

A Study on Working Capital Management on Aavin's Profitability

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ABSTRACT

This study examines the impact of working capital management on the profitability of AAVIN, a prominent dairy cooperative in Tamil Nadu. Effective management of working capital is crucial for maintaining liquidity and operational efficiency, which can significantly influence profitability. The study analyzes key components of working capital such as inventory management, receivables, payables, and cash conversion cycle to determine their relationship with AAVIN'S profitability indicators, including net profit margin and return on assets (ROA). By using financial data from AAVIN'S over a defined period, the research highlights how optimizing working capital practices can enhance profitability without compromising operational sustainability. The findings suggest that efficient working capital management contributes positively to the firm's profitability by reducing costs and improving cash flow management. Recommendations for improving AAVIN'S working capital strategies are provided to maximize its financial performance in the competitive dairy industry.

KEYWORDS: Working capital, Receivable, Payable, Cash conversion cycle, profit margin

1. INTRODUCTION OF THE STUDY:

Working capital refers to the difference between a company's current assets and current liabilities, representing the short-term financial health and operational efficiency of the business. Working capital is a key indicator of a company's ability to meet its short-term obligations and fund its day-to-day operations without needing additional external financing.. It is essential for managing a company's liquidity, ensuring it can cover expenses such as raw materials, wages, and other operational costs. A positive working capital indicates that a company has enough assets to cover its short-term liabilities, which is generally seen as a sign of financial stability.

Conversely, negative working capital could signal potential liquidity problems and the risk of insolvency.

OBJECTIVES

- To evaluate the liquidity and profitability position of the aavin Ltd.
- To analyze the changes in current assets and current liability through a comparative balance sheet.

2. REVIEW OF LITERATURE:

- **Financial Flexibility and Working Capital Management Gupta, A., & Sharma, P. (2023)** Explores the relationship between financial flexibility and working capital management in Indian firms, concluding that better financial flexibility improves working capital efficiency, leading to enhanced long-term performance.
- **Impact of Working Capital Management on Profitability Hina Agha (2023)** Examines the impact of working capital management on profitability in GlaxoSmithKline, Karachi, finding that efficient debtor and inventory management can increase profitability.
- **Impact of COVID-19 on Working Capital Management: Chawla, A. (2022)** Investigates how COVID-19 affected working capital management globally, highlighting a shift to conservative policies focusing on liquidity, reduced inventory, and tighter credit.
- **Working Capital Management at Leyland Joseph Jisha (2022)** Studies working capital management at Leyland, noting its insufficient liquidity and profitability position, suggesting improvements are necessary.
- **Correlation between Working Capital and Profitability Rahman Mohammad M (2022)** Focuses on the positive impact of effective working capital management on profitability in the textile industry.
- **Cash Conversion Cycle and Profitability Uyar Ali (2022)** Examines the relationship between the cash conversion cycle and profitability of firms listed on the Istanbul Stock Exchange, proposing industry benchmarks for the cash conversion cycle.
- **Liquidity and Profitability in Paper Mills Madhavi K. (2021)** Analyzes the impact of inefficient working capital management on the liquidity and profitability of paper mills in Andhra Pradesh.
- **Working Capital Management in Pharmaceutical Companies Gurumurthy N and Reddy Jayachandra K (2021)** Companies Assesses the working capital management in four pharmaceutical companies, concluding that the existing systems need improvements.
- **Comparative Analysis of Working Capital Management Mukti R Barot (2021)** performance of Reymond and Vardhman Textiles, using secondary data from 2006-2015 and ratio analysis.

3. RESEARCH METHODOLOGY:

3.1 DATA ANALYSIS TOOLS AND TECHNIQUES:

Liquidity ratio

Current ratio: Liquidity ratios determine how quickly a company can convert the assets and use them for meeting the dues that arise. The higher the ratio, the easier it is for the company to clear its debts and avoid defaulting on payments.

Quick ratio: The quick ratio assesses a company's ability to swiftly convert its liquid assets into cash to meet short-term financial obligations. In other words, it measures the proportion of a business's current liability that it can meet with cash and assets that can be readily converted to cash.

Cash ratio: The cash ratio is a key liquidity metric that compares a firm's cash and cash equivalents to its current liabilities, providing insight into its ability to cover short-term obligations with its most liquid assets. It indicates a company's ability to cover its short-term liabilities using only its most liquid assets, without relying on the sale of inventory or the collection of receivables. A higher cash ratio suggests that the company has sufficient cash reserves to meet its short-term obligations, providing a stronger

liquidity position. This ratio is considered more conservative than other liquidity ratios, as it focuses solely on cash and cash equivalents, which can be quickly accessed to settle debts.

Profitability ratio

Gross profit margin: Gross profit is a company's profit after deducting the costs associated with producing and selling its products or services.

Net profit margin: net profit is a company's total earnings after subtracting all expenses. It represents the amount of money earned after taking into consideration all costs and expenses, such as operating costs, interest expenses, and taxes.

Return on assets: ROA is a profitability metric that compares a company's net income to its total assets. It's expressed as a percentage.

Return on equity: Return on equity is a financial metric that measures how well a company generates profit from its shareholders' investments. It's calculated by dividing a company's net income by its shareholders' equity

Comparative balance sheet

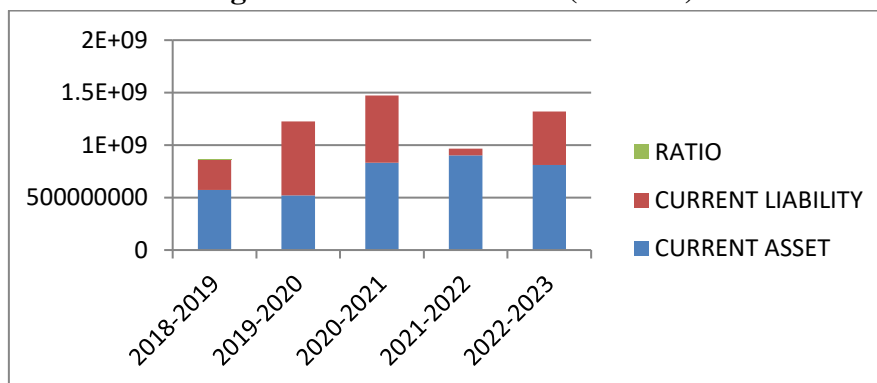
4. DATA ANALYSIS AND INTERPRETATION:

Table 4.1.1 current ratio (Rs in lakhs)

YEAR	CURRENT ASSET	CURRENT LIABILITY	RATIO %
2018-2019	571411097.82	291221879.18	1.96
2019-2020	519946756.90	704071527.75	0.73
2020-2021	831643829	641167832.01	1.29
2021-2022	902215673.63	63817949.40	1.41
2022-2023	810876166.82	509758645.54	1.59

SOURCE: SECONDARY DATA

Figure 4.1.1 Current ratio (in lakhs)



INTERPRETATION:

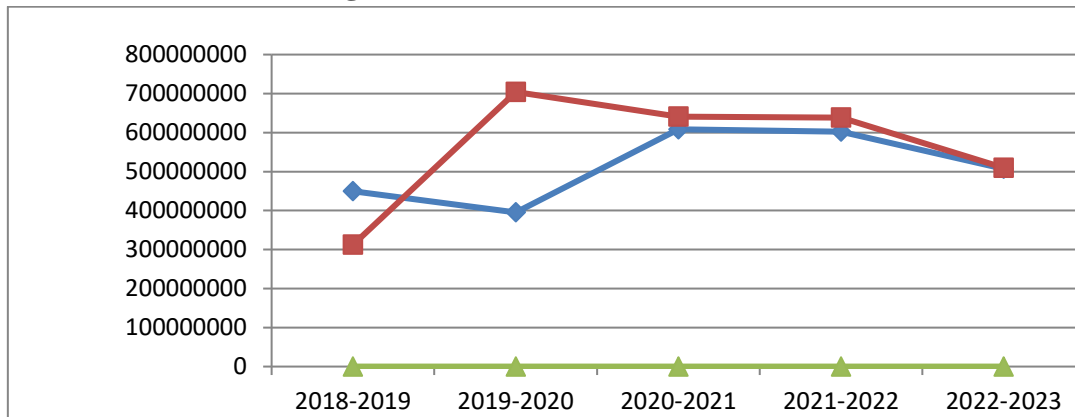
The company's current ratio fluctuated over the years, indicating varying liquidity levels. In 2019-2020, it dropped significantly to 0.73, suggesting potential liquidity issues, while it improved to 1.59 in 2022-2023, indicating a stronger ability to cover short-term liabilities.

Table 4.1.2 quick ratio (Rs in lakhs)

YEAR	CURRENT ASSET - INVENTORY	CURRENT LIABILITY	RATIO %
2018-2019	449216094.24	312233674.02	1.43
2019-2020	395256850.61	704071527.75	0.56
2020-2021	608410915.52	641167832.01	0.94
2021-2022	602301497.11	638179749.40	0.94
2022-2023	507347806.69	509758645.54	0.99

SOURCE: SECONDARY DATA

Figure 4.1.2 Quick ratio (in lakhs)



SOURCE: SECONDARY DATA

INTERPRETATION:

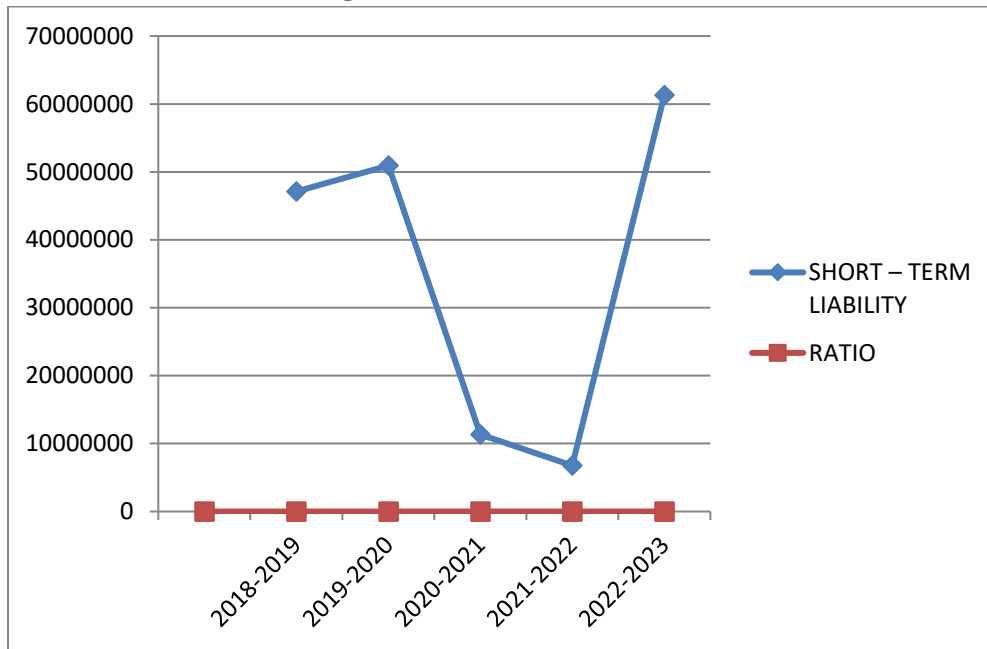
The quick ratio shows a declining trend from 1.43 in 2018-2019 to 0.56 in 2019-2020, indicating reduced liquidity without inventory. However, it gradually improved to 0.99 in 2022-2023, suggesting a slight recovery in the company's ability to cover short-term liabilities with its most liquid assets.

Table 4.1.3 cash ratio (Rs in lakhs)

YEAR	CASH AND CASH EQUIVALENTS	SHORT – TERM LIABILITY	RATIO %
2018-2019	972731288.45	47110652.25	2.1
2019-2020	962310566.25	50907741.75	2.0
2020-2021	165131515.45	11320148.46	1.4
2021-2022	156082145.79	6766694.81	2.3
2022-2023	655235700.78	61302973.92	1.5

SOURCE: SECONDARY DATA

Figure 4.1.3 cash ratio (in lakhs)



SOURCE : SECONDARY DATA

INTERPRETATION:

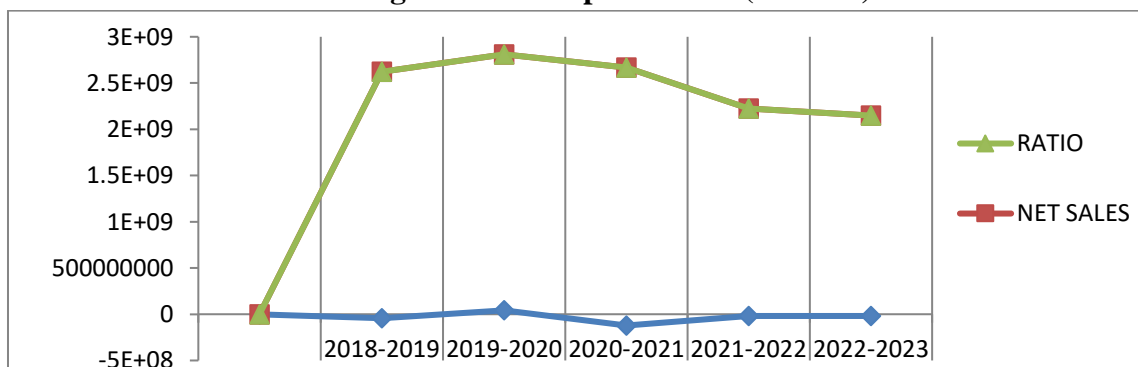
AAVIN Ltd.'s cash ratio fluctuated over the five years but generally remained strong, with cash reserves consistently sufficient to cover short-term liabilities, peaking at 2.3 in 2021-2022. Despite some volatility, the company maintained a solid liquidity position throughout.

Table 4.1.4 net profit ratio (Rs in lakhs)

YEAR	NET PROFIT	NET SALES	RATIO %
2018-2019	(41423732.89)	2664792496.88	(1.55)
2019-2020	41843862.93	2768354264.63	1.51
2020-2021	(121870607.34)	2789484060.21	4.37
2021-2022	(20063479.21)	2243011535.54	(0.89)
2022-2023	(17893187.15)	2167121683.49	(0.83)

SOURCE: SECONDARY DATA

Figure 4.1.4 net profit ratio (in lakhs)



SOURCE : SECONDARY DATA

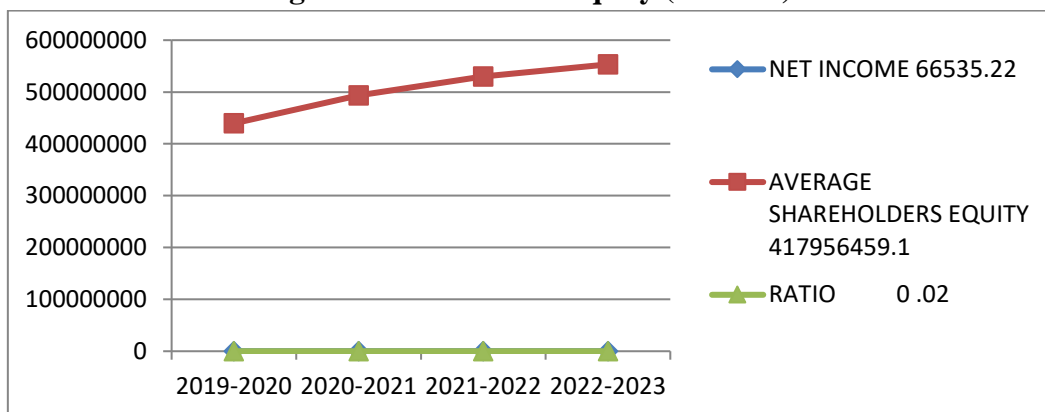
INTERPRETATION:

AAVIN Ltd.'s gross profit margin showed significant volatility, with negative margins in most years, indicating persistent challenges in generating profitability from its core operations, despite some improvements in 2019-2020.

Table 4.1.5 return on equity (Rs in lakhs):

YEAR	NET INCOME	AVERAGE SHAREHOLDERS EQUITY	RATIO
2018-2019	66535.22	417956459.1	0.02
2019-2020	66536.22	439544909.6	0.02
2020-2021	66537.22	493395791.1	0.01
2021-2022	66538.22	529823833.1	0.01
2022-2023	66539.22	553284980.7	0.01

Figure 4.1.5 return on equity (in lakhs):



INTERPRETATION:

Despite a steady increase in AAVIN Ltd.'s average shareholders' equity, the return on equity slightly declined, indicating reduced profitability relative to the growing equity base over the five-year period.

Table 4.1.6 comparative balance sheet (Rs in lakhs)

S.I	PARTICULAR		2020-2021	2021-2022	2022-2023	
1	Member ship	number	1289	1178	1179	
2	Paid up capital	Share capital amount	99.13	84.03	84.03	
		Out of which govt. share capital	NIL	NIL	NIL	
3	purchase	milk	Qty.in lakhs	907.16	832.01	827.79
			Amount	24346.06	24432.32	25789.48
		Milk products	Qty.in lakhs	91.21	54.27	89.99

		Other than milk products like cattle feed etc	Qty. in MT	NIL	NIL	NIL
			amount	769.02	974.51	1031.54
4	Sales	Milk	Qty in ltr	726.76	821.85	681.40
			Amount	23854.81	26081.68	22572.19
		Milk products	qty in MT			
			amount	1875.65	2279.61	4105.86
		Other than milk products like cattle feed etc	Qty in ltrs			
			amount	917.46	1073.47	1216.79
		Average local sales/day		0.33	0.32	0.00
5	Capacity utilisation	Capacity installed processing		2.88	2.60	2.72
		Capacity utilised		2.22	2.28	2.24
6	Trade charges	Amount		1873.7	1998.85	2426.34
		% of trade charges to sales		7.03	7.66	8.70
7	Estt & contingencies	Amount		1314.68	1235.12	892.75
		% of E&C to sales		4.93	4.74	3.20
8	Profit and loss	Gross profit if any		1410.47	1614.84	131.31
		% of gross profit to sales		5.29	6.19	0.47
		Loss if any		414.24	NIL	1218.71
		Current profit		NIL	418.44	0.00
		Cumulative loss		2806.27	2387.83	3606.53
9	Sundry debtors	No of items		41	37	41
		Amount		3671.30	3623.18	4260.54
		More than 3 yrs		935.61	1418.03	237.26
10	Sundry creditors	No of items		36	39	26
		Amount		2666.34	2263.10	3491.99
		More than 3 yrs				
11	No of employees			104	96	86
12	Reserves	Statutory		NIL	NIL	NIL
		Non Statutory		777.12	347.80	3107.81
13	borrowing	Government		NIL	NIL	1064
		Other		5471.74	2149.76	917.34
		TOTAL		5471.74	2149.76	1981.34
		In coop.banks		-	22.05	75.75

14	investment	Other banks	-	44.16	94.86
		Others	65.33	98.72	0.00
		TOTAL	65.33	164.93	170.61

INTERPRETATION:

AAVIN Ltd. faced financial challenges from 2020-2023, with declining milk sales, rising losses, and increasing costs, despite some improvements in reserves and a shift toward processed dairy products. The company needs to focus on profitability, cash flow management, and operational efficiency to overcome its financial strain.

FINDINGS:

- AAVIN Ltd.'s current ratio fluctuated from 2018 to 2023, improving after 2019-2020 and stabilizing above 1, indicating sufficient liquidity to meet short-term obligations.
- The quick ratio showed fluctuating liquidity, with a significant drop in 2019-2020 and gradual recovery, but consistently struggled to surpass the ideal benchmark of 1.
- The cash ratio remained strong from 2018 to 2023, with fluctuations in cash reserves but consistently enough to cover short-term liabilities, indicating financial stability.
- The gross profit margin fluctuated significantly, with a sharp decline in 2020-2021 but a recovery by 2022-2023, reflecting improved profitability after operational challenges.
- Despite some improvements, AAVIN Ltd. faced ongoing struggles with profitability, as its gross profit margins remained negative for most of the period, reflecting operational inefficiencies.
- Net income remained stable, but the increasing shareholders' equity led to a decline in return on equity, indicating diminishing returns on expanded capital.
- Return on assets showed stability with a slight upward trend, reflecting modest improvements in the company's ability to generate profits from assets.

CONCLUSION:

AAVIN Ltd. faces financial challenges, with fluctuating profitability, liquidity issues, and increased reliance on external financing. While liquidity and working capital management have improved, rising production costs and declining sales pressure profitability. To ensure sustainability, AAVIN Ltd. must focus on cost reduction, operational efficiency, product diversification, and better cash flow and inventory management. These measures are key to achieving sustainable growth and financial stability.

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