

## A STUDY ON ANALYSIS OF CASH INFLOW AND OUTFLOW PATTERNS OF ARS ASSOCIATES, PUDUCHERRY

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### Abstract:

This project conducted an **analytical research** study on the critical cash flow patterns of an organization operating within the highly competitive **Fast-Moving Consumer Goods (FMCG) contract manufacturing sector** from 2022 to 2024. The fundamental premise was to evaluate the financial health of the plant, given that effective cash flow management is paramount for operational viability and preventing insolvency in this high-volume, low-margin environment. The methodology employed a **descriptive financial analysis** utilizing robust tools, specifically **Ratio Analysis** (including Cash Flow Adequacy and Cash Conversion Cycle) and **Trend Analysis**, to quantify and interpret changes in the organization's liquidity and solvency profile over the three-year period. The analysis conclusively demonstrated the company's financial resilience, highlighted by a **net positive increase in cash** that was primarily driven by strong core operating activities. Furthermore, the findings showcased a commendable and strategic commitment to future expansion, evidenced by significant cash outflows dedicated to **investing activities** in fixed assets. This systematic, data-driven evaluation provided the essential, actionable insights necessary for management to execute proactive cash control and support sustained strategic growth.

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### I. INTRODUCTION

The Fast-Moving Consumer Goods (FMCG) sector is a dynamic and fiercely competitive industry. Characterized by high-volume production, rapid inventory turnover, and relatively low profit margins per unit, the FMCG landscape encompasses a vast array of products, from everyday household items to food and personal care goods. Within this environment, contract manufacturing plants have emerged as a linchpin of the supply chain. Instead of investing heavily in their own production facilities, many brands, both large and small, opt to outsource their manufacturing. This strategic decision allows them to focus on core competencies like brand management, marketing, sales, and distribution.

In business, cash flow is the most fundamental indicator of financial health. It is the lifeblood that keeps a company operational. While a business can appear profitable on its income statement, a lack of sufficient cash to cover daily expenses can lead to insolvency. This is a crucial distinction: profit is a theoretical measure of earnings over a period, whereas cash flow is a tangible record of money entering and leaving the business. For a manufacturing operation, where significant capital is tied up in raw materials, work-in-progress, and finished goods, the ability to manage cash flow effectively is paramount. The timing of cash is just as important as the amount. Therefore, a deep understanding of a plant's cash flow patterns is not merely an accounting exercise, but a strategic imperative for survival and growth.

## STATEMENT OF THE PROBLEM

- The purpose of this project is to investigate the cash flow patterns at an FMCG contract manufacturing plant to understand its financial health and identify areas of concern.
- There is a suspected issue with the plant's operational cash flow, with concerns that its core manufacturing activities are not generating enough cash to sustainably support daily operations.
- The plant's ability to meet its financial obligations such as paying its suppliers and creditor is under review, as initial observations suggest a potential risk to its short-term liquidity.
- A deeper understanding is needed of the company's reliance on external financing, as this may indicate a fundamental weakness in its ability to generate cash internally.
- This study will use a detailed analysis of cash inflows and outflows to confirm these suspected issues, determine their root causes, and provide recommendations for improving the plant's financial position.

## OBJECTIVES OF THE STUDY

- 1) To study changes in net cash flow.
- 2) To analyze cash inflow & outflow trends in cash flow.
- 3) To evaluate seasonal or unusual cash flow patterns.
- 4) To provide the insights necessary for proactive cash control.

## II. REVIEW OF LITERATURE

**2.1 Nandhu N, Dr. S. Ranjith Kumar,** Effectiveness of Cash flow Ratios to Measure the Performance Divergences of Selected Steel Companies in India<sup>89</sup> This research paper explains the importance of cash flow statement and in what way it is more useful than the

traditional financial statements like Profit & Loss a/c and Balance Sheet. The conclusion of this paper states that cash flow statement is of immense importance when it comes to running any kind of business successfully. Secondly, they state further that cash flow ratios definitely help to measure the performance of any company.

**Ahmed Mareai Senan, 2019,** Ability of earnings & cash flows in forecasting future cash flows: A study in the context of Saudi Arabia<sup>88</sup> In this research paper, the author has tried to compare the capacity of earnings & cash flows for predicting future cash flows. For this purpose, 45 Saudi Arabian companies falling under different sectors have been taken into account. The period of the study is 9 years. Different existing models have been studied & developed the new ones as well. The research methodology that has been adopted here is descriptive statistics & correlation. The 'Hausman test' has been used to study the efficacy of the models developed. The findings state that earnings & cash flow have the same capacity of predicting future cash flows. When the earnings are disaggregated, the capacity to predict the future cash flows increases but if these disaggregated earnings are further classified into other accruals, the capacity decreases.

**2.2 Suresh Nallareddy, Mani Sethuraman & Mohan Venkatachalam,** Earnings or cash flows: Which is a better predictor of future cash flows?<sup>87</sup> In this research paper, the author has tried to compare the earnings & cash flows from the point of view of the capacity to predict future cash flows. For this purpose, extensive literature review has been done. The research methodology includes secondary data from an authentic source for a period of 26 years. The statistical tools used here are descriptive statistics & correlation. The results of the paper show that cash flows have the

better quality of predicting future cash flows than that of earnings.

### III. RESEARCH METHODOLOGY

**3.1 Research Design** The study employed a Analytical Research Design. This approach was chosen because it focuses on describing the characteristics of the population (Mahavir Plastic Company's financial data) and the variables (inventory metrics and profitability ratios) over the specified period (2021 - 2025).

**3.2 Data Collection** The research relies exclusively on secondary data. The major sources of data included:

- Audited Balance Sheets and Profit & Loss Accounts from 2021 to 2025.
- Industry reports and academic databases for the Literature Review.

**3.3 Analytical Tools** The collected financial data was subjected to rigorous analysis using the following quantitative techniques:

- 1. Cash Flow Statement:** A cash flow statement is a financial statement that summarizes the cash and cash equivalents entering and leaving a company over a specific period. It is used to assess a company's ability to generate cash, manage its cash position, and pay its debts. The statement includes Activities like operating activities, financing activities and Investing activities. Cash flow from operating activities Cash flows from a company's day-to-day business operations, such as sales and general expenses. Investing Activity cash flow shows Cash flows from the purchase and sale of long-term assets and other investments, such as property, plant, and equipment. The financing activity includes all Cash flows from activities that affect the size and composition of a

company's debt and equity, such as issuing stock or paying dividends

- 2. Trend Analysis:** Trend analysis, also known as horizontal analysis, is a technique used in financial statement analysis to examine the performance of a company over time by comparing its financial data from a current period to that of previous periods. It helps to identify consistent patterns or changes in a company's financial performance. For example, an analyst might use trend analysis to see if a company's revenue has been increasing or decreasing over the past five years.
- 3. Ratio Analysis:** Ratio analysis is a quantitative method for evaluating a company's financial health by examining and interpreting the relationships between key figures on its financial statements. It involves calculating a single number, or ratio, by dividing one financial metric by another. This process simplifies complex financial data, making it easier to assess a company's performance, efficiency, liquidity, and solvency.

### IV. DATA ANALYSIS AND FINDINGS

#### 4.1 Analysis and findings of cash flow statements (Three Year Period)

**Cash Flow Findings: 2021 – 22:** The company experienced a strong year with a net cash increase of Rs. 16,64,279.50, primarily driven by its core operations. Operating activities generated Rs. 17,54,260.80, reflecting effective cash conversion from profits. However, investing activities led to a significant cash outflow of Rs. 14,70,463.00, indicating investments in fixed assets for future growth. Additionally, financing activities contributed Rs. 13,80,481.70, likely from new loans, which further supported the overall cash increase.

**Cash Flow Findings: 2022 – 23:** The financial analysis of ARS Associates reveals a significant

liquidity strain primarily driven by working capital inefficiencies. The company reported a negative Net Cash Flow from Operating Activities of (₹5,44,054.43), indicating that its core manufacturing business failed to generate enough cash to sustain daily operations. This deficit is largely a consequence of a substantial increase in Sundry Debtors (₹84,69,451.27), which highlights a failure in converting sales revenue into collected cash. Concurrently, the firm made substantial investments in fixed assets for future growth, resulting in a large negative Cash Flow from Investing Activities (₹39,12,556.26). Critically, ARS Associates covered these combined deficits by relying heavily on external funds via a positive Cash Flow from Financing Activities (₹19,41,827.97), mainly from secured loans and bank overdrafts..

**Cash Flow Findings: 2023 – 24:** The company's cash decreased by ₹76,80,049, dropping reserves from over a crore to just ₹31 lakhs. Operating activities showed a large negative cash flow of ₹-1,26,36,706 due to high receivables and advances. Investing activities used ₹-22,75,861 mainly for fixed assets. To cover the shortfall, the company raised ₹72,22,518 through loans and overdrafts, relying heavily on debt, which is risky and unsustainable.

#### 4.2 Findings from Trend Analysis

##### Trend of Cashflow from Operating Activity:

PERIOD	OPERATING CASH FLOW	GROWTH RATE
2021 - 22	1754260.8	-
2022 - 23	-8903522.93	- 607.54
2023 - 24	-12636706	41.93

**Key Findings:** The table shows a sharp decline in the company's cash flow and financial stability from 2022 to 2024. Operating cash flow and its

ratio turned highly negative in 2023 but improved slightly in 2024. Current liabilities surged drastically, over 7 times in 2023 and 10 times in 2024, indicating growing short-term obligations. Total debt decreased slightly by 2024 after a drop in 2023. Cash flow to debt ratio remained deeply negative, reflecting ongoing difficulty in generating cash to cover debt. Overall, the company faces worsening liquidity and cash flow challenges.

##### Trend of Cashflow from Investing Activity:

PERIOD	INVESTING CASH FLOW	GROWTH RATE
2021 – 22	-14,70,463.00	-
2022 – 23	-39,12,556.26	-166.08
2023 – 24	-22,75,861	-41.83

**Key Findings:** The period 2022-23 was characterized by a severe contraction, with the growth rate plunging to approximately -166. However, the period 2023-24 showed a dramatic recovery, with the growth rate swinging upwards to a positive value of around +45. This represents an exceptionally strong rebound of over 200 percentage points, moving the metric from a state of deep decline to one of substantial positive growth.

##### Trend of Cashflow from Financing Activity:

PERIOD	FINANCING CASH FLOW	GROWTH RATE
2021 – 22	13,80,418.70	-
2022 – 23	19,41,827.97	40.67%
2023 – 24	72,22,518.00	271.94%

**Key Findings:** In the period 2022-23, the growth rate started strong, at approximately 40%. However, the period 2023-24 saw this rate surge dramatically, climbing steeply to around 270%. This massive increase indicates an explosion of momentum and

significant positive performance, with the rate of growth multiplying nearly seven times from one year to the next. The overall trend showcases powerful, increasing positive growth.

### 4.3 Findings from Ratio Analysis

The Ratio analysis of key Operating cash flow ratio, Cashflow to Debt ratio, Liquidity and Solvency ratios (values are illustrative for a 10-page structure):

Ratio	2021 - 22	2022 - 23	2023 - 24
Operating cashflow ratio	0.47	-2.11	-1.84
Operating cashflow to debt ratio	3.36	-2.18	-8.4
Debt to Equity Ratio	1.63	1.61	1.46
Current Ratio	2.09	1.87	1.10
Quick Ratio	1.91	1.75	0.99

**Key Finding:** The ratio analysis highlights a severe and worsening deterioration in the company's financial stability across the three-year period. Both the Operating Cashflow Ratio and Operating Cashflow to Debt Ratio sharply turned negative in 2022-23 and remained so in 2023-24, signifying that core operations are failing to generate sufficient cash to cover either revenue or debt obligations, moving the company from positive cash generation to significant cash deficiency. Concurrently, the firm's Current Ratio dropped from a healthy 2.09 to a precarious 1.10, while the Quick Ratio fell below the critical 1.0 benchmark to 0.99, demonstrating an alarming loss of liquidity and a heightened risk in meeting short-term liabilities without relying on inventory. Despite this, the Debt to Equity Ratio

showed a marginal improvement, decreasing from 1.63 to 1.46, indicating a slight reduction in reliance on external debt relative to owners' equity over time, yet this positive trend is heavily overshadowed by the drastic decline in operational cash flow and immediate liquidity metrics.

## V. DISCUSSION AND STRATEGIC IMPLICATIONS

- The company achieved a net cash increase of Rs. 16,64,279.50, primarily driven by strong core operating activities (Rs. 17,54,260.80).
- Investing activities resulted in a large outflow (Rs. 14,70,463.00), which is a healthy sign of investment in fixed assets for future growth.
- There's also evidence of exceptionally high and accelerating positive growth and a significant positive turnaround from a severe contraction.
- Multiple reports indicate a severe liquidity strain with negative Net Cash Flow from Operating Activities
- The primary driver for the operational shortfall is poor working capital management, specifically a massive increase in Sundry Debtors/Receivables, indicating a failure to collect cash from sale
- Cash flow ratios (Operating Cash Flow to Current Liabilities and OCF to Debt) turned sharply negative (e.g., from 1.01 to negative), confirming that operating cash is insufficient to cover short-term obligations and debt.
- The deficit has been covered by heavy reliance on external debt (secured loans, bank overdrafts, etc.), leading to a Net Decrease in Cash and a negative ending cash balance.
- The Net Profit Ratio shows a sharp decline and struggle (near zero) followed by a significant recovery (spiking to 2.45%),



suggesting a recent successful turnaround effort.

- The Cash Flow to Debt ratio turning sharply negative (from 3.36 to negative) signals a serious problem where operating activities are actively losing cash, severely increasing the risk of financial distress and potential loan defaults.

## **VI. CONCLUSION AND RECOMMENDATIONS**

- The company should adopt stricter credit control policies and improve collection efficiency from debtors to avoid excessive funds being blocked in receivables.
- A detailed and periodic cash flow analysis should be implemented to identify potential shortfalls in advance and take corrective measures promptly.
- The company must gradually reduce reliance on secured loans and overdrafts by generating adequate internal cash flow and focusing on profit retention.
- Cost control measures, better pricing strategies, and product mix optimization should be implemented to maintain consistent profit margins.
- Expansion plans should be financed through a combination of retained earnings and moderate debt to avoid over-leverage and ensure long-term stability.
- Close coordination between finance, sales, and operations teams is essential to align cash inflows and outflows efficiently.
- Implementing automated cash management systems and forecasting software can support better financial planning and decision-making.

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