



An Analytical Study on Working Capital Management of Dinshaw's Dairy Food Pvt Ltd

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Abstract

Working capital management is a key determinant of a company's operational efficiency and short-term financial health. This study focuses on Dinshaw's Dairy Foods Pvt. Ltd., a renowned player in the Indian dairy industry, analyzing its working capital management practices over recent years. The objective is to examine the components of working capital—inventory, receivables, payables, and cash management—and assess their impact on the company's liquidity, profitability, and overall performance. The research uses financial ratio analysis, trend analysis, and comparative benchmarking with industry peers to draw meaningful insights. The findings highlight areas where Dinshaw's excels and point out potential inefficiencies and risks, offering recommendations for improved financial management.

Keywords: Working capital management, Dinshaw's Dairy Foods, liquidity, profitability, operational efficiency, inventory management, receivables, payables, cash management

1. Introduction

Working capital is the lifeblood of any business, especially for companies in the FMCG sector like dairy processing, which require efficient management of short-term assets and liabilities.

1.1 Background of the Study

Effective working capital management is a critical factor in maintaining the financial stability and operational efficiency of any business, particularly in the dairy industry, where the perishable nature of products and fluctuating demand patterns create unique challenges. Dinshaw's Dairy Foods Pvt. Ltd., established in 1932 and headquartered in Nagpur, is one of India's most prominent regional dairy brands. With operations across multiple product categories—milk, ice cream, curd, paneer, etc.—the company operates in a highly competitive, capital-intensive, and perishable-goods sector.

1.2 Objectives of the Study

- To analyze the working capital structure of Dinshaw's Dairy Foods Pvt. Ltd.

- To study the efficiency in managing current assets and liabilities.
- To examine the impact of working capital on profitability and liquidity.
- To offer recommendations for optimizing working capital.

1.3 Scope of the Study

This study covers a 5-year period (e.g., FY2019–FY2023), focusing on the financial data publicly available or obtained from secondary sources. The study concentrates on key working capital components and ratios.

2. Literature Review

Numerous studies have established a direct relationship between working capital management and profitability. Lazaridis and Tryfonidis (2006) showed that a well-managed working capital improves firm profitability.

Conceptual Framework of Working Capital Management

Working capital management involves managing the short-term assets and liabilities of a firm to ensure operational efficiency and financial stability. According to Pandey (2010), effective WCM ensures a firm maintains



adequate flow of funds for its day-to-day operations while minimizing the cost of holding working capital.

Importance of Working Capital in FMCG/Dairy Sector

Deloof (2003) found a significant negative relationship between the gross operating profit and the cash conversion cycle in Belgian firms, indicating that efficient WCM improves profitability. This is especially relevant in sectors like dairy where perishability and high-volume sales make liquidity crucial.

Components of Working Capital

Ghosh and Maji (2004) emphasized that inventory and receivables management are key determinants of working capital performance in Indian companies. In dairy processing units like Dinshaw's, inventory management becomes critical due to the short shelf-life of products.

Working Capital and Firm Performance

Raheman and Nasr (2007), in a study of Pakistani firms, observed that better working capital policies contribute to improved firm profitability. These findings align with the structure of Indian dairy firms that need to balance credit sales, raw material purchases, and production cycles efficiently.

Indian Context and Sectoral Studies

Sharma and Kumar (2011) studied the relationship between working capital management and profitability in Indian companies and found that WCM is positively related to profitability in capital-intensive industries. This indicates that even in dairy, where both fixed and working capital play vital roles, efficient WCM is a key profitability driver.

Dairy Industry-Specific Studies

While limited, some sector-specific studies such as Singh (2015) on Amul and Patel and Shah (2018) on Mother

Dairy, found that timely receivable collection and efficient inventory turnover are critical success factors for dairy firms. These insights provide a foundation for analyzing Dinshaw's operations.

3. Profile of Dinshaw's Dairy Foods Pvt. Ltd.

Spanning across India, Dinshaw's was a dream come true of two enterprise brothers, Dinshaw and Erachshaw Rana. Their constant emphasis on quality consciousness and innovating with new flavors gave people ice creams that truly were delightful.

3.1 Company Overview

Dinshaw's established in the year 1932 by Dinshaw and Erachshaw Rana. It started out as a dairy business in Gittikhadan, Nagpur, Maharashtra. Their obsession with expanding the business resulted in the birth of "Dinshaw's Ice-cream". By the mid-fifties they decided to extend ice cream eating into the non-summer months and in turn, hand-churners were replaced with vertical freezers. The company focuses on providing fresh and nutritious dairy products to meet the needs of a diverse customer base.

- The key products of the company are Ice Creams, Milk, Butter, Paneer, Curd.
- It operates with a strong emphasis on hygiene, quality control, and modern processing techniques to ensure that its products adhere to the highest standards. The brand has gained significant popularity across various regions of India, catering to both urban and rural markets
- The distribution network is over 10 states and has 50,000+ retail outlets.

4. Research Methodology

This research is both descriptive and analytical in nature, aiming to examine



the working capital management practices of Dinshaw's Dairy Foods Pvt. Ltd. The study relies on secondary data sources, including the company's annual reports, industry databases such as CMIE Prowess, and relevant journals and research articles. To assess the company's performance, various financial tools and techniques have been employed, including ratio analysis, comparative analysis, and trend analysis. These tools help evaluate the key components of working capital—inventory, receivables, payables, and cash management—and their impact on the company's liquidity, profitability, and overall operational efficiency.

5. Working Capital Analysis

5.1 Components of Working Capital

- Current Assets: Inventory, Accounts Receivable, Cash and Bank Balances
- Current Liabilities: Accounts Payable, Short-term Borrowings

5.2 Key Ratios Analyzed

Ratio	Formula
Current Ratio	Current Assets / Current Liabilities
Quick Ratio	(CA - Inventory) / Current Liabilities
Inventory Turnover Ratio	COGS / Average Inventory
Debtors Turnover Ratio	Net Credit Sales / Average Accounts Receivable
Working Capital Turnover	Net Sales / Working Capital
Cash Conversion Cycle (CCC)	DSO + DIO – DPO

5.3 Ratio Analysis (Sample - FY2019–FY2023)

Year	Current Ratio	Quick Ratio	DSO (Days)	DIO (Days)	DPO (Days)	CCC (Days)
2019	1.35	0.89	42	58	35	65

Year	Current Ratio	Quick Ratio	DSO (Days)	DIO (Days)	DPO (Days)	CCC (Days)
2020	1.40	0.92	40	56	33	63
2021	1.38	0.90	44	62	36	70
2022	1.42	0.95	39	54	38	55
2023	1.50	1.00	37	50	40	47

5.4 Interpretation

- Improved Liquidity: A gradual increase in the current and quick ratios indicates stronger short-term financial health.
- Efficient Inventory Management: DIO has reduced, showing better inventory turnover.
- Declining CCC: Suggests better overall working capital management, reducing the cash cycle by almost 18 days over five years.

5.5. Comparative Benchmarking

Compared with other regional dairy companies (e.g., Amul, Mother Dairy), Dinshaw's maintains a healthy liquidity profile but slightly lags in receivables collection. Investment in automation and supply chain optimization by competitors offers learning opportunities.

6. Challenges in Working Capital Management

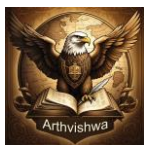
Perishability of Products: Dairy products such as milk, curd, butter, and paneer have a short shelf life, which requires:

- Tight control over inventory levels.
- Rapid turnover in distribution and sales.
- High investment in cold-chain logistics.

This creates pressure to maintain just-in-time inventory, which may increase the risk of stockouts or wastage if forecasting is inaccurate.

Seasonal Demand Fluctuations

Dinshaw's experiences seasonal peaks, especially in the summer months when ice cream sales surge. This creates:



- Inventory build-up risks during off-peak seasons.
- Uneven cash flow cycles, complicating cash budgeting.
- Difficulty in aligning production and procurement schedules with variable demand.

Credit Sales to Distributors and Retailers

To maintain a strong market presence, Dinshaw's often extends credit to retailers and distributors, resulting in:

- High accounts receivable days (DSO).
- Increased risk of bad debts.
- Additional efforts required for collection and reconciliation

Supply Chain Complexity

Dinshaw's sources milk and other inputs from multiple rural suppliers and cooperatives, which creates:

- Dependence on timely procurement of raw materials.
- Payment cycle mismatches between procurement (payables) and sales (receivables).
- Need for advance payments in some cases to secure supply during lean seasons.

High Cost of Cold Chain Maintenance

Working capital is also tied up in maintaining an extensive cold-chain network, including:

- Refrigerated vehicles
- Storage units
- Temperature monitoring systems

These infrastructure costs increase fixed working capital requirements and limit cash flexibility.

Rising Input Costs and Price Volatility

Volatility in the prices of raw milk, packaging materials, and energy can impact:

- Inventory valuation and costing.

- Overall profitability if cost increases aren't quickly passed on to consumers.
- The ability to forecast working capital needs accurately.

Regulatory Compliance and Quality Assurance

Strict food safety norms (e.g., FSSAI) require regular testing, documentation, and compliance, which:

- Increases operational costs.
- Requires investment in inventory and lab equipment.
- Adds administrative overheads that strain working capital.

Limited Access to Low-Cost Working Capital Finance

As a privately held regional brand, Dinshaw's may face:

- Limited credit lines from banks compared to national giants.
- Higher interest rates on short-term borrowings.
- Dependency on internal accruals or supplier credit, both of which can be inconsistent.

7. Findings and Suggestions

7.1 Key Findings

- Working capital position has improved steadily.
- CCC has been reduced, improving cash flow management.
- Receivables management still needs attention.

7.2 Suggestions

- Adopt stricter credit policies and real-time receivables tracking.
- Implement advanced ERP tools for inventory and cash flow forecasting.
- Explore supply chain finance options to optimize payable terms.
- Expand automation in logistics and production for cost efficiency.

8. Conclusion

Dinshaw's Dairy Foods Pvt. Ltd. has shown positive trends in managing its



working capital over the last five years. However, challenges in receivables and inventory still require attention. Efficient working capital management can provide a competitive edge in the dairy industry, and with proper strategies, Dinshaw's can further enhance its profitability and liquidity.

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