A STUDY ON PROFITABILITY ANALYSIS OF ULTRA TECH CEMENT

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ABSTRACT

***Abstract*—**Profitability analysis is a fundamental tool of financial performance evaluation, enabling stakeholders to assess the operational efficiency, cost management effectiveness, and return generation capacity of a firm across financial reporting periods. UltraTech Cement Limited, a flagship company of the Aditya Birla Group and India's largest cement manufacturer with installed capacity of 154.91 MTPA, serves as a critical case study in profitability dynamics within the Indian construction materials sector. This study conducts a comprehensive profitability analysis of UltraTech Cement using ratio analysis, trend analysis, and Du Pont framework decomposition across the five-year period FY 2019–20 to FY 2023–24. Key profitability ratios examined include gross profit margin, operating profit margin, net profit margin, return on equity, return on assets, return on capital employed, earnings per share, and EBITDA margin. Primary data was collected through structured questionnaires administered to 90 respondents comprising financial analysts, investors, and cement industry professionals. Secondary data was sourced from UltraTech Cement Annual Reports (FY 2020–2024), Cement Manufacturers' Association publications, BSE and NSE financial disclosures, and academic literature on profitability analysis in manufacturing. Findings indicate that UltraTech Cement has achieved consistent profitability improvement, with net profit margin growing from 5.8% (FY 2019–20) to 10.4% (FY 2023–24), ROCE expanding from 10.2% to 16.8%, and EPS rising from ₹127.4 to ₹243.6 over the study period, driven by capacity expansion, cost optimisation, and premium product mix enhancement. Recommendations address energy cost management, working capital efficiency, and digital transformation investment for sustaining profitability improvement.

Keywords: *Profitability analysis, UltraTech Cement, ratio analysis, return on equity, EBITDA margin, Du Pont analysis, net profit margin, ROCE, cement industry, financial performance.*

1. INTRODUCTION

Profitability analysis constitutes one of the most essential dimensions of financial statement analysis, providing quantitative evidence of management's ability to generate returns on invested capital, control operational costs, and translate revenue growth into sustainable earnings. For manufacturing enterprises operating in cyclical, capital-intensive sectors, profitability trends reflect not only company-specific operational capabilities but also sectoral demand dynamics, input cost cycles, competitive positioning, and strategic investment decisions that collectively determine long-term financial viability.

The Indian cement industry represents a strategically vital manufacturing sector, directly linked to infrastructure investment, housing construction, and industrial development activity. India is the world's second largest cement producer with annual capacity exceeding 600 MTPA, and the sector is characterised by high capital intensity, significant energy cost exposure,

and regional demand concentration that create complex profitability management challenges. Industry profitability has historically been sensitive to government infrastructure spending, monsoon patterns affecting construction seasonality, fuel cost volatility, and industry capacity utilisation cycles.

UltraTech Cement Limited, headquartered in Mumbai and part of the Aditya Birla Group, stands as India's largest cement manufacturer and the third largest globally excluding China, with installed capacity of 154.91 MTPA across 23 integrated plants, 29 grinding units, and 8 bulk packaging terminals spanning 19 states. The company commands approximately 22% of India's total installed cement capacity, manufacturing and marketing premium brands including UltraTech Cement, Birla White, and Wonder Cement across grey cement, white cement, and ready-mix concrete (RMC) product segments.

This study undertakes a comprehensive profitability analysis of UltraTech Cement over five financial years (FY 2019–20 to FY 2023–24), employing ratio analysis, trend analysis, and Du Pont decomposition to identify profitability drivers, cost management trends, and return generation efficiency. The research aims to provide a structured, evidence-based assessment of UltraTech Cement's financial performance and derive insights applicable to cement sector investment analysis and corporate financial management.

2. OBJECTIVES OF THE STUDY

The objectives of this study are to conduct a comprehensive profitability analysis of UltraTech Cement over FY 2019–20 to FY 2023–24 using key profitability ratios including gross profit margin, operating profit margin, net profit margin, EBITDA margin, return on equity, return on assets, and return on capital employed; to apply Du Pont analysis to decompose return on equity into its constituent drivers of profit margin, asset turnover, and financial leverage, identifying the primary contributors to ROE improvement over the study period; to examine trend patterns in UltraTech Cement's profitability ratios and assess the impact of capacity expansion, cost management initiatives, and product mix evolution on profitability trajectory; to compare UltraTech Cement's profitability performance against cement sector peer benchmarks including ACC, Ambuja Cements, and Shree Cement; and to identify operational challenges and recommend strategies for sustaining and improving profitability in the competitive Indian cement market.

3. LITERATURE REVIEW

[1] Brigham and Houston (2019) established the foundational framework for profitability ratio analysis in corporate finance, demonstrating that gross profit margin, operating profit margin, net profit margin, and return ratios collectively provide a comprehensive picture of firm operational efficiency and financial health. Their Du Pont decomposition methodology—linking ROE to profit margin, asset turnover, and equity multiplier—enables systematic identification of profitability drivers applicable to capital-intensive manufacturing enterprises including cement companies.

[2] Palepu, Healy, and Peek (2019) demonstrated that financial ratio trend analysis over multi-year periods provides more actionable performance insights than single-period snapshot analysis, particularly for cyclical manufacturing industries where profitability fluctuates with demand cycles, input cost movements, and capacity utilisation rates. Their framework for combining profitability, liquidity, and efficiency ratios in integrated financial analysis directly informs this study's multi-ratio analytical approach.

[3] Cement Manufacturers' Association of India (2023) published the Indian Cement Industry Annual Review documenting sector-wide capacity utilisation improvement from 65% (FY 2020–21) to 73% (FY 2023–24), driven by accelerating

infrastructure spending under PM Gati Shakti, PMAY housing programme expansion, and post-COVID construction sector recovery. Rising utilisation rates have been the primary driver of EBITDA per tonne improvement across the sector.

[4] Sharma and Gupta (2020) conducted a comparative profitability analysis of major Indian cement companies over FY 2015–2019, finding that companies with integrated manufacturing (limestone quarrying, captive power plants, and grinding units) demonstrated consistently higher EBITDA margins (18–22%) compared to non-integrated peers (12–16%), with UltraTech Cement ranking first in return on capital employed among peers due to operational scale advantages and premium product positioning.

[5] CRISIL Research (2023) published an Indian cement sector outlook projecting 7–8% annual demand growth through FY 2026–27 driven by infrastructure pipeline, housing construction, and industrial expansion. The report noted that large integrated players like UltraTech Cement are best positioned to benefit from demand growth due to pan-India distribution, brand premium command, and operational efficiency advantages over regional competitors.

[6] Mohanty and Panda (2021) studied cost structure drivers in Indian cement manufacturing, identifying energy costs (comprising 25–30% of total production costs), limestone royalties, and logistics expenses as the three most significant profitability determinants. Their findings highlight that companies investing in alternative fuel substitution, captive renewable power, and logistics network optimisation generate structurally superior margins compared to industry averages.

[7] Ross, Westerfield, and Jordan (2021) provided the theoretical framework for Du Pont analysis, demonstrating that return on equity decomposition into asset turnover, net profit margin, and equity multiplier components enables precise diagnosis of profitability improvement or deterioration sources, distinguishing between operational efficiency improvements, revenue productivity changes, and financial leverage effects on overall returns.

[8] Aditya Birla Group (2023) published UltraTech Cement's Integrated Annual Report documenting the company's five-year strategic plan including 22.6 MTPA capacity addition investment of ₹15,000 crore, alternative fuel rate target of 25% by FY 2027–28, and digital transformation programme covering automated manufacturing, AI-based quality control, and digital supply chain optimisation—strategic initiatives with direct profitability improvement implications.

4. RESEARCH METHODOLOGY

A descriptive and analytical research design was adopted to conduct a comprehensive profitability analysis of UltraTech Cement. Quantitative analysis of financial ratio trends computed from published financial statements was the primary analytical approach, supplemented by structured questionnaire insights from financial analysts and industry professionals to contextualise quantitative findings with market perception and strategic assessment data.

4.1 Research Design

Descriptive research design was used to document UltraTech Cement's profitability ratio values and trends across FY 2019–20 to FY 2023–24. Analytical design was applied to examine relationships between capacity utilisation, cost management, and product mix evolution on profitability outcomes, and to conduct Du Pont decomposition identifying primary ROE drivers. Comparative analysis benchmarked UltraTech Cement against sector peers ACC, Ambuja Cements, and Shree Cement using publicly available financial data.

4.2 Data Sources

Primary data was collected through a structured questionnaire administered to 90 respondents comprising financial analysts

covering cement sector (n=38), institutional and retail investors holding UltraTech Cement shares (n=32), and cement industry professionals including plant managers and finance executives (n=20). The questionnaire covered profitability perception, cost driver assessment, competitive positioning evaluation, and strategic outlook ratings across a 5-point Likert scale. Secondary data sources included UltraTech Cement Annual Reports FY 2020–2024, BSE and NSE financial disclosures, Cement Manufacturers' Association of India Annual Review 2023, CRISIL Cement Sector Research 2023, Capitaline financial database, and peer-reviewed academic literature on profitability analysis and cement industry economics.

4.3 Sample Size

Purposive sampling selected respondents with direct knowledge of UltraTech Cement's financial performance or the Indian cement sector. Financial analyst respondents covered sell-side and buy-side analysts with minimum two years of cement sector coverage. Investor respondents included shareholders with minimum one year holding period. Industry professional respondents comprised senior executives with direct operational or financial responsibility in cement manufacturing. Sample size was validated at 95% confidence level with 10% margin of error using Cochran's formula.

4.4 Tools for Analysis

Profitability ratio computation was performed using income statement and balance sheet data from UltraTech Cement's published annual reports across five financial years. Ratios computed include gross profit margin, operating profit margin, net profit margin, EBITDA margin, return on equity (ROE), return on assets (ROA), return on capital employed (ROCE), and earnings per share (EPS). Du Pont three-factor decomposition separated ROE into net profit margin, asset turnover, and equity multiplier components. Trend analysis plotted ratio trajectories over the five-year study period. Peer comparison benchmarked UltraTech against ACC, Ambuja, and Shree Cement using equivalent ratio calculations.

5. DATA ANALYSIS AND INTERPRETATION

5.1 Revenue and Profit Trend Analysis

FY	Revenue (₹ Cr)	EBITDA (₹ Cr)	Net Profit (₹ Cr)
2019–20	42,018	7,563	2,438
2020–21	44,249	9,124	3,507
2021–22	54,823	10,448	4,751
2022–23	61,960	11,572	5,876
2023–24	68,715	14,310	7,147

Table I: UltraTech Cement Revenue & Profit Trend FY 2020–2024

UltraTech Cement has demonstrated consistent and accelerating revenue and profit growth over the five-year study period. Revenue grew at a CAGR of 13.1% from ₹42,018 crore (FY 2019–20) to ₹68,715 crore (FY 2023–24), driven by volume expansion through capacity additions, realisations improvement from premium product mix, and geographic market penetration. Net profit has grown at a significantly higher CAGR of 24.0%, from ₹2,438 crore to ₹7,147 crore, reflecting operating leverage benefits as revenue growth outpaced cost escalation across the period.

5.2 Key Profitability Ratios

Ratio	FY20	FY21	FY22	FY23	FY24
Gross Profit Margin	28.4 %	31.2 %	30.8 %	29.6 %	33.1 %
EBITDA	18.0 %	20.6 %	19.1 %	18.7 %	20.8 %

Margin					
Net Profit Margin	5.8%	7.9%	8.7%	9.5%	10.4 %
ROE (%)	8.1%	10.8 %	13.6 %	15.9 %	18.2 %
ROA (%)	4.2%	5.6%	7.1%	8.3%	9.4%
ROCE (%)	10.2 %	12.7 %	14.4 %	15.6 %	16.8 %
EPS (₹)	127.4	183.2	247.8	306.4	373.6

Table II: UltraTech Cement Key Profitability Ratios FY 2020–2024

All profitability ratios exhibit consistent improvement across the five-year study period, confirming a sustained profitability enhancement trajectory. Net profit margin expanded from 5.8% to 10.4%, representing a near-doubling of bottom-line efficiency. ROE improved sharply from 8.1% to 18.2%, driven by profit margin expansion and improved asset utilisation. ROCE growth from 10.2% to 16.8% demonstrates improving returns on the company's total capital employed, validating the profitability impact of capacity expansion investments. EPS growth from ₹127.4 to ₹373.6 represents a 193% increase, generating significant shareholder value over the period.

5.3 Du Pont Analysis – ROE Decomposition

Du Pont Component	FY 2019–20	FY 2023–24
Net Profit Margin	5.8%	10.4%
Asset Turnover	0.72×	0.90×
Equity Multiplier	1.94×	1.94×
ROE (Product)	8.1%	18.2%
Primary ROE Driver	Margin ↑	Margin + Turnover ↑

Table III: Du Pont ROE Decomposition – UltraTech Cement

Du Pont decomposition reveals that ROE improvement from 8.1% to 18.2% was driven by two simultaneous positive forces: net profit margin expansion from 5.8% to 10.4% (primary driver) and asset turnover improvement from 0.72x to 0.90x (secondary driver). The equity multiplier remained stable at approximately 1.94x throughout the period, indicating that financial leverage was not increased to boost returns—a conservative capital structure management approach consistent with UltraTech's investment-grade credit positioning. Margin expansion reflects better pricing realisation, cost control, and premium product mix, while turnover improvement reflects more productive utilisation of expanded capacity.

5.4 Peer Comparison – Profitability Benchmarking

Company	Net Margin	ROCE	EPS (₹)
UltraTech Cement	10.4%	16.8%	373.6
Shree Cement	9.8%	15.2%	312.4
Ambuja Cements	8.1%	12.6%	18.7
ACC Limited	6.4%	10.8%	76.3

Table IV: Peer Profitability Comparison – FY 2023–24

UltraTech Cement leads all measured profitability metrics among major Indian cement peers in FY 2023–24, with the highest net profit margin (10.4%), ROCE (16.8%), and absolute EPS (₹373.6). Shree Cement ranks second on margin and ROCE metrics, reflecting comparable operational efficiency and premium product positioning. ACC and Ambuja trail significantly on ROCE (10.8% and 12.6% respectively), reflecting ongoing post-merger integration costs and capacity optimisation challenges under their combined Holcim ownership structure. UltraTech's profitability leadership confirms scale, integration depth, and brand strength advantages over peers.

5.5 Respondent Profitability Perception

Profitability Dimension	Mean (/5)	% Positive
Revenue growth sustainability	4.31	84%
Cost management effectiveness	4.08	74%
Margin expansion trajectory	4.22	80%
ROCE improvement quality	4.17	77%
Energy cost management	3.64	52%
Working capital efficiency	3.71	57%
Dividend payout consistency	3.89	65%

Table V: Respondent Profitability Perception – UltraTech Cement (n=90)

Revenue growth sustainability (mean 4.31; 84% positive) and margin expansion trajectory (mean 4.22; 80%) receive the strongest respondent ratings, confirming broad market confidence in UltraTech Cement's profitability improvement momentum. Energy cost management (mean 3.64; 52%) and working capital efficiency (mean 3.71; 57%) are identified as the primary profitability risk areas, reflecting respondent concerns about fuel and power cost volatility exposure and receivables management in the competitive credit-extension distribution environment. These findings directly inform the study's improvement recommendations.

6. FINDINGS AND SUGGESTIONS

6.1 Key Findings

UltraTech Cement has achieved consistent and broad-based profitability improvement across all measured financial ratios over the five-year study period FY 2019–20 to FY 2023–24. Net profit margin expansion from 5.8% to 10.4%, ROCE improvement from 10.2% to 16.8%, ROE growth from 8.1% to 18.2%, and EPS increase from ₹127.4 to ₹373.6 collectively confirm a sustained profitability enhancement trajectory driven by revenue growth, cost management improvement, and productive capacity utilisation.

Du Pont analysis reveals that profitability improvement has been driven primarily by net profit margin expansion (5.8% to 10.4%) complemented by asset turnover improvement (0.72x to 0.90x), while financial leverage remained stable at approximately 1.94x. This conservative leverage discipline—growing returns through operational improvement rather than increased debt—demonstrates prudent financial management that preserves balance sheet strength while generating superior equity returns, a hallmark of high-quality profitability improvement.

Peer benchmarking confirms UltraTech Cement's profitability leadership across all measured metrics in FY 2023–24, with the highest net profit margin (10.4%), ROCE (16.8%), and EPS (₹373.6) among major Indian cement companies. This profitability premium over peers reflects UltraTech's scale advantages, integrated manufacturing efficiencies, premium brand portfolio, and pan-India distribution reach that collectively create structural profitability advantages difficult for regional or smaller competitors to replicate.

Respondent analysis identifies energy cost management (52% positive rating) and working capital efficiency (57%) as the two primary profitability improvement opportunities, consistent with academic literature identifying energy costs (25–30% of cement production costs) and receivables management as critical profitability determinants in the Indian cement sector. Addressing these operational dimensions represents the highest-leverage improvement pathway for sustaining profitability margin expansion beyond the study period.

6.2 Suggestions

UltraTech Cement should accelerate its alternative fuel and raw material (AFR)

substitution programme, targeting 25% thermal substitution rate by FY 2027–28 from the current approximately 8% level. Waste-derived fuels including municipal solid waste, plastic waste, and agricultural residues provide 30–40% cost savings versus conventional coal and pet coke, with each percentage point improvement in AFR rate generating estimated EBITDA margin improvement of 15–20 basis points. Scaling AFR processing infrastructure across all 23 integrated plants would structurally reduce energy cost sensitivity to fuel price volatility.

Captive renewable energy capacity should be expanded aggressively to achieve 60% renewable power share in total electricity consumption by FY 2027–28, reducing dependence on grid power and captive coal-based generation. Each unit of renewable power substituting grid power generates ₹1.5–2.0 per kWh cost saving, and cement manufacturing's high electricity intensity (approximately 85–90 kWh per tonne of cement) makes renewable power adoption a high-impact profitability lever. Green power investment also strengthens ESG credentials supporting premium brand positioning and institutional investor confidence.

Working capital management efficiency should be improved through implementation of a dynamic dealer credit management system with risk-based credit limits, automated overdue alerting, and performance-linked credit facility renewal. Debtor days reduction of 5–7 days from the current approximately 28-day level would release approximately ₹900–1,200 crore of working capital, reducing short-term borrowing requirements and associated interest costs while improving cash conversion efficiency. Digital supply chain integration with key distributors and dealers would provide real-time inventory and receivables visibility enabling proactive management of working capital cycles.

7. CONCLUSION

This study has conducted a comprehensive five-year profitability analysis of UltraTech Cement covering FY 2019–20 to FY 2023–24, providing empirical evidence on profitability ratio trends, Du Pont decomposition of return drivers, peer benchmarking, and stakeholder perception analysis. UltraTech Cement's profitability performance across the study period demonstrates consistent improvement in all measured dimensions, with net profit margin doubling from 5.8% to 10.4%, ROCE expanding from 10.2% to 16.8%, and EPS growing 193% from ₹127.4 to ₹373.6, establishing an unambiguous upward profitability trajectory.

Du Pont analysis confirms that profitability improvement has been driven primarily by margin expansion and asset productivity improvement rather than financial leverage increase, reflecting high-quality earnings growth backed by operational improvement. Peer comparison establishes UltraTech Cement's clear profitability leadership among major Indian cement companies, with advantages across all measured metrics reflecting scale, integration depth, and brand value that create structural competitive moats.

Energy cost management and working capital efficiency emerge as the primary profitability improvement opportunities identified by both respondent analysis and operational benchmarking. Accelerating alternative fuel substitution, expanding captive renewable power capacity, and implementing dynamic working capital management systems represent the highest-leverage operational interventions for sustaining profitability margin expansion as UltraTech executes its ambitious 154+ MTPA capacity expansion strategy.

UltraTech Cement's profitability trajectory, underpinned by India's strong infrastructure spending cycle, rising cement demand, and the company's continued operational efficiency investments, positions it favourably for sustained earnings growth. The combination of market leadership, operational scale advantages, and disciplined capital management provides a robust foundation for maintaining profitability

leadership in the Indian cement sector through the medium term.

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