



MARCH, 2025

FINANCIAL REPORT



Key Highlights

-  DCF Valuation (FCFF & Excess Return)
-  Scenario Forecasting & Sensitivity Analysis
-  Monte Carlo Simulations & Value at Risk (VaR)
-  Business Resilience & Industry Analysis
-  DuPont, Altman Z-Score & Ratio Screening
-  Relative Valuation (CCA) & Key Value Drivers
-  Economic, Strategic & Competitive Outlook

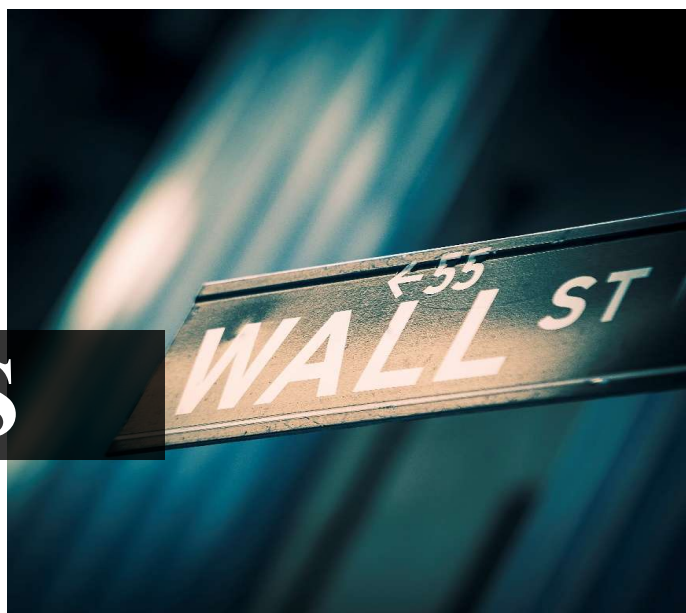
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COAL INDIA LTD | ₹386.1

BSE: 533278 | NSE: COALINDIA

coalindia.in

Company Overview

Coal India Ltd is India's largest coal producer and a government-owned company, supplying over 80% of the nation's coal. It plays a vital role in powering the country's energy and industrial sectors, with strong cash flows and consistent dividends.

Market Cap	₹237,912 Cr.	As of	July 21, 2025
Sector	Energy		
Industry	Oil, Gas & Consumable Fuels		
Founded	1973.00		

Valuation Output Ranges

Current Price	₹ 386.1	₹ 349.3	52W Range	₹ 543.6
Free Cash Flow to Firm	₹530.1	-	₹1140.7	
Excess Return Model	₹1090.8	-	₹2163.2	
Relative Valuation	₹371.4	-	₹1509.4	

P/L Highlights

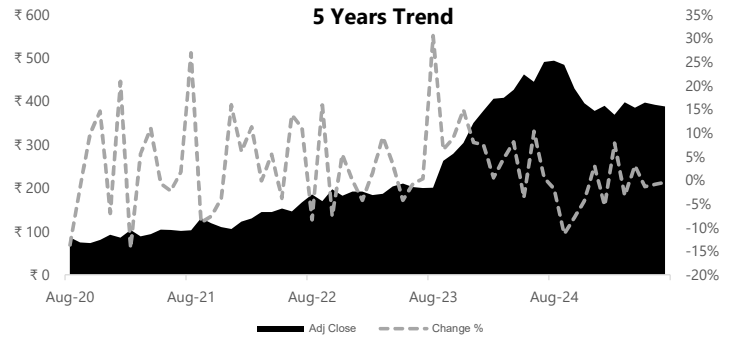
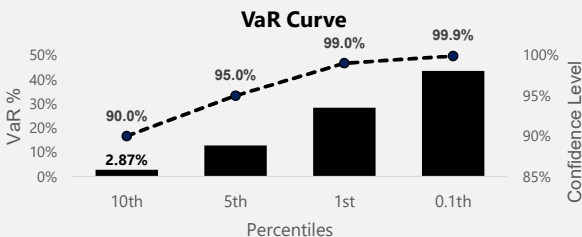
Sales	₹141,821 Cr.	YoY Growth	0.7%
EBITDA	₹57,051 Cr.	Core Margin	33.8%
Profit	₹35,358 Cr.	Net Margin	24.9%

Balance Sheet Overview

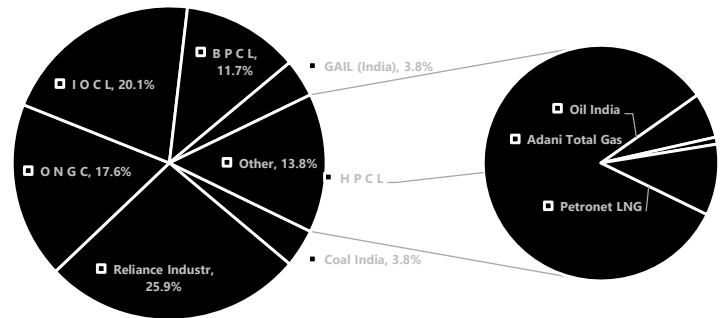
	Mar-25
Cash & Cash Equivalents	34,215
Total Debt	9,146
Total Liabilities	160,247
Total Shareholders' Equity	99,951
Debt-to-Equity	9.2%
Equity Ratio	38.4%
Debtor Turnover Ratio	11.3x
Creditor Turnover Ratio	5.4x

Cash Flow Overview

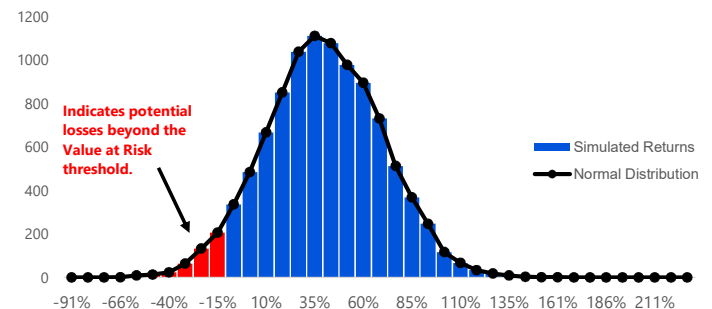
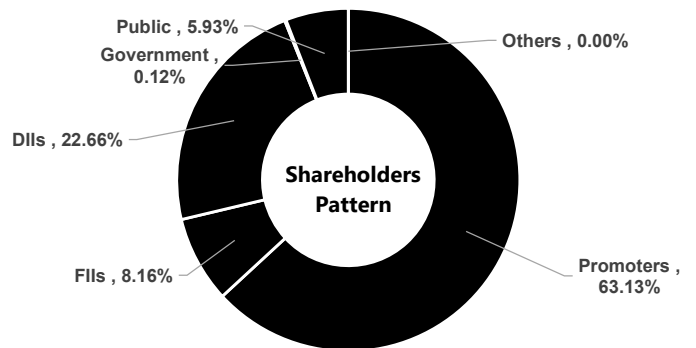
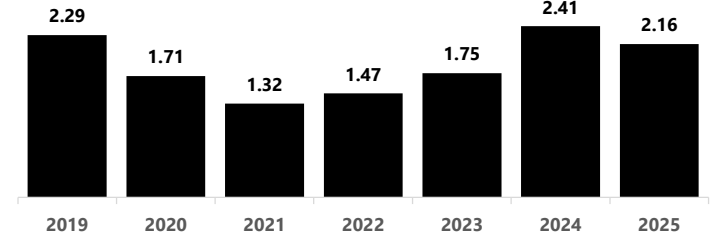
	Mar-25
Cash from Operating Activity	29,200
Cash from Investing Activity	(10,076)
Cash from Financing Activity	(13,309)
Net Cash Flow	5,815
CFO/Sales	20.4%
CFO/Total Assets	11.2%
CFO/Total Debt	319.3%



Market Share (Top Peers)



Altman's Z-Score



1. Executive Summary

Coal India Limited (CIL) is India's state-owned coal mining behemoth and the world's largest coal. Formed in 1975 through nationalization, CIL now operates through seven coal-producing subsidiaries and one mining consultancy (CMPDI) across eight states, managing hundreds of mines. It dominates the Indian coal market (producing over 80% of domestic coal) and underpins roughly 55% of India's power generation (about 70% of the coal-fired power supply). CIL's mission is to ensure energy security by steadily ramping up output – the government has set targets of ~1.3 billion tonnes by FY2024-25 and 1.5 billion tonnes by FY2029— while modernizing mining and diversifying into new energy businesses.

CIL's market position is exceptionally strong. It supplies coal at controlled prices to central/state power utilities via long-term Fuel Supply Agreements and sells the balance on market auctions to industries (steel, cement, etc.), thereby generating virtually all its revenue from coal sales. Buoyed by record Indian power demand, CIL has hit new production highs (over 773 MT in FY2023-24) and recently sold a record 763 MT in FY2024-. At the same time, management is broadening CIL's strategic focus. The company is investing heavily in coal-handling infrastructure (First-Mile Connectivity projects), clean-coal R&D (underground coal gasification), and in **renewable and allied energy ventures**. For example, CIL plans ₹25,000 crore of investment (~\$3 billion) to build ~4.5 GW of solar/wind projects and has formed a joint venture with EDF to develop pumped-storage hydro and other clean projects. CIL also supports national clean-energy goals through critical-minerals and coal-liquefaction initiatives.

Over the next 3–5 years, CIL is expected to sustain double-digit coal production growth (in line with government targets) while navigating rising competition and policy pressures. Its **future prospects** hinge on continuing domestic coal demand growth (driven by GDP and power needs) and on execution of its modernization initiatives. Aided by Government backing and monopoly-scale advantages, CIL is well-placed to meet near-term energy demand; however, it must manage rising environmental and technological challenges as India's energy mix evolves.

2. Business Model & Revenue Segmentation

Coal India's business is essentially a **mining and sales operation**. All of CIL's revenue comes from selling coal (and washed coal) to domestic customers. It produces a mix of thermal (non-coking) coal – which accounts for the vast majority (roughly 90%+) of its volume – and a smaller portion of coking coal (via BCCL and washeries) for steel production. Sales are made under two primary channels:

(a) **Fuel Supply Agreements (FSAs)** with government power utilities (e.g. NTPC, state generation and distribution companies) at pre-negotiated prices, and

(b) **market-price auctions (e-auctions)** open to all industrial buyers. In practice, the power sector commands the largest share of offtake. CIL's coal feeds almost 70% of India's coal-fired power and a similar share of total generation, as most coal-based electricity is supplied by central and state utilities. The remaining coal is sold to steel makers, cement manufacturers, and other industries.

In FY2024-25 CIL achieved its highest-ever dispatch (763 million tonnes, mainly via e-auctions). Analysts note that CIL is **ramping up both FSAs and auction sales**: "Its focus [is] on ramping up of FSA and e-auction volumes, along with enhanced volumes from coal washeries". In other words, long-term FSA contracts ensure a stable core business with bulk power customers, while e-auction revenues grow as industrial demand rises. CIL's seven coal subsidiaries (ECL, BCCL, CCL, WCL, SECL, MCL, NCL) also operate a handful of coal washeries to upgrade raw coal for captive use, further modestly contributing to revenue.

Revenue by Geography is entirely domestic. CIL mines in eight states (Jharkhand, Odisha, Chhattisgarh, West Bengal, MP, Maharashtra, Telangana, Assam) and sells coal nationwide. There is virtually no export business (except minor coking coal shipments); the strategy and policy emphasize meeting India's own fuel needs. All revenues and costs are in INR.

Client concentration is moderately high but diversified by segment. Historically, roughly 75–80% of CIL's coal has been consumed by the power. Major clients include NTPC, Power Grid, and state utilities (together consuming hundreds of millions of tonnes under FSAs). The remainder is split among many industrial clients (over a thousand e-auction buyers, including SAIL, Tata Steel, ACC, Ambuja, JSW, cement unions, etc.). This mix reduces reliance on any single customer. Moreover, under statutory linkage policies, CIL has assured demand through its FSAs. If one large client cuts back, others will consume more (e.g. increased offtake by distribution companies or private power plants). CIL mitigates client risk by: long-term contracts for ~60–70% of its coal, flexible auction channels for the rest, and a broad marketing network. Its closest relationship is with the government power sector, which both assures volume and influences pricing regimes.

Product segmentation: Thermal power coal is the dominant product line, but CIL also sells *washed coking coal* (through 12 coking-coal washeries). Coking-wash coal typically commands a premium price, but comprises under 10% of volumes. Other revenue sources (incidental) include coal bed methane exploration income and consultancy fees from CMPDI, but these are negligible relative to coal sales.

CIL's business model is a single-product, high-scale commodity mining business. It leverages backward integration (in-house exploration and washing) and government-mandated markets (FSAs) to sell coal exclusively within India. Revenue mix is split mainly between *power utilities* (FSAs) and *industrial e-auctions*, with coal types (thermal vs. coking) defining sub-segments. The company's customer base is dominated by the power sector but also extends across steel, cement and others. This built-in demand stability (with supportive state policy) underpins CIL's financial strength, but also means performance is tied to domestic energy demand and government regulations rather than export markets.

3. Industry Overview & Value Chain

Coal India operates in India's vast coal industry, the second-largest globally by production and consumption. **Global context:** In 2024, coal demand continued to grow in emerging markets even as it declined in advanced. Two regions – China and India – drive world coal use. India's coal consumption jumped ~5.5% in 2024 to a record, led by surging power needs and strong industrial output. Coal (mainly for power) still provides roughly 75% of India's coal. By contrast, in advanced economies coal use is shrinking (US down ~4% in), but this global decline is offset by robust growth in Asia. The International Energy Agency forecasts India's electricity demand will grow fastest of any major economy, implying continued strong coal use in the near term.

Domestic structure: India has immense coal resources (~378 billion tonnes), with reserves concentrated in eastern and central states. CIL, through its subsidiaries, works these major coalfields (Jharkhand, Odisha, Chhattisgarh, West Bengal, etc.), mining both high-ash thermal coal and some metallurgical coal. Other producers include Singareni Collieries (state-owned in Telangana), NLC India (lignite in Tamil Nadu), and private/captive miners (Adani Group, Jindal, Tata, etc.), though their output was relatively small until recent policy changes. In 2023-24 total Indian coal production neared 774 MT, up 10% year-on-. Most of this increase came from CIL (which produces ~80% of it) as well as expansions by private miners under new leases.

Value Chain: The coal value chain in India spans exploration, mining, processing, transport, and consumption:

- ❑ **Exploration & Planning:** Geological Survey of India (GSI), CMPDI (CIL's planning arm) and others conduct surveys to estimate and update coal. CMPDI also provides technical consulting and planning for CIL's mines.
- ❑ **Mining & Processing:** CIL (and others) extract coal primarily via large-scale surface (open-cast) mines, where excavators, conveyors, and drill-blast methods dominate. Underground mines (room-and-pillar) contribute a small share. A large portion of production is now mechanized. Raw coal from the mine is sent to washeries (especially coking coal, where impurities are washed out in 12 dedicated) and to on-site (captive) power plants. Off-mine processing includes sorting, crushing, and stockpiling.
- ❑ **Transportation & Logistics:** Coal is transported mainly by Indian Railways (CIL accounts for ~85% of IR's coal freight). Rail links (especially "first-mile connectivity" conveyors and rapid-loading facilities) are being expanded aggressively. Coal is also moved by road or conveyor to nearby power plants. Major users often have jetties/ports for small-scale maritime shipment (e.g. to Bangladesh), but CIL itself rarely exports directly.
- ❑ **Consumption:** The bulk of coal sold by CIL fuels thermal power plants (national and state grids). Smaller volumes go to steel mills (sinter plants, blast furnaces), cement kilns, sponge-iron factories, brick kilns, and other industries. End-customers may burn CIL coal directly or, in some cases, blend it with imported coal or add beneficiated coal from washeries.
- ❑ **Growth Drivers:** Coal demand in India is driven by GDP growth, industrialization, and power demand. Despite a rapid rollout of renewable capacity, India's power sector remains coal-centric: as of mid-2025, thermal power capacity is ~240 GW (~50% of total), and coal accounts for the majority of generation. Key drivers include rising electricity consumption (driven by urbanization, appliances, data centers), expanded manufacturing (steel output grew ~6% in), and government policies (e.g. Ujjwala, rural electrification, Make-in-India). The government has explicitly targeted higher coal output to achieve "Aatmanirbhar" (self-sufficiency) energy.
- ❑ **Key Trends:** Several trends are shaping the industry. Environmental pressure is mounting (e.g. stricter emission norms for plants, fly-ash utilization mandates), pushing investments in cleaner coal technologies and plant upgrades. Mechanization and digitalization are rising – from IoT sensors and drones for mine safety to real-time quality monitoring – improving efficiency and safety. Logistics modernization (first-mile rail conveyors, high-volume rakes) is a high priority, enabling more coal to move faster. On the policy side, the coal sector has been opened to commercial mining and imports have been tightly restricted to boost domestic supply. Global coal prices remain volatile, but with India's domestic coal often cheaper than imports (especially since imported coal is now largely blocked), the industry is somewhat insulated.
- ❑ **Value Chain Role:** CIL sits at the center of this chain as the dominant miner and supplier. It interacts with upstream planners (CMPDI, regulators) and downstream customers (utility DISCOMs, steel majors) but has little presence in downstream logistics (other than captive power plants at some mines). Its value chain role is to *reliably extract* coal and *furnish the market* under government linkages; this function – combined with scale and government ties – is hard for competitors to replicate.

4. Market Share & Competitive Positioning

Coal India's market position is unmatched domestically. It produces roughly **80–82% of India's total coal**, making it by far the largest player (in fact the largest coal mining company in the). No other company comes close: Telangana's SCCL and Neyveli NLC (central PSUs) each contribute only a few percent; other PSU blocks add marginally; recent private producers (Adani, Tata, JSW) have begun output but (as of FY2024-25) total perhaps ~5–10% of supply and are ramping up. By virtue of its size, CIL enjoys **scale economies** that yield lower mining costs per tonne than smaller miners. Its deep, mechanized mines achieve high productivity, and fixed costs (overburden removal, equipment) are spread over huge volumes.

CIL's **competitive advantages** are manifold:

- ❑ **Guaranteed Demand & Pricing:** As a Maharatna PSU, it has government-guaranteed markets (via FSAs) and known pricing formulas (linked to a national coal index). This gives predictable volumes and revenue. Private and captive mines face more uncertain off-take agreements.
- ❑ **Infrastructure & Logistics:** CIL and the Coal Ministry have preferentially funded rail sidings, stockyards and silos at its mines. The company's growing investment in First-Mile Connectivity (see below) further enhances its delivery network. Newer private mines must build out transport links from scratch.
- ❑ **Resource Base:** CIL controls India's largest coal reserves (over 293 billion tonnes of JORC resources) through its subsidiaries. Its geographic spread across major coalfields insulates it against local disruptions (e.g. political unrest or weather in one state can be balanced by output in another).
- ❑ **Regulatory Position:** Being state-owned and tied to the Ministry of Coal, CIL has influence on policy. This often translates into early access to new mining blocks or favorable regulatory treatment. Conversely, private miners must navigate more open-market competition for leases.
- ❑ **Diversification & Value-add:** CIL has the resources to invest in R&D (through CMPDI) and large-scale projects (coal-to-gasification, power plants, renewables). These initiatives may widen its competitive moat relative to smaller firms.
- ❑ **Unique Selling Propositions:** CIL's USP is essentially *"India's energy backbone."* It can assure large customers (like NTPC) that it will deliver required coal volumes on a sustained basis. No private miner currently offers such volume assurance. CIL's monolithic role also simplifies logistics planning for utilities – e.g., a power plant can deal primarily with CIL for coal supply rather than contracting dozens of smaller sources. Finally, its brand and government backing carry weight in investor and public perception; it is often treated as a proxy for national energy security policy.

In sum, Coal India's market share and competitive posture are extraordinarily strong. As PIB noted recently, *"CIL produces over 80% of India's overall coal"* and *"contributes to 70% of the total coal-based power generation"*. This dominance means it effectively determines the economics of domestic coal. The main competitive threats come not from public peers (SCCL, NLC, which are much smaller) but from potential oversupply if private miners scale up rapidly, or from imported coal (although imports have been curtailed). CIL's advantages in scale, scale-efficient costs and regulated offtake give it a clear upper hand in this landscape.

5. Technological Trends & Strategic Initiatives

Coal India is aggressively deploying new technologies and strategic projects to modernize its mining operations and transition toward cleaner energy solutions. Key initiatives include:

- ❑ **First-Mile Connectivity (FMC) and Railing:** To move coal more efficiently, CIL is executing dozens of FMC projects (road-to-rail conveyor systems, material handling plants and siding expansions). In total, **61 FMC projects** (Rs 24,750 Cr capex) are planned, with a combined capacity of ~763 million tonnes per. As of mid-2023, 8 projects (capacity ~112 Mt) were already operational, with dozens more due by FY2025–29. When complete, these projects will expand mechanized coal evacuation capacity to ~915 .
- ❑ **Automation and Digitization:** CIL is adopting digital technologies across mines. In 2025 CIL completed a company-wide SAP ERP rollout (covering the headquarters and three subsidiaries) to integrate supply-chain, production, quality, and finance. In mining operations, drones and analytics are being introduced: a recent contract with drone firm Aereo will deploy aerial surveys and machine-learning analytics at seven large. (Notably, India's mining regulations now mandate drone mapping for volumetric surveys in all major opencast mines.) Other initiatives include GPS tracking of equipment, remote monitoring of critical parameters, and automation of washery processes. These efforts aim to improve safety and efficiency – for example, aerial mapping replaces costly manual surveys, and ERP dashboards enable real-time decision-making on dispatch and inventory.

- ❑ **Clean Coal R&D:** CIL is exploring conversion of coal into cleaner fuels and chemicals. In late 2024, its Eastern subsidiary (ECL) initiated India's first underground coal gasification (UCG) pilot in. UCG involves in-situ combustion of coal seams to generate synthesis gas (CO + H₂), which can be used for power or chemicals without mining the coal. This pilot is intended to produce syngas for industrial gasifiers, potentially adding value to lower-grade coal. CIL has also preserved its legacy L-T (low-temperature carbonization) plant at Dankuni (West Bengal) and is reportedly considering coal-to-methanol processes there. These R&D steps signal a push toward "coal beyond combustion" – extracting more value from coal while reducing surface disturbance and emissions.
- ❑ **Renewables & Diversification:** Recognizing the energy transition, CIL is diversifying into renewable energy and clean projects. It has signed a massive memorandum with AM Green (Greenko) to procure 2.5–3.0GW solar and 1.5–2.0GW wind power for green hydrogen. In May 2025, CIL announced a joint venture with France's EDF India to build pumped-storage hydro and other renewable projects in India and neighboring. CIL also plans its own utility-scale solar/wind farms (announced ~4.5GW, ₹25k Cr) and has proposed ultra-supercritical coal power (1.6GW in Jharkhand with Damodar Valley Corp.) to modernize its generation. These initiatives leverage CIL's land bank and government support to pivot toward low-carbon energy, partially offsetting coal's environmental impact.
- ❑ **Critical Minerals and Strategic M&A:** CIL has inked MoUs to secure critical minerals for India's clean-tech future. In early 2025 CIL signed agreements with IREL (Indian Rare Earths) and Hindustan Copper to jointly develop assets like mineral sands and rare. The goal is to reduce India's import reliance on lithium, cobalt and REEs, leveraging CIL's mining expertise. Such moves illustrate CIL's strategic ambition to evolve from "coal miner" into a broader energy/minerals company.
- ❑ **Other Capex Projects:** Significant capital is also being directed to modernization of existing infrastructure. CIL has proposed building several coal washeries to increase yield (e.g. a new washer at Gare Palma III, and expansions of others) and is installing flue gas desulphurization (FGD) units at its captive thermal power plants to cut SO₂ emissions. Underground mine fleets are being updated with continuous miners and highwall miners. The company's Technology Roadmap (by the Ministry of Coal) encourages adoption of advanced mining methods (longwall, hydrogen-powered equipment, etc.) – CIL is evaluating these for future deployment.
- ❑ In summary, CIL is aggressively upgrading its value chain through technology. It is modernizing coal handling (FMC projects and rail connectivity) to meet ambitious production targets, automating mines with digital tools (ERP, drones, real-time sensors) to boost efficiency and safety, and investing in next-generation fuels (gasification, renewables) to ensure long-term relevance. These efforts – often funded with large capex – position Coal India to improve productivity while aligning with India's environmental and energy policy goals.

6. Regulatory & Geo-Political Environment

Coal India operates in a complex regulatory and political landscape that both protects and challenges its business. Domestically, the company is regulated by the Mines and Minerals (Regulation and Development) Act, environmental laws (EIA norms, Air/Water Acts), and coal-sector policies issued by the Ministry of Coal. Historically, CIL and its subsidiaries enjoy certain privileges (automatic licensing of captive mines, priority forest clearance), but they are also subject to stringent compliance. For example, every new mine or mine expansion requires environmental and forest clearances, along with social (resettlement) compliance. Recent judicial activism has tightened oversight: notably, in April 2025 India's National Green Tribunal ruled that thermal plants cannot switch coal sources without fresh environmental. This decision throws uncertainty over new commercial coal blocks (since plants can no longer freely change to cheaper domestic coal without re-clearing), which could reduce e-auction demand for some high-ash CIL coal – illustrating how environmental regulation can have material policy impact on CIL's market.

Environmental regulations are an especially critical factor. India's commitments (Paris Agreement, net-zero by 2070) mean coal producers must increasingly account for climate and pollution impacts. CIL must comply with national emission standards (e.g., Strict CO₂/O₂ limits at power plants, mandatory FGD fitment on big boilers, 100% ash utilization policies). It also pays significant levies: coal royalty, cesses, District Mineral Foundation (DMF) fees, etc. In FY2024-25 H1, CIL and subsidiaries paid Rs 44,018 Cr in royalty, GST, NMET/DMF and other levies. Changes in taxes or royalties (set by central/state governments) directly affect CIL's cost structure. Land acquisition and local clearances also pose regulatory risk. Mines in Jharkhand and Odisha require social rehab of displaced families, which can delay projects. Pollution control boards scrutinize CIL's mining operations, and any lapses (e.g. dust/effluent norms) can result in stoppages or penalties.

On the **geo-political front**, CIL is mostly insulated since its market is domestic. However, two factors loom: **coal imports** and **international climate policy**. The Indian government has actively curtailed coal imports (suspending import bidding for power plants) to boost domestic supply. As a result, India's coal imports have dropped (e.g. an 8% YoY decline in FY24-). While this policy benefits CIL (captive market protection), it also means CIL must bridge any domestic shortfall. If domestic production lags targets, demand pressure could build. Internationally, the price and availability of coking coal (largely imported) affects CIL's coking-coal strategy: as more steel is built, India still depends on imports for prime coking coal. Geopolitical events (e.g. Russia supply, Australia-China trade) can jitter coal markets, indirectly affecting India's industrial coal prices.

Finally, **decarbonization commitments** are a looming strategic risk. India's pledge to peak emissions (premised on slower growth in coal share) means coal demand could eventually plateau. Multilateral pressure (EU's Carbon Border Adjustment Mechanism, global ESG trends) may reduce capital flows into coal projects. CIL's management must hedge against a policy shift away from coal. For now, India's coal policy remains supportive (e.g. earmarked auctions, production targets), but any future pivot to aggressive carbon pricing or accelerated coal-plant retirements would challenge CIL's core model.

In summary, Coal India navigates a supportive yet demanding regulatory environment. It benefits from government targets and protected domestic demand, but must continuously comply with strict environmental/social laws and adapt to policy shifts. Ongoing regulatory risks include evolving pollution norms, land/forest clearance processes, and global climate pressures – all of which the company addresses through compliance investments (e.g. FGD units, afforestation) and strategic lobbying.

7. Client Mix & Geographic Risk Analysis

CIL's **client mix** is skewed heavily toward the power sector, but it sells coal to a broad array of customers. Roughly 70–75% of its coal (by volume) goes to state and central power utilities under. Key clients include NTPC (with linkages to dozens of plants nationwide), state electricity boards (e.g. Jharkhand, Odisha, West Bengal, Chhattisgarh), and central institutions (NHPC, SESCO, etc.). The remaining ~25–30% is sold to industries: major steel producers (SAIL, JSW, Tata Steel), cement companies (ACC, Ambuja, others), and a long tail of smaller industrial/distribution consumers via e-auctions. This client base is **diverse** in number, but **concentrated** in coal-intensive sectors.

Client concentration risk is moderate. No single customer accounts for a majority of sales because utilities are numerous and tariff-regulated. However, a handful of large plants (for example, Eastern India power plants or a big SAIL steel plant) each take tens of millions of tonnes. If any large customer significantly reduced offtake (say, due to switching fuel, plant closure, or payment issues), CIL could reallocate that coal to others or to the auction market, albeit possibly at lower prices. Long-term FSAs mitigate this risk: they obligate power buyers to take stipulated coal volumes. Payment/default risk is limited by the fact that CIL only supplies to government or large corporate entities (credit risk is low for central PSUs). Importantly, any demand shortfall in power can generally be offset by higher e-auction sales or supply to industries, which CIL can ramp up at short notice.

Geographic risk pertains both to CIL's customer base and its mining footprint. On the demand side, coal offtake centers are dispersed (from Haryana to Tamil Nadu), so regional disruptions (e.g. local financial stress of a state utility) do not heavily skew CIL's business. On the supply side, however, CIL's mines are concentrated in eastern/central India. States like Jharkhand, Odisha and Chhattisgarh account for the bulk of production. This concentration carries risks: political changes in these states could affect mining policy or royalties; Maoist insurgency in some areas poses security and labor risks; and monsoon flooding can halt mining operations seasonally. For example, CIL's North Karanpura and Lalmatia mines (Jharkhand) have seen periodic protests and litigation over land. Similarly, Maharashtra (WCL) and Telangana (SCCL) mines have different regulatory milieus. A significant risk is transportation bottlenecks – many mines are remote and rely on single rail corridors. Any disruption (rail strike, infrastructure failure) can choke coal dispatch until alternatives (roads/silos) are used.

Mitigation strategies: CIL addresses these client and geographic risks through its integrated network and government backing. By expanding its rail and conveyor infrastructure (FMC), it reduces logistical vulnerability of far-flung mines. Multi-modal transport plans (silos, barges in some riverine areas) are also being developed. For client risk, CIL spreads offtake and pricing: it diversifies power customers across states, and many revenue via market auctions means it is not dependent on any one industrial buyer. Furthermore, long-term fuel linkages effectively "socialize" the volume risk across the system: if one state falls short on coal, the Central government can procure it from elsewhere or prompt CIL to fill the gap elsewhere. The company's large resource base also means that a single mine's downtime is a small fraction of total output, minimizing impact of localized issues.

In summary, CIL's client portfolio (power plus industry) and its nationwide (though regionally concentrated) mine footprint present some risk of client and regional dependence. The company's mitigation lies in national policy support, infrastructure investment, and diversifying sales channels. As a result, no single customer or mining region dominates its revenue; and any shortfalls in one area can be largely offset by increased supply to another.

8. ESG Profile

As India's largest coal miner, Coal India occupies a unique ESG (Environmental, Social, Governance) profile. By nature its core product is carbon-intensive, so the Environmental segment is the greatest challenge. CIL recognizes this and has launched several mitigation programs. For example, CIL has implemented a corporate environmental policy (2018) and has been expanding afforestation on mined lands and creating "green ecosystems" in waste dump areas. The company reports that over 50 million trees have been planted in project affected areas to restore green cover. It also invests heavily in emission controls: its captive power plants are being equipped with Electrostatic Precipitators and Flue Gas Desulfurization units to limit dust and SO₂. CIL's drain and water management systems recycle excess water and avoid operating in water-stressed. However, CIL still receives environmental scrutiny; activists and regulators routinely audit fly-ash disposal and dust control.

In recognition of its CSR and environmental efforts, CIL recently won international awards. In Nov 2024, CIL was honored with the *Green World Environment Award 2024* in the CSR. This accolade was for initiatives such as the *Thalassemia Bal Sewa Yojana* (funding bone marrow transplants for 600+) and expanding green cover of mines (eco-parks, vegetation on dumps). The award highlighted that “CIL, living up to its corporate citizenship role, is one of the largest spenders...under Corporate Social Responsibility”. Indeed, CIL mandates ~2% of net profit for CSR each year (translating to ~₹1,000–1,500 crore recently) on education, health, water supply and rural infrastructure in mining regions. It has built dozens of schools, clinics, and provided drinking water projects in local communities. The “Green World Ambassador” honor reflects that CIL’s social and environmental programs are substantial (e.g. ₹60+ crore spent annually on rehabilitation, ₹10 lakh/grant for thalassemia treatment per patient).

Socially, CIL is a major employer (over 220,000 staff) and operates in some of India’s most vulnerable areas. It maintains extensive community engagement and welfare schemes. CIL has internal committees for labor welfare and safety, and runs large medical facilities for employees and their families. According to recent disclosures, CIL has seen a steady decline in mining accidents and fatalities over the past decade through stricter safety protocols and mechanization. The company also engages in skill training and employment programs for project-affected locals. On the downside, like all mining entities it faces challenges of land acquisition and community displacement. CIL reports on rehabilitation compliance, indicating that resettlement reaches nearly all Project Affected Families (PAFs) under its mining projects, funded via DMF and CSR.

From a Governance standpoint, CIL (with 51%+ Government ownership) has a government-appointed Board and is subject to CAG audits, CVC oversight and SEBI listing rules. It has the standard committees (Audit, CSR, etc.) and publishes detailed sustainability reports. Transparency is relatively high for an Indian PSU. However, coal mining is inherently susceptible to conflicts (e.g. lease allocations, regulatory arbitrations). Recently, Competition Commission of India dismissed an abuse-of-dominance complaint against, which suggests it is generally operating within fair practice. The company has also moved to enhance corporate governance by planning IPOs of subsidiaries (BCCL, CMPDI) to bring more market discipline.

ESG Impact: Overall, CIL’s ESG efforts are mixed. The company’s products (coal) are carbon-intensive, so its core business conflicts with global decarbonization goals. However, CIL is actively addressing this through investments (e.g. coal washery expansion to reduce ash, gasification pilots, diversifying into renewables). Its environmental footprint is partially mitigated by these actions and by compliance (e.g. no operation in water-stressed). Socially, CIL contributes significantly to mining community development, which is recognized by awards. Stakeholder impact is positive in terms of energy security and social programs, though negative in terms of greenhouse gases and local ecological disruption. Rating agencies give CIL a moderate ESG risk profile: it scores well on governance and social initiatives, but still carries high environmental risk inherent to coal.

In summary, CIL’s ESG profile reflects the tension of a coal miner in the 21st century. It is **enhancing sustainability** where feasible – expanding green cover, enabling fly-ash recycling, launching community health schemes – and even earning international CSR. Yet its core business remains at odds with long-term climate goals. Going forward, the company’s growth and stakeholder reputation will hinge on how effectively it can decouple coal from carbon (through technology and diversification) and maintain its social license to operate in mining regions.

9. Economic Outlook & Impact

Coal India’s prospects are closely tied to India’s macroeconomic trajectory and global energy trends. India’s GDP growth is expected to stay robust (~6–7% annually). The IMF forecasts ~6.2% real GDP growth and ~4.2% inflation for India in, broadly in line with RBI’s view of 6.5% GDP growth for FY2025-. With low-to-moderate inflation (near the RBI target) and proactive fiscal policy (17% jump in planned), domestic demand across industry and agriculture should remain resilient. Rapid rural income growth (from record monsoons) and strong service-sector consumption also boost power use.

These macro factors bode well for coal demand. India’s electricity consumption (which is ~75% coal-based) tends to grow with GDP. For example, 2024 saw power generation rise ~10%, driven by hot summer and industrial growth. Given CIL’s role in the power sector (supplying ~55% of total), continued economic expansion implies continued coal demand. Moreover, government stimulus in infrastructure (especially rail and metro expansion) requires steel and cement, both of which consume coal.

However, several countervailing forces could moderate coal demand. India is aggressively scaling renewables (recently raising the 2030 target from 500 GW to) and natural gas is also being promoted. On the other hand, the Economics Division of IEA notes that India’s coal demand hit a fresh high in 2024 with a 5%, suggesting that renewables have not yet dented coal’s dominance. In the short term (next 2–3 years), coal demand will likely grow in line with GDP (perhaps 3–6% annually), given minimal immediate policy curbs.

Scenario Analysis: Three broad macro scenarios illustrate coal’s outlook:

- ❑ **Best Case (High Growth, Moderate Global Prices):** India achieves ≥7% GDP growth, driving electricity demand up sharply. Inflation and interest rates remain moderate, supporting industrial output. Global coal prices remain stable or modest (as supply overhangs high-cost producers). In this scenario, CIL comfortably meets incremental domestic demand, possibly exceeding production targets (hitting ~875–900 MT by FY2026, ~1,000 MT by FY2027). Import bans remain in place, so domestic coal prices strengthen, boosting CIL’s margins. CIL’s planned investments (FMC, mines) pay off with higher volume.

- ❑ **Base Case (Steady Growth, Lower Prices):** India grows ~6–6.5%, with coal demand rising at mid-single digits. Global coal prices soften (IEA/World Bank forecast ~25% drop in), easing fuel costs for power plants but slightly reducing CIL's spot realizations on e-auctions. Inflation hovers in RBI's comfort zone, so power tariffs rise only modestly. Domestic policies remain supportive (coal leeway, FSA fulfillment) with no major policy shocks. Under this scenario, CIL is expected to meet targeted production ramp-up (875 MT by FY26) and maintain healthy profitability, though any cost inflation (e.g. labor, diesel) must be controlled.
- ❑ **Worst Case (Slowdown/Accelerated Transition):** A significant global (or domestic) economic slowdown drags India below 5% growth. Power demand stagnates or declines (as industry contracts and high tariff hikes slow consumption). International pressure or internal policy suddenly tightens coal use (e.g. earlier-than-expected carbon tax, faster plant retirements). In this scenario, CIL faces weaker offtake and possibly forced inventory build-up. Domestic production may need cutting back to avoid oversupply, squeezing revenues. Lower global coal prices (with abundant supply elsewhere) would also limit export opportunities and curb incentive to invest in new mines. However, India's government commitment to energy security likely prevents any abrupt collapse, so a true "worst case" (mass demand destruction) seems unlikely before 2030.

Macro Factors: Inflation and interest rates have mixed effects. High inflation (say 7–8%) could erode real coal prices and raise CIL's input costs (diesel, spares). High interest rates might delay coal-related capex (roads, silos), but given CIL's govt backing much financing is internally sourced or budgeted. A stronger rupee could make imported coal and mining equipment (if any) cheaper, but with imports restricted this is a minor benefit. On the upside, lower fuel prices and commodities generally reduce CIL's operating costs.

In all scenarios, CIL remains a core beneficiary of India's growth. As one analyst noted, India's peak energy demand is projected to climb dramatically by, much of it likely coal-fired in the absence of alternatives. Thus, under the base and optimistic forecasts, coal demand (and hence CIL sales) should steadily increase. Downside scenarios would entail modest production cuts or slower volume growth, but given India's continued coal-centric energy strategy, the risk of a steep decline in the near term is limited.

10. Forward-Looking Commentary

Looking ahead, Coal India's strategic priorities are clear: **scale up production to meet government targets while steering toward a cleaner, more diversified energy portfolio**. In the near term (next 3–5 years), management will focus on executing its production capex (opening new mines, maximizing output from existing pits) and completing the FMC and mechanization projects. Achieving the 875–900 MT production and ~900 MT dispatch goals for FY2026 will be a first-order objective, requiring efficient mine expansion and robust coal off-take from utilities.

Simultaneously, CIL must navigate the **energy transition**. Despite coal's dominance today, the renewable share of India's energy mix will grow rapidly. Coal India is therefore expanding into complementary areas: renewables (the 4.5 GW solar/wind plan, hydro JV), gasification (making value-added products from coal), and critical minerals (REEs, lithium). These moves can create new long-term revenue streams and mitigate the risk of a future decline in coal demand. For example, co-firing coal with biomaterials or using coal gasification to produce hydrogen or fertilizers could become valuable extensions of its business. CIL's nascent involvement in clean hydrogen projects (via green power purchase) and its forays into REE extraction suggest management is aligning with India's net-zero goals, albeit in early stages.

CIL will also need to **innovate operationally**. The adoption of digital tools must translate into cost and productivity gains. For instance, drones and real-time analytics could significantly reduce non-productive time and enhance mine safety. The company has set ambitious automation targets (e.g. continuous miners in underground mines, autonomous haulage in opencast), which if realized could lower the cost per tonne. Environmental performance will remain under scrutiny; proactive engagement (investing in FGD, ash recycling, land reclamation, water management) will be crucial to prevent regulatory pushback that could hamper future mining.

Energy-sector trends suggest stable-to-growing coal demand in India through the 2030s, as evidenced by IEA projections and CEA forecasts. CIL's ability to meet this demand will depend on its resilience to logistical bottlenecks and its competitiveness relative to private suppliers. The company's backed mandate and scale give it an edge, but it faces growing competition from large private players (e.g. Adani has begun coal exports from Talabira mines) and must maintain cost leadership.

In sum, **Coal India's forward outlook is cautiously optimistic**. Its immense reserves and government support are enduring strengths, but success hinges on execution of its modernization and diversification strategy. If CIL can deliver higher outputs cost-effectively while simultaneously reducing its carbon footprint (through technology and renewable ventures), it will capture the bulk of India's future coal demand and maintain a key role in the energy transition. Conversely, failure to adapt to environmental imperatives or energy-sector reforms could leave it with underutilized assets in a carbon-constrained world. As one executive put it, CIL must "protect the current business while creating the future business."

Sources: Authoritative industry reports, government releases and recent news (cited above) were used to compile this strategic outlook, among others. These reflect the latest available data as of mid-2025. Tables and figures are illustrative of the cited data.

Historical Financial Statements - COAL INDIA LTD



Years	Mar-16	Mar-17	Mar-18	Mar-19	Mar-20	Mar-21	Mar-22	Mar-23	Mar-24	Mar-25	TTM
# Income Statement (Rs. crore)											
Revenue and Cost of Goods Sold (COGS):											
Revenues	77,861	78,164	85,244	99,586	96,080	90,026	109,715	138,252	142,324	143,369	141,821
Revenue Growth	-	0.4%	9.1%	16.8%	-3.5%	-6.3%	21.9%	26.0%	2.9%	0.7%	-
Cost of sales	50,583	55,455	67,895	64,347	63,347	64,326	75,563	90,710	91,391	55,193	-
Gross Profit	27,278	22,709	17,349	35,239	32,734	25,700	34,152	47,542	50,933	88,176	-
Gross Margin	35.0%	29.1%	20.4%	35.4%	34.1%	28.5%	31.1%	34.4%	35.8%	61.5%	-
Operating Expenses:											
Selling, General and Administrative Expenses	8,564	10,261	8,061	10,232	11,153	7,072	9,432	3,310	2,962	41,113	-
EBITDA	24,653	17,764	14,263	30,841	28,025	22,369	28,586	50,792	56,367	56,995	57,051
EBITDA Margin	31.7%	22.7%	16.7%	31.0%	29.2%	24.8%	26.1%	36.7%	39.6%	39.8%	40.2%
Depreciation and Amortization	2,826	2,907	3,063	3,450	3,451	3,718	4,429	6,833	6,735	9,145	9,145
Total operating expenses	11,390	13,167	11,124	13,682	14,604	10,790	13,860	10,143	9,697	50,259	-
EBIT	21,827	14,857	11,200	27,391	24,574	18,651	24,158	43,959	49,632	47,850	47,906
EBIT Margin	28.0%	19.0%	13.1%	27.5%	25.6%	20.7%	22.0%	31.8%	34.9%	33.4%	33.8%
Non-operating Items and Taxes:											
Other income, net	5,939	5,316	4,975	5,834	6,444	3,742	3,866	6,560	8,396	9,932	9,932
Interest Expense	388	410	430	264	503	642	541	684	819	884	884
Earnings Befor Tax (EBT)	21,440	14,446	10,770	27,127	24,071	18,009	23,616	43,275	48,813	46,966	47,022
EBT Margin	27.5%	18.5%	12.6%	27.2%	25.1%	20.0%	21.5%	31.3%	34.3%	32.8%	-
Tax	7,172	5,165	3,732	9,662	7,371	5,307	6,238	11,552	11,443	11,664	11,664
Effective Tax Rate	33.5%	35.8%	34.7%	35.6%	30.6%	29.5%	26.4%	26.7%	23.4%	24.8%	-
Net Profit	14,268	9,282	7,038	17,464	16,700	12,702	17,378	31,723	37,369	35,302	35,358
Net Margin	18.3%	11.9%	8.3%	17.5%	17.4%	14.1%	15.8%	22.9%	26.3%	24.6%	24.9%
Share Statistics:											
Adjusted Equity Shares in Cr	631.64	620.74	620.74	616.27	616.27	616.27	616.27	616.27	616.27	616.27	616.27
Per Share Information:											
Earnings Per Share (EPS)	22.59	14.95	-	-	-	-	28.20	51.48	60.64	57.28	
EPS Growth	-	-33.8%	0.0%	0.0%	0.0%	0.0%	0.0%	82.5%	17.8%	-5.5%	-
Dividend Per Share	27.40	19.90	16.50	13.10	12.00	16.00	17.00	24.25	25.50	26.50	-
Payout Ratio	121.3%	133.1%	0.0%	0.0%	0.0%	0.0%	60.3%	47.1%	42.1%	46.3%	-
Retention Ratio	0.0%	0.0%	100.0%	100.0%	100.0%	100.0%	39.7%	52.9%	57.9%	53.7%	-

# Balance Sheet (Rs. Crores)											
Assets:											
Current Assets:											
Trade Receivables	11,448	12,476	6,258	5,499	14,408	19,623	11,368	13,060	13,256	12,728	
Cash & Cash Equivalents	38,015	31,149	31,280	31,124	28,449	17,310	29,965	39,922	30,235	34,215	
Inventory	8,301	9,717	6,444	5,584	6,618	8,947	7,076	8,764	10,797	12,614	
Other Current Assets	26,255	31,365	41,939	45,369	53,461	56,325	62,533	70,341	80,443	87,800	
Total Current Assets	84,018	84,708	85,920	87,576	102,936	102,206	110,942	132,087	134,731	147,357	
Non-Current Assets:											
Net Block (PPE + Intangibles)	22,082	23,811	27,574	32,618	36,784	42,405	46,677	64,547	75,668	89,361	
Capital Work-in-Progress (CWIP)	4,553	8,585	10,273	9,658	8,328	10,490	12,897	17,622	18,960	15,889	
Investments	2,906	1,483	1,704	3,170	1,973	5,950	8,921	7,139	7,110	7,591	
Total Non-Current Assets	29,542	33,879	39,550	45,446	47,085	58,845	68,495	89,309	101,739	112,841	
Total Assets	113,560	118,587	125,471	133,021	150,020	161,051	179,436	221,396	236,470	260,198	
Liabilities & Shareholders' Equity:											
Current Liabilities:											
Trade Payables	3,297	3,884	6,974	9,418	7,251	8,473	8,604	8,549	8,386	10,206	
Other Current Liabilities	74,126	86,824	96,418	94,530	103,785	109,735	123,502	146,902	137,979	140,896	
Total Current Liabilities	77,423	90,708	103,392	103,948	111,036	118,208	132,106	155,451	146,365	151,102	
Borrowings	1,199	3,014	1,538	2,210	6,434	5,884	3,514	4,331	6,523	9,146	
Non-Current Liabilities	1,199	3,014	1,538	2,210	6,434	5,884	3,514	4,331	6,523	9,146	
Total Liabilities	78,622	93,723	104,930	106,158	117,470	124,092	135,619	159,782	152,888	160,247	
Shareholders' Equity:											
Equity Share Capital	6,316	6,207	6,207	6,163	6,163	6,163	6,163	6,163	6,163	6,163	
Reserves	28,517	18,311	13,971	20,292	25,994	30,355	36,980	54,680	76,567	92,942	
Shareholders' Equity (Less Minority Interest)	34,833	24,518	20,179	26,455	32,157	36,517	43,143	60,843	82,730	99,105	
Non-Controlling Interest	105	346	362	408	394	441	674	771	852	846	
Total Shareholders' Equity	34,938	24,864	20,541	26,863	32,551	36,958	43,817	61,614	83,582	99,951	
Total Liabilities & Equity	113,560	118,587	125,471	133,021	150,020	161,051	179,436	221,396	236,470	260,198	
Validation	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	
Total Invested Capital	(1,878)	(3,271)	(9,202)	(2,051)	10,536	25,532	17,365	26,024	59,870	74,881	

# Cash Flow Statements (Rs. Crores)											
Cash from Operating Activity	13,154	16,461	21,115	16,356	4,977	10,592	41,107	35,734	18,103	29,200	
Cash from Investing Activity	8,154	455	(7,747)	(7,896)	1,033	182	(25,715)	(23,465)	(4,486)	(10,076)	
Cash from Financing Activity	(19,587)	(17,598)	(13,564)	(10,885)	(4,791)	(8,453)	(13,441)	(13,704)	(13,899)	(13,309)	
Net Cash Flow	1,721	(682)	(196)	(2,426)	1,219	2,321	1,951	(1,436)	(282)	5,815	

Ratio Analysis - COAL INDIA LTD



This analysis examines Coal India Ltd.'s financial performance from FY17 to FY25, based on a comprehensive ratio analysis sheet. The data reveals trends in growth, profitability, cost structure, solvency, returns, efficiency, working capital, and cash flow efficiency, offering insights into the company's operational and financial health. The analysis is tailored for institutional investors, focusing on trends and their implications for future performance.

1. Growth Ratios

Years	Mar-16	Mar-17	Mar-18	Mar-19	Mar-20	Mar-21	Mar-22	Mar-23	Mar-24	Mar-25	Trend	Mean	Median
Sales Growth	-	0%	9%	17%	-4%	-6%	22%	26%	3%	1%		7.6%	2.9%
EBITDA Growth	-	-28%	-20%	116%	-9%	-20%	28%	78%	11%	1%		17.4%	1.1%
EBIT Growth	-	-32%	-25%	145%	-10%	-24%	30%	82%	13%	-4%		19.4%	-3.6%
Net Profit Growth	-	-35%	-24%	148%	-4%	-24%	37%	83%	18%	-6%		21.4%	-4.4%
Dividend Growth	-	-27%	-17%	-21%	-8%	33%	6%	43%	5%	4%		2.0%	3.9%

Trends

- Sales Growth: Sales growth was modest at 0.4% in FY17, peaked at 16.8% in FY19, declined to -6.3% in FY21 due to the COVID-19 pandemic, and rebounded strongly to 26.0% in FY23. However, it slowed to 2.9% in FY24 and is projected at 0.7% in FY25.
- EBITDA Growth: Exhibited high volatility, with a significant decline of -27.9% in FY17, a surge to 116.2% in FY19, and a strong recovery to 77.7% in FY23, moderating to 1.1% in FY25.
- EBIT Growth: Followed a similar pattern, with a peak of 144.5% in FY19 and 82.0% in FY23, but a projected decline of -3.6% in FY25.
- Net Profit Growth: Mirrored EBIT trends, peaking at 148.1% in FY19 and 82.5% in FY23, with a projected -5.5% in FY25.
- Dividend Growth: Negative from FY17 to FY20 (-27.4% to -8.4%), it turned positive in FY21 (33.3%) and peaked at 42.6% in FY23, slowing to 3.9% in FY25.

Implications: The volatility in growth rates reflects CIL's sensitivity to economic cycles, particularly the impact of the COVID-19 pandemic in FY20-FY21. The strong recovery in FY22-FY23 suggests robust demand for coal, likely driven by India's energy needs. However, the projected slowdown in FY25 indicates potential challenges, such as market saturation, increased competition from captive mines, or a shift toward renewable energy. Investors should monitor whether this slowdown is temporary or indicative of structural changes in the coal industry.

2. Profitability Margins

Years	Mar-16	Mar-17	Mar-18	Mar-19	Mar-20	Mar-21	Mar-22	Mar-23	Mar-24	Mar-25	Trend	Mean	Median
Gross Margin	35.0%	29.1%	20.4%	35.4%	34.1%	28.5%	31.1%	34.4%	35.8%	61.5%		34.5%	34.2%
EBITDA Margin	31.7%	22.7%	16.7%	31.0%	29.2%	24.8%	26.1%	36.7%	39.6%	39.8%		29.8%	30.1%
EBIT Margin	28.0%	19.0%	13.1%	27.5%	25.6%	20.7%	22.0%	31.8%	34.9%	33.4%		25.6%	26.5%
EBT Margin	27.5%	18.5%	12.6%	27.2%	25.1%	20.0%	21.5%	31.3%	34.3%	32.8%		25.1%	26.1%
Net Profit Margin	18.3%	11.9%	8.3%	17.5%	17.4%	14.1%	15.8%	22.9%	26.3%	24.6%		17.7%	17.5%

Trends

- Gross Margin: Improved from 29.1% in FY17 to 35.8% in FY24, with an anomalous jump to 61.5% in FY25.
- EBITDA Margin: Rose from 22.7% in FY17 to 39.8% in FY25, with significant gains post-FY22.
- EBIT Margin: Increased from 19.0% in FY17 to 33.4% in FY25.

Implications: The consistent improvement in profitability margins reflects CIL's enhanced operational efficiency, likely driven by economies of scale and cost optimization efforts, such as increased mechanization and infrastructure investments. The significant jump in gross margin to 61.5% in FY25 is highly unusual and may result from accounting changes, a shift in product mix (e.g., higher e-auction volumes), or a one-time event. Without additional context, this figure should be treated cautiously, as it significantly deviates from historical trends. The sustained high EBITDA and EBIT margins indicate strong operational performance, but investors should verify the FY25 gross margin anomaly to assess its sustainability.

3. Cost Structure Ratios

Years	Mar-16	Mar-17	Mar-18	Mar-19	Mar-20	Mar-21	Mar-22	Mar-23	Mar-24	Mar-25	Trend	Mean	Median
SalesExpenses%Sales	11.0%	13.1%	9.5%	10.3%	11.6%	7.9%	8.6%	2.4%	2.1%	28.7%		10.5%	9.9%
Depreciation%Sales	3.6%	3.7%	3.6%	3.5%	3.6%	4.1%	4.0%	4.9%	4.7%	6.4%		4.2%	3.9%
OperatingExpenses%Sales	14.6%	16.8%	13.0%	13.7%	15.2%	12.0%	12.6%	7.3%	6.8%	35.1%		14.7%	13.4%

Trends

- Sales Expenses % Sales: Declined from 13.1% in FY17 to 2.1% in FY24, then surged to 28.7% in FY25.
- Depreciation % Sales: Remained relatively stable, ranging from 3.5% to 4.4%, with a slight increase in FY25.
- Operating Expenses % Sales: Decreased from 16.8% in FY17 to 6.8% in FY24, but spiked to 35.1% in FY25.

Implications: The significant reduction in sales and operating expenses as a percentage of sales up to FY24 indicates improved cost efficiency, likely due to streamlined operations and economies of scale. The sharp increase in FY25 is concerning and may reflect a strategic shift (e.g., increased marketing or distribution costs), a reclassification of expenses, or a data anomaly. This spike could pressure

4. Solvency Ratios

Years	Mar-16	Mar-17	Mar-18	Mar-19	Mar-20	Mar-21	Mar-22	Mar-23	Mar-24	Mar-25	Trend	Mean	Median
Debt-to-Equity	3.4%	12.1%	7.5%	8.2%	19.8%	15.9%	8.0%	7.0%	7.8%	9.2%		9.9%	8.1%
Debt Ratio	1.1%	2.5%	1.2%	1.7%	4.3%	3.7%	2.0%	2.0%	2.8%	3.5%		2.5%	2.3%
Interest Coverage Ratio	56.3x	36.2x	26.0x	103.9x	48.9x	29.0x	44.6x	64.2x	60.6x	54.2x		52.4x	51.5x
Equity Ratio	30.8%	21.0%	16.4%	20.2%	21.7%	22.9%	24.4%	27.8%	35.3%	38.4%		25.9%	23.7%
Capital Employed to Total Assets	31.8%	23.5%	17.6%	21.9%	26.0%	26.6%	26.4%	29.8%	38.1%	41.9%		28.4%	26.5%

Trends

- Debt-to-Equity: Fluctuated between 7.0% (FY23) and 19.8% (FY20), reaching 9.2% in FY25, indicating low leverage.
- Debt Ratio: Remained low, ranging from 1.2% to 4.3%, with 3.5% in FY25.
- Interest Coverage Ratio: Consistently high, peaking at 103.9x in FY19 and at 54.2x in FY25.
- Equity Ratio: Increased from 21.0% in FY17 to 38.4% in FY25.
- Capital Employed to Total Assets: Rose from 21.9% to 41.9%, reflecting a stronger equity base.

Implications: CIL's conservative leverage and high interest coverage ratios demonstrate a robust solvency position, reducing financial risk. The increasing equity ratio suggests a strengthening balance sheet.

5. Returns

Years	Mar-16	Mar-17	Mar-18	Mar-19	Mar-20	Mar-21	Mar-22	Mar-23	Mar-24	Mar-25	Trend	Mean	Median
Return on Invested Capital	-773.5%	-291.8%	-79.5%	-859.7%	161.8%	51.5%	102.4%	123.8%	63.5%	48.0%		-145.4%	49.8%
Return on Capital Employed	60.4%	53.3%	50.7%	94.2%	63.0%	43.5%	51.0%	66.7%	55.1%	43.9%		58.2%	54.2%
Retained Earnings%	0.0%	0.0%	100.0%	100.0%	100.0%	100.0%	39.7%	52.9%	57.9%	53.7%		60.4%	55.8%
Return on Equity	40.8%	37.3%	34.3%	65.0%	51.3%	34.4%	39.7%	51.5%	44.7%	35.3%		43.4%	40.2%
Self Sustained Growth Rate	0.0%	0.0%	34.3%	65.0%	51.3%	34.4%	15.8%	27.2%	25.9%	19.0%		27.3%	26.6%

Trends

- Return on Invested Capital (ROIC): Highly volatile, with negative values in FY17–FY19 (-291.8% to -859.7%), improving to 123.8% in FY23, but declining to 48.0% in FY25.
- Return on Capital Employed (ROCE): Peaked at 94.2% in FY19, stabilizing around 44–55% in FY24–FY25.
- Return on Equity (ROE): Peaked at 65.0% in FY19 and 51.5% in FY23, declining to 35.3% in FY25.
- Self-Sustained Growth Rate: Varied with ROE, reaching 27.2% in FY23 but dropping to 19.0% in FY25.

Implications: The negative ROIC in early years may reflect accounting adjustments or inefficient capital allocation, while the post-FY20 improvement indicates better capital utilization. The recent decline in ROIC, ROCE, and ROE suggests normalizing profitability or an increased capital base, potentially due to investments in infrastructure or diversification (e.g., coal gasification). Investors should assess whether

6. Efficiency Ratios

Years	Mar-16	Mar-17	Mar-18	Mar-19	Mar-20	Mar-21	Mar-22	Mar-23	Mar-24	Mar-25	Trend	Mean	Median
Debtor Turnover Ratio	6.8x	6.3x	13.6x	18.1x	6.7x	4.6x	9.7x	10.6x	10.7x	11.3x		9.8x	10.1x
Creditor Turnover Ratio	15.3x	14.3x	9.7x	6.8x	8.7x	7.6x	8.8x	10.6x	10.9x	5.4x		9.8x	9.3x
Inventory Turnover	6.1x	5.7x	10.5x	11.5x	9.6x	7.2x	10.7x	10.4x	8.5x	4.4x		8.4x	9.0x
Sales to Capital (ICT)	-41.46x	-23.90x	-9.26x	-48.55x	9.12x	3.53x	6.32x	5.31x	2.38x	1.91x		-9.5x	2.1x
WC Turnover Ratio	11.8x	-13.0x	-4.9x	-6.1x	-11.9x	-5.6x	-5.2x	-5.9x	-12.2x	-38.3x		-9.1x	-6.0x

Trends

- Debtor Turnover Ratio: Improved from 6.3x in FY17 to 11.3x in FY25, indicating faster receivables collection.
- Inventory Turnover: Fluctuated, peaking at 11.5x in FY19 but declining to 4.4x in FY25.
- Sales to Capital (ICT): Volatile, with negative values in FY17–FY19, improving to 1.9x in FY25.

Implications: The improved debtor turnover reflects effective credit management, supporting liquidity. The decline in inventory turnover in FY25 suggests potential overstocking or slowing demand, which could tie up capital and increase carrying costs. The stabilization of sales to capital at 1.9x indicates efficient capital utilization for a mature company like CIL, aligning with industry benchmarks (1.5x–2.5x).

7. Working Capital Cycle Ratios

Years	Mar-16	Mar-17	Mar-18	Mar-19	Mar-20	Mar-21	Mar-22	Mar-23	Mar-24	Mar-25	Trend	Mean	Median
Debtor Days	54	58	27	20	55	80	38	34	34	32		43	36
Payable Days	24	26	37	53	42	48	42	34	33	67		41	40
Inventory Days	60	64	35	32	38	51	34	35	43	83		48	41
Cash Conversion Cycle (in days)	90	97	24	-2	51	82	30	35	44	48		50	46

Trends

- Debtor Days: Decreased from 58 days in FY17 to 32 days in FY25.
- Payable Days: Extended from 26 days to 67 days.
- Inventory Days: Increased from 64 days to 83 days in FY25.
- Cash Conversion Cycle: Improved from 97 days to 48 days, though it lengthened from 30 days in FY22.

Implications: The reduction in debtor days and extension of payable days reflect optimized working capital management, enhancing liquidity. However, the increase in inventory days in FY25 could indicate overstocking or reduced demand, potentially straining working capital. Investors should monitor inventory trends to ensure efficient capital use.

8. Cash Flow Efficiency Ratios

Years	Mar-16	Mar-17	Mar-18	Mar-19	Mar-20	Mar-21	Mar-22	Mar-23	Mar-24	Mar-25	Trend	Mean	Median
CFO/Sales	16.9%	21.1%	24.8%	16.4%	5.2%	11.8%	37.5%	25.8%	12.7%	20.4%		19.2%	18.6%
CFO/Total Assets	11.6%	13.9%	16.8%	12.3%	3.3%	6.6%	22.9%	16.1%	7.7%	11.2%		12.2%	11.9%
CFO/Total Debt	1097.3%	546.1%	1373.1%	740.1%	77.4%	180.0%	1169.9%	825.0%	277.5%	319.3%		660.6%	643.1%

Trends

- CFO/Sales: Varied from 5.2% in FY20 to 37.5% in FY22, projected at 20.4% in FY25.
- CFO/Total Assets: Ranged from 3.3% to 22.9%, with 11.2% in FY25.
- CFO/Total Debt: Consistently high, peaking at 1373.1% in FY18 and at 319.3% in FY25.

Implications: CIL’s strong cash flow generation supports its ability to fund operations, capital expenditures, and dividends without significant reliance on external financing. The variability in CFO/Sales reflects operational fluctuations, but the consistently high CFO/Total Debt ratio underscores financial resilience, a key attraction for risk-averse investors.

Key Takeaways

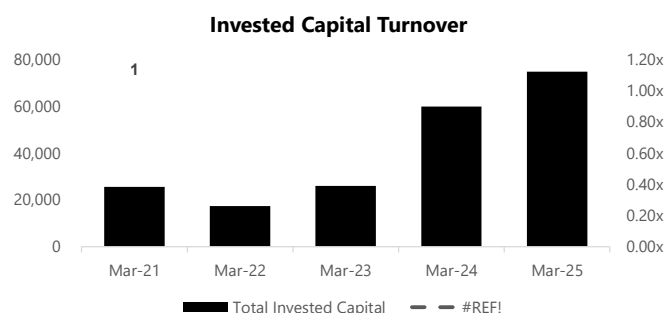
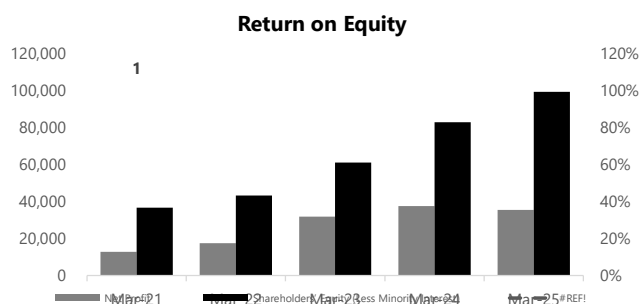
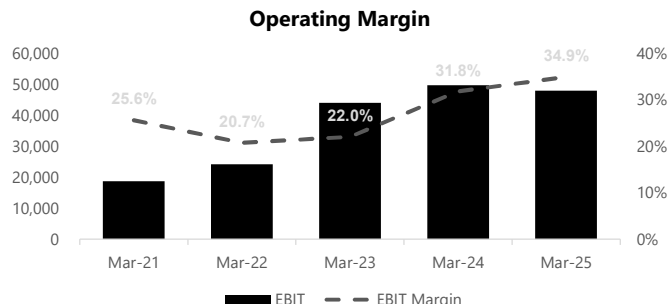
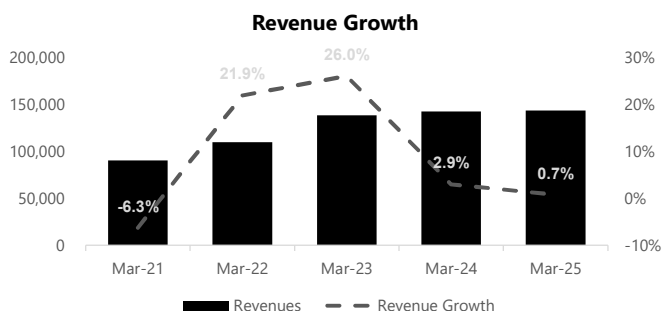
Coal India Ltd. has demonstrated robust financial performance from FY17 to FY25, characterized by improving profitability margins, conservative leverage, and strong cash flow generation. Key strengths include enhanced EBITDA margins (39.8% in FY25), low debt-to-equity ratios (9.2% in FY25), and efficient working capital management, with debtor days reduced to 32 days. However, concerns arise from the projected slowdown in growth (0.7% sales growth in FY25), declining return metrics (ROE at 35.3% in FY25), and anomalies in FY25 data, particularly the 61.5% gross margin and 28.7% sales expenses, which may reflect accounting changes or projection errors. Investors should verify these figures and monitor inventory trends (83 days in FY25) to assess potential liquidity risks. CIL’s financial stability and cash flow strength make it an attractive option for conservative investors, but the recent slowdown and data inconsistencies warrant cautious optimism.

Financial Projections - COAL INDIA LTD



This report provides a detailed five-year financial projection for Coal India Ltd. (CIL), a leading state-owned coal mining company in India, based on insights from the latest earnings call (May 14, 2025), Wall Street analysts' forecasts, and current industry and macroeconomic trends. The projections cover revenue, EBIT margin, Return on Equity (ROE), and Invested Capital Turnover Ratio, presented in base, bull, and bear case scenarios for fiscal years 2026 to 2030 (FY26–FY30), with a target for FY35 where required. All financial figures are in INR crore, and projections align with the fiscal year ending March 31.

Financial Highlights



1. Revenue Projection

(Mar-26 ----- Mar-30)

Revenue projections are segmented into three primary sales channels: power sector, non-power sector, and e-auctions, based on historical contributions and management guidance. For FY26 and FY27, projections rely on Wall Street analysts' estimates, while FY28–FY30 projections incorporate management's production guidance, company fundamentals, and industry trends, such as India's coal demand growth and competitive dynamics.

a) Base Case Scenario

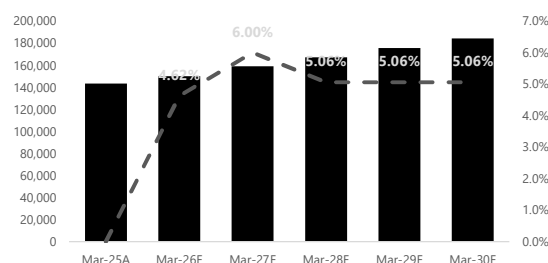
The base case assumes steady growth driven by a 3% annual increase in sales volume and a 2% annual increase in average realization per tonne from FY28 onward. For FY26 and FY27, revenues are based on analysts' average estimates of INR 150,000 crore and INR 159,000 crore, respectively.

The volume growth aligns with management's guidance of 875 million tonnes (mt) production in FY26 and 900 mt in FY27, reflecting a ~3% annual increase from FY25's estimated 850 mt sales. The price growth accounts for stable e-auction premiums (30–40%) and modest notified price adjustments, consistent with inflation and market conditions.

Industry trends support this, with India's coal demand projected to grow to 1,192–1,325 mt by 2030 (NITI Aayog, 2021). CIL's focus on capturing import substitution (60–100 mt) and increasing long-term linkages supports volume growth, while stable pricing is expected due to balanced supply and demand dynamics.

Mar-25A	143,369	
Mar-26E	149,993	4.62%
Mar-27E	158,992	6.00%
Mar-28E	167,037	5.06%
Mar-29E	175,489	5.06%
Mar-30E	184,369	5.06%

Projected Revenue - Base Case



Revenue Breakdown:

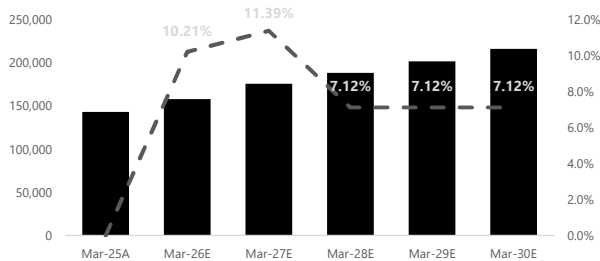
Year	Power Sector (Cr)	Non-Power Sector (Cr)	E-Auctions (Cr)	Total (Cr)	% Growth
FY26	96,270	28,785	24,945	150,000	4.62%
FY27	102,046	30,512	26,442	159,000	6.00%
FY28	107,195	32,052	27,797	167,044	5.06%
FY29	112,627	33,653	29,216	175,496	5.06%
FY30	118,355	35,319	30,697	184,371	5.06%

The segmentation assumes FY25 proportions (power: 64.18%, non-power: 19.19%, e-auctions: 16.63%), derived from estimated FY25 revenues (power: INR 91,999 crore, non-power: INR 27,515 crore, e-auctions: INR 23,835 crore) based on sales volumes (power: 614 mt, non-power: 147 mt, e-auctions: 89 mt) and prices (power: INR 1,498.22/tonne, non-power: INR 1,872.78/tonne, e-auctions: INR 2,678.07/tonne). Total revenue growth of ~5.06% annually from FY28 reflects combined volume (3%) and price (2%) growth.

b) Bull Case Scenario

Mar-25A	143,369	-
Mar-26E	158,007	10.21%
Mar-27E	176,004	11.39%
Mar-28E	188,535	7.12%
Mar-29E	201,959	7.12%
Mar-30E	216,339	7.12%

Projected Revenue - Bull Case



The same FY25 proportions are applied, with higher total revenues reflecting increased volumes (4% growth) and prices (3% growth), leading to ~7.12% annual revenue growth from FY28.

The bull case assumes higher growth, with analysts' high estimates for FY26 (INR 158,000 crore) and FY27 (INR 176,000 crore), followed by 4% volume growth and 3% price growth for FY28–FY30.

This reflects optimism about CIL's ability to capture additional market share, increase e-auction volumes (up to 20% of production, or 175 mt in FY26), and maintain higher premiums (e.g., 40–50%) due to strong demand and limited competition. India's coal production target of 1,533 mt by FY31 (Ministry of Coal, 2025) supports higher volumes, and CIL's infrastructure investments (e.g., first-mile connectivity) enhance efficiency, boosting revenues.

Revenue Breakdown:

Year	Power Sector (Cr)	Non-Power Sector (Cr)	E-Auctions (Cr)	Total (Cr)	% Growth
FY26	101,384	30,314	26,302	158,000	10.21%
FY27	112,904	33,750	29,346	176,000	11.39%
FY28	120,996	36,171	31,363	188,530	7.12%
FY29	129,614	38,742	33,602	201,958	7.12%
FY30	138,840	41,496	36,000	216,336	7.12%

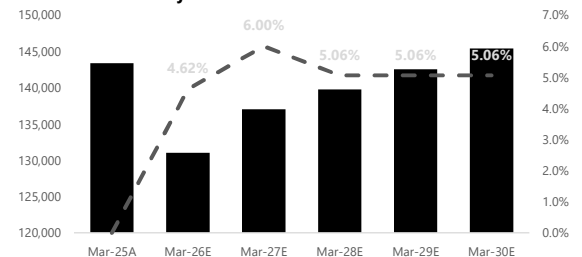
c) Bear Case Scenario

The bear case uses analysts' low estimates for FY26 (INR 131,000 crore) and FY27 (INR 137,000 crore), followed by 2% volume growth and 0% price growth for FY28–FY30.

This reflects challenges from rising competition (captive mines projected at 320 mt by FY30) and potential price pressure from increased domestic supply and renewable energy adoption, which could cap demand growth (NITI Aayog, 2021). CIL's market share may erode, limiting revenue growth.

Mar-25A	143,369	-
Mar-26E	131,011	-8.62%
Mar-27E	137,011	4.58%
Mar-28E	139,751	2.00%
Mar-29E	142,546	2.00%
Mar-30E	145,397	2.00%

Projected Revenue - Bear Case



Revenue Breakdown:					
Year	Power Sector (Cr)	Non-Power Sector (Cr)	E-Auctions (Cr)	Total (Cr)	% Growth
FY26	84,058	25,127	21,815	131,000	-8.62%
FY27	87,944	26,290	22,766	137,000	4.58%
FY28	89,693	26,805	23,242	139,740	2.00%
FY29	91,489	27,341	23,670	142,500	2.00%
FY30	93,319	27,888	24,093	145,300	2.00%

FY25 proportions are maintained, with lower revenues reflecting slower volume growth (2%) and stagnant prices, resulting in ~2% annual revenue growth from FY28.

2. EBIT Margin Projection

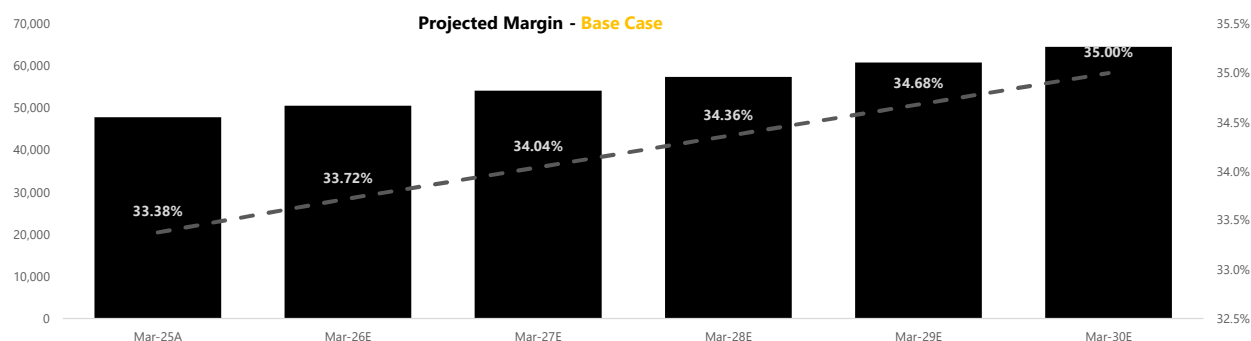
(Mar-26 ----- Mar-30)

EBIT margin projections consider cost structures, economies of scale, and competitive dynamics, with FY25's margin at 33.4%. Management's focus on cost optimization (e.g., MDO vs. departmental production) and infrastructure investments supports margin stability or growth, though wage revisions in FY26–27 pose risks.

a) Base Case Scenario

Margins are expected to improve gradually from 33.4% in FY25 to 35% by FY30, driven by strong economies of scale from increased production (875 mt in FY26, 900 mt in FY27) and efficiency gains from first-mile connectivity projects. Limited competition supports stable pricing, offsetting cost pressures from wage revisions (due in June 2026 and January 2027) and rising stripping ratios (currently 2.67). The target margin for FY35 remains at 35%, assuming sustained efficiency and stable market conditions.

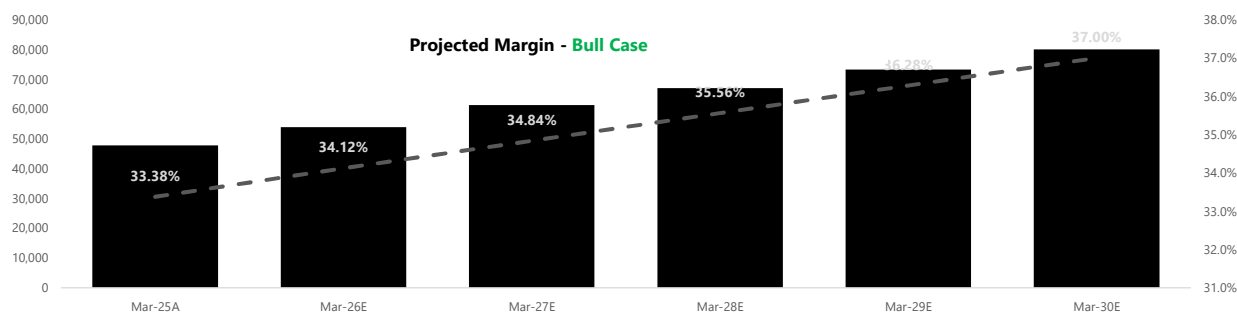
		EBIT
Mar-25A	33.38%	47,850
Mar-26E	33.72%	50,577
Mar-27E	34.04%	54,121
Mar-28E	34.36%	57,394
Mar-29E	34.68%	60,860
Mar-30E	35.00%	64,529



b) Bull Case Scenario

		EBIT
Mar-25A	33.38%	47,850
Mar-26E	34.12%	53,912
Mar-27E	34.84%	61,320
Mar-28E	35.56%	67,043
Mar-29E	36.28%	73,271
Mar-30E	37.00%	80,045

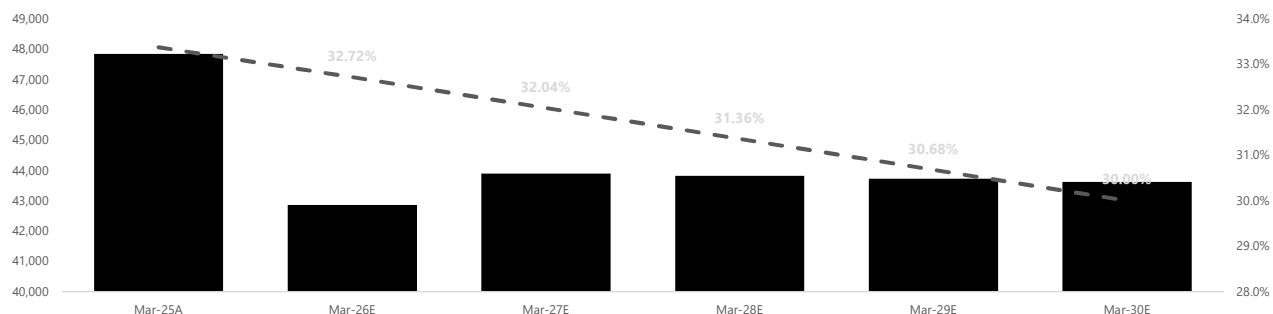
Margins rise from 33.4% to 37% by FY30, reflecting enhanced pricing power due to no or very limited competition and higher e-auction volumes (up to 20% of production). Investments in coal gasification and infrastructure further boost efficiency, mitigating cost increases. The FY35 target is 37%, assuming continued market dominance and successful diversification.



c) Bear Case Scenario

Margins decline from 33.4% to 30% by FY30 due to high competition from captive and commercial mines, leading to price pressure and higher costs (e.g., from wage revisions and stripping ratios). Efficiency gains are limited by market share erosion. The FY35 target is 30%, reflecting a competitive market with reduced profitability.

		EBIT
Mar-25A	33.38%	47,850
Mar-26E	32.72%	42,867
Mar-27E	32.04%	43,898
Mar-28E	31.36%	43,826
Mar-29E	30.68%	43,733
Mar-30E	30.00%	43,619



Target Operating Margin (Terminal)

Historical Median -	26.54%
Industry Median -	13.22%

Base	35.00%
Bull	37.00%
Bear	30.00%

3. Return on Equity Projection

(Mar-26 ----- Mar-30)

a) Base Case Scenario

ROE remains at 42.67% for FY26–FY30, driven by strong profitability (improving EBIT margins) and efficient capital allocation in a market with limited competition. The FY35 target is 42.67%, assuming sustained financial discipline and stable market conditions.

Mar-25A	42.67%
Mar-26E	42.67%
Mar-27E	42.67%
Mar-28E	42.67%
Mar-29E	42.67%
Mar-30E	42.67%

b) Bull Case Scenario

Mar-25A	42.67%
Mar-26E	45.00%
Mar-27E	45.00%
Mar-28E	45.00%
Mar-29E	45.00%
Mar-30E	45.00%

ROE increases to 45% for FY26–FY30, reflecting higher profitability from enhanced margins and minimal competition. Investments in high-return projects like coal gasification support this. The FY35 target is 45%, assuming continued market leadership.

c) Bear Case Scenario

ROE declines to 35% for FY26–FY30 due to lower profitability from competitive pressures and margin compression. The FY35 target is 35%, reflecting a challenging market environment.

Mar-25A	42.67%
Mar-26E	35.00%
Mar-27E	35.00%
Mar-28E	35.00%
Mar-29E	35.00%
Mar-30E	35.00%

Target ROE (Terminal)

Historical Median -	40.25%
Industry Median -	13.74%

Base	42.67%
Bull	45.00%
Bear	35.00%

The invested capital turnover ratio is projected at 3.0x for FY26–FY30 across all scenarios, higher than FY25's 1.91x. As a stable company, CIL is expected to maintain efficient capital utilization, supported by INR 80,000 crore in planned capex for infrastructure and diversification (e.g., coal gasification). Industry benchmarks for mining companies typically range from 1.7x to 3.8x, and CIL's established operations and focus on efficiency justify a 3.0x ratio. Macro trends, such as India's coal demand growth, support sustained revenue generation relative to capital employed.

Current ICT	1.91x
Historical Median -	2.15x
Industry Median -	1.77x
Predicted in Year 5	3.00x

To forecast invested capital turnover (Sales / (Debt + Equity – Cash)), we use a fade-adjusted approach that blends the company's historical efficiency with industry norms. For younger companies, the industry benchmark carries greater weight, assuming the firm is still optimizing capital deployment. In contrast, mature businesses are projected primarily based on their historical capital efficiency. The 5-year target is reached through a gradual linear convergence from current levels, ensuring a smooth and realistic transition path that reflects business evolution over time.

Final Thought

Coal India Ltd. is well-positioned for steady growth through FY30, driven by robust coal demand in India and strategic initiatives to enhance production and efficiency. The base case reflects a balanced outlook with moderate growth and stable margins, while the bull case highlights potential for higher profitability in a low-competition environment. The bear case accounts for risks from increased competition and renewable energy adoption. The projections are grounded in management guidance, Wall Street estimates, and industry trends, providing a comprehensive view for institutional investors.

Citations:

Coal India Ltd. earnings call, May 14, 2025

Wall Street analysts' forecasts

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NITI Aayog, Coal Demand Report, 2021 (<https://indbiz.gov.in>)

International Energy Agency, Coal Report, 2021

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Business Standard, Coal Sector News, 2024–2025 (<https://www.business-standard.com>)

Weighted Average Cost of Capital - COAL INDIA LTD



This document presents the calculation of the Weighted Average Cost of Capital (WACC) for COAL INDIA LTD. The WACC is a critical financial metric that represents the average rate of return required by all of the company's security holders, including equity investors and debt holders. It is used in financial modeling and valuation to discount future cash flows and assess investment opportunities. The following calculations are based on the latest available financial data and market information as of the date of this analysis.

Top Peers of COAL INDIA LTD

All figures are in INR Cr. unless stated otherwise.

Name	Country	Mkt Value of Equity	Debt	Tax Rate ¹	Debt/Equity	Debt/Capital	Levered Beta ²	Unlevered Beta ³
Coal India	India	237,912	9,146	30%	3.84%	3.70%	1.05	1.02
Reliance Industr	India	1,955,915	369,575	30%	18.90%	15.89%	1.18	1.04
O N G C	India	308,091	187,817	30%	60.96%	37.87%	1.20	0.84
I O C L	India	212,242	152,271	30%	71.74%	41.77%	1.11	0.74
B P C L	India	148,550	61,101	30%	41.13%	29.14%	1.12	0.87
GAIL (India)	India	120,949	21,595	30%	17.85%	15.15%	1.35	1.20
H P C L	India	92,241	70,558	30%	76.49%	43.34%	1.13	0.74
Oil India	India	73,376	30,645	30%	41.76%	29.46%	1.40	1.08
Adani Total Gas	India	72,417	1,834	30%	2.53%	2.47%	1.04	1.02
Petronet LNG	India	45,570	2,657	30%	5.83%	5.51%	0.72	0.69
Gujarat Gas	India	32,079	150	30%	0.47%	0.47%	0.00	0.00
Average				30.00%	31.05%	20.43%	1.03	0.84
Median				30.00%	18.90%	15.89%	1.12	0.87

Capital Structure

		Current	Target
Total Debt	9,146	3.70%	15.89%
Market Capitalization	237,912	96.30%	84.11%
Total Capitalization	247,058	100%	100%

Debt / Equity	3.84%	18.90%
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Cost of Debt

Interest Coverage Ratio	54.2x
Default Spread ⁵	0.45%
Pre-tax Cost of Debt	6.75%
Tax Rate	30.00%
After Tax Cost of Debt	4.72%

The cost of equity, estimated using the Capital Asset Pricing Model (CAPM), is 13.06%. The overall cost of capital (WACC) is calculated at 11.74%, incorporating multiple layers of risk including currency risk, country risk, company-specific risk, and credit (debt) risk. All inputs and assumptions have been carefully derived from reliable and credible data sources to ensure the highest possible accuracy.

Levered Beta

Peers Median Unlevered Beta	0.87
Target Debt/ Equity	18.90%
Tax Rate	30%
Levered Beta	0.98

Cost of Equity

Risk Free Rate ⁶	6.30%
Equity Risk Premium ⁷	6.87%
Levered Beta ⁴	0.98
Cost of Equity	13.06%

Weighted Average Cost of Capital

Cost of Equity	13.06%
Equity Weight	84.11%
Cost of Debt	4.72%
Debt Weight	15.89%
WACC	11.74%

Notes

1. The tax rate used in the calculations is the marginal tax rate applicable in India.
2. The levered beta is estimated using 5 years of monthly stock return data relative to the appropriate market index.
3. The unlevered beta is calculated using the formula: $\text{Unlevered Beta} = \text{Levered Beta} / (1 + (1 - \text{Tax Rate}) \times (\text{Debt} / \text{Equity}))$
4. The company's levered beta is calculated using the formula: $\text{Levered Beta} = \text{Unlevered Beta} / (1 + (1 - \text{Tax Rate}) \times (\text{Debt} / \text{Equity}))$
5. The default spread for the pretax cost of debt is determined using the synthetic rating method, which is based on the company's interest coverage ratio, which can be current or historical median, based on the current market scenario.
6. The risk-free rate is the yield on the 10-year Indian Treasury bond.
7. The equity risk premium is calculated as the sum of the equity risk premium for a developed market (specifically, the United States) and the country risk premium for India.

Free Cash Flow to Firm Model (FCFF) - COAL INDIA LTD



This report outlines a Free Cash Flow to Firm (FCFF)-based Discounted Cash Flow (DCF) valuation model. The model is designed using a methodology inspired by Ivy League professors and is widely accepted globally. Its purpose is to estimate the enterprise and equity value of a company by forecasting its cash flows over a multi-year period and discounting them to present value.

The model forecasts unlevered free cash flows over a 10-year horizon, incorporating company-specific operational drivers, macroeconomic conditions, and alternative data insights.

The DCF model employed in this analysis follows a structured three-stage framework, enabling a realistic projection of a company's financial trajectory:

1. High Growth Phase (Years 1–5): This initial stage captures a period of accelerated growth, driven by strong revenue expansion, improving margins, and reinvestment. The firm is expected to generate returns on invested capital (ROIC) significantly above its cost of capital.

2. Transition Phase (Years 6–10): During this intermediate stage, the company's growth rate and profitability gradually normalize. Key financial metrics such as ROIC, reinvestment rate, and cost of capital begin to converge toward stable long-term averages, reflecting a maturing business.

3. Stable Growth Phase (Terminal Year Onward): In the final stage, the firm reaches financial stability with modest, perpetual growth. Cash flows are assumed to grow at a constant rate, and excess returns diminish as the company becomes fully mature.

This multi-stage approach ensures a balanced valuation by capturing both near-term performance and long-term sustainability.

Forecast assumptions such as revenue growth rates, operating margins, and reinvestment rates (sales-to-capital ratio) are discussed in the **Financial Projections** section, while the cost of capital is detailed in the **WACC** section. The table presented here reflects the **Base Case Scenario**, as discussed in the financial projections. For alternate scenarios, refer to the upcoming **Scenario Analysis** section.

(Amount in INR Cr.)

Year	Mar-25A	Mar-26E	Mar-27E	Mar-28E	Mar-29E	Mar-30E	Mar-31E	Mar-32E	Mar-33E	Mar-34E	Mar-35E	Terminal Value
Revenue Growth Rate		4.62%	6.00%	5.06%	5.06%	5.06%	5.31%	5.55%	5.80%	6.05%	6.30%	6.30%
Revenues	143,369	149,993	158,992	167,037	175,489	184,369	194,154	204,939	216,830	229,947	244,427	259,819
EBIT Margin	33.38%	33.72%	34.04%	34.36%	34.68%	35.00%	35.00%	35.00%	35.00%	35.00%	35.00%	35.00%
EBIT	47,850	50,577	54,121	57,394	60,860	64,529	67,954	71,729	75,890	80,482	85,549	90,937
Tax Rate(T)	24.84%	24.84%	24.84%	24.84%	24.84%	24.84%	25.87%	26.90%	27.93%	28.97%	30.00%	30.00%
EBIT(1-T)	35,966	38,017	40,680	43,140	45,745	48,503	50,376	52,433	54,691	57,168	59,885	63,656
Sales to Capital	1.91x	2.13x	2.35x	2.57x	2.78x	3.00x	3.00x	3.00x	3.00x	3.00x	3.00x	3.00x
Less: Reinvestment		3,107	3,832	3,135	3,037	2,960	3,262	3,595	3,964	4,372	4,827	23,950
FCFF		34,909	36,848	40,005	42,708	45,543	47,114	48,838	50,728	52,796	55,058	39,705
Cost of Capital		11.74%	11.74%	11.74%	11.74%	11.74%	11.74%	11.74%	11.74%	11.74%	11.74%	11.74%
Discount Factor		0.895	0.801	0.717	0.642	0.574	0.514	0.460	0.412	0.368	0.330	
PV(FCFF)		31,243	29,514	28,677	27,399	26,149	24,209	22,459	20,878	19,447	18,150	
Invested capital	74,881	77,989	81,820	84,956	87,993	90,953	94,214	97,809	101,773	106,145	110,972	
ROIC	48.03%	48.75%	49.72%	50.78%	51.99%	53.33%	53.47%	53.61%	53.74%	53.86%	53.96%	16.74%

Calculation of Terminal Value		Calculation of Enterprise Value		Calculation of Intrinsic Value	
Terminal Cash flow	39,705	PV (CF over next 10 years)	248,125	Less: Debt	9,146
Terminal Cost of Capital	11.74%	Sum of PV	488,762	Less: Minority Interest	846
Terminal Value	729,971	Default Spread	0.45%	Add: Cash	34,215
PV(Terminal Value)	240,637	Synthetic Rating	Aaa/AAA	Value of Equity	506,800
		Probability of failure ²	2%	Number of Shares	616.27
		Distress Proceeds ¹	B 70%	Current Price	386.05
		Proceeds if firm fails	76,368	Estimated value/share	₹ 822.37
		Value of Operating Assets	482,576	Trading at Discount: Undervalued by -	53.06%

Notes:

1. Distress Proceeds (or Recovery Rate): This represents the expected percentage of debt value recoverable per ₹ 100 of face amount in a default scenario. Methodologically, we infer it by mapping the firm's synthetic credit spread—itsself derived from the Interest Coverage Ratio—to a corresponding credit-rating bucket, and then applying long-term empirical "distress proceeds" averages for that bucket (e.g. ~70% for AAA, ~55% for BBB, ~25% for CCC).

2. Probability of Failure: The one-year default probability reflects the market's implied likelihood of default, net of expected recoveries. We calculate it by first converting the ICR into a synthetic spread (using an approximate-match lookup of coverage bands), then applying the standard market-implied formula:

$$\text{Probability} = \text{Synthetic Spread} / (1 - \text{Recovery Rate})$$

3. Terminal Growth Rate: The terminal growth rate is set equal to the risk-free rate (typically the 10-year T-bond yield), representing the long-term sustainable growth ceiling aligned with the economy's risk-free expansion potential.

4. Terminal Cost of Capital: Mature firms tend to have cost of capital levels closer to the market average. A general rule is:

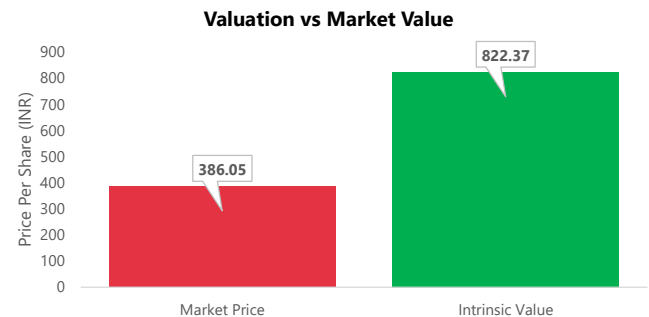
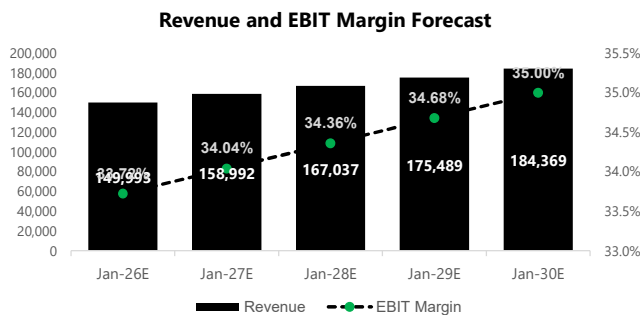
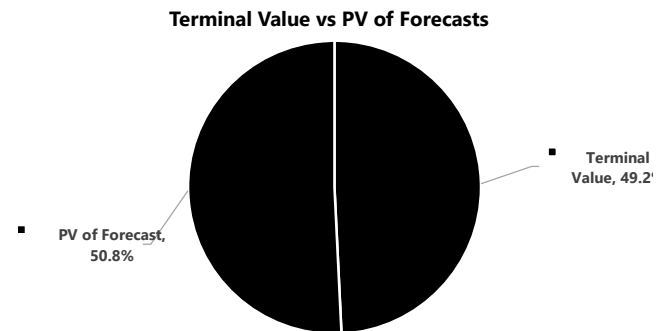
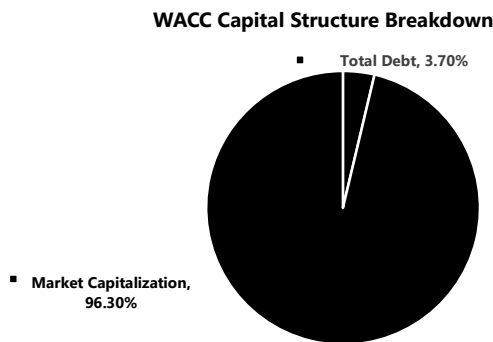
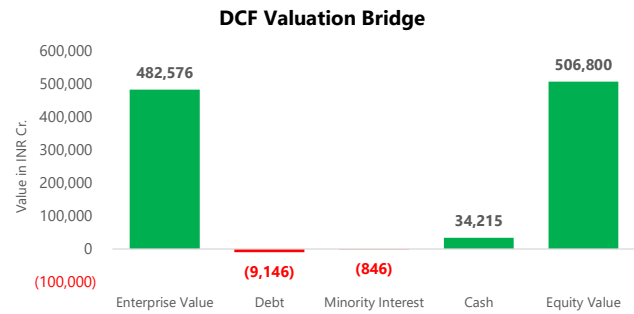
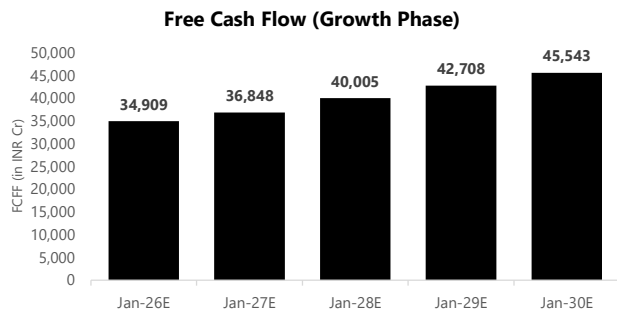
Risk-free rate + 4.5% for an average-risk mature firm

Risk-free rate + 6% for mature firms in riskier industries

Risk-free rate + 4% for safer, more stable mature companies

(This adjustment reflects the declining business risk profile over time.)

5. Terminal Return on Invested Capital (ROIC): The default assumption is that competitive advantages diminish over time, causing ROIC to converge to the cost of capital. This is a realistic scenario for most firms. However, firms with strong and sustainable competitive advantages (e.g., brand power or network effects) may continue earning **excess returns** beyond year 10. In such cases, a terminal ROIC slightly above the cost of capital may be justified, but should be capped—**not exceeding a 5% spread** for mature companies to avoid overestimation.



Model Output

Under the base case scenario, the FCFF valuation model estimates an enterprise value of ₹482,576 crore. After adjusting for net debt and minority interests, the resulting equity value is ₹506,800 crore, implying an intrinsic value of ₹822.37 per share. In comparison to the current market price of ₹386.05, the stock appears to be trading at a Discount of approximately 53.06%, suggesting Undervalued under the given assumptions.

Key Value Driver Sensitivity

While the Discounted Cash Flow (DCF) valuation using the Free Cash Flow to Firm (FCFF) approach provides a detailed intrinsic value estimate, it heavily depends on input assumptions. Given the inherent uncertainty in long-term forecasting, we conduct a **sensitivity analysis** to evaluate how changes in key variables affect the estimated fair value of the business. This adds a layer of robustness and transparency to our valuation by highlighting the range of potential outcomes.

Variables Selected for Sensitivity Testing:

After evaluating various drivers of the model, we selected the following two variables for sensitivity analysis:

1. Terminal Growth Rate (g): The **terminal value** contributes a significant portion of the total enterprise value in a DCF model—often over 50%. A slight change in the **terminal growth rate** materially affects the terminal value and thus the overall valuation. Since estimating growth in perpetuity is speculative and macro-driven, testing its impact helps investors understand best-case and worst-case long-term scenarios.

2. Weighted Average Cost of Capital (WACC): WACC is the discount rate applied to future free cash flows; even minor adjustments can cause large valuation shifts, especially in longer-duration cash flows. It reflects the **cost of equity, debt, and overall capital structure**—which may change due to market volatility, interest rate movement, or perceived business risk. Stress-testing the WACC helps gauge how sensitive the business's valuation is to changes in its risk premium or capital mix.

Sensitivity Table:

Below is the matrix showing how the Enterprise value and Intrinsic equity value per share changes with different combinations of WACC and terminal growth rate.

		Implied Enterprise Value (INR Crores)							Implied Value Per Share (INR)				
		Terminal Growth Rate →							Terminal Growth Rate →				
		5.04%	5.67%	6.30%	6.93%	7.56%			5.04%	5.67%	6.30%	6.93%	7.56%
WACC ↓	10.68%	517,725	540,174	568,153	604,417	653,944	WACC ↓		879.4	915.8	961.2	1,020.1	1,100.4
	11.21%	481,637	499,595	521,403	548,734	584,418			820.8	850.0	885.4	929.7	987.6
	11.74%	450,534	465,175	482,576	503,804	530,562			770.4	794.1	822.4	856.8	900.2
	12.27%	423,396	435,523	449,682	466,574	487,277			726.3	746.0	769.0	796.4	830.0
	12.80%	399,469	409,652	421,362	435,077	451,504			687.5	704.0	723.0	745.3	772.0

Sensitivity Table Output:

This sensitivity analysis demonstrates that the DCF output is particularly reactive to **WACC and terminal growth rate**—underscoring the importance of precision in estimating these inputs. The **lower range** of valuation occurs when WACC is high and terminal growth is low, indicating a pessimistic market and business environment. The **upper range** reflects optimistic growth expectations and lower capital costs.

In our base case, assuming a WACC of 11.74% and a terminal growth rate of 6.3%, we estimate: Enterprise Value of ₹482,576 Cr, Intrinsic Equity Value per Share of ₹822.4. However, under reasonable variations, the valuation range spans: EV: ₹399,469 Cr to ₹653,944 Cr and Per Share: ₹687.5 to ₹1100.4.

This range provides investors with a more realistic view of valuation risk under differing macro or business assumptions.

Scenario-Based Valuation Outlook

This section presents a scenario analysis for the Discounted Cash Flow (DCF) valuation using Free Cash Flow to the Firm (FCFF). The analysis evaluates the impact of varying four key inputs—revenue growth, operating margin, Weighted Average Cost of Capital (WACC), and terminal growth rate—across three scenarios: Base Case, Optimistic Case, and Pessimistic Case. The scenarios are designed to reflect potential economic, market, and operational conditions affecting the valuation. Detailed assumptions for revenue growth and operating margin are provided in the Projection section, while reasons for WACC and terminal growth rate variations are outlined below.

Statistical Forecast Validation: OLS Regression Cross-Check:

While the Base, Bull, and Bear case forecasts in this report are meticulously constructed using a combination of, **Historical financial performance**, **Management guidance from the latest earnings call**, and **Macroeconomic and industry-specific dynamics**, we recognize the importance of validating these scenario-based projections through an **objective, data-driven lens**.

To this end, we have employed a **linear regression model (OLS – Ordinary Least Squares)** based on historical trends of key financial metrics (e.g., Revenue). This regression provides a **statistically derived “intrinsic growth trajectory”**, free from any judgmental or qualitative bias. The intent here is **not to replace** scenario-based forecasting, but to **stress test and benchmark** its assumptions. If the Base Case projections significantly deviate from the OLS-estimated path, it may indicate either overly optimistic/pessimistic assumptions or a structural shift in business fundamentals.

Interpretation Framework:

To assess how closely the Cases aligns with the OLS estimate, we classify the deviation as follows:

- a) **> 15% deviation** = “Statistically Divergent” - Projections may reflect aggressive assumptions or a major anticipated shift
- b) **5 – 15% deviation** = “Statistically Marginal” - Projections differ but within a justifiable range given qualitative context
- c) **< 5% deviation** = “Statistically Aligned” - Projections closely follow historical patterns; assumptions appear validated

Year	Sales	Growth
Mar-25A	143,369	
Mar-26E	150,331	4.86%
Mar-27E	158,380	5.35%
Mar-28E	166,429	5.08%
Mar-29E	174,478	4.84%
Mar-30E	182,526	4.61%

Key Assumptions:

(For detailed explanation refer Projections section)

		1. Revenue Growth Rates				
		Mar-26E	Mar-27E	Mar-28E	Mar-29E	Mar-30E
Bull		10.21%	11.39%	7.12%	7.12%	7.12%
Base		4.62%	6.00%	5.06%	5.06%	5.06%
Bear		-8.62%	4.58%	2.00%	2.00%	2.00%
OLS		4.86%	5.35%	5.08%	4.84%	4.61%

(For detailed explanation refer Projections section)

		2. Operating Margins				
		Mar-26E	Mar-27E	Mar-28E	Mar-29E	Mar-30E
Bull		34.12%	34.84%	35.56%	36.28%	37.00%
Base		33.72%	34.04%	34.36%	34.68%	35.00%
Bear		32.72%	32.04%	31.36%	30.68%	30.00%
OLS		32.69%	32.01%	31.32%	30.64%	29.96%

3. WACC (Cost of Capital): We adjust the WACC to reflect broad economic and market conditions. In the Bull scenario we assume a more favorable macro environment (lower risk premiums, stable rates), resulting in a lower WACC. In the Bear scenario we assume rising interest rates, higher credit spreads and risk aversion, yielding a higher WACC. WACC inputs (risk-free rate, equity premium, debt spread) vary with macroeconomic and capital market factors. For example, if central banks raise rates or investors demand higher returns for risk, the company's cost of capital increases (raising WACC).

4. Terminal Growth Rate: The terminal growth rate reflects long-term economic and industry factors. It is typically set in line with sustainable GDP or inflation rates, since a firm cannot grow perpetually faster than the economy. In our Base case we use a conservative long-term growth (e.g. near long-run GDP), the Bull case may allow a slightly higher rate if secular tailwinds are expected, and the Bear case assumes a lower terminal growth (mature industry or deflationary pressures). As valuation best practices note, terminal growth should remain realistic (often in the

		Bull	Base	Bear	OLS
WACC		11.21%	11.74%	12.27%	11.74%
Terminal		6.93%	6.30%	5.67%	6.30%

Scenario Output Comparison:

	Bull Case	Base Case	Bear Case	OLS
Enterprise Value (EV)	678,735	482,576	302,459	385,621
Equity Value	702,958	506,800	326,683	409,845
Intrinsic Value per Share	1,140.67	822.37	530.10	665.04

Statistically Divergent

The above scenario analysis yields an equity value per share of ₹1140.67, ₹822.37, and ₹530.10 under the Bull, Base, and Bear cases, respectively. Based on our OLS (Ordinary Least Squares) regression analysis, the Base Case projection is considered 'Statistically Divergent' with the historical statistical trend.

Excess Return Model (ERM) - COAL INDIA LTD



The **Excess Return Model (ERM)** is an advanced equity valuation methodology widely accepted across global finance institutions and academic circles, especially those affiliated with Ivy League research¹. Unlike conventional Free Cash Flow to Firm (FCFF) or Free Cash Flow to Equity (FCFE) models that rely on estimating cash flows and discounting them using WACC or cost of equity, the ERM takes a more return-oriented view.

At its core, the ERM values a firm's equity as the **sum of the current equity capital invested** and the **present value of expected excess returns** generated on that equity over time:

$$\text{Value of Equity} = \text{Book Value of Equity} + \text{Present Value of Expected Excess Returns}$$

This method is particularly useful in valuing **firms**, where defining free cash flows and total capital invested is often challenging due to the nature of their operations and accounting. Therefore, ERM narrows its focus to **equity capital and returns to equity investors**, making it both practical and insightful for financial institutions.

To realistically capture the evolution of a firm's value, the Excess Return Model is applied in **three phases**:

- 1. High Growth Phase (Years 1–5):** During this period, the firm is expected to earn **ROEs significantly above its cost of equity**, supported by competitive advantages, strong brand equity, and efficient capital allocation. The **reinvestment rate** or **retention ratio** during this phase is usually high, indicating aggressive growth.
- 2. Transition Phase (Years 6–10):** As the firm matures, competitive pressures increase and incremental returns on new investments begin to decline. This phase reflects a **gradual convergence of ROE toward the cost of equity**.
- 3. Terminal Phase (Year 11 Onwards):** In the final stage, the firm reaches financial stability with modest, perpetual growth. Cash flows are assumed to grow at a constant rate, and excess returns diminish as the company becomes fully mature.

Note: Forecast assumptions such as **Return on Equity (ROE)**, **Retention Ratios**, and **Growth** are discussed in the **Financial Projections** section, while **Cost of Equity** is detailed in the **WACC** section. The table presented here reflects the **Base Case Scenario**. For alternate outcomes, refer to the upcoming **Scenario Analysis** section.

Cash Flow Assumptions

All figures are in INR Cr. unless stated otherwise.

Inputs from Current Financials		
Net Income	35,302	
Book Value of Equity (Current)	99,105	
Book Value of Equity (Last Year)	82,730	
Current Earnings Per Share	57.28	
Current Dividends Per Share	26.50	
Number of Shares Outstanding	616.3	

Do we want to normalize the net income/earnings per share? (Yes or No) **No**

Normalized Earnings Calculation (Not Applicable Here)

Approach to normalized earnings:

Approach 1: Average Net Income over last 5 years

Year	Net Income
-5	12,702
-4	17,378
-3	31,723
-2	37,369
Current	35,302
Average	26,895

Approach 2: Normalized Return on Equity

Normalized ROE **14%**

Inputs for Discount Rate

Beta of the stock	0.98
Riskfree rate	6.30%
Risk Premium	6.87%

(Amount in INR Cr.)

Year	Mar-25A	Mar-26E	Mar-27E	Mar-28E	Mar-29E	Mar-30E	Mar-31E	Mar-32E	Mar-33E	Mar-34E	Mar-35E	Terminal Value
Net Income	35,302	42,288	51,985	63,905	78,559	96,572	118,717	141,990	165,101	186,482	204,429	217,302
Less: Equity Cost (see below)		12,945	15,913	19,562	24,047	29,561	36,340	43,464	50,538	57,083	62,577	66,517
Excess Equity Return (ERM)		29,343	36,072	44,343	54,512	67,011	82,377	98,526	114,563	129,399	141,852	150,785
Cumulated Cost of Equity		1.131	1.278	1.445	1.634	1.847	2.089	2.362	2.670	3.019	3.413	
Terminal Value (ERM)											2,229,060	
Present Value		25,954	28,219	30,682	33,360	36,272	39,438	41,720	42,907	42,865	694,654	
Beginning BV of Equity	82,730	99,105	121,830	149,766	184,108	226,324	278,221	332,762	386,926	437,034	479,092	509,261
Cost of Equity		13.06%	13.06%	13.06%	13.06%	13.06%	13.06%	13.06%	13.06%	13.06%	13.06%	13.06%
Equity Cost		12,945	15,913	19,562	24,047	29,561	36,340	43,464	50,538	57,083	62,577	66,517
Return on Equity	42.67%	42.67%	42.67%	42.67%	42.67%	42.67%	42.67%	42.67%	42.67%	42.67%	42.67%	42.67%
Net Income	35,302	42,288	51,985	63,905	78,559	96,572	118,717	141,990	165,101	186,482	204,429	217,302
Dividend Payout Ratio	46.26%	46.26%	46.26%	46.26%	46.26%	46.26%	54.06%	61.85%	69.65%	77.45%	85.24%	85.24%
Dividends paid	16,331	19,563	24,049	29,563	36,342	44,676	64,175	87,826	114,993	144,424	174,260	
Retained Earnings	18,971	22,725	27,936	34,342	42,216	51,897	54,541	54,164	50,108	42,059	30,168	

Calculation of Growth Rate

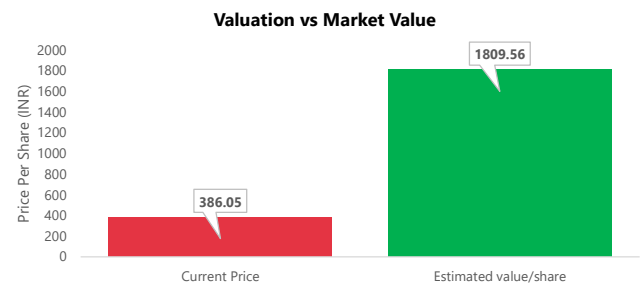
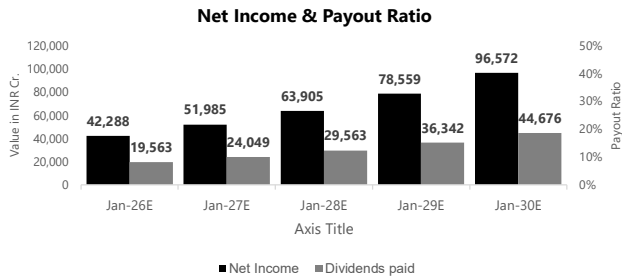
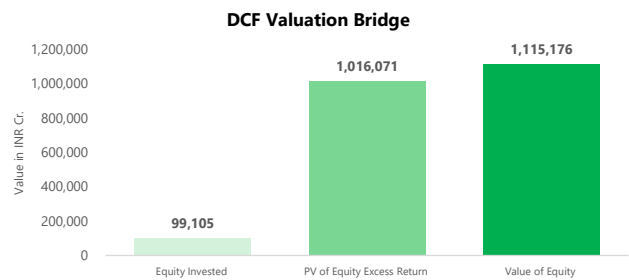
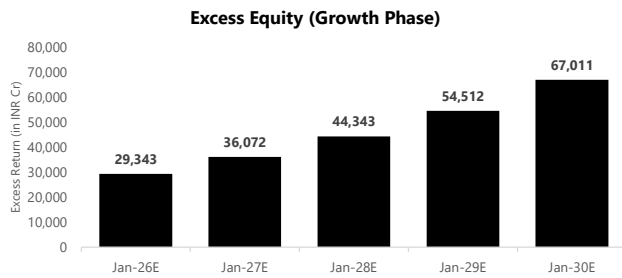
Cost of Equity	13.06%
Return on Equity	42.67%
Retention Ratio	53.74%
Expected Growth Rate	22.93%

Calculation of Equity Value

Equity Invested	99,105
PV of Equity Excess Return	1,016,071
Value of Equity	1,115,176

Calculation of Intrinsic Value

Number of shares	616.27
Current Price	386.05
Estimated value/share	₹ 1809.56
Trading at Discount: Undervalued by -	78.67%



Model Output

Under the base case scenario, the Excess Return Model estimates an equity value of ₹1,115,176 crore, implying an intrinsic value of ₹1809.56 per share. In comparison to the current market price of ₹386.05, the stock appears to be trading at a Discount of approximately 78.67%, suggesting Undervalued under the given assumptions.

Notes:

1. Why Use ERM When FCFF Already Exists?

While FCFF is robust and widely used, the Excess Return Model offers several advantages in specific contexts:

- Focus on Economic Profitability:** Unlike FCFF, which aggregates cash flow, ERM emphasizes the quality of returns by isolating how much value the company creates *above* the required rate of return (cost of equity).
- Better Fit for Financial Institutions:** Since banks and NBFCs (Non-Banking Financial Companies) often have volatile or non-existent free cash flows, ERM's reliance on book value and ROE provides a more stable and interpretable framework.
- Direct Link to Value Creation:** ERM offers a direct assessment of whether a firm is creating or destroying shareholder value by comparing ROE to the cost of equity.
- Avoids Terminal Value Sensitivity:** ERM reduces dependence on distant terminal values, especially when value is driven by near-to-mid-term excess returns.

2. Key Inputs and Model Dynamics

The ERM relies on **two primary inputs**:

I. Equity Capital Invested: Measured as the **book value of equity**, this represents the shareholder capital currently employed in the business. For financial service firms, this is a relatively reliable metric due to:

- Assets often marked to market (e.g., loans, investments)
- Minimal depreciation or fixed asset distortions
- Less complex capital expenditure tracking than manufacturing

Adjustment Note: Stock buybacks and one-time losses may reduce book value, and adjustments might be required to reflect true economic capital.

II. Excess Returns on Equity: $\text{Excess Return} = (\text{ROE} - \text{Cost of Equity}) \times \text{Book Value of Equity}$

This component captures the firm's ability to generate economic profits. It reflects future expectations based on:

- Competitive positioning
- Regulatory environment
- Macroeconomic and interest rate trends
- Historical consistency of ROE

Key Value Driver Sensitivity

The valuation based on the **Excess Return Model (ERM)** is highly sensitive to the firm's ability to generate **economic profits** — returns above its cost of equity — over time. To evaluate the reliability and robustness of our base case valuation, we conduct a **sensitivity analysis** using two key variables that directly influence the present value of future excess returns: **Return on Equity (ROE)** and **Cost of Equity (Ke)**.

These two inputs are central to the model's excess return component: $\text{Excess Return} = (\text{ROE} - \text{Ke}) \times \text{Book Value of Equity}$

By testing a range of realistic ROE and Ke combinations, we present a valuation spectrum that reflects both optimistic and conservative scenarios, helping investors gauge the risk and opportunity embedded in the assumptions.

Key Variables Selected: We have chosen the following two variables for the ERM sensitivity analysis:

1. Return on Equity (ROE): ROE reflects the firm's profitability and ability to generate value from shareholder capital. It is the **primary driver** of excess returns and hence of equity value in the ERM. Small changes in ROE, especially when it hovers near the cost of equity, have a **non-linear impact** on valuation.

2. Cost of Equity (Ke): Cost of equity reflects the **required rate of return** by investors based on business risk, market volatility, and macroeconomic factors. It acts as the threshold over which value is created or destroyed. Even a $\pm 0.5\%$ change can materially affect the excess return stream, especially during the high-growth phase.

Sensitivity Table:

Below is the matrix showing how the Enterprise value and Intrinsic equity value per share changes with different combinations of WACC and terminal growth rate.

Implied Equity Value (INR Crores)						
Cost of ↓	Return on Equity (Growth Phase) →					
	34.14%	38.40%	42.67%	46.94%	51.20%	
	11.80%	1,110,719	1,266,400	1,439,637	1,632,084	1,845,522
	12.43%	970,878	1,107,765	1,260,080	1,429,278	1,616,925
	13.06%	858,102	979,787	1,115,176	1,265,562	1,432,338
	13.69%	765,429	874,582	996,016	1,130,890	1,280,453
	14.32%	688,083	786,743	896,490	1,018,372	1,153,515

Implied Value Per Share (INR)						
Cost of ↓	Return on Equity (Growth Phase) →					
	34.14%	38.40%	42.67%	46.94%	51.20%	
	11.80%	1,802.3	2,054.9	2,336.1	2,648.3	2,994.7
	12.43%	1,575.4	1,797.5	2,044.7	2,319.2	2,623.7
	13.06%	1,392.4	1,589.9	1,809.6	2,053.6	2,324.2
	13.69%	1,242.0	1,419.2	1,616.2	1,835.1	2,077.8
	14.32%	1,116.5	1,276.6	1,454.7	1,652.5	1,871.8

Sensitivity Table Output:

The sensitivity analysis clearly demonstrates that the **intrinsic equity value** is highly responsive to variations in both **Return on Equity (ROE)** and **Cost of Equity (Ke)**: **Higher ROE** and **lower Ke** significantly expand excess returns, thereby increasing equity value. Conversely, **lower ROE** or **higher Ke** compresses excess returns, resulting in more conservative valuations — and in some cases, value destruction.

In our base case, assuming a COE of 13.06% and a growth phase ROE of 42.67%, we estimate: Equity Value of ₹1,115,176 Cr, Intrinsic Equity Value per Share of ₹1809.6
However, under reasonable variations, the valuation range spans: Equity: ₹688,083 Cr to ₹1,845,522 Cr and Per Share: ₹1116.5 to ₹2994.7

This analysis highlights the importance of sustaining superior ROE and managing risk (captured in Ke) to drive long-term shareholder value. It also equips investors with a clearer understanding of how changes in macro and business fundamentals might influence the fair value of equity.



Scenario-Based Valuation Outlook

Under the Excess Return Model, equity value is driven by “excess returns” – the amount ROE exceeds the cost of equity (CoE). By definition, value is created when ROE surpasses CoE and destroyed when ROE falls below CoE. In ERM, intrinsic value equals current book equity plus the present value of expected future excess earnings. This section sets up bull/base/bear cases with ROE and CoE assumptions around the central base case, using the 5-year historical ROE as a validation benchmark.

Statistical Forecast Validation:

We compare the base-case ROE forecasts against the company’s 5-year median historical ROE. The 5-year median ROE serves as a robust historical benchmark (less sensitive to outliers than a mean). If the forecasted ROE deviates materially from the median, the analyst should justify the deviation (e.g. cyclical tailwinds or structural shifts). In practice, the median ROE anchors expectations and flags any overly aggressive or conservative assumptions in the model.

Interpretation Framework:

To assess how closely the Cases aligns with the stats-based estimate, we classify the deviation as follows:

- a) > 15% deviation = “Statistically Divergent” - Projections may reflect aggressive assumptions or a major anticipated shift
- b) 5 – 15% deviation = “Statistically Marginal” - Projections differ but within a justifiable range given qualitative context
- c) < 5% deviation = “Statistically Aligned” - Projections closely follow historical patterns;

	Bull	Base	Bear	Stats-based
CoE	12.43%	13.06%	13.69%	13.06%
Terminal	5.67%	6.30%	6.93%	6.30%

(For detailed explanation refer Projections section)

1. Return on Equity (Growth Phase)					
Bull	45.00%	45.00%	45.00%	45.00%	45.00%
Base	42.67%	42.67%	42.67%	42.67%	42.67%
Bear	35.00%	35.00%	35.00%	35.00%	35.00%
Stats-Based	40.25%	40.25%	40.25%	40.25%	40.25%

2. Cost of Equity (CoE): We input scenario-specific CoE to reflect macro conditions. In a Bull case, lower interest rates or a thinner equity risk premium would yield a lower CoE (raising valuations), whereas in a Bear case higher rates or risk aversion increase CoE. Thus CoE in each scenario encapsulates broad equity-risk expectations – it is not driven by firm operations but by market/interest-rate outlook. In practice, analysts often tie CoE to long-term bond yields plus a risk spread.

3. Terminal Growth Rate: The terminal growth rate reflects long-term economic and industry factors. It is typically set in line with sustainable GDP or inflation rates, since a firm cannot grow perpetually faster than the economy. In our Base case we use a conservative long-term growth (e.g. near long-run GDP), the Bull case may allow a slightly higher rate if secular tailwinds are expected, and the Bear case assumes a lower terminal growth (mature industry or deflationary pressures). As valuation best practices note, terminal growth should remain realistic (often in the low single digits) and congruent with broad economic growth

Scenario Output Comparison:

	Bull Case	Base Case	Bear Case	Stats-based
Equity Value	1,333,095	1,115,176	672,222	1,036,619
Intrinsic Value per Share	2,163.17	1,809.56	1,090.79	1,682.09

Statistically Marginal

The above scenario analysis yields an equity value per share of ₹2163.17, ₹1809.56, and ₹1090.79 under the Bull, Base, and Bear cases, respectively. Based on our stats-based analysis, the Base Case projection is considered ‘Statistically Marginal’ with the historical statistical trend.

Relative Valuation - COAL INDIA LTD



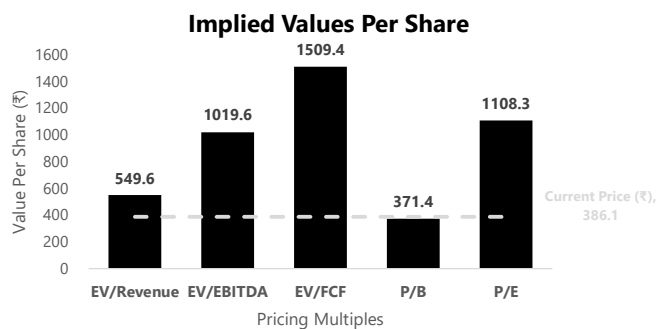
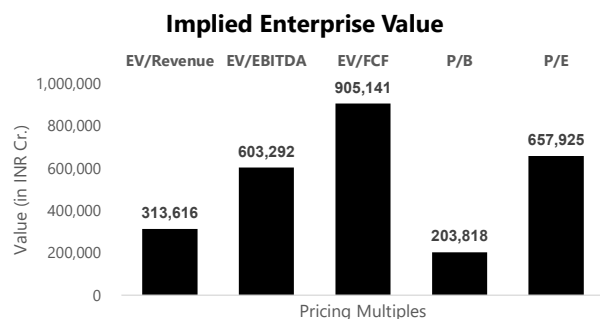
This report applies a **comparables (peer) valuation** framework using key pricing multiples. In a comparables analysis, we identify similar companies and compute standardized multiples (e.g. EV/Revenue, EV/EBITDA, EV/FCF, P/B, P/E). We then take a central tendency (commonly the median) of these peer multiples and apply it to the company's own financial metrics to estimate its value. This approach is straightforward and widely used, though it relies on the assumption that the company's growth, margins and risk profile are broadly in line with the peer group.

Peer Selection: Our peer set includes the largest publicly traded firms that operate in similar markets and business segments. We gather the latest market and financial data for each: share price and count, market capitalization, net debt (total debt less cash), revenue, EBITDA, free cash flow (FCF), book value and net income. These figures are taken from recent financial statements, stock exchange filings or financial databases as of the valuation date. Enterprise Value (EV) is computed as Equity Value + Debt – Cash. Net debt is defined as total interest-bearing debt minus cash/cash equivalents. All values are in ₹ (crore) for consistency.

Multiples and Percentiles: For each company we compute the following multiples: **EV/Revenue**, **EV/EBITDA**, **EV/FCF**, **P/B (Price/Book)**, and **P/E (Price/Earnings)**. (EV-based multiples are capital-structure-neutral, using EV in numerator and sales/EBITDA/FCF in denominator; equity multiples use share price and per-share metrics.) We then aggregate the peer multiples. To summarize these, we calculate the **25th percentile**, **median (50th percentile)**, and **75th percentile** of each multiple across the peer set. In practice, analysts often

(Amount in INR Cr.)

Company	Market Data			Financials				Pricing Multiples				
	Share Price	Shares Outstanding	Enterprise Value	Revenue	EBITDA	Free Cash Flow	Net Income	EV/Revenue	EV/EBITDA	EV/FCF	P/B	P/E
Coal India	386	616.27	212,843	143,369	57,062	16,450	35,302	1.5x	3.7x	12.9x	2.4x	6.7x
Reliance Industr	1,445	1353.25	2,218,988	976,541	198,656	41,079	94,647	2.3x	11.2x	54.0x		20.7x
O N G C	245	1258.03	468,731	663,262	102,343	50,154	38,329	0.7x	4.6x	9.3x	0.9x	8.0x
I O C L	150	1412.12	361,208	758,106	41,281	421	13,789	0.5x	8.8x	858.0x	1.1x	15.4x
B P C L	342	433.85	199,175	440,272	29,420	8,794	13,337	0.5x	6.8x	22.6x	1.8x	11.1x
GAIL (India)	184	657.51	139,824	141,903	18,206	7,818	12,463	1.0x	7.7x	17.9x	1.4x	9.7x
H P C L	434	212.78	162,546	434,106	18,513	4,797	6,736	0.4x	8.8x	33.9x	1.8x	13.7x
Oil India	451	162.66	96,824	32,512	12,824	1,749	7,040	3.0x	7.6x	55.4x	1.5x	10.4x
Adani Total Gas	658	109.98	73,782	5,000	1,180	23	654	14.8x	62.5x	3205.1x	17.3x	110.7x
Petronet LNG	304	150.00	39,122	50,982	6,300	2,941	3,973	0.8x	6.2x	13.3x	2.3x	11.5x
Gujarat Gas	466	68.84	31,870	16,487	2,093	1,055	1,148	1.9x	15.2x	30.2x	3.8x	27.9x
High								14.8x	62.5x	3205.1x	17.3x	110.7x
75th Percentile								2.2x	10.6x	55.0x	2.3x	19.3x
Median								0.9x	8.2x	32.0x	1.8x	12.6x
25th Percentile								0.5x	7.0x	19.1x	1.4x	10.6x
Low								0.4x	4.6x	9.3x	0.9x	8.0x
Implied Enterprise Value								313,616	603,292	905,141	203,818	657,925
Net Debt								-25,070	-25,070	-25,070	-25,070	-25,070
Implied Market Value								338,686	628,361	930,211	228,888	682,995
Shares Outstanding								616.27	616.27	616.27	616.27	616.27
								549.57	1019.62	1509.42	371.41	1108.27
Implied Value per Share (₹)	(Based on Median)							549.6	1019.6	1509.4	371.4	1108.3
Current Price (₹)	386.1											
								Underpriced	Underpriced	Underpriced	Overpriced	Underpriced



Model Output

Based on the 75th Percentile peer multiples, COAL INDIA LTD's implied equity value per share ranges roughly from ₹371.4 to ₹1509.4 depending on the chosen metric. We stress that this is a simplified illustrative exercise: true valuation would require adjustments for growth differences, one-time items, accounting variations, and forward ("next-twelve-months") estimates. Moreover, the use of historical or forward multiples, currency effects, and market timing can all sway the result. Analysts often present a valuation range (e.g. using the 25th–75th percentile of each multiple) to capture this uncertainty.

Monte Carlo Simulation & VaR Model



1-Year Value at Risk (VaR) Report

This report estimates the 1-year Value at Risk (VaR) for COAL INDIA LTD using a Monte Carlo Simulation approach. By simulating 10,000 potential future price paths based on historical volatility and mean return, we quantify the risk of extreme loss under normal market conditions.

Date	Price	Returns	Replication	Simulated Returns	Simulated Price	VaR
2-Mar-2022	146	9.0%	1	30.37%	523	137
25-Feb-2022	129	9.0%	2	27.33%	507	121
25-Feb-2021	107	8.1%	3	36.54%	556	170
13-Nov-2023	311	8.0%	4	54.91%	669	282
17-May-2022	146	7.5%	5	42.87%	593	207
10-May-2021	104	7.5%	6	0.23%	387	1
7-Sep-2023	244	7.1%	7	72.26%	795	409
29-Sep-2021	134	6.4%	8	-5.97%	364	-22
7-Aug-2024	500	6.4%	9	31.25%	528	142
3-Jan-2022	119	6.3%	10	3.68%	401	14
29-Jan-2024	384	6.0%	11	-23.12%	306	-80
11-May-2021	110	5.9%	12	83.29%	888	502
19-Dec-2023	341	5.6%	13	37.29%	561	174
24-Feb-2021	99	5.5%	14	31.57%	529	143
9-Feb-2022	129	5.4%	15	81.71%	874	488
10-Oct-2023	270	5.4%	16	27.61%	509	123
5-Feb-2024	410	4.9%	17	29.73%	520	134
1-Aug-2023	210	4.8%	18	74.37%	812	426
11-Apr-2025	392	4.7%	19	25.94%	500	114
4-Feb-2021	98	4.6%	20	45.00%	605	219
4-Sep-2023	220	4.6%	21	41.28%	583	197
6-Oct-2022	187	4.6%	22	12.52%	438	51
3-Feb-2021	94	4.6%	23	83.70%	892	506
3-May-2024	447	4.6%	24	8.17%	419	33
13-Feb-2024	421	4.5%	25	143.62%	1623	1237
21-Jun-2022	146	4.5%	26	64.22%	734	348
28-Sep-2021	126	4.5%	27	3.63%	400	14
11-Oct-2021	142	4.5%	28	-19.66%	317	-69
5-Nov-2020	77	4.4%	29	59.59%	701	314
19-Apr-2022	156	4.4%	30	51.47%	646	260
21-May-2024	462	4.3%	31	69.54%	774	388
31-Jan-2025	396	4.3%	32	56.46%	679	293
3-Jun-2024	482	4.3%	33	85.71%	910	524
15-May-2024	440	4.3%	34	36.69%	557	171
7-Mar-2022	149	4.2%	35	40.93%	581	195
5-Jun-2024	433	4.2%	36	-5.96%	364	-22
5-Oct-2021	143	4.2%	37	80.52%	864	478
28-Dec-2023	354	4.2%	38	65.42%	743	357
29-Jul-2022	167	4.1%	39	17.93%	462	76
15-Sep-2021	117	4.1%	40	27.19%	507	121
13-Sep-2021	112	4.0%	41	29.42%	518	132
11-Jun-2021	115	3.9%	42	50.62%	640	254
21-Apr-2022	164	3.9%	43	77.81%	841	454
30-Apr-2021	94	3.9%	44	23.78%	490	104
6-Mar-2025	383	3.9%	45	39.60%	574	188
4-Oct-2022	179	3.9%	46	42.20%	589	203
1-Nov-2021	124	3.8%	47	5.49%	408	22
23-Nov-2021	113	3.8%	48	-14.55%	334	-52
10-Apr-2024	429	3.8%	49	-11.84%	343	-43
28-Feb-2022	134	3.7%	50	51.46%	646	260
14-Dec-2020	98	3.7%	51	-10.65%	347	-39
19-May-2021	107	3.7%	52	49.93%	636	250
30-Aug-2021	101	3.6%	53	-0.40%	385	-2
22-Sep-2021	117	3.6%	54	92.66%	975	589

..... Upto 10,000 rows

Descriptive Statistics (5Y - Daily)

Mean	0.14%
Standard Error	0.05%
Median	0.09%
Standard Deviation	1.90%
Sample Variance	0.00
Kurtosis	4.39
Skewness	0.11
Range	0.23
Minimum	-13.75%
Maximum	9.00%
Sum	1.73
Count	1239

Monte Carlo Simulation 1-Year

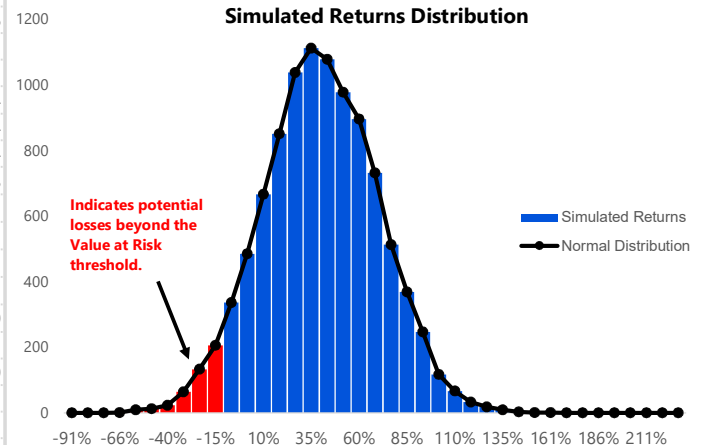
Current Price	₹ 386.05
Time Horizon (Days)	252
Mean	35.59%
Std Deviation	29.95%
Min	-69.90%
Max	157.78%

Output Summary

Average Simulated Price	₹ 576.34
Minimum Simulated Price	₹ 191.90
Maximum Simulated Price	₹ 1,870.13
5th Percentile Simulated Price	₹ 336.41
1-Year 95% VaR	₹ 49.64
1-Year 95% VaR (%)	12.86%

Percentile	Confidence Level	1 Year VAR	VaR %
10 th	90.0%	11.10	2.87%
5 th	95.0%	49.64	12.86%
1 st	99.0%	109.72	28.42%
0.1 th	99.9%	168.09	43.54%

Simulated Returns Distribution



The results of the Monte Carlo simulation provide a probabilistic framework for assessing the downside risk in COAL INDIA LTD's equity over a 1-year horizon. By generating 10,000 potential future price paths based on historically observed mean returns and volatility, we arrive at a 95% confidence Value at Risk (VaR) of ₹49.64, or 12.86% of the current stock price.

This implies that, under normal market conditions, we can be 95% confident that COAL INDIA LTD's share price will not fall below ₹336.41 within one year. Conversely, there exists a 5% probability that the losses could exceed this threshold.

Interpretation in Context:

1) Volatility-Driven Exposure:

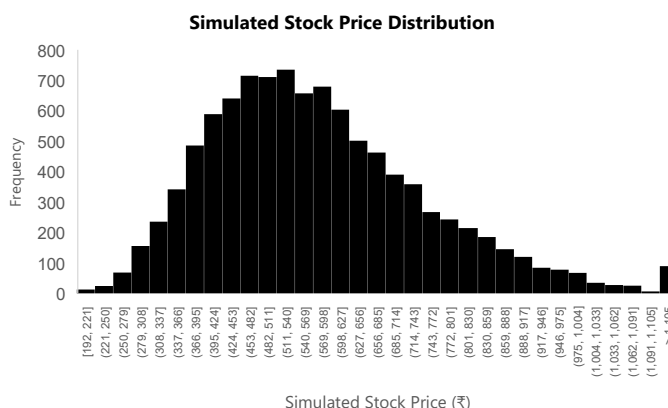
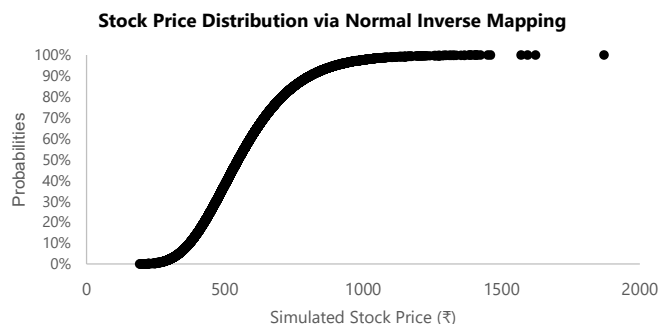
With a daily volatility of 1.9%, the risk profile of COAL INDIA LTD over a 252-day trading horizon scales materially. The wide distribution of final simulated prices — from a low of ₹191.9 to a high of ₹1870.13 — reflects both upside and downside tail exposures.

2) Positive Drift, But Non-negligible Tail Risk:

The simulation incorporates a small positive drift (daily mean return of 0.14%), consistent with historical equity returns. Despite this, the left tail remains significant due to the compounding impact of volatility over time.

3) Skewness Not Captured:

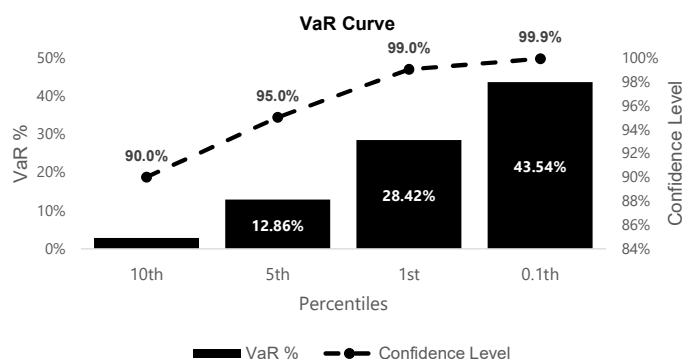
Since the simulation assumes normally distributed returns, it may understate extreme downside moves (negative skew, here skewness is equal to 0.11) that are often observed during market crises. This suggests that actual downside risk could be higher in a stressed environment.



Limitations & Enhancements:

While Monte Carlo simulation offers flexibility and a robust stochastic approach, certain limitations must be acknowledged:

- 1) The model assumes constant volatility and normally distributed returns, which may not hold in real-world equity markets.
- 2) Macroeconomic shocks, regime shifts, or company-specific events are not explicitly modeled but could materially alter risk estimates.



Notes and Disclosures:

1) Model Assumptions: The Monte Carlo simulation assumes returns follow a normal distribution and that stock prices evolve according to a Geometric Brownian Motion (GBM) process. Inputs for drift (mean return) and volatility are based on historical estimates and assumed constant throughout the simulation period.

2) Time Horizon: The simulation covers a one-year (252 trading days) investment horizon. Shorter- or longer-term results may differ materially and should be interpreted with caution.

3) Confidence Levels: Value at Risk (VaR) estimates are provided at 90%, 95%, and 99% confidence levels. For instance, a 95% confidence level indicates there is a 5% chance that losses will exceed the stated VaR amount over the simulated period.

4) Simulated Returns: For each simulated path, we draw a random probability via RAND() and convert it into a normally distributed annual log-return using Excel's NORM.INV function:

$$\text{Simulated Return} = \text{NORM.INV}(\text{RAND}(), \mu_1, \sigma_1)$$

Here, μ_1 (= daily_mean $\times$ 252) is the annualized expected return and σ_1 (= daily_volatility $\times$ $\sqrt{252}$) is the annualized volatility. By mapping a uniform [0,1] random draw through the inverse normal distribution, we generate realistic, normally distributed log-returns for each Monte Carlo trial.

5) Price Calculation Method: Simulated prices are computed using the formula:

$$\text{Price}_t = \text{Price}_0 \times e^{\text{Simulated Return}_t}$$

This approach assumes continuously compounded returns and ensures that prices remain positive, reflecting the log-normal nature of equity returns.

6) Historical Volatility and Drift: Volatility and mean return are calculated using historical daily return data. These are backward-looking and may not reflect future conditions or incorporate real-time market dynamics.

Business Resilience & Opportunity Analysis



Coal India Ltd. (CIL), the world's largest coal producer, is a cornerstone of India's energy landscape, supplying coal primarily to the power sector while also serving industries like steel, cement, and fertilizers. As a state-owned enterprise, CIL operates through multiple subsidiaries, leveraging its vast reserves and infrastructure to meet domestic demand. This Business Resilience & Opportunity Analysis, structured as a SWOT analysis, evaluates CIL's internal strengths and weaknesses, alongside external opportunities and threats, based on insights from the company's earnings call on May 14, 2025. The analysis incorporates key performance indicators (KPIs) such as production volumes, rake loadings, and e-auction premiums to provide a comprehensive view for institutional investors. All financial figures are presented in INR crore, aligning with the company's reporting standards.

Strengths

Dominant Market Position and Robust Demand: CIL holds a commanding position in India's coal market, driven by consistent demand from both power and non-power sectors. The earnings call highlighted that consumers are actively seeking more coal from subsidiaries like South Eastern Coalfields Ltd. (SECL) and Central Coalfields Ltd. (CCL), despite production challenges. A key KPI underscoring this strength is the 28% increase in long-term linkages with the non-power sector, rising from 90 million tonnes to 115 million tonnes over two years. This growth reflects CIL's ability to secure and expand its customer base, reinforcing its market leadership.

Strategic Volume Growth Projections: CIL's ambitious production targets demonstrate its operational confidence and strategic planning. The company projects a production volume of 875 million tonnes for FY26, with expectations to exceed 900 million tonnes in FY27. These targets are supported by initiatives like First Mile Connectivity (FMC) projects, which achieved a 32% growth in rake loadings last year and a 15% increase in the first 45 days of the current year. This KPI highlights CIL's focus on scaling production to meet rising demand, positioning it as a reliable supplier.

Advanced Supply Chain and Infrastructure: CIL's investments in supply chain enhancements, particularly FMC projects, bolster its operational efficiency. Rake loadings increased from 292 to 311 rakes last year, with daily loadings rising from 72.7 to 87.1 rakes in the first 45 days of FY25, targeting 100 rakes per day by Q2. The company plans to enable 900 million tonnes of capacity through FMC projects by FY30, supported by new silos in subsidiaries like Mahanadi Coalfields, CCL, and Northern Coalfields Ltd. (NCL). These improvements enhance coal evacuation, reducing bottlenecks and improving customer satisfaction.

Market Adaptability: CIL's flexibility in managing e-auction volumes and premiums allows it to navigate market dynamics effectively. Current e-auction premiums stand at 43%, with historical ranges between 35% and 40%, and management expects stability within 30–40%. This adaptability ensures revenue optimization, particularly in response to seasonal and cyclical demand fluctuations. For example, reforms in steel coking coal linkage auctions, allowing consortiums and partner flexibility, have increased participation and premiums, demonstrating CIL's ability to tailor strategies to market needs.

Reduced Import Dependency: CIL's role in reducing India's reliance on imported coal strengthens its strategic importance. Coal imports dropped by 10% from April to February of the previous financial year, and CIL estimates a potential to supply an additional 60–100 million tonnes domestically. This shift is evident in capacities that previously imported 1–10% of coal for blending now relying entirely on domestic supply, enhancing CIL's market share and supporting national energy security.

Financial and Operational Stability: CIL's financial prudence is evident in its planned capital expenditure (capex) of INR 80,000 crore over the next four to five years, with INR 37–38,000 crore allocated for coal gasification and INR 15,000 crore for thermal power generation. Regular capex of INR 20,000 crore annually supports mine development and equipment upgrades. Operationally, CIL manages a workforce of 220,000, with 12,000 annual retirements outpacing 1,000–1,500 new hires, reducing employee costs until upcoming wage revisions. A high cash balance further ensures financial flexibility for future investments.

Weaknesses

Operational Inefficiencies in Subsidiaries: CIL faces operational challenges in subsidiaries like SECL and CCL, resulting in flat volumes in FY25. Issues such as inefficiencies in production processes and delays in internal coordination have hindered output. For instance, SECL struggled with production due to operational bottlenecks, while CCL faced delays in securing environmental and forest clearances. These inefficiencies, reflected in a modest 2–3% month-on-month growth at CCL in April and May, highlight the need for improved operational management to meet volume targets.

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High Employee Costs and Wage Revisions: With a workforce of approximately 220,000, employee costs represent a significant expense for CIL. Upcoming wage revisions for non-executives in June 2026 and executives in January 2027 are expected to increase costs significantly. Although annual retirements (12,000) outpace new hires (1,000–1,500), the impending wage revisions could strain profitability, especially if not offset by price adjustments in Fuel Supply Agreements (FSAs).

Increasing Stripping Ratio: The stripping ratio, currently at 2.67 and rising, indicates higher operational costs due to increased overburden removal to access coal. This trend, noted in the earnings call, could pressure profit margins if not mitigated by efficiency gains or higher coal prices, posing a challenge to long-term cost management.

Opportunities

Capturing Market Share from Reduced Imports: Declining coal imports present a significant opportunity for CIL to expand its market share. With a 10% reduction in imports from April to February last year, CIL estimates a potential to supply an additional 60–100 million tonnes domestically. This shift, coupled with zero import reliance for blending in some capacities, positions CIL to capture additional demand and strengthen its market position.

Growth in Non-Power Sector Demand: The non-power sector, including industries like sponge iron, cement, and fertilizers, offers substantial growth potential. CIL has increased long-term linkages with this sector by 28%, from 90 to 115 million tonnes, and plans to add another 30–40 million tonnes. This diversification reduces dependence on the power sector and opens new revenue streams, particularly in regions like Chhattisgarh with high sponge iron demand.

Enhancement of First Mile Connectivity (FMC) Projects: Investments in FMC projects are set to improve coal evacuation efficiency, supporting higher production volumes. With a 32% growth in rake loadings last year and a target of 100 rakes per day, new silos in subsidiaries like Mahanadi Coalfields and CCL are expected to drive a 20% growth in FY26. These enhancements will streamline supply chains and boost customer reliability.

Expansion in Steel and Coking Coal Market: CIL is poised to expand its presence in the steel sector by enhancing coking coal supply and washery capacities. The auction of the Durga Washery (2 million tonnes) to JSW Steel and plans for three new washeries at BCCL, where all production is coking coal, underscore this opportunity. Reforms in linkage auctions, allowing consortiums, are expected to increase participation and premiums starting May 20, 2025.

Leveraging New Government Schemes: The SHAKTI scheme offers flexible coal supply options for the power sector, enabling central and state gencos to receive coal on a nomination basis and private players to bid for linkages.

Capital Expenditure and Diversification: CIL's INR 80,000 crore capex plan, including INR 37–38,000 crore for coal gasification and INR 15,000 crore for thermal power generation, supports diversification into high-margin areas. A joint venture with BHEL for coal-to-ammonium nitrate production at Sonepur-Bazari is underway, potentially enhancing profitability and reducing reliance on traditional coal sales.

Threats

Competition from Captive and Commercial Mines: The rise of captive and commercial mines, projected to produce 320 million tonnes by FY30 (up from 198 million tonnes), threatens CIL's market share. With a peak rated capacity of 500 million tonnes, these mines could significantly erode CIL's dominance, necessitating strategic responses like increased long-term commitments.

Regulatory and Legal Risks: Regulatory uncertainties, such as the Supreme Court case on mineral taxes with a potential INR 35,000 crore liability, pose financial risks. Additionally, increased royalties at CCL (INR 150 per tonne) and environmental clearance delays could raise costs and disrupt operations.

Infrastructure Delays: Delays in critical infrastructure, such as the Jharsuguda-Sardega railway line (now expected by May 2026), hinder coal evacuation. These delays, driven by land acquisition and environmental regulations like elephant corridor guidelines, could limit production growth and customer satisfaction.

Subdued Power Sector Demand: The power sector's modest demand growth of 2.5–3% annually challenges CIL's volume targets. Declining e-auction bookings (from 100% in FY22 to 63% in FY25) and potential shifts to renewable energy further complicate demand dynamics.

Commentary

Coal India Ltd. remains a vital player in India's energy sector, leveraging its market dominance, strategic volume growth, and infrastructure investments to maintain resilience. However, operational inefficiencies, rising costs, and increasing competition from captive mines present challenges. Opportunities in import substitution, non-power sector growth, and diversification into coal gasification offer significant potential for expansion. External threats, including regulatory risks, infrastructure delays, and environmental challenges, require proactive management. By addressing these dynamics, CIL can sustain its leadership and deliver value to stakeholders.

Coal India Limited (CIL) stands as a cornerstone of India's energy sector, being one of the world's largest coal producers and a state-owned enterprise headquartered in Kolkata. Operating through its subsidiaries across various coalfields, CIL supplies coal primarily to power generation companies and industrial sectors, playing a critical role in meeting India's energy demands. In fiscal year 2025 (FY25), CIL faced operational challenges, resulting in flat volume growth due to issues such as heavy rainfall, land acquisition difficulties, and delays in environmental and forest clearances at subsidiaries like South Eastern Coal Company (SECL) and Central Coalfields Ltd. (CCL). Despite these setbacks, CIL has set ambitious production targets of 875 million tonnes for FY26 and over 900 million tonnes for FY27, supported by enhanced production capabilities and first-mile connectivity (FMC) projects. The company plans a capital expenditure of ₹80,000 crore over the next four to five years to bolster its operations and diversify into areas like coal gasification and thermal power generation. India's coal industry is evolving, with increasing participation from private players following government reforms that opened commercial mining in 2020. Captive and commercial coal mines are projected to increase production from approximately 198 million tonnes to 320 million tonnes by FY30, challenging CIL's market dominance. To counter this, CIL is securing long-term commitments, reducing reliance on imports, and targeting additional demand from non-power sectors. This report analyzes the competitive landscape of the Indian coal industry, focusing on CIL, through Porter's Five Forces framework, assessing each force's intensity—high, low, or moderate—using key performance indicators (KPIs) from the May 14, 2025, earnings call and other reliable sources.

1. Threat of New Entrants: Moderate

The Indian coal mining industry is characterized by significant barriers to entry, which temper the threat of new competitors but do not eliminate it entirely. High capital requirements are a primary hurdle, as establishing mining operations demands substantial investments in equipment, infrastructure, and land acquisition. For instance, CIL's planned capital expenditure of ₹80,000 crore over four to five years underscores the financial scale required, with ₹37,000–38,000 crore allocated for coal gasification and ₹15,000 crore for thermal power projects. Regulatory approvals, including environmental and forest clearances, pose additional challenges. The earnings call highlighted delays in these clearances as a factor impacting CIL's subsidiaries, suggesting that new entrants face similar bureaucratic obstacles. Infrastructure development, particularly for coal evacuation, is another barrier, with issues like railway rake availability and first-mile connectivity constraints noted in the earnings call.

Government policies have, however, lowered some barriers by liberalizing the sector. Since the introduction of commercial mining in 2020, auctions have facilitated private participation. In 2025, the government auctioned 12 coal mines, expected to generate an annual revenue of ₹3,330 crore and create over 20,000 jobs, with a cumulative peak-rated capacity of 15.46 million tonnes per annum (MTPA) and geological reserves of approximately 5,759.23 million tonnes. These auctions reflect growing private sector interest, with captive and commercial mines projected to increase production from 198 million tonnes to 320 million tonnes by FY30. Despite this, the complexity of navigating regulatory and logistical challenges moderates the threat of new entrants, as new players struggle to achieve the scale and efficiency of established firms like CIL.

Key KPIs:

- **Captive and Commercial Mine Production:** Current production at 198 million tonnes, projected to reach 320 million tonnes by FY30.
- **Capital Expenditure:** CIL's planned ₹80,000 crore capex over four to five years highlights the financial barrier for new entrants.
- **Auction Activity:** 12 coal mines auctioned in 2025, generating ₹3,330 crore in annual revenue.

2. Bargaining Power of Suppliers: Moderate

Suppliers in the coal mining industry include providers of mining equipment, technology, and labor. Labor is a critical input for CIL, with employee costs representing a significant portion of operational expenses. As of 2025, CIL employs approximately 220,000 workers, and the earnings call noted that 12,000 employees superannuate annually, with only 1,000–1,500 new hires, leading to a short-term reduction in manpower costs. However, upcoming wage revisions in June 2026 for non-executives and January 2027 for executives are expected to increase costs, indicating the bargaining power of labor unions. CIL's status as a state-owned enterprise and its large scale provide leverage to manage these costs, potentially through adjustments in Fuel Supply Agreement (FSA) prices, as discussed in the earnings call. For other suppliers, such as equipment and technology providers, CIL's substantial purchasing power likely enables favorable terms. The coal industry's reliance on specialized equipment suggests that suppliers could exert some influence if alternatives are limited, but CIL's dominance and government backing mitigate this. The absence of specific supplier-related data in the earnings call suggests that non-labor suppliers have less impact on CIL's cost structure compared to labor. Thus, the bargaining power of suppliers is moderate, driven primarily by labor's influence through wage negotiations.

Key KPIs:

- **Employee Count:** Approximately 220,000 employees.
- **Annual Superannuation:** 12,000 employees retire annually, with 1,000–1,500 recruited.
- **Wage Revision Impact:** Expected cost increase post-2026–27 revisions.

3. Bargaining Power of Buyers: Moderate

CIL's primary customers are power generation companies and industrial users, with the power sector accounting for the majority of its sales. In FY25, CIL supplied approximately 614 million tonnes to the power sector under FSAs, against a planned 645 million tonnes, reflecting strong demand. The bargaining power of these buyers is moderated by government-regulated pricing through FSAs, which set prices based on predefined formulas, limiting negotiation flexibility. The new Shakti scheme, as mentioned in the earnings call, enhances coal supply flexibility for power producers, securing long-term linkages for CIL and reducing buyer leverage. For instance, CIL's power sector demand is projected at 686 million tonnes for FY26, underscoring its critical role.

In the non-power sector and e-auction market, buyers have more flexibility. E-auction premiums, currently at 43% (with historical ranges of 30–40%), indicate buyers' willingness to pay above notified prices, suggesting constrained bargaining power. CIL maintains e-auction volumes between 10–20% of production (87.5–170 million tonnes), with last year's bookings at 90 million tonnes. The company's strategy to increase non-power sector linkages from 90 million tonnes to 115 million tonnes over two years further locks in customers, reducing their ability to switch to alternatives like captive mines or imports. Thus, buyer bargaining power is moderate.

Key KPIs:

- **Power Sector Supply (FY25):** 614 million tonnes supplied, against 645 million tonnes planned.
- **E-Auction Premiums:** Current 43%, historical range 30–40%.
- **Non-Power Sector Linkages:** Increased from 90 to 115 million tonnes in two years.

4. Threat of Substitute Products or Services: Moderate

Substitutes for coal include natural gas, renewable energy (solar, wind, hydro), and nuclear power. India's push for renewable energy is significant, with a target of 500 GW of non-fossil fuel capacity by 2030, as per the Central Electricity Authority (CEA). By 2029–30, the CEA estimates renewable energy will account for 44% of electricity generation, while thermal energy, primarily coal, will constitute 52%. As of October 2024, renewable energy capacity reached 203.18 GW, or 46.3% of India's total 452.69 GW installed capacity, driven by solar (92.12 GW), wind (47.72 GW), and hydro (46.93 GW). Despite this, coal remains critical, with new coal-based power plants (14,000 MW) commissioned to meet growing demand, as noted in the earnings call.

For industries like steel and cement, coal (especially coking coal) is indispensable, with CIL's subsidiary Bharat Coking Coal Ltd. supplying 3.7 million tonnes to the steel sector. The gradual transition to renewables and the continued reliance on coal for energy security and industrial applications suggest a moderate threat from substitutes in the near term.

Key KPIs:

- **Renewable Energy Capacity:** 203.18 GW (46.3% of total capacity) as of October 2024.
- **Coal-Based Capacity Additions:** 14,000 MW added recently.
- **Coking Coal Supply:** 3.7 million tonnes to steel sector.

5. Rivalry Among Existing Competitors: Moderate

The Indian coal mining industry is dominated by CIL, but competition is intensifying due to the rise of captive and commercial mines. These mines are projected to increase production from 198 million tonnes to 320 million tonnes by FY30, potentially eroding CIL's market share. To counter this, CIL is enhancing production, targeting 875 million tonnes in FY26 and over 900 million tonnes in FY27, and improving infrastructure through FMC projects, with installed capacity at 150 million tonnes per annum. CIL is also securing long-term contracts, increasing non-power sector linkages from 90 to 115 million tonnes in two years, and targeting an additional 30–40 million tonnes.

The growing overall coal demand, projected at 1.043 billion tonnes by FY30, allows multiple players to coexist without intense price competition. The earnings call noted a 2.5–3% demand growth in the power sector and efforts to reduce imports, which fell 10% last year. Thus, rivalry among existing competitors is moderate, with CIL maintaining a strong position through strategic initiatives.

Key KPIs:

- **CIL Production Guidance:** 875 million tonnes (FY26), 900+ million tonnes (FY27).
- **Captive/Commercial Production:** 198 million tonnes (current), 320 million tonnes by FY30.
- **Non-Power Linkages:** 90 to 115 million tonnes in two years.

Commentary

Coal India Ltd. operates in an industry where competitive forces are generally moderate, reflecting a balanced competitive landscape. The threat of new entrants is tempered by high barriers, such as capital intensity and regulatory hurdles, though government auctions are fostering private participation. Suppliers, particularly labor, exert moderate influence due to wage negotiations, but CIL's scale mitigates this. Buyers, especially in the power sector, have limited bargaining power due to regulated pricing and long-term agreements, while the non-power sector's flexibility is constrained by high demand. The threat of substitutes is moderated by coal's critical role in India's energy mix, despite renewable energy growth. Rivalry among competitors is increasing but remains moderate due to growing demand and CIL's strategic responses. To sustain its leadership, CIL must continue to enhance operational efficiency, invest in infrastructure, and adapt to the evolving coal industry dynamics.

Citations:

[Earnings call transcript of Coal India Ltd., May 14, 2025](#)

[Ministry of Coal, Government of India: Auction/Allotment, 2025](#)

[Central Electricity Authority estimates, 2025](#)

[Tata Power: Renewable Energy Trends, 2025](#)

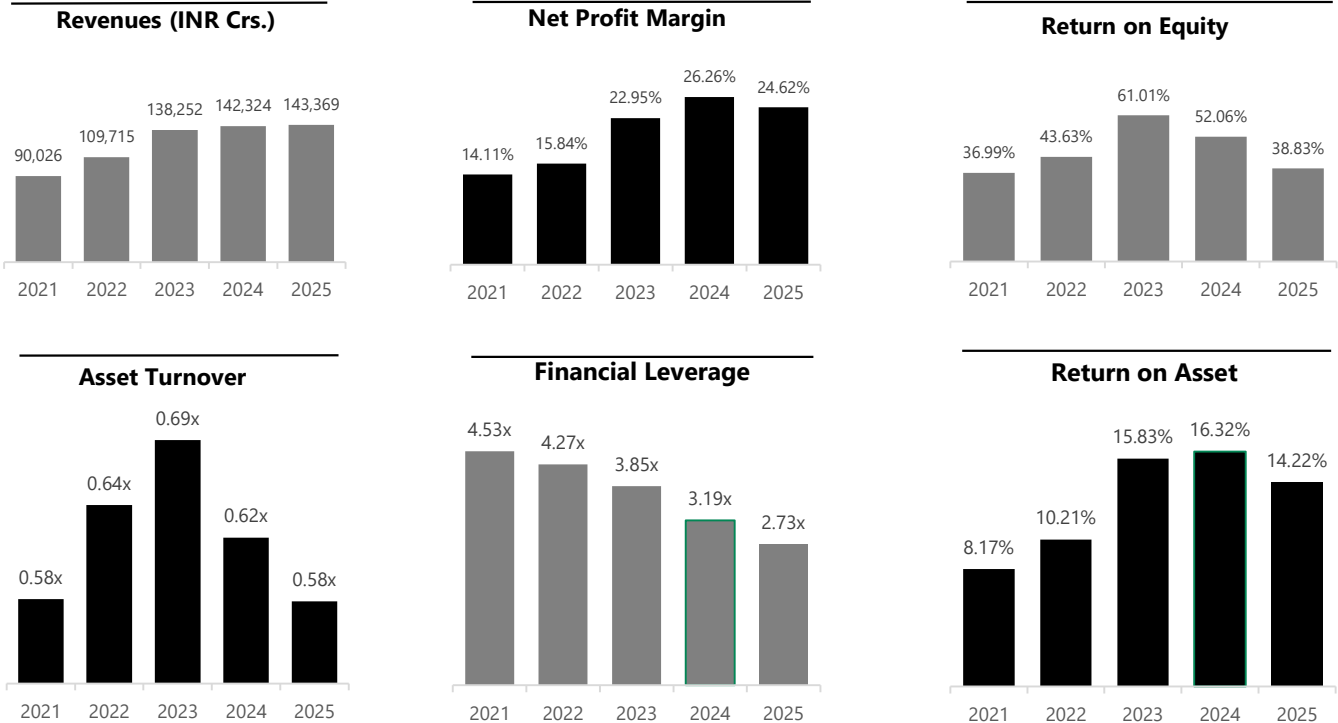
[India Briefing: India's Power Sector in 2025: Investor Outlook, 2025](#)



Dupont Analysis - COAL INDIA LTD

This DuPont Analysis report provides a comprehensive evaluation of COAL INDIA LTD's financial performance by dissecting its Return on Equity (ROE) and Return on Assets (ROA) through the DuPont framework. By breaking down these key metrics into their underlying components, this report aims to uncover the operational, financial, and strategic factors influencing profitability.

Financial Summary



Return on Equity (ROE) Analysis

Return on Equity (ROE)							
	Mar-19	Mar-20	Mar-21	Mar-22	Mar-23	Mar-24	Mar-25
Net Profit	17,464	16,700	12,702	17,378	31,723	37,369	35,302
Average Shareholder Equity	23,317	29,306	34,337	39,830	51,993	71,786	90,917
Return on Equity	74.90%	56.99%	36.99%	43.63%	61.01%	52.06%	38.83%

ROE - Dupont Equation							
	Mar-19	Mar-20	Mar-21	Mar-22	Mar-23	Mar-24	Mar-25
Net Profit	17,464	16,700	12,702	17,378	31,723	37,369	35,302
Revenue	99,586	96,080	90,026	109,715	138,252	142,324	143,369
Net Profit Margin (A)	17.54%	17.38%	14.11%	15.84%	22.95%	26.26%	24.62%
Revenue	99,586	96,080	90,026	109,715	138,252	142,324	143,369
Average Total Asset	129,246	141,521	155,536	170,244	200,416	228,933	248,334
Asset Turnover Ratio (B)	0.77x	0.68x	0.58x	0.64x	0.69x	0.62x	0.58x
Average Total Asset	129,246	141,521	155,536	170,244	200,416	228,933	248,334
Average Shareholder Equity	23,317	29,306	34,337	39,830	51,993	71,786	90,917
Equity Multiplier (C)	5.54x	4.83x	4.53x	4.27x	3.85x	3.19x	2.73x
Return on Equity (A*B*C)	74.90%	56.99%	36.99%	43.63%	61.01%	52.06%	38.83%

Key Observations

- **Significant Volatility in ROE:** ROE peaked at 74.90% in March 2019, driven by high financial leverage, but fell to a low of 36.99% in March 2021 due to declines in profitability and asset efficiency. It recovered to 61.01% in March 2023 before declining to 38.83% by March 2025.
- **Decreasing Financial Leverage:** The equity multiplier, which measures debt relative to equity, decreased steadily from 5.54x in March 2019 to 2.73x in March 2025, a reduction of approximately 50.7%, indicating a shift toward a less leveraged capital structure.
- **Improving Profitability:** Net profit margin rose from 17.54% in March 2019 to a high of 26.26% in March 2024, a 49.6% increase, before slightly declining to 24.62% in March 2025, reflecting strong cost management or pricing power.
- **Fluctuating Asset Utilization:** The asset turnover ratio, which measures how efficiently assets generate revenue, varied between 0.58x (March 2021 and March 2025) and 0.77x (March 2019), showing inconsistent asset efficiency.

Trend Analysis

- **Leverage Reduction:** The consistent decline in the equity multiplier suggests Coal India Ltd has strategically reduced its reliance on debt financing. This is supported by the rapid growth in average shareholder equity (25.5% CAGR from March 2019 to March 2025) compared to average total assets (11.5% CAGR), indicating significant retention of earnings or reduced debt issuance, enhancing financial stability.
- **Profitability Enhancement:** The upward trend in net profit margin, particularly from 14.11% in March 2021 to 26.26% in March 2024, reflects improved operational efficiency or favorable market conditions. The slight decline to 24.62% in March 2025 suggests a need to monitor cost structures or revenue streams.
- **Asset Turnover Variability:** The asset turnover ratio's fluctuations indicate challenges in maintaining consistent asset utilization. The decline from 0.69x in March 2023 to 0.58x in March 2025 suggests potential inefficiencies in deploying assets to generate sales, which could impact future returns.
- **ROE Dynamics:** ROE's volatility is driven by the interplay of increasing profitability and decreasing leverage. The high ROE in

Return on Assets (ROA) Analysis

Return on Asset							
	Mar-19	Mar-20	Mar-21	Mar-22	Mar-23	Mar-24	Mar-25
Net Profit	17,464	16,700	12,702	17,378	31,723	37,369	35,302
Average Total Asset	129,246	141,521	155,536	170,244	200,416	228,933	248,334
Return on Asset	13.51%	11.80%	8.17%	10.21%	15.83%	16.32%	14.22%

ROA - Dupont Equation							
	Mar-19	Mar-20	Mar-21	Mar-22	Mar-23	Mar-24	Mar-25
Net Profit	17,464	16,700	12,702	17,378	31,723	37,369	35,302
Revenue	99,586	96,080	90,026	109,715	138,252	142,324	143,369
Net Profit Margin (A)	17.54%	17.38%	14.11%	15.84%	22.95%	26.26%	24.62%
Revenue	99,586	96,080	90,026	109,715	138,252	142,324	143,369
Average Total Asset	129,246	141,521	155,536	170,244	200,416	228,933	248,334
Asset Turnover Ratio (B)	0.77x	0.68x	0.58x	0.64x	0.69x	0.62x	0.58x
Return on Asset (A*B)	13.51%	11.80%	8.17%	10.21%	15.83%	16.32%	14.22%

Key Observations

- **ROA Fluctuations:** ROA declined from 13.51% in March 2019 to 8.17% in March 2021, reflecting challenges in profitability and asset efficiency. It then rose to 16.32% in March 2024 before slightly decreasing to 14.22% in March 2025.
- **Profit Margin Expansion:** Net profit margin, a key driver of ROA, fell to 14.11% in March 2021 but increased significantly to 26.26% in March 2024, before dipping to 24.62% in March 2025.
- **Asset Turnover Variability:** The asset turnover ratio mirrored ROE's pattern, dropping to 0.58x in March 2021, peaking at 0.69x in March 2023, and declining to 0.58x in March 2025, indicating inconsistent asset efficiency.

Trend Analysis

- **Initial Decline:** The drop in ROA from March 2019 to March 2021 was driven by simultaneous declines in net profit margin (from 17.54% to 14.11%) and asset turnover ratio (from 0.77x to 0.58x), suggesting operational challenges during this period.
- **Recovery Driven by Profitability:** The significant increase in ROA from 10.21% in March 2022 to 16.32% in March 2024 was primarily due to a sharp rise in net profit margin, despite fluctuations in asset turnover. This indicates strong operational improvements.
- **Recent Decline:** The slight decrease in ROA to 14.22% in March 2025 reflects small declines in both net profit margin and asset turnover, highlighting the need for sustained focus on profitability and efficient asset utilization.
- **Operational Focus:** As ROA is independent of financial leverage, it provides a clearer picture of operational performance. The recovery in ROA suggests effective management of core operations, but the recent dip indicates potential areas for improvement in asset deployment.

Commentary

Coal India Ltd has demonstrated robust financial performance from March 2019 to March 2025, characterized by significant growth in net profit and shareholder equity, outpacing revenue and asset growth. The company's strategic reduction in financial leverage, as evidenced by the declining equity multiplier, has enhanced financial stability, while improvements in net profit margin reflect strong operational efficiency or favorable market conditions.

ROE has been volatile, driven by the interplay of increasing profitability and decreasing leverage. The high ROE in earlier years was supported by high leverage, while recent years show that improved profit margins have sustained competitive ROE levels despite lower debt. ROA, which focuses on operational performance, recovered strongly after 2021, driven by enhanced profitability, though the slight decline in 2025 suggests a need to address asset utilization.

To sustain and enhance shareholder value, Coal India Ltd should continue focusing on cost management, operational efficiency, and optimal asset utilization. Monitoring market conditions and maintaining a balanced capital structure will be crucial for long-term financial health.

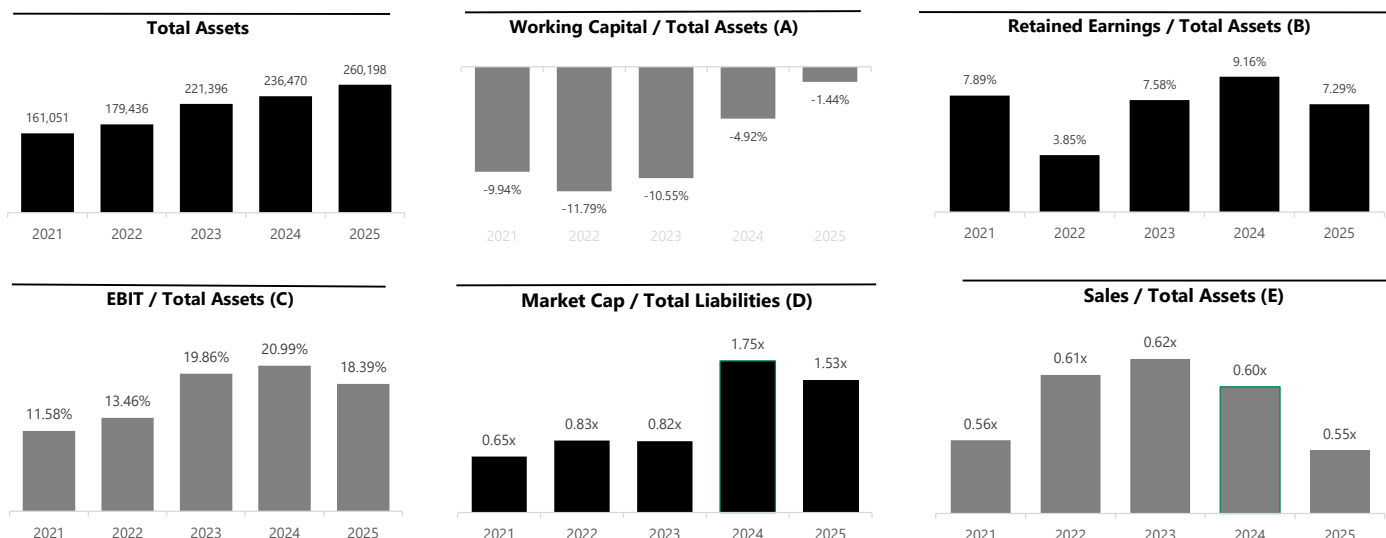
**** Concept Behind DuPont Analysis :** The DuPont Analysis, developed by the DuPont Corporation in the early 20th century, is a financial performance framework that decomposes ROE and ROA into their constituent parts to reveal the drivers of profitability. This methodology enables a granular understanding of how operational efficiency, asset utilization, and financial leverage contribute to shareholder returns.

Corporate Default Probability Screening



This Corporate Default Probability Screening Analysis report provides a comprehensive evaluation of COAL INDIA LTD's financial health. By applying the Altman Z-Score model, a robust framework for predicting bankruptcy risk, this report dissects key financial ratios to uncover the underlying factors influencing COAL INDIA LTD's creditworthiness and operational resilience. By analyzing key financial ratios related to profitability, leverage, liquidity, and activity, the score provides insight into a company's financial stability and its chances of defaulting on obligations.

Financial Summary



1. Working Capital / Total Assets (A)

Working Capital / Total Assets							
	Mar-19	Mar-20	Mar-21	Mar-22	Mar-23	Mar-24	Mar-25
Working Capital	-16,373	-8,100	-16,003	-21,164	-23,363	-11,634	-3,745
Total Assets	133,021	150,020	161,051	179,436	221,396	236,470	260,198
Working Capital / Total Assets (A)	-12.31%	-5.40%	-9.94%	-11.79%	-10.55%	-4.92%	-1.44%

- **Liquidity Trends:** The consistently negative values of this ratio, ranging from -12.31% in March 2019 to -1.44% in March 2025, indicate that current liabilities have exceeded current assets throughout the period. This could signal potential liquidity risks, as the company may face challenges in meeting short-term obligations without additional financing. However, the significant improvement from -11.79% in March 2022 to -1.44% in March 2025 suggests enhanced working capital management, possibly through better cash flow strategies or a reduction in short-term liabilities.
- **Implications for Financial Health:** The trend toward a less negative ratio, particularly from March 2023 (-10.55%) to March 2025, reflects a strengthening short-term financial position. This improvement may stem from increased current assets or more strategic management of payables and receivables, reducing liquidity concerns.

2. Retained Earnings / Total Assets (B)

Retained Earnings / Total Assets							
	Mar-19	Mar-20	Mar-21	Mar-22	Mar-23	Mar-24	Mar-25
Retained Earnings	17,464	16,700	12,702	6,902	16,778	21,654	18,971
Total Assets	133,021	150,020	161,051	179,436	221,396	236,470	260,198
Retained Earnings / Total Assets (B)	13.13%	11.13%	7.89%	3.85%	7.58%	9.16%	7.29%

- **Profit Retention Dynamics:** The ratio declined sharply from 13.13% in March 2019 to 3.85% in March 2022, indicating a significant reduction in retained earnings relative to total assets. This could reflect periods of lower profitability, high dividend payouts, or other factors reducing accumulated profits. The absolute retained earnings dropped from 17,464 in March 2019 to 6,902 in March 2022, underscoring this trend.
- **Recovery Signs:** From March 2023 to March 2024, the ratio recovered to 9.16%, with retained earnings increasing to 21,654 by March 2024. This suggests improved profitability or a shift toward retaining more earnings, strengthening the company's ability to finance its operations internally. The slight decline to 7.29% in March 2025

3. EBIT / Total Assets (C)

EBIT / Total Assets							
	Mar-19	Mar-20	Mar-21	Mar-22	Mar-23	Mar-24	Mar-25
EBIT	27,391	24,574	18,651	24,158	43,959	49,632	47,850
Total Assets	133,021	150,020	161,051	179,436	221,396	236,470	260,198
EBIT / Total Assets (C)	20.59%	16.38%	11.58%	13.46%	19.86%	20.99%	18.39%

- **Operating Profitability Trends:** The ratio fell from 20.59% in March 2019 to 11.58% in March 2021, reflecting a decline in operating profitability relative to the asset base. This could be due to lower earnings before interest and taxes (EBIT) or an increase in assets not yet generating proportional returns. EBIT itself decreased from 27,391 in March 2019 to 18,651 in March 2021.
- **Significant Improvement:** From March 2022 to March 2024, the ratio rebounded to 20.99%, with EBIT rising to 49,632 by March 2024. This indicates enhanced operating efficiency or substantial growth in earnings, reflecting a stronger ability to generate profits from the asset base. The slight decline to 18.39% in March 2025 suggests a need for continued focus on maintaining profitability.

4. Market Cap / Total Liabilities (D)

Market Cap / Total Liabilities							
	Mar-19	Mar-20	Mar-21	Mar-22	Mar-23	Mar-24	Mar-25
Market Cap	146,179	86,309	80,331	112,808	131,666	267,523	245,399
Total Liabilities	106,158	117,470	124,092	135,619	159,782	152,888	160,247
Market Cap / Total Liabilities (D)	1.38x	0.73x	0.65x	0.83x	0.82x	1.75x	1.53x

- **Market Confidence Fluctuations:** The ratio decreased from 1.38x in March 2019 to 0.65x in March 2021, indicating a decline in market valuation relative to total liabilities. This could reflect market concerns about the company's financial performance or external economic conditions, with market capitalization dropping from 146,179 to 80,331 over this period.
- **Resurgence in Valuation:** From March 2022 to March 2024, the ratio increased significantly to 1.75x, with market capitalization rising to 267,523 by March 2024. This suggests renewed market confidence, likely driven by improved financial performance or favorable market conditions. The slight decline to 1.53x in March 2025 indicates that this positive trend may require monitoring to ensure sustainability.

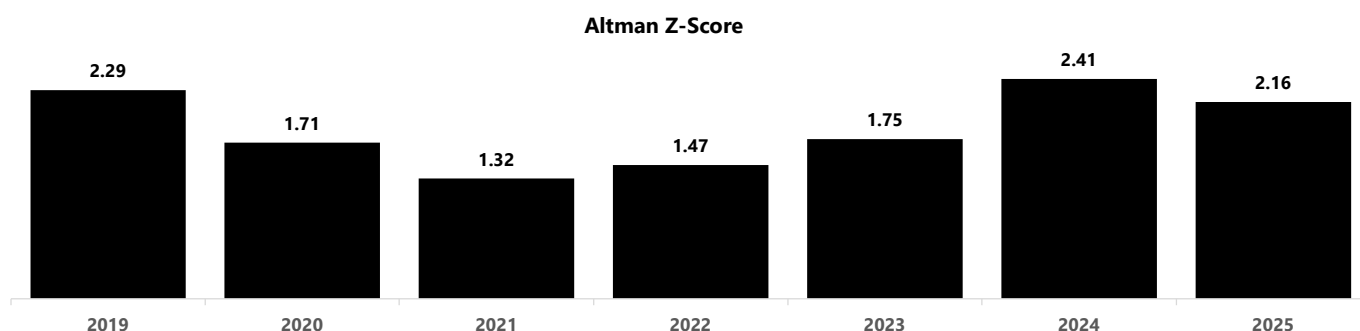
5. Sales / Total Assets (E)

Sales / Total Assets							
	Mar-19	Mar-20	Mar-21	Mar-22	Mar-23	Mar-24	Mar-25
Total Sales	99,586	96,080	90,026	109,715	138,252	142,324	143,369
Total Assets	133,021	150,020	161,051	179,436	221,396	236,470	260,198
Sales / Total Assets (E)	0.75x	0.64x	0.56x	0.61x	0.62x	0.60x	0.55x

- **Asset Utilization Efficiency:** The asset turnover ratio has trended downward from 0.75x in March 2019 to 0.55x in March 2025, indicating that the company is generating less revenue per unit of assets over time. Total sales increased from 99,586 in March 2019 to 143,369 in March 2025, but this growth has not kept pace with the increase in total assets from 133,021 to 260,198.
- **Potential Inefficiencies:** The decline in this ratio suggests potential inefficiencies in asset utilization or investments in assets that have yet to yield proportional sales growth. This could be a concern for long-term financial efficiency, as it indicates that the company's asset base is expanding faster than its revenue generation capacity.

Altman Z-Score and Financial Stability

Altman's Z Score							
	Mar-19	Mar-20	Mar-21	Mar-22	Mar-23	Mar-24	Mar-25
Final Score	2.3	1.7	1.3	1.5	1.8	2.4	2.2
Financial Stability	Grey Zone	Distressed	Distressed	Distressed	Distressed	Grey Zone	Grey Zone



Model Interpretation & Disclaimer

The Altman Z-score model, which combines the above five ratios with specific weightings ($Z = 1.2A + 1.4B + 3.3C + 0.6D + 1.0E$), indicates that the company was in the Distressed zone ($Z < 1.81$) from March 2020 to March 2023, with scores ranging from 1.3 to 1.8. This suggests a higher risk of financial distress during this period. However, the subsequent improvement to the Grey Zone ($1.81 < Z < 2.99$) in March 2024 ($Z = 2.4$) and March 2025 ($Z = 2.2$) points to a strengthening financial position.

Despite these fluctuations, the consistent growth in total assets (from 133,021 in March 2019 to 260,198 in March 2025) and recent improvements in key financial metrics, such as EBIT and market capitalization, suggest underlying financial strength not fully captured by the Z-score model. For instance, the negative working capital, while typically a concern, may be manageable due to strong cash flows or access to financing, which the model does not account for. Additionally, the Z-score was originally developed for manufacturing firms and may not fully reflect the financial dynamics of a company with a large asset base and potentially unique operational characteristics. Therefore, the Z-score results should be interpreted cautiously, considering these factors and the company's recent performance trends.

Final Conclusion

The Altman Z-score analysis for Coal India Ltd. reveals a period of financial distress from March 2020 to March 2023, followed by a notable recovery in March 2024 and 2025. The improvement in the Z-score from 1.8 in March 2023 to 2.4 in March 2024 reflects positive developments in working capital management, retained earnings, operating profitability, and market valuation relative to liabilities. Despite these advancements, the declining asset turnover ratio raises concerns about the efficiency of asset utilization, as sales growth has not kept pace with asset expansion.

Given the company's significant asset base and recent financial improvements, the Z-score's indications of distress in earlier years may overstate the risk of default. The model's limitations, particularly its applicability to non-manufacturing firms, suggest that the company's financial stability may be stronger than indicated. Therefore, while the Z-score provides valuable insights, it should be considered alongside other financial indicators and operational factors to form a comprehensive view of Coal India Ltd.'s financial health. The recent trend toward the Grey Zone suggests a move toward greater stability, but continued focus on improving asset utilization and sustaining profitability will be critical for long-term financial strength.

**** Concept Behind Altman Z-Score :** The Altman Z-Score, developed by Edward I. Altman in 1968, is a predictive model that assesses the likelihood of a company facing bankruptcy within two years. The Z-Score combines five financial ratios, each weighted to produce a single score that categorizes a company into one of three zones: Safe, Grey, or Distress. The formula for publicly traded companies is: $Z = 1.2A + 1.4B + 3.3C + 0.6D + 1.0E$. Where:

A: Working Capital / Total Assets (liquidity), B: Retained Earnings / Total Assets (cumulative profitability), C: Earnings Before Interest and Taxes (EBIT) / Total Assets (operating efficiency),
D: Market Value of Equity / Total Liabilities (financial leverage), E: Sales (Revenue) / Total Assets (asset turnover)



Investment Thesis - COAL INDIA LTD

Coal India Ltd. (CIL), the world's largest coal producer, presents a compelling investment case rooted in its dominant position in India's energy sector, substantial coal reserves, and strong government support. As a mature, cash-generating business, CIL benefits from its critical role in meeting India's energy demands, particularly in the power sector, where coal remains a cornerstone despite the global push for renewables. The company's strategic initiatives, including modernization of operations and diversification into renewable energy and coal gasification, position it to maintain relevance in a transitioning energy landscape. Financially, CIL has demonstrated robust performance, with significant growth in net profit and shareholder equity, alongside a strategic reduction in financial leverage, enhancing its stability. Valuation analyses, including Discounted Cash Flow (DCF) and relative valuation models, suggest that the stock is trading at a substantial discount to its intrinsic value, potentially offering significant upside for investors. However, market sentiment appears cautious, likely reflecting uncertainties around environmental regulations and the long-term role of coal. Despite these challenges, CIL's proactive measures to address operational inefficiencies, capitalize on import substitution, and adapt to regulatory changes make it an attractive opportunity for investors seeking value and resilience in a critical industry.

Valuation Rationale

The valuation of Coal India Ltd. has been assessed through multiple methodologies, each providing a distinct perspective on the company's worth and highlighting its potential undervaluation.

- ❑ **Discounted Cash Flow: Free Cash Flow to Firm (FCFF):** The FCFF model estimates an enterprise value of ₹482,576 crore, translating to an equity value of ₹506,800 crore after adjustments for net debt and minority interests. This results in an intrinsic value of ₹822.37 per share. Compared to the market price of approximately ₹386.05 (as referenced in the report), the stock appears undervalued by about 53.06%. This significant discount suggests that the market may not fully reflect CIL's cash-generating capabilities or its strategic initiatives.
- ❑ **Relative Valuation:** Using the 75th percentile of peer multiples, CIL's implied equity value per share ranges from ₹371.4 to ₹1,509.4, depending on the metric used (e.g., P/E, P/B, or EV/EBITDA). This broad range reflects the variability inherent in relative valuation, influenced by factors such as growth differences, accounting variations, and market timing. While the lower end of the range is close to the current market price, the upper end aligns with the DCF valuations, suggesting that CIL's valuation is attractive compared to its peers.

Key Catalysts

Several catalysts could unlock or accelerate value creation for Coal India Ltd., enhancing its investment appeal:

- **Modernization and Operational Efficiency:** CIL's focus on modernizing its mining operations, including adopting advanced technologies and improving logistics, could reduce costs and boost productivity. Successful execution could significantly enhance profitability and cash flows.
- **Diversification into Renewable Energy and Coal Gasification:** CIL's ventures into renewable energy (via subsidiaries like CIL Navikarniya Urja Limited) and coal gasification align with India's energy transition goals. These initiatives could diversify revenue streams and mitigate risks associated with declining coal demand.
- **Import Substitution and Non-Power Sector Growth:** With India aiming to reduce coal imports, CIL is well-positioned to capture additional market share in both power and non-power sectors (e.g., steel and cement). Growth in these areas could drive volume increases and revenue growth.
- **Government Support and Policy Tailwinds:** As a Maharatna company under the Ministry of Coal, CIL benefits from strong government backing, including favorable policies to ensure energy security. Recent developments, such as the memorandum of understanding with Indian Rare Earth Ltd., suggest potential expansion into new areas like rare earth minerals.

- **Strong Financial Performance and Dividends:** CIL's robust financial metrics, including a high return on equity (averaging 48.6% over three years) and a dividend yield of approximately 6.86% as of March 2025, make it attractive for income-focused investors. The company's recent announcement of a 56% final dividend on January 31, 2025, underscores its commitment to shareholder returns.

Risks to the Thesis

While the investment case for CIL is strong, several risks could impact its outlook:

- ❑ **Operational Inefficiencies:** Challenges such as labor disputes, equipment downtime, and logistical bottlenecks could hinder production and increase costs, eroding profitability.
- ❑ **Increasing Competition:** Government auctions fostering private participation and the rise of captive mines could challenge CIL's market dominance, particularly in the non-power sector.
- ❑ **Environmental and Regulatory Pressures:** Stricter environmental regulations and the global shift toward renewable energy pose long-term risks to coal demand. Failure to adapt to a carbon-constrained world could result in underutilized assets.
- ❑ **Macroeconomic and Market Risks:** Fluctuations in global coal prices, currency exchange rates, or economic slowdowns could adversely affect CIL's financial performance. Recent market data indicates a 20.4% decline in market capitalization over the past year, reflecting broader market volatility.

Detailed Analysis Supporting the Thesis

Economic, Industry, and Strategic Outlook: CIL's forward outlook is cautiously optimistic, driven by its immense coal reserves and government support, which provide a strong foundation for sustained operations. The company's success hinges on executing its modernization strategy to enhance efficiency and reduce its carbon footprint through investments in technology and renewable ventures. As India's energy demand grows, CIL is poised to capture a significant share, particularly through import substitution. However, the company must navigate environmental imperatives and energy-sector reforms to avoid stranded assets in a carbon-constrained future. As one executive noted, CIL must "protect the current business while creating the future business," highlighting the dual challenge of maintaining core operations while innovating.

CIL's market dominance, strategic volume growth, and infrastructure investments underpin its resilience. Opportunities in import substitution, non-power sector expansion, and diversification into coal gasification offer significant growth potential. However, operational inefficiencies, rising costs, and competition from captive mines present challenges. External threats, such as regulatory risks and infrastructure delays, require proactive management to sustain leadership and deliver stakeholder value.

Market Perception and Recent Developments: Market sentiment toward CIL appears cautious, likely due to environmental concerns and the global energy transition. Recent data indicates a 20.4% decline in market capitalization over the past year, with the stock price around ₹388.40 as of July 18, 2025, close to the ₹386.05 referenced in the report. Analyst target prices range from ₹340 to ₹614, with a median of ₹448.73, suggesting a potential upside of approximately 15.5% from the current price. The stock's P/E ratio of 7.00 and dividend yield of 6.86% (as of March 2025) make it attractive compared to peers. Recent news, such as the memorandum of understanding with Indian Rare Earth Ltd. and a planned interim dividend announcement on July 31, 2025, signal positive strategic and financial developments.

Commenatry

Coal India Ltd. offers a compelling investment opportunity, combining strong fundamentals, strategic growth initiatives, and an attractive valuation. The company's dominant position, robust financial performance, and proactive diversification efforts position it to navigate the challenges of the energy transition while capitalizing on India's coal demand. Valuation models indicate significant undervaluation, though market sentiment reflects caution due to environmental and regulatory uncertainties. By addressing operational inefficiencies and executing its strategic vision, CIL can unlock substantial value, making it an appealing choice for investors seeking a balance of income, stability, and growth potential.

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