



An Analytical Study on the Financial Performance of Coal India Limited

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Abstract:

This study provides a comprehensive and critical evaluation of the financial performance of Coal India Limited (CIL) over three financial years: 2022–23, 2023–24, and 2024–25. By employing consolidated financial statement analysis, ratio evaluation, trend examination, and DuPont decomposition, the research investigates profitability, liquidity, solvency, and shareholder value creation. The study further integrates cash flow performance and capital expenditure trends to identify CIL's operational strengths, vulnerabilities, and long-term sustainability in the context of India's energy transition.

The analysis reveals that while CIL has maintained strong profitability, revenue growth has stagnated. Meanwhile, the asset base has expanded significantly, supported by rising debt. Shareholder value creation remains robust, but declining liquidity and efficiency indicators highlight potential vulnerabilities. The study concludes with recommendations for policymakers, investors, and managers to improve capital allocation, strengthen working capital, and diversify into clean energy.

Keywords: Coal India Limited; Financial Performance; Profitability; Liquidity; Solvency; Shareholder Value; Energy Transition.

Introduction:

Coal India Limited (CIL) is the world's largest coal producer and a central pillar of India's energy economy. Established in 1975, CIL was created to consolidate the country's coal industry under a single public sector entity, with the strategic aim of ensuring energy security. Today, it meets more than 80% of India's domestic coal demand, making it indispensable for the nation's power generation, industrial activity, and infrastructure growth. Coal continues to dominate India's energy mix despite mounting challenges. Globally, the coal

industry faces scrutiny due to climate change, stricter environmental policies, and the rise of renewable energy. Yet, in India, coal remains abundant, cost-effective, and crucial for meeting the needs of a fast-growing economy. Against this backdrop, CIL's financial health is not just a corporate concern but also a matter of national significance.

The period from FY2022-23 to FY2024-25 is particularly instructive. These years capture a paradox: revenue stagnation alongside rising profitability, increased asset base, and growing financial leverage. This makes it imperative to ask: is CIL's

performance sustainable? Can it continue to deliver value to shareholders while shouldering India's energy transition? This study seeks to answer these questions by conducting a detailed financial analysis of CIL's performance.

Literature Review:

The financial performance of public sector undertakings (PSUs) has long drawn attention from economists and policymakers. Kumar and Sharma (2021) observed that PSUs in India often benefit from financial stability due to government support but are vulnerable to inefficiencies, bureaucratic hurdles, and limited cost optimization. These findings suggest that while PSUs play a vital role in the Indian economy, structural weaknesses can affect their long-term sustainability.

For the coal sector specifically, Rao (2022) emphasized CIL's consistent profitability but noted its exposure to regulatory changes, environmental restrictions, and growing competition from renewable energy. Global research reflects a dual reality: coal demand is shrinking in advanced economies, but it continues to hold strategic importance in emerging economies like India, where rapid industrialization sustains demand for inexpensive and reliable energy sources.

Despite this scholarship, there are few studies that have analyzed CIL's financial performance across the most recent years with an integrated approach. Earlier works often focus narrowly on profitability or efficiency ratios, leaving out the combined perspectives of liquidity, solvency, shareholder value, and cash flow. This gap is particularly relevant given the

global momentum toward decarbonization and India's own climate commitments.

The present study addresses this gap by analyzing CIL's performance between 2022-23 and 2024-25 using ratio analysis, trend evaluation, and DuPont decomposition, while also integrating shareholder value and capital expenditure perspectives. This makes the study both timely and relevant to academics, policymakers, and investors.

Objectives of the Study:

The present study is designed to evaluate the financial performance of Coal India Limited during the three most recent financial years, with a focus on profitability, liquidity, solvency, and shareholder value creation. In line with the literature and research motivation, the study is guided by the following objectives:

1. To analyze key financial indicators of CIL for 2022-23, 2023-24, and 2024-25 using ratio and trend analysis.
2. To evaluate profitability, liquidity, and solvency through conventional ratios and DuPont decomposition.
3. To examine shareholder value creation in terms of Earnings per Share (EPS), Return on Equity (ROE), Book Value per Share (BVPS), and dividend policies.
4. To integrate cash flow and capital expenditure data into the analysis to assess financial sustainability.
5. To identify risks, vulnerabilities, and opportunities for improvement in financial performance.
6. To provide actionable recommendations for policymakers, investors, and managers to strengthen financial resilience.

Research Methodology:

This study is based on secondary data derived from the audited annual reports of Coal India Limited, integrated financial statements, and reputable financial databases such as Moneycontrol, Reuters, and *Livemint*. The research design combines descriptive and analytical approaches, with an emphasis on ratio analysis, trend analysis, and DuPont decomposition.

Data Source:

Annual reports published by Coal India Limited for 2022-23, 2023-24, and 2024-25 serve as the primary source of data. Supplementary financial figures were drawn from databases including Moneycontrol (2025), Reuters (2025), and *Livemint* (2025). These sources provide the necessary financial statements, ratio data, and disclosures to enable comprehensive evaluation.

Analytical Tools:

Ratio analysis is employed to examine profitability (Net Profit Margin, ROA, ROE, EPS, BVPS), liquidity (Current Ratio), and solvency (Debt-to-Equity, Debt-to-Assets). DuPont decomposition was applied to analyze the components of ROE—profit margin, asset turnover, and leverage. Trend analysis was conducted on revenue, profit after tax (PAT), assets, and equity to highlight growth patterns and anomalies.

Approach to Interpretation:

Quantitative results were interpreted in the context of broader industry trends, government energy policies, and shareholder expectations. In particular, financial performance was connected to sustainability concerns, capital structure dynamics, and India's gradual transition toward renewable energy.

Limitations:

The study relies exclusively on published secondary data, which may contain reporting constraints or lack granularity in segment-level disclosures. Moreover, external factors such as market volatility, government interventions, and global coal demand shifts are acknowledged as influencing performance but are beyond the scope of direct measurement in this study.

Financial Performance Analysis:

This section presents the detailed results of Coal India Limited's performance across 2022-23, 2023-24, and 2024-25. The analysis focuses on revenue and profitability, liquidity, solvency, efficiency, and shareholder value creation, supported by ratio analysis, trend evaluation, and DuPont decomposition.

Table 1: Consolidated Financial Data of Coal India Limited (₹ crore) during the FYs 2022-23 to 2024-25

Year	Revenue (₹ crores)	PAT (₹ crores)	Assets (₹ crores)	Equity (₹ crores)	Debt (₹ crores)	EPS (₹)	BVPS (₹)
2022–23	144,803	28,125	222,431	60,843	26,881	45.61	98.7
2023–24	144,762	37,369	237,581	82,764	41,063	60.6	134.19
2024–25	143,369	35,302	260,198	99,105	56,172	57.25	160.76

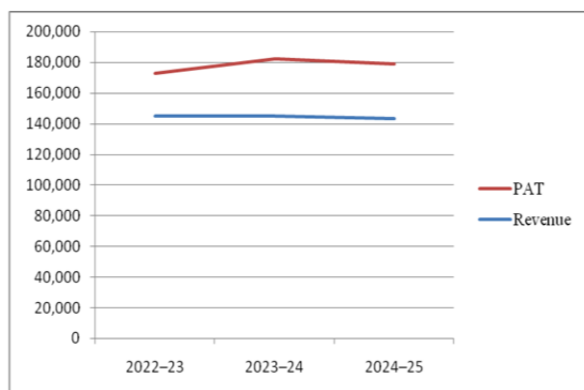
Table 2: Financial Analysis CIL during the FYs 2022-23 to 2024-25

Year	Current Ratio	D/E Ratio	D/A Ratio	ROE (%)	ROA (%)	Net Profit Margin (%)	Asset Turnover (x)	Equity Multiplier (x)
2022–23	1.69	0.44	0.12	46.23	12.64	19.42	0.65	3.66
2023–24	1.52	0.5	0.17	45.17	15.73	25.82	0.61	2.87
2024–25	1.41	0.57	0.22	35.61	13.56	24.62	0.55	2.63

Revenue and Profitability Trends:

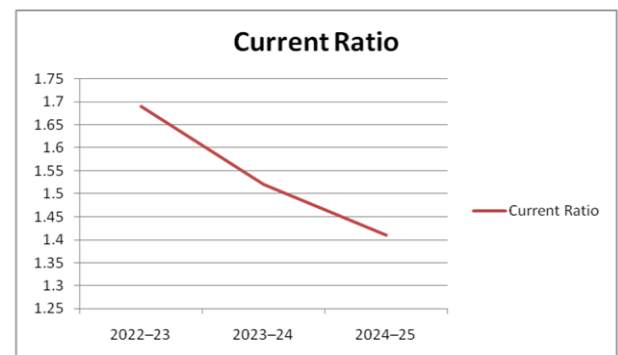
CILs revenue remained largely stagnant across the three-year period, declining slightly from ₹144,803 crore in FY2022-23 to ₹143,369 crore and in FY2024-25. In contrast, profit after tax (PAT) rose significantly in FY2023-24 to ₹37,369 crore before moderating to ₹35,302 crore in FY2024-25.

Profitability indicators highlight strong but fluctuating performance. Net Profit Margin improved from 19.4% in FY2022-23 to 25.8% in FY2023-24, before settling at 24.6% in FY2024-25. Return on Assets (ROA) peaked at 15.7% in FY2023-24, while Return on Equity (ROE) declined from 46.2% in FY2022-23 to 35.6% in FY2024-25.

**Figure 1:** Revenue Profitability trends**Liquidity:**

Liquidity analysis shows a declining trend in the company's ability to cover

short-term obligations. The current ratio fell from 1.69 in FY2022-23 to 1.41 in FY2024-25, suggesting increasing pressure on working capital. Although still above the critical threshold of 1.0, the downward movement signals the need for improved receivables management and tighter cash control.

**Figure 2:** Liquidity trend**Solvency:**

CIL's solvency position weakened during the study period due to increased reliance on long-term borrowing. Long-term debt rose from ₹26,881 crore in FY2022-23 to ₹56,172 crore in FY2024-25. The debt-to-equity ratio increased from 0.44 to 0.57, while the debt-to-assets ratio climbed from 12% to 22%. These trends suggest that the company is financing asset growth through leverage, which requires prudent debt servicing and careful monitoring of interest obligations.

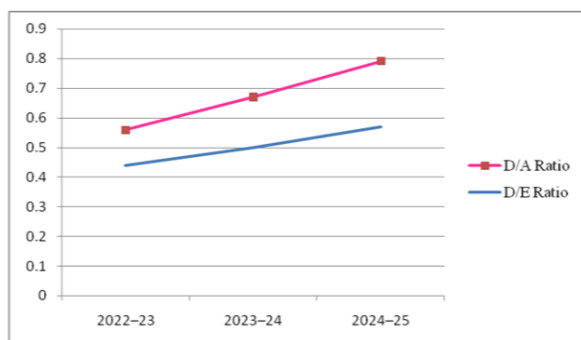


Figure 3: Solvency ratios of CIL

Efficiency and DuPont Analysis:

Asset turnover declined steadily from 0.65 in FY2022-23 to 0.55 in FY2024-25, reflecting weaker utilization of the asset base in generating revenue. DuPont decomposition reveals that ROE was supported primarily by strong margins and leverage rather than efficiency. While this maintains high shareholder returns, it raises concerns about sustainability in the absence of revenue growth.

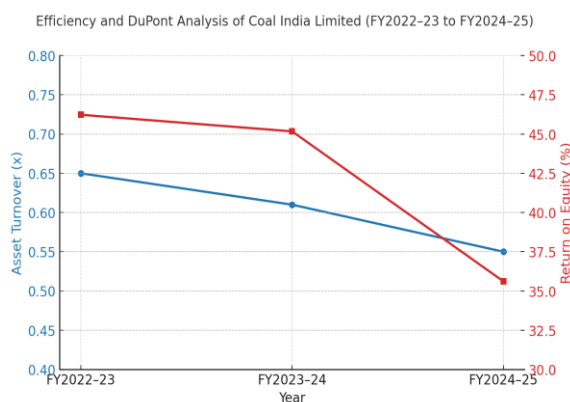


Figure 4: Efficiency and DuPont ratios of CIL

Shareholder Value Creation:

CIL's per-share indicators reflect consistent value creation for shareholders. Earnings per Share (EPS) rose from ₹45.61 in FY2022-23 to ₹60.60 in FY2023-24 before moderating to ₹57.25 in FY2024-25. Book Value per Share (BVPS) improved steadily from ₹98.70 to ₹160.76 over the same period. The combination of high

dividends, earnings, and equity growth underscores CIL's attractiveness to investors despite sectoral uncertainties.

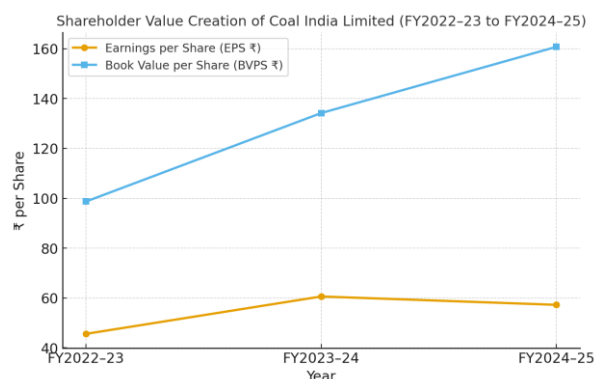


Figure 5: Shareholder value creation of CIL through EPS and BVPS

Discussion:

The financial analysis of Coal India Limited across FY2022-23 to FY2024-25 presents a paradoxical picture: robust profitability and shareholder value creation on the one hand, and revenue stagnation, declining efficiency, and rising leverage on the other.

Profitability and Shareholder Value:

The consistently high Net Profit Margin (see Figure 5) indicates that CIL has been able to maintain strong cost management and operational efficiency. The surge in PAT during FY2023-24 highlights the firm's capacity to generate returns even in the absence of revenue growth. Similarly, Earnings per Share (EPS) and Book Value per Share (BVPS) (see Table 1) underscore consistent value creation for shareholders, bolstered by regular dividend payouts. This makes CIL an attractive option for investors seeking stable returns.

Revenue Stagnation and Efficiency Concerns:

Despite growth in profits, revenue has remained stagnant (see Figure 1). This stagnation is problematic when juxtaposed with the steady increase in the asset base (see Figure 2). The decline in asset turnover from 0.65x in FY2022-23 to 0.55x in FY2024-25 suggests that new investments are not yet translating into proportionate revenues. This erosion of efficiency raises questions about the company's long-term growth trajectory.

Solvency and Leverage:

The rising debt-to-equity ratio (see Table 1) reflects a shift toward greater financial leverage. While CIL's debt levels remain manageable compared to its asset size, the pace of increase—from ₹26,881 crore in FY2022 - 23 to ₹56,172 crore in FY2024 - 25 - signals higher risk exposure. The DuPont decomposition (see Figure 4) further reveals that ROE has been sustained largely by strong profit margins and financial leverage rather than asset utilization. This composition may be less sustainable in the long run, especially if market conditions change.

Liquidity Pressures:

The current ratio's (see Figure 2) steady decline from 1.69 to 1.41 suggests increasing working-capital pressures. Although liquidity remains above critical thresholds, the trend reflects potential risks if short-term obligations continue to grow faster than current assets. Improved receivable management and tighter cash control mechanisms will be essential to reversing this decline.

Strategic Implications:

From a broader perspective, CIL's financial trajectory underscores the challenges of operating as a fossil-fuel-based enterprise in a world transitioning to renewable energy. While the company currently benefits from India's continued reliance on coal, the medium- to long-term scenario requires diversification into cleaner energy options, value-added coal beneficiation, or logistics to sustain relevance. Investors, meanwhile, must balance short-term gains from dividends with the strategic risks posed by the global decarbonization agenda.

Recommendations:

Based on the financial performance analysis of Coal India Limited (CIL) during FY2022-23 to FY2024-25, the following recommendations are proposed to strengthen the company's financial resilience and long-term sustainability:

Accelerate revenue conversion of new assets: Capital investments should be swiftly transformed into revenue-generating capacity. This will reverse the declining asset turnover trend (see Figure 4) and ensure that expansion projects yield measurable returns.

Enhance working-capital management: Given the declining current ratio (see Table 2), CIL must focus on reducing receivable days, improving collection efficiency, and optimizing payables. Tighter management of inventories will also help stabilize liquidity.

Maintain prudent debt strategy: Rising leverage (see Figure 4) necessitates careful debt management. CIL should focus on locking in long-term debt at favorable rates, aligning repayment schedules with project

cash flows, and avoiding overexposure to short-term borrowing.

Balance dividend policy with reinvestment: While dividend payouts remain a major attraction for investors, CIL should ensure that its dividend policy does not undermine reinvestment capacity, especially in projects aimed at improving efficiency and diversifying revenue streams.

Diversify into clean energy and value-added services: To mitigate risks associated with global decarbonization, CIL should explore investments in renewable energy, coal beneficiation, logistics, and integrated power projects. Such diversification will enhance resilience while preserving relevance in India's evolving energy landscape.

Improve transparency and disclosures: Detailed reporting on capital expenditure, debt utilization, sustainability initiatives, and expected project returns will enhance investor confidence and allow stakeholders to make better-informed decisions.

Conclusion:

The financial performance of Coal India Limited (CIL) during FY2022-23 to FY2024-25 highlights a company that is both resilient and vulnerable. On one hand, CIL has demonstrated strong profitability, robust shareholder value creation, and the ability to generate consistent dividends. Net Profit Margin and Return on Equity (see Table 2 and Figure 1) reflect a well-performing enterprise that continues to play a dominant role in India's energy security.

On the other hand, revenue stagnation, declining liquidity, and increasing leverage raise concerns about long-term sustainability. Asset turnover has

steadily decreased (see Figure 2), indicating that expanding assets are not translating into proportional revenue growth. Rising debt (see Figure 4) adds financial risk, while liquidity pressures reflected in the declining current ratio suggest the need for tighter working-capital management.

Strategically, CIL must prepare for a global and domestic shift toward renewable energy. Although coal remains vital to India's immediate energy needs, the structural transition toward cleaner energy sources is inevitable. By prioritizing efficiency, diversifying into new energy domains, and maintaining prudent capital structures, CIL can continue to deliver value to shareholders while aligning itself with future energy demands.

This study underscores that CIL's current financial strength is clear, but sustainability requires forward-looking strategies. Effective capital allocation, debt prudence, and diversification will determine whether the company remains not only India's largest coal producer but also a resilient energy enterprise capable of thriving in a changing global landscape.

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