



IMPACT OF WORKING CAPITAL MANAGEMENT PRACTICE ON PROFITABILITY OF AMUL

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ABSTRACT

AMUL is an Indian dairy co-operative, based at Anand in the state of Gujarat, India. The objectives of present study are to analyse profitability and working capital management of AMUL and to investigate the impact of working capital management on its profitability. For this purpose, secondary data has been used which consist financial data of AMUL from 2017-18 to 2021-22. To analyse data Pearson correlation and Ratio analysis is used in this research. The result of the study shows the positive relation of profitability with average payable period and negative relation of Profitability with average collection period, inventory conversion period and cash conversion cycle.

Key Words: Amul, Profitability, Liquidity, Correlation

INTRODUCTION

The trio of Verghese Kurien, Tribhuvandas Patel and H.M. Dalaya, led by Sardar Vallabhbhai Patel formed the Kaira Districts Co-operative Milk Producers Union Limited better known as AMUL in 1946 to stop the exploitation by middlemen. This co-operative began with just two village dairy co-operative societies and 247 litres of milk and now it has turnover of more than Rs.5700 crore. The establishment of AMUL is known as White Revolution.

AMUL has got brilliant success because of its model known as 'AMUL model'. Because of success of AMUL model the National Dairy Development Board was set up with the basic objective of replicating the AMUL model in 1965 by Prime Minister Lal Bahadur Shastri.

The financial performance is measured by using profitability ratios named as, Gross Profit Margin, Net Profit Margin and Return on Assets. Working capital management is measured by Average Collection Period, Inventory Conversion Period, Average Payable Period and Cash Conversion Cycle.

LITERATURE REVIEW

MS. D. Maharani and Dr. C. Vellaichamy had investigated the impact of working capital management in their paper "Impact of Working Capital Management on Profitability of Kribhco Ltd." They found a positive relationship between gross profit and level of working capital and a negative relationship between net profit and level of working capital.

Marc Deloof found significant negative relation between gross operating income and the numbers of days accounts receivable in his research “Does Working Capital Management Affect Profitability of Belgian Firms?”

Faris Nasif Al-Shubiri and Nasseem Mohammad Aburumman observed that there is no significant relationship between profitability and cash conversion cycle in their study “The relationship between cash conversion cycle and financial characteristics of industrial sector: an empirical study”

Dr. Ashok Kumar Panigrahi observed that inventory conversion period has an inverse relationship with firms’ profitability in his study “Relationship Between Inventory Management and Profitability: An Empirical Analysis of Indian Cement Companies”

Jyoti Mahato and Uday Kumar Jagannathan indicate positive relation between average payable period and profitability in their research “Impact of Working Capital Management on Profitability: Indian Telecom Sector”

OBJECTIVES

- To analyse the profitability of AMUL.
- To analyse the working capital management of AMUL.
- To analyse the impact of working capital management on profitability.

RESEARCH AND METHODOLOGY

Data collection

In this research secondary data is used. The data for this research is collected from the annual report of concern which provide help in getting authentic results. The financial data include firm’s Net Sales, Gross Profit, Net Profit after Tax, Purchase, Trade Receivable, Trade Payables, Inventory and Total Assets.

Sample

The sample consist from 2012-13 to 2016-17 financial data of AMUL.

Methodology

To analyse profitability of concern Profitability ratios like Gross Profit Margin, Net Profit Margin and Return on Assets are used and as working capital management components Average Collection Period, Inventory Conversion Period Average Payable Period and Cash Conversation Cycle are taken into consideration. To analyse relationship between working capital management and profitability, Karl Person’s correlation analysis is used.

Table.1. Indicators of profitability and working capital management

Description	Measurement
Indicators of Profitability	
Gross Profit Margin	$(\text{Gross Profit}) / (\text{Net Sales}) \times 100$
Net Profit Margin	$(\text{Net Profit}) / (\text{Net Sales}) \times 100$
Return on Assets	$(\text{Net Profit}) / (\text{Total Assets}) \times 100$
Indicators of Working Capital Management	
Average Collection Period (ACP)	$(\text{Trade Receivables}) / (\text{Net Sales}) \times 365$
Inventory Conversion Period (ICP)	$(\text{Inventory}) / (\text{Cost of Goods Sold}) \times 365$
Average Payable Period (APP)	$(\text{Trade Payables}) / (\text{Purchase}) \times 365$
Cash Conversation Cycle (CCC)	$\text{ACP} + \text{ICP} - \text{APP}$

DATA ANALYSIS

Table.2. Profitability and Working Capital Management Analysis

Year	2021-22	2020-21	2019-20	2018-19	2017-18	Average
Gross Profit Margin	4.57	19.15	9.49	12.91	11.37	11.50
Net Profit Margin	0.25	0.25	0.28	0.32	0.38	0.30
Return on Assets	0.68	0.92	0.93	1.05	1.24	0.96
Average Collection Period	21.22	15.48	17.40	14.90	15.71	16.94
Inventory Conversion Period	57.45	36.33	43.23	37.77	41.37	43.23
Average Payable Period	39.13	47.15	37.25	46.46	56.57	45.41
Cash Conversion Cycle	39.54	4.66	23.39	6.21	0.51	14.86

Gross Profit Margin

The gross profit margin ratio is the ratio of gross margin expressed as a percentage of sales. The average gross profit margin was 11.50% which indicates that every rupee generated in sales, 11.50 paisa left over to cover basic operating costs and profit.

Net Profit Margin

The net profit margin indicates how much net income a concern makes with total sale achieved. The average net profit margin is 0.30% which means that 0.30 rupee of net income for every rupee of sales.

Return on Assets

The return on assets is a ratio that measures the net income produced by total assets during a period by comparing net income to total assets. AMUL has 0.96% average return on assets which indicates that every rupee invested in assets averagely produced 0.96 rupee of net income. There is one good sign suggested by ROA that during research period ROA is just increasing and not diminishing.

Average Collection Period

The average collection period is the average number of days taken by concern to collect invoiced amounts from customers. Average of average collection period was 16.94 days which means concern takes nearly 17 days to convert receivables into cash.

Inventory Conversion Period

The inventory conversion period is the average time taken for clearing the stock of goods. Average inventory conversion period for research period was 43.23 days. It indicates that AMUL takes 43 to 44 days to convert inventory into sales.

Average Payable Period

The average payable period is the numbers of days a concern takes to pay off credit purchases. Average of average payable period for the period covered was 45.41 days. It means that AMUL take 45 to 46 days to pay its creditors and account payable.

Cash Conversion Cycle

The cash conversion cycle is a ratio which measures the number of days for which concern's cash is tied up in inventories and accounts receivables. Average cash conversion cycle was 14.86 days which indicates that AMUL averagely takes 14 to 15 days to convert cash on hand into inventory and account payable, through sales and account receivable and then back into cash.

Table.3. Correlation Analysis

Correlations								
		GPM	NPM	ROA	ACP	ICP	APP	CCC
GPM	Pearson Correlation	1	.019	.411	-.817	-.889*	.451	-.798
	Sig. (2-tailed)		.976	.491	.092	.043	.446	.106
	N	5	5	5	5	5	5	5
NPM	Pearson Correlation	.019	1	.908*	-.512	-.337	.772	-.616
	Sig. (2-tailed)	.976		.033	.378	.579	.126	.268
	N	5	5	5	5	5	5	5
ROA	Pearson Correlation	.411	.908*	1	-.801	-.685	.823	-.865
	Sig. (2-tailed)	.491	.033		.103	.201	.087	.058
	N	5	5	5	5	5	5	5
ACP	Pearson Correlation	-.817	-.512	-.801	1	.977**	-.624	.953*
	Sig. (2-tailed)	.092	.378	.103		.004	.261	.012
	N	5	5	5	5	5	5	5
ICP	Pearson Correlation	-.889*	-.337	-.685	.977**	1	-.496	.901*
	Sig. (2-tailed)	.043	.579	.201	.004		.396	.037
	N	5	5	5	5	5	5	5
APP	Pearson Correlation	.451	.772	.823	-.624	-.496	1	-.823
	Sig. (2-tailed)	.446	.126	.087	.261	.396		.087
	N	5	5	5	5	5	5	5
CCC	Pearson Correlation	-.798	-.616	-.865	.953*	.901*	-.823	1
	Sig. (2-tailed)	.106	.268	.058	.012	.037	.087	
	N	5	5	5	5	5	5	5
*. Correlation is significant at the 0.05 level (2-tailed).								
**. Correlation is significant at the 0.01 level (2-tailed).								

CONCLUSION

This study objective is to investigate the relationship between the profitability and working capital management. The finding result suggest positive relationship between profitability and average payable period. The finding also indicates that average collection period, inventory conversion period and cash conversion cycle are negatively related with profitability of concern.

REFERENCE

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