

## **Effect of Working Capital Management on selected FMCG Companies in India.**

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### *Abstract*

*There is no doubt that the ultimate objective of any firm is to maximize profit. However, the preservation of the liquidity of a firm is an important objective too and it is the efficient management of the various components of working capital that helps to preserve liquidity. The goal of working capital management is to ensure that a firm is able to continue its operations and that it has sufficient ability to satisfy both maturing short-term debt and upcoming operational expenses. The management of working capital involves managing inventories, accounts receivable and payable, and cash. The management of working capital affects the liquidity and the profitability of the corporate firm and consequently its net worth. Working capital management therefore aims at maintaining a balance between liquidity and profitability while conducting the day to day operations of business concern.*

*The profitability and the efficiency of every sector in the nation have direct bearing on the prosperity of economy which can be primarily achieved through efficient working capital management practices. It helps in designing a framework to smoothen the financial constraints of business so as to make effective use of its resources. Keeping in mind the significance of working capital management an attempt has been made to examine its impact on the profitability of Indian industries.*

**Key words:** Working Capital, Profit Maximization, Profitability, Accounts Receivables, Industry.

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## 1. Introduction:

Management of working capital is an important component of corporate financial management because it directly affects the profitability of the firms. Management of working capital refers to management of current assets and of current liabilities. Researchers have approached working capital management in numerous ways. While some studied the impact of proper or optimal inventory management, others studied the management of accounts receivables trying to postulate an optimal way policy that leads to profit maximization.

Every business needs adequate liquid resources in the short term to maintain day-to-day cash flow needed for operations. However, this does not mean working capital is only important in the short run because adequate liquidity is also needed to ensure the survival of the business in the long run. Profitability and liquidity are at most important issue for any firm to tackle in the modern world.

These liquidity and profitability decisions are contradictory to each other for finance managers. The managers of the firm should formulate proper policies on working capital management in order to achieve the desired goal.

## 2. Review of Literature:

**Prof. Roland Smith,(2017)** Says that “Working Capital is usually defined as the excess of current assets over current liabilities and is calculated as Current Assets minus Current Liabilities in the balance sheet. If Current Assets are more than Current Liabilities, this is a surplus figure and, if less, a negative figure”.

**Criscent Ike Eya (2016)** “This study examined the impact of working capital management on firm performance using Nestle Food Nigeria plc as a case study. The study was anchored on Behavioral Finance Theory, Economic Order Quantity (EOQ) Model and Theory of Capital Movement”.

**Mawutor (2014) and Kodithuwakku (2015)** on manufacturing companies of Ghana (2006-2010) and manufacturing companies listed on Columbia Stock exchange (2008-2012) respectively presented a similar view. The results showed that the working capital management had significantly negative influence on the profitability. Further, it was also shown in the analysis that the variables like growth, the size of the company and debt-equity ratio also had a strong influence on the profitability apart from the working capital management.

**Oladipupo and Okafor (2013)** examined the implications of a firm’s working capital management practice on its profitability and dividend payout ratio. The study focused on the extent of the effects of working capital management on the Profitability and Dividend Payout Ratio.

**Panigrahi (2012)** based on the case study on the cement company in India, i.e. ACC Ltd. During 1900-00 to 2009-10 found that there existed a moderate relationship between working capital management and profitability as few working capital variables had a positive impact on profitability while the others had negative. It was concluded that even though there was some influence of working capital management on the profitability, it was highly insignificant.

**Maradi, Salehi and Arianpoor (2012)** compared working capital management of two groups of listed companies in Tehran Stock Exchange (TSE), which comprised of chemical industry and medicine industry. In chemical industry, 34 companies and medicine industry, 30 companies were selected and information related to these companies was gathered over 10 years (2001-2010) and analyzed using OLS multiple regression. The results show that, in medicine industry compared to chemical industry, debt ratio makes more impact on reduction of net liquidity.

**Mathuva (2010)** in his study on the influence of working capital management on corporate profitability found that there exists a highly significant negative relationship between the time it takes for firms to collect cash from their customers and profitability. He explained that the more profitable firms take the shortest time to collect cash from the customers.

**Sarbapriya Ray (2012)** the study assess the relationship among working capital management components and the profitability for the Indian manufacturing firms using a sample of 311 Indian manufacturing firms through the periods of 1996/1997 to 2009/2010 and have studied the effect of different variables of working capital management including the average collection period, inventory turnover in days, average payment period, cash conversion cycle and current ratio, debt ratio, size of the firm and financial assets to total assets ratio on the net operating profitability of Indian firms. The result suggests a strong negative relationship between the measures of working capital management including the number of days accounts receivable and cash conversion cycle, financial debt ratio with corporate profitability.

**Raheman and Nasr (2007)** explains that working capital management has its effect on liquidity as well on profitability of the firm and hence studied the effect of different variables of working capital management including the average collection period, inventory turnover in days, average payment period, cash conversion cycle and current ratio on the net operating profitability of Pakistani firms. Debt ratio, size of the firm (measured in terms of natural logarithm of sales) and financial assets to total assets ratio were used as control variables. Their results showed significant negative relationship between variables of the working capital management and profitability of the firm. It means that as the cash conversion cycle increases it will lead to decreasing profitability of the firm, and managers can create a positive value for the shareholders by reducing the cash conversion cycle to a possible minimum level.

**According to Eljelly, (2004)** working capital management requires planning and controlling current assets and current liabilities in such a way that eradicate the threat of inability to meet short term liabilities and evade excessive investment in these assets. The relation between profitability and liquidity was examined, as measured by current ratio and cash gap (cash conversion cycle) on a sample of joint stock companies in Saudi Arabia using correlation and regression analysis. In a study, cash conversion cycle and size variable was found to be important than current ratio which affect profitability. The results were stable and had important implications for liquidity management in various Saudi companies. It was found that profitability and liquidity were negatively correlated. The study also revealed that there was great variation among industries with respect to the significant measure of liquidity.

**Ghosh and Maji( 2003)** in this paper made an attempt to examine the efficiency of working capital management of the Indian cement companies during 1992 – 1993 to 2001 – 2002. For measuring the efficiency of working capital management, performance, utilization, and overall efficiency indices were calculated instead of using some common working capital management ratios. Setting industry norms as target-efficiency levels of the individual firms, this paper also tested the speed of achieving that target level of efficiency by an individual firm during the period of study. Findings of the study indicated that the Indian Cement Industry as a whole did not perform remarkably well during this period.

### **3. Objectives of the Study**

- 1) To study the working capital and profitability position of the selected companies of the FMCG industry.
- 2) To examine the impact of working capital management on profitability of the selected companies of the FMCG industry.

### **4. Research Methodology**

The present study analyses the financial data of select 5 FMCG companies listed on the BSE India namely, Hindustan Unilever Limited (HUL), ITC Ltd., Marico Ltd., Nestle India Ltd. and Tata Coffee Limited. The financial data of the companies are collected for a period of 15 years from FY2002-03 to FY2015-16 from PROWESS software of the CMIE Database which has been suitably rearranged, classified and tabulated according to the requirements of the study. In addition, the Economic Survey of India of different years, research publications, various books, journals, newspapers, related websites, Publications of Bombay stock exchange (BSE) and National Stock exchange (NSE) of India have been viewed for collecting the required data.

#### **Variables:**

The study aims to analyze the impact of working capital management on profitability, for which one dependent variable, 4 independent variables and 3 control variables are chosen. The selection of the variables is influenced by conceptual knowledge of the researcher and the above studied literatures. The selected variables are mentioned below:

**Table 4.1: Variables Selected for the Study**

Categories	Variables	Formula
Dependent Variable	Return on Assets (ROA)	(Profit after Tax/ Total assets)
Independent Variables	Acid test Ratio or Quick Ratio (ATR)	Quick Assets/ Current Liabilities
	Current Assets to Total Assets Ratio (CTTR)	Current Assets/ Total Assets
	Current Assets to Sales Ratio (CTSR)	Current Assets/ Sales Ratio
	Current Ratio (CR)	Current Assets/ Current Liabilities
Control Variables	Debt Equity Ratio (DER)	Debt/ Shareholders' funds
	Growth	(Salest – Salest-1) / Salest-1
	Size	Log(Sales)

Source: Based on Literature Reviewed.

**Technique Applied:**

The selection of the techniques applied is based on the type of data and their measurement scale. Here, the financial data have been collected from 5 companies for 15 years. The data type is therefore, both cross-sectional and time series and is measured on a ratio scale. To test the hypothesis of the study, the following techniques/tools have been applied on the selected variables:

**Objective 1:**

Descriptive statistical tools: Mean, Standard Deviation (Overall, between and within), and Minimum & Maximum values.

**Objective 2:**

- Panel Data Regression: Pooled OLS Model, Fixed effect Model and Random effect Model
- To test the Model Fit: Hausman Test and Restricted F-test.
- Test for regression assumptions: Unit Root Test, Durbin Watson Test and Jarque Bera Test.

## 5. Data Collection:

### Analysis and Interpretation:

Table 5.1 titled “Descriptive Statistics: Working Capital Management Variables” measures the working capital and profitability position of the select companies. In the table, the financial ratios have been studied by using descriptive statistical techniques, namely, Mean, Standard Deviation (overall, between and within), Minimum and Maximum values. The table represents an overall picture of the working capital management of the companies under examination.

**Table 5.1: Descriptive Statistics Working Capital Management Variables**

Variable		Mean	Std. Dev.	Min	Max	Observation
ATR	Overall	0.31	0.15	0.06	0.71	75
	Between		0.07	0.19	0.36	5
	Within		0.14	0.08	0.66	15
CTTR	Overall	0.34	0.09	0.17	0.58	75
	Between		0.06	0.28	0.43	5
	Within		0.07	0.20	0.54	15
CTSR	Overall	0.25	0.13	0.11	0.67	75
	Between		0.13	0.14	0.48	5
	Within		0.04	0.15	0.45	15
CR	Overall	0.87	0.32	0.41	1.67	75
	Between		0.26	0.53	1.11	5
	Within		0.22	0.33	1.45	15
ROA	Overall	19.33	7.69	2.80	34.87	75
	Between		7.14	8.19	25.94	5
	Within		4.22	6.79	30.55	15

**Acid Test Ratio:** The overall mean value of the acid test ratio is 0.31 and the minimum and maximum value is 0.06 and 0.71. This shows that the companies are keeping a low level of quick assets in the business as the quick ratio is much below the normal thumb rule of 1:1. Further, the overall standard deviation is 0.15. According to the table, the companies show more time period variation (0.14) than cross-sectional variation (0.07). This means that the company's liquidity position varies more over the period of time.

**Current Assets to Total Assets Ratio:** The overall mean value of the Current Assets to Sales ratio is 0.34 and the minimum and maximum value is 0.17 and 0.58. This signifies that more of company's funds are invested in fixed assets than the current assets. Further, the overall standard deviation is 0.09. The companies, as per the results, show more time period variation (0.07) than cross-sectional variation (0.06). This shows that the company's liquidity position varies more over the period of time.

**Current Assets to Sales Ratio:** The overall mean value of the Current Assets to Sales ratio is 0.25 and the minimum and maximum value is 0.11 and 0.67. This depicts that the current assets are used efficiently to generate sales. Further, the analysis shows that the overall standard deviation is 0.13 and the companies have more cross-sectional variation (0.13) than time period variation (0.04). This depicts that the company's liquidity position varies from company to company.

**Current Ratio:** The overall mean value of the Current ratio is 0.87 and the minimum and maximum value is 0.41 and 1.67. This means that the companies are keeping a low level of current assets as the current ratio is much below the preferred level of 2:1. Further, the overall standard deviation is 0.32. The companies show more cross-sectional variation (0.26) than time period variation (0.22). This means that the company's liquidity position varies more company-wise.

**Return on Assets:** The overall mean value of the Return on Assets is 19.33 and the minimum and maximum value is 2.80 and 34.87. This shows that the company's efficiency to generate profits by using their total assets. According to the results, the companies are able to generate a maximum of 34.87 per cent of the profits from the total assets. Further, the overall standard deviation is 7.69. The companies show more cross-sectional variation (7.14) than time period variation (4.22). This means that the company's profitability position varies more company-wise.

The results signify that the company's overall working capital position and profitability position is not satisfactory. The companies are maintaining less working capital in the business and on the contrary, the profitability position of the companies is not good.

## 6. Findings

- 1) The overall mean value of the acid test ratio is 0.31 and the minimum and maximum value is 0.06 and 0.71.
- 2) The overall mean value of the Current Assets to Sales ratio is 0.34 and the minimum and maximum value is 0.17 and 0.58. This signifies that more of company's funds are invested in fixed assets than the current assets.
- 3) The Current Assets to Sales ratio is 0.25 and the minimum and maximum value is 0.11 and 0.67. This depicts that the current assets are used efficiently to generate sales.
- 4) Return on Assets is 19.33 and the minimum and maximum value is 2.80 and 34.87. This shows that the company's efficiency to generate profits by using their total assets.
- 5) The selected industries working capital management is not satisfactory by overall performance.

## 7. Suggestions & Conclusion

The FMCG industry is one of the prominent industries of the Indian manufacturing sector. The study aims to find out the impact of working capital management on the firm profitability of the select FMCG companies for the period 2002-03 to 2015-16. The results of the study signify that the companies kept limited funds for their working capital needs during the period under study. Further, the profitability position suggests that the companies earned a low level of profits during the study period which varies from company to company.

Based on the panel data regression analysis, the results show that there is positive relationship between working capital variables (ATR, CTTR and CR) and ROA. The results are in favor of the literature studied such as Bamal et al (2013) and Toby (2008). However, the study found that there are other factors like size of the firm, growth and leverage that have significant impact on firm profitability. It is suggested that the firms need to manage their working capital effectively by making optimum investment in current assets. The companies' managers must also focus on the other factors like leverage, growth and size of the companies in order to maximize the profits of the companies.

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