Techniques, PHI Learning Private Limited, Chennai, 2-4.

#### Webpages

9. Sail, (2023, Aug 07), <https://sail.co.in/>.
10. Money control, (2023, Aug 07), <https://www.moneycontrol.com>.

