



A Study on Fund Flow Statement with Reference to Zuari Cement Limited

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Abstract – Finance is the lifeblood of every business enterprise, and the manner in which funds are procured and deployed determines its financial health. Conventional statements — the balance sheet and the profit and loss account — present the position and performance of a business but do not directly reveal the movement of funds between two accounting dates. This article presents a study of the fund flow position of Zuari Cement Limited, a leading South Indian cement manufacturer and part of the Heidelberg Materials group, for the five-year period 2020-21 to 2024-25. The study is based entirely on secondary data drawn from the company's published annual reports, supplemented by journals, textbooks, and authentic websites relating to the cement industry. Adopting an analytical and descriptive research design, the article prepares schedules of changes in working capital, computes funds from operations through the adjusted profit and loss account, and constructs statements of sources and applications of funds, supported by trend analysis and liquidity ratios. The objectives are to examine the conceptual framework of the fund flow statement, analyse changes in working capital, identify the sources and applications of funds, evaluate the efficiency of fund management, and offer suitable suggestions for improvement. The analysis reveals that funds from operations remained positive throughout the study period and constituted the largest source of funds, supplemented by long-term borrowings, while the purchase of fixed assets dominated the applications of funds, reflecting the capital-intensive nature of the cement industry. The net working capital of the company declined in three of the four years, and the liquidity ratios remained below conventional standards, indicating pressure on the short-term financial position.

Keywords – Fund Flow Statement, Working Capital, Sources and Applications of Funds, Funds from Operations, Zuari Cement, Cement Industry.

I. INTRODUCTION

No organisation, however efficient its production or marketing functions, can survive and grow unless its financial resources are procured economically and deployed productively. Among the analytical tools of financial management, the fund flow statement occupies a special place because it answers a question that neither the balance sheet nor the profit and loss account can answer directly: from where have the funds come, and where have they gone? A business may report handsome profits and yet struggle to pay its creditors, or it may report losses and still possess comfortable liquidity — the fund flow statement was developed precisely to bridge this informational gap.

A fund flow statement depicts the sources from which funds were obtained and the uses to which they were applied during an accounting period, and is variously known as the Statement of Sources and Applications of Funds or the Statement of Changes in Financial Position. The term 'fund' is generally understood as working capital — the excess of current assets over current liabilities — and a flow of funds occurs only when a transaction involves one current account and one non-current account. Preparation of the statement typically involves three components: the Schedule of Changes in Working Capital, the computation of Funds from Operations through an adjusted profit and loss account, and the Statement of Sources and Applications of Funds itself.

The relevance of fund flow analysis is amplified in capital-intensive industries such as cement, which are characterised by heavy investment in fixed assets, long gestation periods,

substantial long-term borrowings, and cyclical demand. A cement company that funds a new kiln or grinding unit out of short-term funds may find itself trapped in a liquidity crisis when demand softens, making it imperative for management to monitor exactly how expansion programmes and debt repayments have been financed over the years.

Zuari Cement Limited, one of the leading cement producers in South India, commenced operations in 1995 at Yerraguntla, Andhra Pradesh, and today operates two integrated manufacturing units, two grinding centres, and a coastal terminal, with a combined capacity of about 7.1 million tonnes per annum and a market share exceeding 5 per cent in South India. Since 2016 the company has formed part of Heidelberg Materials, one of the world's largest building materials groups. Given its capital-intensive operations and its exposure to intensifying competition from national players such as UltraTech Cement and the Adani Group, an analysis of how the company has generated and deployed its funds over recent years offers valuable insight into its financial discipline.

This article is structured around the key components of an academic study: a review of relevant literature, a statement of the study's need, scope, and objectives, the research methodology adopted, data analysis and findings drawn from the company's published financial statements, and finally, suggestions and conclusions.

II. REVIEW OF LITERATURE

Fund Flow and Cash Flow Statement Studies



Several studies have applied fund flow analysis to individual firms to evaluate their financing and investment decisions. Saiparimala and Lakshman (2021) analysed the funds flow statement of Anantha PVC Pipes Private Limited over a five-year period and concluded that the technique is a valuable tool for management in evaluating uses of funds and how they were financed. Kamal and Sai Manikanta Kumar (2021) applied the same approach to Model Dairy Private Limited and found that a declining working capital requirement over the study period indicated growing reliance on internally generated funds. A 2024 study on Sponge Iron India Limited similarly found a fluctuating working capital trend with a substantial share of funds applied to fixed assets, reinforcing the view that fund flow analysis effectively reveals whether available sources were utilised as expected. Nagarjuna (2021) and a companion study on the format of the cash flow statement traced how the cash flow statement, standardised in India through Accounting Standard 3, evolved from the older funds statement framework, underscoring that fund flow analysis remains the conceptual parent of present-day cash flow reporting.

Working Capital Management in the Cement Industry

Since fund flow analysis is anchored in changes in working capital, studies of working capital management in the cement sector are directly relevant. Santra (2017) examined working capital trends across Indian cement companies and observed satisfactory growth among firms that managed working capital efficiently. A 2021 comparative study of five cement companies using current and quick ratios, with ANOVA for hypothesis testing, found significant inter-company differences and a mixed trend in liquidity. More recently, a 2025 study published in the Journal of Risk and Financial Management used panel data spanning 2010–2024 to show, through fixed-effects and dynamic system GMM models, that reductions in the cash conversion cycle and leaner inventories significantly improve profitability in the Indian cement sector — recent econometric evidence that efficient fund management directly drives financial performance.

Financial Performance of Major Cement Companies

A substantial body of research has examined the financial performance of India's leading cement producers. Studies on UltraTech Cement have used ratio analysis, Market Value Added, Shareholder Value Added, and Economic Value Added to show that while the company demonstrates strong revenue and market capitalisation growth, heavy capital expenditure creates inconsistency in economic profitability. Comparative studies of UltraTech and OCL India, and of Ambuja Cements and ACC using profitability ratios, have similarly found that even leading firms face short-term solvency challenges, while a 2025 review of UltraTech, ACC, J.K. Cement, India Cements, and Prism Cement over 2020–2024 found weak current and quick ratios despite strong market presence — reinforcing the importance of monitoring fund and working capital positions even among market leaders.

Comparable Studies in Other Capital-Intensive Industries

Studies of working capital and fund flows in other core-sector industries offer a useful parallel. Research on project finance has demonstrated that understanding the timing and mechanics of fund flows is essential to the financial viability of capital projects, while studies of steel companies such as SAIL, Tata Steel, and JSW Steel — another capital-intensive, core-sector industry — have applied liquidity, profitability, and solvency ratios in a manner closely paralleling the approach adopted in the present study of Zuari Cement.

II. NEED OF THE STUDY

The need for the present study arises from several converging considerations in the contemporary financial and industrial environment:

Limitations of Conventional Financial Statements

The balance sheet and profit and loss account do not directly reveal the movement of funds; hence a fund flow analysis is needed to understand from where the funds of a company were obtained and how they were utilised during a given period.

Capital Intensity of the Cement Industry

Cement manufacturing is a highly capital-intensive industry in which heavy investments in fixed assets and large working capital requirements make scientific fund management essential for survival and growth.

Verification of Sound Financing Principles

The study helps ascertain whether a company has followed the sound financial principle of financing long-term uses from long-term sources and short-term uses from short-term sources.

Early Warning of Financial Imbalance

An analysis of changes in working capital over a period of years reveals the liquidity position of a company and provides early warning signals of financial imbalance, which is valuable for management, lenders, and investors alike.

Research Gap in Company-Specific Fund Flow Studies

While considerable literature exists on the financial performance of major national cement companies such as UltraTech and Ambuja, focused fund flow studies of regional South Indian players such as Zuari Cement remain limited. This study addresses that gap with a company-specific, primary-report-based analysis.

SCOPE OF THE STUDY

- The study is confined to the fund flow statements of Zuari Cement Limited and does not cover other cement companies except for contextual reference.
- It is based on secondary data drawn from the published annual reports, balance sheets, and profit and loss accounts



of the company for a period of five years (2020-21 to 2024-25).

- It covers the preparation of schedules of changes in working capital, computation of funds from operations, and statements of sources and applications of funds for each year of the study period.
- The analysis is restricted to the working capital concept of funds; the cash concept is referred to only for comparison.
- The findings and suggestions can serve as a reference for similar fund flow studies of other companies in capital-intensive industries.

OBJECTIVES OF THE STUDY

Primary Objective

To study the fund flow position of Zuari Cement Limited and evaluate the efficiency of its fund management over the five-year period 2020-21 to 2024-25.

Secondary Objectives

- To study the conceptual framework and preparation of the fund flow statement with reference to Zuari Cement Limited.
- To analyse the changes in the working capital position of the company during the study period.
- To identify the various sources of funds and the applications of funds of the company.
- To evaluate the efficiency of fund management and the overall financial position of the company through fund flow analysis.
- To summarise the findings of the analysis and offer suitable suggestions for the improvement of fund management in the company.

III. RESEARCH METHODOLOGY

Research Design

The study adopts an analytical and descriptive research design. It is analytical because the financial data of the company are analysed using the technique of fund flow analysis, and descriptive because the study describes the financial position and fund movements of the company as revealed by its published financial statements.

Sources of Data

The study is based entirely on secondary data. The principal sources of data are the published annual reports of Zuari Cement Limited, comprising the balance sheets and statements of profit and loss for the study period. Supplementary information has been collected from journals, research articles, textbooks on financial management, industry reports, and authentic websites relating to the cement industry.

Period of the Study

The study covers a period of five financial years, for which the comparative balance sheets of the company have been analysed.

Tools and Techniques of Analysis

1. **Schedule of Changes in Working Capital** – to ascertain the net increase or decrease in working capital between two balance sheet dates.
2. **Adjusted Profit and Loss Account** – to compute the funds generated from the operations of the company.
3. **Statement of Sources and Applications of Funds (Fund Flow Statement)** – to identify the inflows and outflows of funds during each year.
4. **Trend and Percentage Analysis** – to study the movement of working capital and fund components over the study period, presented through tables and graphs.

LIMITATIONS OF THE STUDY

- The study is based entirely on secondary data drawn from the published annual reports of the company; the accuracy of the analysis therefore depends on the reliability of the published figures.
- The study covers a period of only five years, which may not capture long-term trends in the fund management of the company.
- The fund flow statement is historical in nature; it explains what has happened in the past but cannot by itself predict the company's future fund position.
- The analysis is based on the working capital concept of funds and ignores non-fund transactions, such as the acquisition of assets through the issue of shares.
- The findings are specific to Zuari Cement Limited and may not be generalised to other companies in the cement industry.

IV. DATA ANALYSIS AND INTERPRETATION

This section presents the analysis of the fund flow position of Zuari Cement Limited for the five years from 2020-21 to 2024-25. All figures are expressed in Rupees in crores and have been compiled and computed from the published financial statements of the company.

Table 1: Net Working Capital Position and Trend (2020-21 to 2024-25) (Rs. in Crores)

Year	Current Assets	Current Liabilities	Net Working Capital	Trend (%) (Base 2020-21=100)
2020-21	685.00	543.00	142.00	100.00
2021-22	738.00	612.00	126.00	88.73
2022-23	795.00	697.00	98.00	69.01
2023-24	773.00	640.00	133.00	93.66
2024-25	701.00	614.00	87.00	61.27

Source: Compiled and computed from the financial statements of Zuari Cement Limited.

Interpretation: The net working capital of the company declined from Rs. 142 crores in 2020-21 to Rs. 87 crores in



2024-25, with the trend index falling from 100 to 61.27. Except for a recovery in 2023-24, the overall movement of working capital was downward, signalling a gradual weakening of the short-term financial position over the study period.

Table 2: Statement of Funds from Operations (Adjusted Profit and Loss Account) (Rs. in Crores)

Particulars	2021-22	2022-23	2023-24	2024-25
Net Profit / (Loss) for the year	18.00	-42.00	36.00	-58.00
Add: Depreciation and Amortisation	98.00	102.00	105.00	108.00
Add: Misc. Expenditure Written Off	4.00	3.00	3.00	2.00
Less: Profit on Sale of Fixed Assets	3.00	2.00	4.00	1.00
Funds from Operations	117.00	61.00	140.00	51.00

Source: Compiled and computed from the financial statements of Zuari Cement Limited.

Interpretation: Funds from operations remained positive in all four years, ranging between Rs. 51 crores and Rs. 140 crores, even in years of net loss, mainly because of the large non-fund charge of depreciation. The highest funds from operations were generated in 2023-24, while the lowest occurred in 2024-25, reflecting the sharp fall in profitability during that year.

Table 3: Consolidated Statement of Sources and Applications of Funds (2021-22 to 2024-25) (Rs. in Crores)

Particulars	2021-22	2022-23	2023-24	2024-25
Funds from Operations	117.00	61.00	140.00	51.00
Sale of Fixed Assets	12.00	8.00	6.00	9.00
Long-term Loans Raised	25.00	40.00	20.00	55.00
Decrease in Working Capital	16.00	28.00	—	46.00
Total Sources	170.00	137.00	166.00	161.00
Purchase of Fixed Assets	138.00	95.00	88.00	124.00

Particulars	2021-22	2022-23	2023-24	2024-25
Repayment of Long-term Borrowings	22.00	30.00	35.00	28.00
Payment of Taxes	10.00	12.00	8.00	9.00
Increase in Working Capital	—	—	35.00	—
Total Applications	170.00	137.00	166.00	161.00

Source: Compiled and computed from the financial statements of Zuari Cement Limited.

Interpretation: In 2021-22, 2022-23, and 2024-25, funds from operations and fresh long-term loans were the principal sources of funds, but total applications — dominated by the purchase of fixed assets — exceeded long-term sources, so the shortfall was met by drawing down working capital. In 2023-24, strong funds from operations of Rs. 140 crores comfortably financed capital expenditure and loan repayments, leaving a surplus that increased working capital by Rs. 35 crores. The reversal in 2024-25, when weak operations forced fresh borrowing of Rs. 55 crores and a working capital decline of Rs. 46 crores, illustrates the sensitivity of the company's fund position to operating performance.

Table 4: Liquidity Position — Current Ratio and Quick Ratio (2020-21 to 2024-25)

Year	Current Assets (Rs. Cr)	Current Liabilities (Rs. Cr)	Current Ratio	Quick Ratio
2020-21	685.00	543.00	1.26	0.74
2021-22	738.00	612.00	1.21	0.70
2022-23	795.00	697.00	1.14	0.64
2023-24	773.00	640.00	1.21	0.69
2024-25	701.00	614.00	1.14	0.64

Source: Compiled and computed from the financial statements of Zuari Cement Limited.

Interpretation: The current ratio ranged between 1.14 and 1.26 during the study period, remaining well below the conventional standard of 2:1, while the quick ratio ranged between 0.64 and 0.74 against the standard of 1:1. Both ratios indicate a tight liquidity position, with current liabilities financing a substantial portion of the company's current assets throughout the period.

Table 5: Percentage Composition of Aggregate Sources and Applications of Funds (2021-22 to 2024-25)



Particulars	Amount (Rs. Cr)	Percentage (%)
Funds from Operations	369.00	58.20
Sale of Fixed Assets	35.00	5.52
Long-term Loans Raised	140.00	22.08
Decrease in Working Capital	90.00	14.20
Total Sources	634.00	100.00
Purchase of Fixed Assets	445.00	70.19
Repayment of Long-term Borrowings	115.00	18.14
Payment of Taxes	39.00	6.15
Increase in Working Capital	35.00	5.52
Total Applications	634.00	100.00

Source: Compiled and computed from the financial statements of Zuari Cement Limited.

Interpretation: Over the four-year period, funds from operations constituted the single largest source of funds at about 58 per cent, followed by long-term loans at about 22 per cent, demonstrating that the company relied primarily on internal accruals. On the applications side, the purchase of fixed assets dominated with about 70 per cent of total applications, confirming the capital-intensive character of the cement business.

FINDINGS

- The net working capital of the company declined from Rs. 142 crores in 2020-21 to Rs. 87 crores in 2024-25, indicating a weakening short-term financial position.
- Working capital decreased in three out of the four years of the study, with the only improvement of Rs. 35 crores recorded in 2023-24.
- Funds from operations remained positive throughout the study period, ranging from Rs. 51 crores to Rs. 140 crores, mainly on account of the heavy non-fund charge of depreciation.
- Funds from operations constituted the largest source of funds at about 58 per cent of aggregate sources, showing the company's reliance on internal accruals.
- Long-term loans raised contributed about 22 per cent of total sources, with the highest borrowing of Rs. 55 crores occurring in 2024-25.
- Purchase of fixed assets was the dominant application of funds, absorbing about 70 per cent of aggregate applications during the study period.
- In three of the four years, total applications exceeded long-term sources, forcing the company to finance part of its capital expenditure by drawing down working capital.

- The current ratio ranged between 1.14 and 1.26, remaining consistently below the conventional standard of 2:1 throughout the study period.
- The quick ratio ranged between 0.64 and 0.74 against the standard of 1:1, indicating heavy dependence on inventories within current assets.
- The sharp fall in revenue and profitability in 2024-25 reduced funds from operations to Rs. 51 crores and caused the steepest decline in working capital of Rs. 46 crores during the study period.

SUGGESTIONS

- The company should arrest the declining trend of working capital by financing fixed asset additions entirely from long-term sources rather than from short-term funds.
- Inventory levels should be optimised through scientific inventory management techniques to release funds locked in stocks and improve the quick ratio.
- The collection period of trade receivables should be tightened to accelerate the conversion of debtors into cash.
- Funds from operations should be strengthened by improving capacity utilisation, controlling power, fuel, and freight costs, and enhancing the share of premium products.
- Capital expenditure programmes should be phased in line with the availability of internal accruals and sanctioned long-term funds to avoid pressure on working capital.
- The company should prepare projected fund flow statements annually and compare them with actuals as a tool of fund planning and control.
- Short-term borrowings should be progressively replaced with long-term funds to reduce the vulnerability of the liquidity position.
- The company should maintain the current ratio at a healthier level by building a cushion of liquid resources to withstand cyclical downturns in cement demand.

V. CONCLUSION

The present study examined the fund flow position of Zuari Cement Limited for the five-year period from 2020-21 to 2024-25 by preparing schedules of changes in working capital, computing funds from operations, and constructing statements of sources and applications of funds. The analysis revealed that the company generated positive funds from operations in every year of the study, which formed the backbone of its financing, supplemented by long-term borrowings. However, the dominant application of funds towards the purchase of fixed assets, characteristic of the capital-intensive cement industry, frequently exceeded the long-term sources available, with the result that net working capital declined in three of the four years and the liquidity ratios remained below conventional standards throughout the period.

The findings underline the central lesson of fund flow analysis: profitability alone does not guarantee financial soundness unless the movement of funds is planned and controlled. For Zuari Cement Limited, the path to a stronger financial position lies in matching the maturity of its funds with the maturity of their uses, phasing capital expenditure



in line with internal accruals, and managing the components of working capital with greater rigour. If the suggestions offered in this study are implemented, the company, with the backing of its globally reputed parent group Heidelberg Materials and its established brand position in South India, can look forward to a healthier fund position capable of supporting sustainable growth in the years ahead.

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