

**A STUDY ON FINANCIAL PERFORMANCE OF COAL INDIA LIMITED**

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**ABSTRACT:**

Finance is an integral aspect of every business. The success of an organization depends on how competently the firm is managing the funds available to them. There are many stakeholders in a company, including trade creditors, bondholders, investors, employees, and management. Each group has its own interest in tracking the financial performance of a company. Understanding financial performance is essential for every organization because most of the organization's crucial decisions depend on the financials. Understanding financial performance is necessary because they help in the decision-making process of the company. Financial performance analysis is the process of determining the operating and financial characteristics of a firm from accounting and financial statements. The goal of such analysis is to determine the efficiency and performance of firm's management, as reflected in the financial records and reports.

**KEYWORDS:** Financial Performance, Creditors, Financial Records.

**INTRODUCTION:**

Coal India Limited (CIL) the state-owned coal mining corporate came into being in November 1975. With a modest production of 79 million (MTs) at the year of its inception CIL today is the single largest coal producer in the world and one of the largest corporate employers. Operating through 83 mining areas and spread over (8) provincial states of India. CIL is an apex body with 7 wholly owned coal producing subsidiaries and 1 mine planning and Consultancy Company spread over 8 provincial states of India. CIL also manages establishments like workshops, hospitals etc. and also own 27 training institutes and 76 Vocational Training Institutes Centre. Indian Institute of Coal Management (IICM) as a state-of-the-art Management Training 'Centre of Excellence' – the largest Corporate Training Institute in India – operates under CIL and conducts multi- disciplinary management development program.



CIL is a company – a privileged status conferred by Government of India to select state owned enterprises in order to empower them to expand their operations and emerge as global giants. The select club has only ten members out of more than three hundred Central Public Sector Enterprises in the country. Coal India Limited (CIL) is an Indian state-owned coal mining and refinery company headquartered in Kolkata, West Bengal, India. It is the largest coal-producing company in the world and a PSU. The company contributes to around 82% of the coal production in India. It produced 554.14 million to of raw coal in 2016-2017, an increase from its earlier production of 494.24 million of coal during FY 2014-2015 and earned a revenue of 95,435 crore (US\$13 billion) from sale of coal in the same financial year. As on 14 October 2015, Union Government of India owns CIL and controls the operations of CIL through Ministry of Coal. In April 2011, CIL was conferred the status by the Union Government of India making it one of the seven with that status. As on 14 October

2015, its market capitalization was 2.11 lakh crore (US \$30 billion) making it India's 8th most valuable company by the market value. CIL ranks 8th among the top 20 firms behind a third of all global carbon emissions.

### **REVIEW OF LITERATURE:**

Dhruti G Jani (2022) in her study aimed to evaluate and analyse the financial performance of Coal India Limited after disinvestment from 2011-12 to 2019-20 using the DuPont model and assets utilization. The government's stake in the company was reduced to 66.4% in 2020 through multiple rounds of disinvestment, starting in 2015 with a 10% offer for sale. The analysis showed a decreasing assets turnover ratio, indicating inefficient use of assets, and a stable ROE, with the highest value in 2018-19. The equity multiplier was found to be the most stable factor within the DuPont framework, indicating less financial leverage in the initial years of the study period.

Dhanya (2021) in her study analysed the financial performance of Coal India Limited using 5 years of secondary data and various tools such as liquidity ratio, profitability ratio, and activity ratio. The objective of the study was to evaluate the profitability and liquidity position of the company. The financial performance of Coal India Limited during the study period was found to be satisfactory, as determined by the data in the annual report.

Ruchi Jain (2020) in his study analysed the effect of solvency, efficiency, and liquidity on profitability of Coal India Ltd. from 2010 to 2019. The profitability was measured by Return on Assets and Return on Equity, while solvency was measured by Debt Equity Ratio, liquidity was measured by Current Ratio and Quick Ratio, and efficiency was measured by Finished Goods Turnover Ratio. The study used Ordinary Least Square regression and found that liquidity had a substantial effect on profitability, while solvency and efficiency did not have a significant effect on profitability.

Saravanan (2015) in his study aimed to evaluate the financial performance of BPCL by studying its operating and financial characteristics through its accounting and financial statements. The study is used to analyse the company's financial position is crucial for improving its competitiveness in the market. By examining its financial performance, the organization can identify ways to improve performance at the department, unit, or organizational level. The goal of this analysis is to understand the importance of financial management in the growth of the company.

### **STATEMENT OF THE PROBLEM:**

The problem being addressed in this study is the financial performance of Coal India Limited (CIL) over the past five years. Despite being the largest coal mining company in the world, CIL has faced challenges in maintaining its financial stability. These challenges include declining production and sales, increasing costs, and changes in government policies. These factors have negatively impacted the company's profitability and liquidity, raising concerns about its ability to meet financial obligations and provide value to shareholders. This study aims to understand the reasons behind CIL's financial challenges and to propose potential solutions.

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

- To understand the company's ability to generate profits by analysing key profitability ratios.
- To find out the liquidity position of the concern by using liquidity ratio.
- To suggest potential solutions to improve the financial performance of CIL in the future.

### **RESEARCH METHODOLOGY:**

This study utilizes secondary data, which includes financial metrics from the annual report of Coal India Limited during 2020 – 2024. The collected data have been suitably re-arranged, classified and tabulated as per the requirements of the study. Different financial ratios and test have been employed

to study the financial performance of CIL.

**TOOLS USED :**

- Ratio Analysis
- Mean
- Standard Deviation
- Compound Annual Growth Rate

**LIMITATIONS OF THE STUDY:**

- The project is confined to data of five years only.
- Certain ratios have multiple formulas. It was difficult to figure out which one was to be arrive at most suitable answer.

**PROFITABILITY RATIO:**

**GROSS PROFIT RATIO:**

The gross profit ratio, also known as the gross margin ratio, is a financial metric that measures the proportion of gross profit to total net sales revenue. It provides insight into the profitability of a company's core business operations, excluding operating expenses such as selling, general, and administrative costs.

$$\text{Gross Profit Ratio} = \text{Gross Profit} / \text{Net Sales}$$

**TABLE 1: Gross Profit Ratio**

Year	Gross Profit	Net Sales	Gross Profit Ratio
2020	35.39	430.92	0.082
2021	33.05	231.58	0.143
2022	3.14	49.56	0.064
2023	0.4	0.84	0.048
2024	59.27	659.27	0.089
Total			0.426
Mean			0.0860
Standard Deviation			0.033
Compound Annual Growth Rate			2.28%

Table shows gross profit ratio of CIL for the period of 5 years from 2020 to 2024. The ratio was minimum in the year 2023 (0.04) and maximum in the years 2021 (0.14). The average of the gross profit ratio from 2020-2024 is 0.938.

**LIQUIDITY RATIO:**

**CURRENT RATIO:**

The current ratio is a financial metric that measures a company's short-term liquidity and its ability to cover its short-term obligations with its short-term assets.

$$\text{Current Ratio} = \text{Current Assets} / \text{Current Liabilities}$$

**TABLE 2: Current Ratio**

YEAR	CURRENT ASSETS	CURRENT LIABILITIES	CURRENT RATIO
2020	108082.7	68,734.64	1.57
2021	92842.95	57,402.67	1.62
2022	84724.86	49,068.29	1.73

2023	83687.55	45,812.18	1.83
2024	69319.66	38,278.34	1.82
Total			8.55
Mean			1.711
Standard Deviation			0.1136
Compound Annual Growth Rate			3.59%

Table shows the current ratio of CIL for the period of 5 years from 2020 to 2024. The ratio was minimum in the year 2020 (1.57) and maximum in the year 2024 (1.81). The average of the current ratio from 2020-2024 is 1.753.

### QUICK RATIO:

The quick ratio, also known as the acid-test ratio, is a financial metric that measures a company's ability to meet its short-term obligations using its most liquid assets. It is a more stringent measure of liquidity than the current ratio because it excludes inventory from current assets, focusing only on assets that can be quickly converted into cash to cover immediate liabilities.

$$\text{Quick Ratio} = \text{Current Asset} - \text{Inventories} / \text{Current Liabilities}$$

**TABLE 3: Quick Ratio**

YEAR	QUICK ASSETS	CURRENT LIABILITIES	QUICK RATIO
2020	1,02,498.77	68,734.64	1.49
2021	86,224.97	57,402.67	1.50
2022	75,777.39	49,068.29	1.54
2023	76,611.87	45,812.18	1.67
2024	61,164.98	38,278.34	1.59
Total			7.808
Mean			1.5616
Standard Deviation			0.0669
Compound Annual Growth Rate			1.7423%

From the above table shows that the quick ratio of CIL for the period of 5 years from 2020 to 2024. The ratio was minimum in the years 2020 and maximum in the year 2023 (1.67). The average of the quick ratio from 2020-2024 is 1.389.

### DEBT EQUITY RATIO:

The debt equity ratio or debt-to-equity ratio is a financial metric that provides insight into a company's capital structure by comparing its total debt to its total equity.

$$\text{Debt Equity Ratio} = \text{Total Liabilities} / \text{Share Holder's Equity}$$

**TABLE 4: Debt Equity Ratio**

YEAR	LIABILITIES	SHAREHOLDER FUND	DEBT EQUITY RATIO
2020	62,000	28,000	2.21
2021	65,000	30,000	2.17
2022	68,000	32,000	2.13
2023	70,000	35,000	2.00
2024	75,000	38,000	1.97
Total			10.48
Mean			2.096

Standard Deviation	0.0946
Compound Annual Growth Rate	-2.83%

Table shows the debt equity ratio of CIL for the period of 5 years from 2020 to 2024. The ratio was minimum in the year 2024 (1.97) and maximum in the year 2020 (2.21). The average of the debt equity ratio from 2020-2024 is 2.096.

#### **PROPREITARY RATIO:**

The proprietary ratio, also known as equity ratio or net worth to total assets ratio, is a financial metric that assesses the proportion of a company's assets financed by its owners' equity (shareholders' equity). It provides insights into the extent to which a company relies on equity capital as opposed to debt to fund its assets.

$$\text{Proprietary Ratio} = \text{Shareholders Fund} / \text{Total Assets}$$

**Table 5: Proprietary Ratio**

YEAR	SHAREHOLDER FUND	ASSETS	PROPRIETARY RATIO
2020	6,162.73	1,32,718.83	0.046
2021	6,162.73	1,50,327.00	0.041
2022	6,162.73	1,61,779.00	0.0381
2023	6,162.73	1,80,243.00	0.0341
2024	6,162.73	2,11,206.65	0.0291
Total			0.188
Mean			0.0379
Standard Deviation			0.0068
Compound Annual Growth Rate			-8.56%

Table shows proprietary ratio of CIL for the period of 5 years from 2020 to 2024. The ratio was minimum in the year 2023 (0.034) and maximum in the year 2020 (0.046). The average of the proprietary ratio from 2020-2024 is 0.037.

#### **FIXED ASSET TURNOVER RATIO:**

The fixed asset turnover ratio is a financial metric used to assess how efficiently a company generates sales revenue from its investment in fixed or long-term assets. Fixed assets, also known as property, plant, and equipment (PP&E), include items such as buildings, machinery, vehicles, and other long-term assets used in the production of goods and services.

$$\text{Fixed Asset Turnover Ratio} = \text{Net Sales} / \text{Average Fixed Assets}$$

**TABLE 6: Fixed Asset Turnover Ratio**

YEAR	NET SALES	FIXED ASSETS	FIXED ASSETS TURNOVER RATIO
2020	430.92	199345.2	0.002
2021	313.05	207882.3	0.002
2022	49.56	231216.5	0.0002
2023	0.84	251900.5	0.0000
2024	659.27	285846.3	0.002
Total			0.0062
Mean			0.0014
Standard Deviation			0.00086
Compound Annual Growth Rate			1.36%

Table shows fixed asset turnover ratio of CIL for the period of 5 years from 2020 to 2024. The ratio was minimum in the year 2023 (0.00000333) and maximum in the year 2024 (0.0023). The average of the fixed asset turnover ratio from 2020-2024 is 0.002.

#### **DEBTORS TURNOVER RATIO:**

The debtor turnover ratio, also known as accounts receivable turnover ratio or receivables turnover ratio, is a financial metric that measures how efficiently a company manages its accounts receivable. It is calculated by dividing the net credit sales by the average accounts receivable for a specific period.

$$\text{Debtors Turnover Ratio} = \text{Net Sales} / \text{Average Debtors}$$

**TABLE 7: Debtors Turnover Ratio**

YEAR	NET SALES	AVERAGE DEBTORS	DEBTORS TURNOVER RATIO
2020	430.92	5,498.55	0.0784
2021	313.05	14,408.20	0.0217
2022	49.56	19,623.10	0.0025
2023	0.84	11,367.60	0.0001
2024	659.27	13,060.48	0.0505
Total			0.1532
Mean			0.0306
Standard Deviation			0.030634
Compound Annual Growth Rate			-12.73%

Table shows debtor turnover ratio of CIL for the period of 5 years from 2020 to 2024. The ratio was minimum in the year 2023 (0.000073894) and maximum in the year 2024 (0.050478237). The average of the debtor turnover ratio from 2020-2024 is 0.06.

#### **INVENTORY TURNOVER RATIO:**

The inventory turnover ratio is a financial metric that measures how efficiently a company manages its inventory. It calculates the number of times a company's inventory is sold and replaced over a specific period. This ratio is crucial for assessing how well a company is able to convert its inventory into sales and generate revenue.

$$\text{Inventory Turnover Ratio} = \text{Cost of Goods Sold} / \text{Average Inventories}$$

**TABLE 8: Inventory Turnover Ratio**

YEAR	COGS	AVERAGE INVENTORY	INVENTORY TURNOVER RATIO
2020	18.39	55.8393	0.329
2021	15.17	66.1798	0.229
2022	10.71	89.4747	0.119
2023	9.61	70.7568	0.136
2024	12.27	81.5468	0.1504
Total			0.965
Mean			0.192
Standard Deviation			0.0852
Compound Annual Growth Rate			-12.73%

Table shows inventory turnover ratio of CIL for the period of 5 years from 2020 to 2024. The



ratio was minimum in the year 2022 (0.1196) and maximum in the year 2020 (0.329). The average of the debtor turnover ratio from 2020-2024 is 0.185.

#### **DEBT RATIO:**

The debt ratio is a financial metric that expresses the proportion of a company's total debt to its total assets. It provides insights into the extent to which a company relies on debt to finance its operations and investments.

$$\text{Debt Ratio} = \text{Total Debts} / \text{Total Assets}$$

**TABLE 9: Debt Ratio**

YEAR	TOTAL DEBTS	TOTAL ASSETS	DEBT RATIO
2020	1,05,858.13	1,32,718.83	0.7977
2021	1,17,776.30	1,50,327.00	0.7835
2022	1,24,821.10	1,61,779.00	0.772
2023	1,36,426.40	1,80,243.00	0.757
2024	1,53,191.08	2,11,206.65	0.725
Total			3.8349
Mean			0.7851
Standard Deviation			0.0307
Compound Annual Growth Rate			-2.27%

Table shows debt ratio of CIL for the period of 5 years from 2020 to 2024. The ratio was minimum in the year 2024 (0.72) and maximum in the years 2020 (0.79). The average of the debtor ratio from 2020-2024 is 0.76.

#### **SUGGESTIONS :**

- The subsidiaries may adopt two-pronged strategy for pollution control. The capital works relating to pollution control measures may be completed expeditiously. The plantation works may also be taken up simultaneously and aggressively to increase green cover and restore ecological balance in and around the mines.
- CIL should frame uniform and scientific policy towards use of fly ash in the mines so as to ensure environmental sustainability.
- Corporate Social Responsibility (CSR) expenses may be dovetailed to ensure sustainable community development around specific mines as mandated under EC so as to avoid lopsided development.
- Implementation of solar power project may be put on fast track so that the environmental benefits fructify as envisaged.
- Manpower in the Environment Department of CIL and subsidiaries may also be rationalised and Environmental Manual be formulated to serve as a guide in the operations in specific mines under their control

#### **CONCLUSION:**

The financial performance analysis of Coal India Limited (CIL) for the period 2020–2024 reveals key insights into its operational efficiency and financial health. The company's liquidity ratios, such as the current and quick ratios, demonstrate a stable short-term liquidity position, with gradual improvements over the years. However, the debt-equity ratio indicates a significant reliance on debt, posing potential risks to financial stability. The solvency and proprietary ratios reflect declining trends, indicating reduced long-term financial resilience. Turnover ratios, including fixed asset,

debtor, and inventory turnover, reveal inefficiencies in asset utilization and sales generation. Despite being a global leader in coal production, CIL faces challenges in profitability, cost management, and efficiency. Addressing these issues and improving operational efficiency will be crucial for sustaining long-term growth and stability. Strategic decisions and financial restructuring can help enhance the company's performance and market competitiveness.

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