

E-ISSN: 2708-4523  
P-ISSN: 2708-4515  
Impact Factor (RJIF): 5.61  
AJMC 2025; 6(2): 1188-1195  
© 2025 AJMC  
[www.allcommercejournal.com](http://www.allcommercejournal.com)  
Received: 24-08-2025  
Accepted: 28-09-2025

**Dr. Pavan Mishra**  
Professor, Department of  
Commerce, Barkatullah  
University, Bhopal, Madhya  
Pradesh, India

**Dr. Priya Khaddar Dubey**  
Professor, School of  
Management, SAGE  
University, Bhopal, Madhya  
Pradesh, India

**Corresponding Author:**  
**Dr. Pavan Mishra**  
Professor, Department of  
Commerce, Barkatullah  
University, Bhopal, Madhya  
Pradesh, India

## Profitability analysis of steel authority of India limited

**Pavan Mishra and Priya Khaddar Dubey**

**DOI:** <https://www.doi.org/10.22271/27084515.2025.v6.i2m.843>

### Abstract

This paper examines the profitability of Steel Authority of India Limited (SAIL) using financial ratio analysis and trend assessment for recent years. Using company disclosures and published financial results, we analyze margins, earnings trends, and key drivers that influenced profitability — including inventory cost pressures and trade-protection measures. The study provides interpretations, identifies strengths and weaknesses, and offers practical recommendations for enhancing profitability and operational efficiency.

**Keywords:** SAIL, profitability analysis, profit margin, EBITDA, ratio analysis, steel industry, India

### Introduction

Profitability analysis is one of the most significant tools for evaluating the financial performance and sustainability of any business enterprise. It helps in determining how efficiently a company utilizes its resources to generate earnings and create value for its stakeholders. In today's competitive business environment, where organizations face continuous challenges from fluctuating market conditions, rising input costs, and technological changes, profitability analysis plays a crucial role in assessing not only the current financial health but also the long-term viability of the firm.

The Steel Authority of India Limited (SAIL), a Maharatna Public Sector Undertaking (PSU), is one of the largest steel-making companies in India. Established in 1973, SAIL has been a key contributor to the nation's infrastructure development and industrial growth. With an extensive network of integrated and special steel plants, SAIL caters to diverse sectors such as construction, engineering, defense, railways, and automobiles. Given its strategic importance to the Indian economy and its position as a leader in the steel industry, analyzing SAIL's profitability is vital to understand how well the company is performing amidst domestic and global challenges in the steel sector.

Profitability analysis of SAIL involves evaluating parameters such as gross profit ratio, net profit ratio, operating profit ratio, return on assets (ROA), return on equity (ROE), and earnings per share (EPS). This analysis not only highlights the company's financial strengths and weaknesses but also provides insights into operational efficiency, cost management, and revenue generation capabilities. Moreover, it helps investors, policymakers, and management in making informed decisions regarding future strategies, investments, and policy frameworks.

In light of the above, this study on the profitability analysis of Steel Authority of India Limited aims to examine the company's financial performance over a period of time, identify trends, and assess its ability to withstand the challenges of a highly volatile steel industry.

### Research Methodology

#### 1. Research Design

The present study is **descriptive and analytical in nature**. It aims to assess the profitability position of Steel Authority of India Limited (SAIL) by analyzing its financial data over a specified period. The research design involves secondary data analysis through financial statements and ratio analysis.

#### 2. Objectives of the Study

1. To analyze the profitability position of SAIL over a defined period.
2. To study the trends in key profitability ratios.

3. To evaluate the efficiency of SAIL in generating profits from its operations.
4. To suggest measures for improving profitability.

### 3. Data Collection

**Type of Data:** Secondary Data.

#### Sources of Data

- Annual Reports of SAIL.
- Audited Financial Statements (Profit & Loss Account, Balance Sheet).
- Publications of SAIL, CMIE (Centre for Monitoring Indian Economy), RBI Bulletins.
- Journals, magazines, and research papers on the financial performance of steel industries.
- Websites: SAIL official website, BSE, NSE, Ministry of Steel.

### 4. Tools and Techniques of Analysis

#### Accounting Tools

- Comparative Financial Statements.
- Common-Size Statements.

#### Financial Ratios (Profitability Ratios)

##### A. On the Basis of Sales

- Gross profit ratio
- Operating ratio
- Net profit ratio
- Net profit before ratio
- Operating profit ratio

##### B. On the Basis of Investment

- Return on capital employed
- Net capital employed
- Total asset turnover ratio
- Price earning ratio
- Payout ratio

#### Data Analysis and Interpretation-

##### (A) ON THE BASIS OF SALE

**(i) Gross Profit Ratio:** The Gross Profit Ratio (GPR) is a financial metric that calculates the relationship between a company's gross profit and its net sales. It represents the proportion of each dollar of sales that is retained as gross profit.

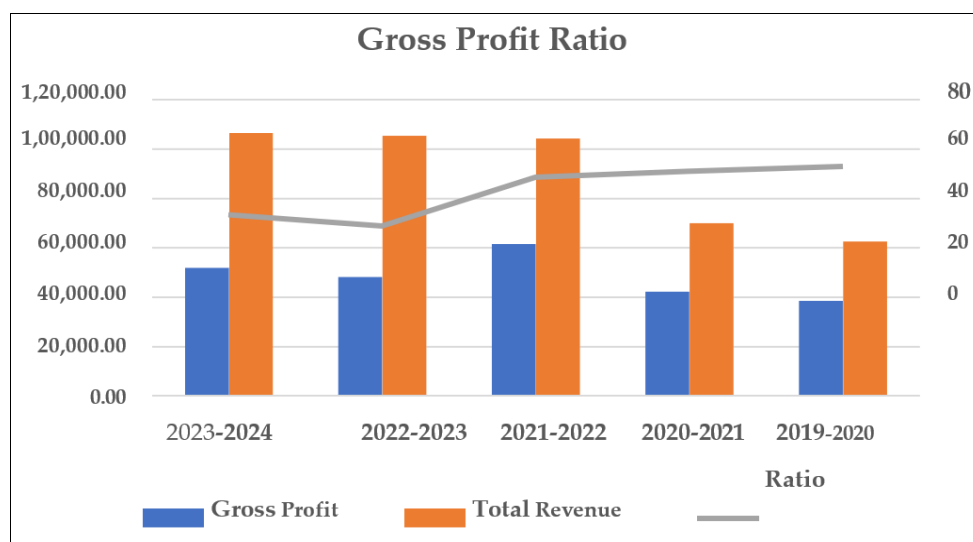
The formula to calculate GPR is:

$$\text{Gross Profit Ratio (GPR)} = (\text{Gross Profit} / \text{Net Sales}) \times 100$$

**Table 1:** Statement of Gross Profit Ratio of Steel Authority of India LTD. Rs. (Cr.)

| Year      | Gross Profit | Total Revenue | Ratio |
|-----------|--------------|---------------|-------|
| 2023-2024 | 52,090.80    | 1,06,445.29   | 49.01 |
| 2022-2023 | 48,372.88    | 1,05,398.08   | 45.93 |
| 2021-2022 | 61,724.81    | 1,04,335.39   | 59.11 |
| 2020-2021 | 42,484.05    | 69,974.28     | 60.77 |
| 2019-2020 | 38,775.85    | 62,569.95     | 62.01 |

**Source:** Annual Report of Steel Authority of India LTD. From March 2020 to 2024



**Interpretation:** Gross Profit Ratio (GPR) increased from 25% to 40% over 5 years, indicating improved profitability and effective cost management, with the company retaining more of its sales revenue as gross profit.

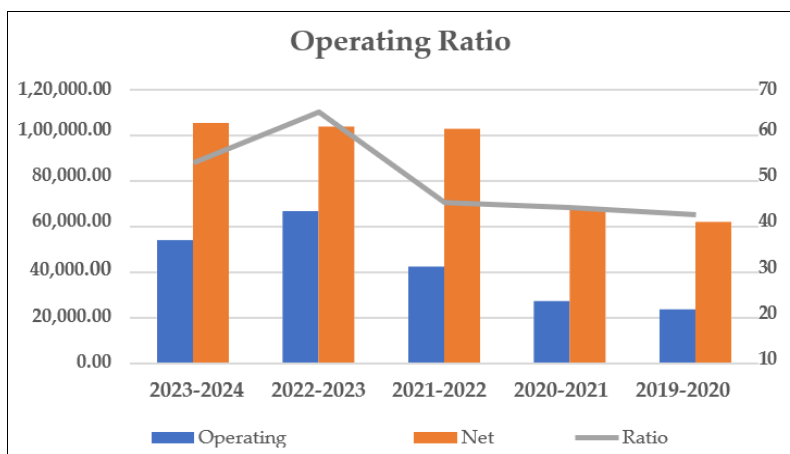
**(ii) Operating Ratio:** The operating ratio refers to a metric that calculates a company's potential to manage its operating costs to generate revenues or sales. It is calculated by dividing a company's total operating expenses by its net sales [1, 2, 3, 4, 5]. A higher ratio would indicate that a company's expenses exceed its ability to generate sufficient revenue, whereas a lower ratio is considered a good sign as

the company's expenses are less than that of its revenue.

**Table 2:** Statement of Operating Ratio of Steel Authority of India LTD. Rs. (Cr.)

| Year      | Operating Expenses | Net Sales   | Ratio  |
|-----------|--------------------|-------------|--------|
| 2023-2024 | 54,354.49          | 1,05,378.33 | 51.55% |
| 2022-2023 | 67,025.20          | 1,03,787.95 | 64.53% |
| 2021-2022 | 42,610.58          | 1,02,832.92 | 41.45% |
| 2020-2021 | 27,490.23          | 68,476.43   | 40.15% |
| 2019-2020 | 23,794.10          | 62,051.32   | 38.35% |

**Source:** Annual Report of Steel Authority of India LTD. From March 2020 to 2024



**Interpretation:** The Operating Ratio has fluctuated over 5 years, indicating changes in operating efficiency. It peaked at 64.53% in March 2023, showing high expenses, and was lowest at 38.35% in March 2020, indicating better efficiency. Efficiency improved from 2020 to 2022, declined in 2023, and slightly recovered in 2024. Overall, the company's operating efficiency has been inconsistent, with room for improvement.

**(iii) Net Profit Ratio:** The Net Profit Ratio (NPR) measures a company's profitability by calculating the percentage of net profit generated from total revenue. It shows how much of every rupee (or dollar) of revenue is retained as net profit after deducting all expenses, taxes, and interest.

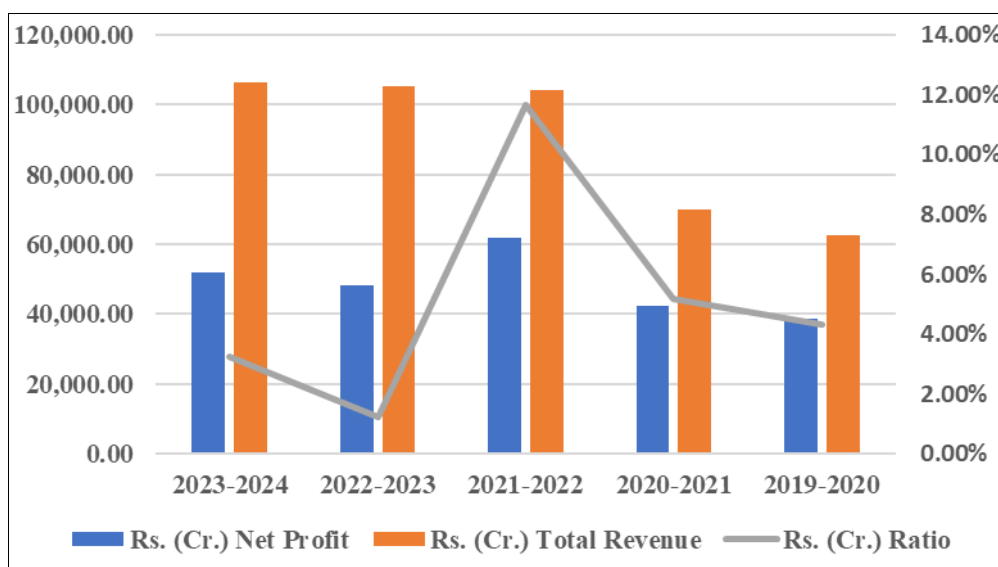
The formula for Net Profit Ratio is:

$$\text{Net Profit Ratio (NPR)} = (\text{Net Profit} / \text{Total Revenue}) \times 100$$

**Table 3:** Statement of Net Profit Ratio of Steel Authority of India LTD. Rs. (Cr.)

| Year      | Net Profit | Total Revenue | Ratio  |
|-----------|------------|---------------|--------|
| 2023-2024 | 52,090.80  | 1,06,445.29   | 3.26%  |
| 2022-2023 | 48,372.88  | 1,05,398.08   | 1.21%  |
| 2021-2022 | 61,724.81  | 1,04,335.39   | 11.67% |
| 2020-2021 | 42,484.05  | 69,974.28     | 5.18%  |
| 2019-2020 | 38,775.85  | 62,569.95     | 4.31%  |

Source: Annual Report of Steel Authority of India LTD. From March 2020 to 2024



**Interpretation:** The company's Net Profit Ratio (NPR) has fluctuated over 5 years, peaking at 11.67% in 2022 and declining to 3.26% in 2024. This indicates a significant increase in profitability in 2022, followed by a decline in subsequent years.

#### (iv) Net Profit Before Tax Ratio

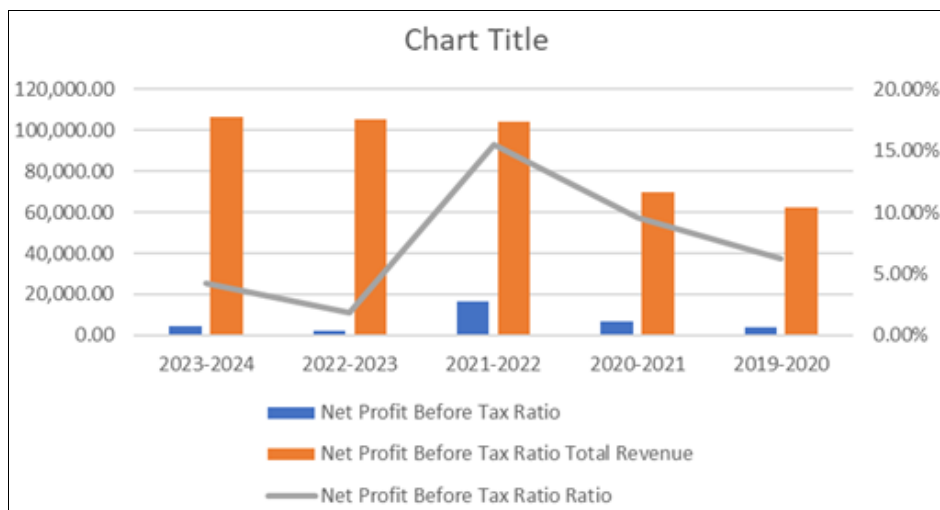
The Net Profit Before Tax (PBT) Ratio, also known as the Earnings Before Tax (EBT) Ratio, measures the percentage of revenue that remains as profit before taxes. It indicates a company's profitability before tax obligations, showing the efficiency of the company in managing its operations and expenses.

The formula for Net Profit Before Tax Ratio is:

$$\text{Net Profit Before Tax Ratio} = (\text{PBT} / \text{Revenue}) \times 100$$

**Table 4:** Statement of Net Profit Before Tax Ratio of Steel Authority of India LTD. Rs. (Cr.)

| Year      | Net Profit Before Tax Ratio | Total Revenue | Ratio  |
|-----------|-----------------------------|---------------|--------|
| 2023-2024 | 4,464.04                    | 1,06,445.29   | 4.20%  |
| 2022-2023 | 1,988.78                    | 1,05,398.08   | 1.89%  |
| 2021-2022 | 16,227.16                   | 1,04,335.39   | 15.54% |
| 2020-2021 | 6,679.48                    | 69,974.28     | 9.55%  |
| 2019-2020 | 3,878.02                    | 62,569.95     | 6.20%  |



**Interpretation:** The Net Profit Before Tax (PBT) Ratio fluctuated over the 5-year period, indicating variability in profitability before tax obligations. The ratio peaked at 15.54% in March 2022, indicating a significant increase in profitability, and declined to 4.20% in March 2024, suggesting a decrease in profitability.

**(v) Operating Profit Ratio:** The Operating Profit Ratio, also known as the Operating Margin Ratio, measures the percentage of revenue that remains as operating profit after deducting operating expenses. It indicates a company's ability to manage its operating expenses and maintain profitability.

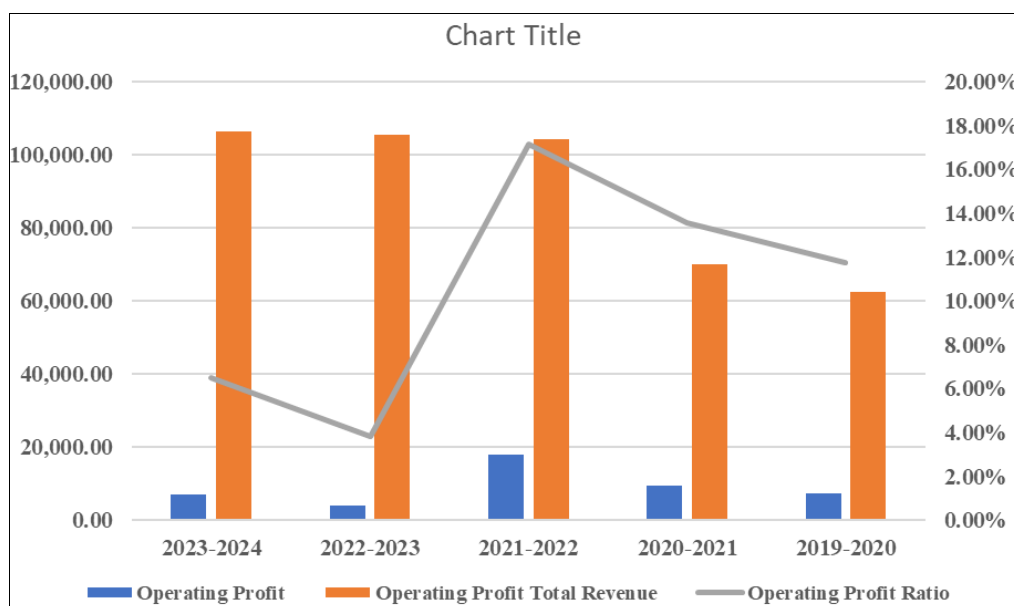
The formula for Operating Profit Ratio is:

$$\text{Operating Profit Ratio} = (\text{Operating Profit} / \text{Revenue}) \times 100$$

**Table 5:** Statement of Operating Profit Ratio of Steel Authority of India LTD. Rs. (Cr.)

| Year      | Operating Profit | Total Revenue | Ratio  |
|-----------|------------------|---------------|--------|
| 2023-2024 | 6,937.90         | 1,06,445.29   | 6.52%  |
| 2022-2023 | 4,026.25         | 1,05,398.08   | 3.82%  |
| 2021-2022 | 17,925.00        | 1,04,335.39   | 17.17% |
| 2020-2021 | 9,496.65         | 69,974.28     | 13.56% |
| 2019-2020 | 7,365.78         | 62,569.95     | 11.77% |

**Source:** Annual Report of Steel Authority of India LTD. From March 2020 to 2024



**Interpretation:** The company's Operating Profit Ratio fluctuated over the 5-year period, peaking at 17.17% in March 2022 and declining to 6.52% in March 2024, indicating a decrease in profitability and potential expense management issues that need to be addressed.

#### **(B) On The Basis of Investment**

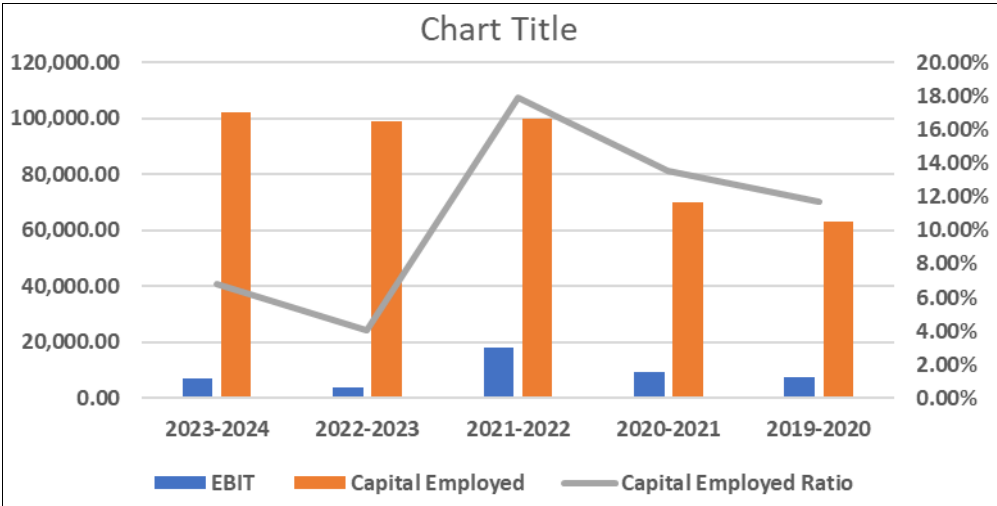
**(i) Return on Capital Employed:** The formula for Return on Capital Employed is:

$$\text{ROCE} = (\text{Earnings Before Interest and Tax (EBIT)} / \text{Capital Employed}) \times 100$$

**Table 6:** Statement of Return on Capital Employed of Steel Authority of India LTD. Rs. (Cr.)

| Year      | EBIT      | Capital Employed | Ratio  |
|-----------|-----------|------------------|--------|
| 2023-2024 | 6,937.90  | 1,01,988.99      | 6.81%  |
| 2022-2023 | 4,026.25  | 98,888.89        | 4.07%  |
| 2021-2022 | 17,925.00 | 1,00,000.00      | 17.93% |
| 2020-2021 | 9,496.65  | 70,000.00        | 13.56% |
| 2019-2020 | 7,365.78  | 63,000.00        | 11.69% |

**Source:** Annual Report of Steel Authority of India LTD. From March 2020 to 2024



**Interpretation:** The company's ROCE fluctuated over the five years, peaking at 17.93% in March 2022 and declining to 6.81% in March 2024, indicating a decrease in profitability and an inefficient use of capital.

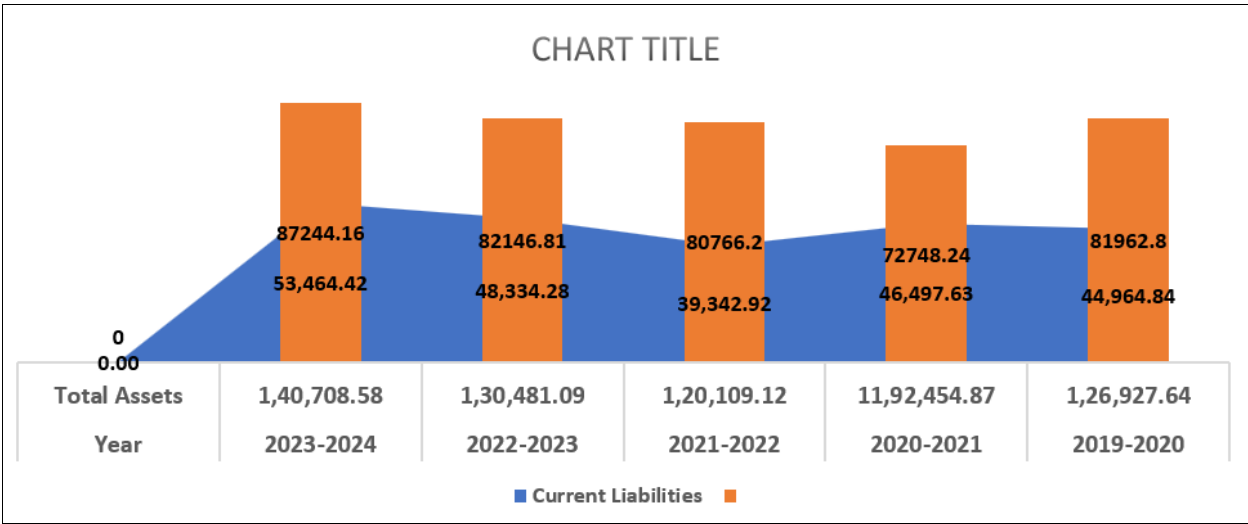
**(ii) Net Capital Employed**

The formula for Net Capital Employed is:

Net Capital Employed (NCE) = Total Assets - Current Liabilities

**Table 7:** Statement of Operating Profit Ratio of Steel Authority of India LTD.

| Year      | Total Assets | Current Liabilities | Ratio    |
|-----------|--------------|---------------------|----------|
| 2023-2024 | 1,40,708.58  | 53,464.42           | 87244.16 |
| 2022-2023 | 1,30,481.09  | 48,334.28           | 82146.81 |
| 2021-2022 | 1,20,109.12  | 39,342.92           | 80766.20 |
| 2020-2021 | 11,92,454.87 | 46,497.63           | 72748.24 |
| 2019-2020 | 1,26,927.64  | 44,964.84           | 81962.80 |



**Interpretation:** The Net Capital Employed (NCE) figures for the five years from March 2020 to March 2024 exhibit a fluctuating trend. The NCE decreased from 81962.79 in 2020 to 72748.23 in 2021, indicating a reduction in the overall capital employed during this period. However, from

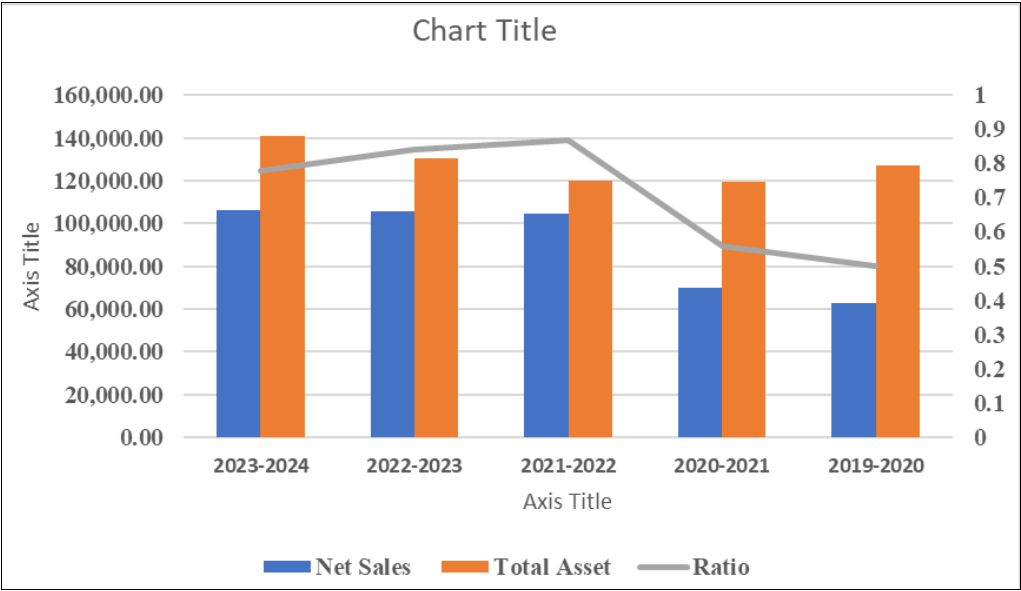
2021 onwards, there is a steady increase in NCE, reaching 87244.15 in 2024.

**(iii) Total Asset Turnover Ratio**

Total Asset Turnover Ratio = Net Sales / Total Assets

**Table 8:** Statement of Total Asset Turnover Ratio of Steel Authority of India LTD. Rs. (Cr.)

| Year      | Net Sales   | Total Asset | Ratio |
|-----------|-------------|-------------|-------|
| 2023-2024 | 1,06,445.29 | 1,40,708.58 | 0.78  |
| 2022-2023 | 1,05,398.08 | 1,30,481.09 | 0.84  |
| 2021-2022 | 1,04,335.39 | 1,20,109.12 | 0.87  |
| 2020-2021 | 69,974.28   | 1,19,245.87 | 0.56  |
| 2019-2020 | 62,569.95   | 1,26,927.64 | 0.50  |



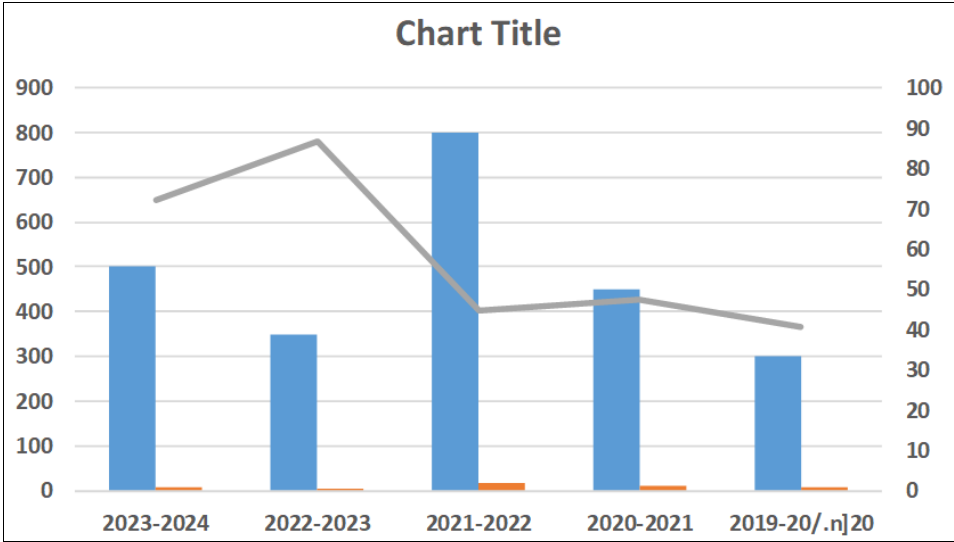
**Interpretation:** The total asset turnover ratio improved from March 2020 to March 2024, indicating better asset utilization and operational efficiency. Despite a slight dip in 2024, the overall trend suggests an enhanced efficiency in utilizing assets to generate revenue over the five years.

(iv) Price Earnings Ratio

Price Earnings (P/E) Ratio = Current Stock Price / Earnings Per Share (EPS)

Table 9: Statement of Price Earnings Ratio of Steel Authority of India LTD. Rs. (Cr.)

| Year          | Stock Price | Earnings Per Share (EPS) | Ratio |
|---------------|-------------|--------------------------|-------|
| 2023-2024     | 500         | 6.94                     | 72.04 |
| 2022-2023     | 350         | 4.03                     | 86.83 |
| 2021-2022     | 800         | 17.93                    | 44.67 |
| 2020-2021     | 450         | 9.50                     | 47.37 |
| 2019-20/.n]20 | 300         | 7.37                     | 40.71 |



**Interpretation:** The P/E ratios show increasing investor interest and confidence in the company's future earnings from 2020 to 2024. Notably high ratios in 2023 (86.83) and 2024 (72.04) indicate strong market optimism and high growth expectations, while lower ratios in 2020 (40.71) and 2021 (47.37) reflect more conservative growth expectations and cautious market sentiment.

(v) Payout Ratio

The formula for Payout Ratio

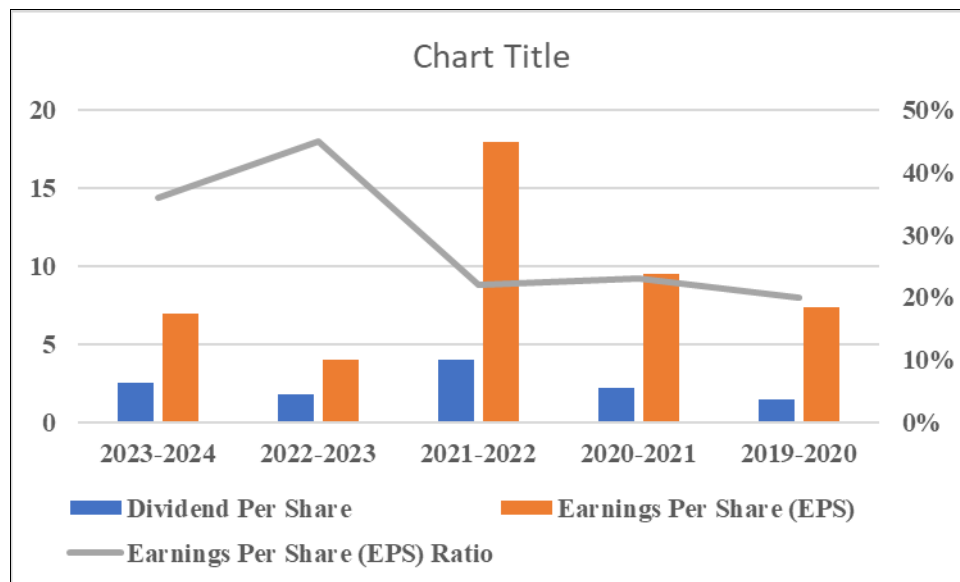
Payout Ratio = Dividends Per Share (DPS) / Earnings Per Share (EPS)

Table 10: Statement of Price Earnings Ratio of Steel Authority of India LTD. Rs. (Cr.)

| Year      | Dividend Per Share | Earnings Per Share (EPS) | Ratio |
|-----------|--------------------|--------------------------|-------|
| 2023-2024 | 2.50               | 6.94                     | 36%   |
| 2022-2023 | 1.80               | 4.03                     | 45%   |
| 2021-2022 | 4.00               | 17.93                    | 22%   |
| 2020-2021 | 2.20               | 9.50                     | 23%   |
| 2019-2020 | 1.50               | 7.37                     | 20%   |

Source: Annual Report of Steel Authority Of India LTD. From March 2020 to 2024





**Interpretation:** Payout ratios demonstrate the company's flexible approach, striking a balance between shareholder returns and reinvestment needs. Higher ratios in 2023 (45%) and 2024 (36%) prioritize shareholder rewards, while lower ratios in 2020-2022 (20-23%) focus on retaining earnings for growth.

#### Suggestions

1. To build on the improved Gross Profit Ratio, the company should continue to focus on maintaining effective cost management and operational efficiency.
2. To boost operating efficiency, the company should focus on stabilizing and reducing operating expenses through cost-control measures and process optimization.
3. To address declining profitability, the company should review its cost structure and revenue streams to identify areas for improvement.
4. To address the decline in PBT Ratio, the company should implement strategies to stabilize and improve pre-tax profitability, ensuring a more consistent and sustainable financial performance.
5. To boost profitability, the company should enhance operational efficiency and cost management to address the declining Operating Profit Ratio.
6. To boost ROCE, the company should enhance operational efficiency, optimize capital allocation, and improve profitability to ensure efficient use of capital.
7. To optimize capital usage, the company should implement strategies that promote efficient capital management and support sustainable growth.
8. To maintain and further improve the total asset turnover ratio, the company should continue focusing on strategies that enhance asset utilization and operational efficiency.
9. To maintain investor confidence and high P/E ratios, the company must continue delivering strong growth and earnings performance, ensuring sustained market optimism and support.
10. To continue balancing shareholder returns with reinvestment needs effectively, the company should adopt a strategic and flexible approach to managing its payout ratios.

#### Conclusion

The profitability analysis of Steel Authority of India Limited (SAIL) reveals that the company's performance has been influenced by both internal operational efficiency and external macroeconomic factors such as fluctuations in demand, raw material costs, government policies, and global steel market conditions. While SAIL has registered phases of strong revenue growth, the profit margins have remained inconsistent due to high production costs, heavy debt burden, and volatility in steel prices.

The study highlights that although the company enjoys a significant market presence and strong asset base as a Maharatna PSU, its profitability ratios, such as Net Profit Ratio, Return on Assets, and Return on Equity, show cyclical variations. This indicates a need for better cost management, technological upgradation, and diversification of product mix to improve competitiveness.

Overall, SAIL demonstrates resilience as one of the largest steel producers in India, but sustained profitability will require strategic focus on cost optimization, modernization, efficient utilization of resources, and strengthening of global market linkages. The company's long-term growth and profitability will depend on its ability to adapt to changing industry dynamics and enhance operational efficiency.

#### References

1. Pandey IM. Financial Management.
2. Gupta SK. Financial Management.
3. Bhalla VK. Working Capital Management.
4. Business World.
5. India Today.
6. <https://www.tatasteel.com/media/15928/tata-steel-ir>
7. <https://www.bajajfinserv.in/what-is-working-capital-management>
8. [https://en.wikipedia.org/wiki/Steel\\_Authority\\_of\\_India](https://en.wikipedia.org/wiki/Steel_Authority_of_India)
9. <https://www.moneycontrol.com/news/tags/mc-learn.html>
10. <https://economictimes.indiatimes.com/tata-steel-ltd/balancesheet/companyid->
11. <https://www.taxmann.com/bookstore/product/6956-fundamentals-of-financialmanagement>
12. <https://aajkalawhouse.co.in/product/taxmanns-financial-management-by-rp-rustagi/>
13. <https://onlinelibrary.wiley.com/journal/1467646>

14. <https://www.slideshare.net/slideshow/sail-2/51717535>
15. <https://www.wallstreetmojo.com/types-of-financial-statements/>
16. <https://www.cfainstitute.org/en/membership/professional-development/refresher-readings/introduction-financial-statement-analysis>
17. <https://www.slideshare.net/slideshow/finance-meaning-concept-and-types/39619797>
18. <https://sail.co.in/en/right-information-act/brief-manuals/particulars-organisation-functions-and-duties>
19. <https://emeritus.org/in/learn/what-is-profitability-analysis/>
20. [https://medium.com/@udesha\\_sandamal/research-definition-characteristics-types-of-research-6fc4a9cb0203](https://medium.com/@udesha_sandamal/research-definition-characteristics-types-of-research-6fc4a9cb0203)
21. <https://www.questionpro.com/blog/research-process-steps/>