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### Relationship between Working capital and Profitability of Food and Beverage Product Industry

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#### **Abstract**

Working capital plays a vital role in a business enterprise, as it helps the companies to maintain enough cash flow to meet its short-term goals and obligations. Working capital or net working capital is the difference between a company's current assets and its current liabilities. Working capital management is important for Nestle industries, as they deals with anonymous current assets and current liabilities. Data of Nestle India Limited was collected for five years from its secondary source and analysed. The study helps to determine the impact of working capital on the firm's profitability. Pearson's correlation analysis was calculated to find the relationship between the firm's working capital and its profitability. It was found that the relationship was positively correlated between working capital and profitability, and suggested the company to maintain this positive relationship constantly without any further changes.

Keywords: Working capital, Profitability, Current assets, Current liabilities, Pearson correlation, Statistical analysis.

#### 1. Introduction

Effective management of working capital is an important prerequisite for successful working of a business concern, as it reduces the chances of business failure and security confidence in the minds of personnel in the organization to assure the solvency of steady organization. Working capital is one of the salient measure of a firm's efficiency. The literature on working capital management has found that efficient management can enhance profitability and increase the value of the firm. It has been widely accepted that the profitability of a business concern likely depends upon the way it's working capital is managed. Proper analyzing of working capital increases the profit margin of a firm. An effective management of working capital, by optimizing the use of funds, enhances the profitability of the organization.[1-5].

#### 2. Objective of the study

The relationship between the working capital and profitability has become a the fascinating topic among the financial management of an organization. Proper analyzing of working capital increases the profit margin of a firm. To determine the impact of working capital on the firm's profitability, it is necessary to analyze the relationship between these two. The study focus on the objective – "To study the impact of working capital on firm's profitability".

#### 3. Review of literature

Literature review gives an idea to carry out the study by providing a skeleton for further research. Part of such reviews has been existing below:[6-10]. Prof. Kruti A. Patel (2015), have done a research on "Impact of working capital management on profitability in Indian Petroleum industries with reference to Indian Oil Corporation". The study has

limited to five years from 2009-10 to 2013-14. The findings of the paper, about how the components of WC are affecting the profitability. From the study, the author concluded that the excess of working capital leads to inflation and inadequate working capital leads to deflation.Mrs. Poonam Gautam Sharma and Ms. Risham Preet Kaur (2016), both made an attempt to study the "Working capital management and its impact on profitability: A case study of Bharti Airtel Telecom Company". This study focus on relationship between profitability and liquidity of the selected company. The researcher gathered both income statement and balance sheet as their secondary data. They finally concluded that there exists significant negative relationship between liquidity and profitability during the period under study. Dr. Ashok Kumar Panigrahi (2012), the author made an attempt on the "Impact of working capital management on profitability of ACC LTD". The ultimate objective of this research has been specifically designed to instigate the dependence of profitability on working capital management of ACC Ltd., the leading cement industry of India for the period of 2000 -2010, with the help of the regression model, hypothesis and correlation analysis. The results indicate that there is a moderate relationship between working capital management and firm's profitability.[11-14].

#### 4. Scope and Limitations

Study on working capital helps to enhance the profitability of the firm. This study deals with the overall performance of working capital management and the impact of working capital management on firm's profitability. The study helps out to increase the profitability of the firm using various analyses. Hence, this study also improves the financial standard of Nestle India Limited. The study is wholly based on the secondary data obtained from the annual report of Nestle India Limited. The research is drew on a single company only .Hence, it will reflect just a partial view of working capital in the worldwide NESTLE company.

#### 5. Methodology

The paper is based on analytical tools which purely depend on the facts that are provided. The secondary data of NESTLE India Limited has been analysed for the purpose of the study. No primary data have been taken into consideration. Secondary data includes various articles, books, annual reports,

journals and magazines. The data for analysis part has been assembled from the annual report of the company. The study period is for the past five financial years, i.e., from FY 2015 to FY 2019. The financial year of Nestle India Limited was based on the calendar year (January to December). In an attempt of analysing the impact of working capital on the profitability of NESTLE India Limited, 'Correlation analysis' has been applied.

#### 5.1. Correlation

The term correlation is the measure of a linear relationship between two variables. When one variable in correlation increases, the other will also increase in vise versa. The variables changes together at a constant rate. Correlation shows a statistical relation between two random variables. Correlation contains three possible results, they are;

- Positive correlation
- Negative correlation
- ➤ No correlation

In the correlation analysis, '1' denotes a perfectly positive correlation; '-1' denotes a negative correlation and '0' denotes no correlation. Finally, '-1 to 1' shows the strength of the correlation. In a weak correlation, the variables are hardly related. Pearson's correlation coefficient helps to measure the strength of linear regression.

#### **6.** Analysis and Findings

Data analysis is necessary for an organization to understand its problems and to explore the data. In this study, we calculate and analyze the relationship between working capital management and the profitability of Nestle India Limited.

### **6.1 Impact of Working Capital on the Profitability**

Table 1 shows the 'Net working capital and Net profit' of the firm. The net working capital of Nestle limited was increasing between the years of 2015-2018 and it falls in the year 2019. Net profit of the firm was increasing steadily during the study period. The below 'Descriptive Statistics' table 2 shows the Mean and Standard Deviation of Net Working Capital and Net Profit. 'N' denotes the number of years taken.

# 6.2 Relationship between Net Working Capital and Net Profit of Nestle India ltd. – Correlation Analysis

From Table 3, we found that the value of Pearson's Correlation is 0.494 (lies between 0 to +1) which indicates a positive relationship. The acceptance of

null hypothesis is proved to be false; it shows that there is a relationship between the working capital and profitability. In this analysis, NWC and NP is noted to be positively correlated. Hence, it proves that 'working capital has a positive impact on profitability' during the study period.

Table.1.Net working capital and Net profit

YEAR	NWC	NP
ILAK	(Rs.)	(Rs.)
2015	1003.88	563.27
2016	1916.05	1001.36
2017	2444.68	1225.19
2018	2882.00	1606.93
2019	1669.66	1969.55

(Source: Secondary source)

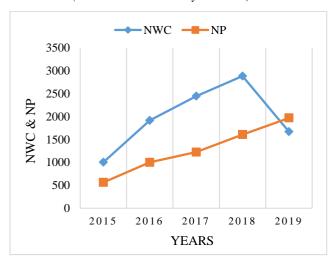


Fig.1. Net Working Capital and Net Profit of Nestle India Ltd.

Table.2. Mean and Standard Deviation of Net Working Capital and Net Profit

	MEAN	STANDARD DEVIATION	N
NWC	1983.254	721.5763	5
NP	594.182	542.3287	5

(Source: Microsoft Excel)

**Note:** MS Excel and IBM SPSS software have been used for analysing the data.

**Table.3. Pearson's Correlation** 

		NWC	NP
	Pearson Correlation	1	.494
NWC	Sign. (2-tailed)		.398
	N	5	5
	Pearson Correlation	.494	1
NP	Sign. (2-tailed)	.398	
	N	5	5

(Source: IBM SPSS software)

#### **6.3.** Hypothesis Testing

H0: There is no relationship between the working capital and the profitability.

H1: There is a relationship between the working capital and the profitability.

#### Conclusion

The purpose of working capital management is to maintain the sufficient cash flow of an organization. It is essential for an organization to monitor its working capital, whether it has appropriate balance to meet the short-term and long-term obligations. The impact of working capital on profitability was identified by using correlation analysis as a tool. The correlation value for net working capital and net profit lies between 0 to +1, which was r = 0.494. This shows a positive relationship between the firms working capital and profitability. The relationship between net working capital and net profit are positively correlated. So, we suggest the company to maintain this positive relationship constantly without any further changes. In the study of working capital management of Nestle India Limited, we conclude that the firm should maintain adequate working capital to manage the efficiency of liquidity and profitability of an organization.

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