



Working Capital and its Impact on Profitability: Study on the Listed Food Processing Companies in India

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ABSTRACT:

The study has been conducted on the working capital management and its impact on profitability of the listed food processing companies in India. The main objective of this research is to analyse trends in the working capital management that impact the profitability of food processing companies in India. The study used secondary data of 5 companies' observations between 2015 to 2019. The five companies selected for this study are: Britannia industries Ltd, Heritage foods Ltd, Parag milk food Ltd, Nestle India Ltd and Tasty bite eatables Ltd. The data analysed using Descriptive Analysis, Correlation Analysis and Regression. The result reveals that independent variables (ICP, DCP and CCP) in this study are positively related to the dependent variable (EBIT). In any case working capital is a particularly important topic in industry due to the continuous development of technology and rapid changes in business environment. The Indian food processing companies are part of this study as the population goes the consumption is more compared to many countries. This study is conducted on top food processing companies which are listed on BSE (Bombay Stock Exchange).

KEYWORD: Working capital, Descriptive analysis, Correlation Analysis, Regression Analysis, Indian Companies

1. INTRODUCTION:

Working capital management is an area which is very widely revisited by academicians along with capital budgeting, Lazaridis and Tryfonidis (2006). In the financial theory and economic practice, a high level of current assets, through the generation of excessive liquidity costs, exercises a negative influence on the company profitability, whereas their insufficient level may increase a risk of the loss of liquidity, and as a consequence, lead to a range of difficulties in maintaining undisturbed operation of an enterprise (Van Horne and Wachowicz, 2004).

Working Capital refers to the portion of total fund which is used to finance the day – to – day working expenses of an organization. Working capital is required to fund current assets such as shares, debtors, marketable securities, short-term loans and advances, and advance tax payments, among others. Working capital management is the most critical aspect in ensuring the organization's liquidity, profitability, existence, and solvency. Smith (1980) emphasised the significance of striking a balance between working capital management's profitability and liquidity aims. The decision to increase profitability at the expense of appropriate liquidity is a bad one. When the focus is on liquidity, on the other hand, the firm's profitability suffers. A firm's current assets may not meet its current liabilities if it does not manage its liquidity properly. The Indian food companies accounts for 32% of the country's total food market. The food industries make a contribution about 13% of GDP in India. The importance of working capital management in a business enterprise cannot be underplayed, company basically requires sufficient capital in conducting operational activities. It is company's assets that are rotated continuously in accordance with company objective. Previous study on working capital management and business performance (Garcia-Teruel and Martinez-Solano (2007), Deloof (2003), and Wang (2002)) found a linear link between working capital investment and firm profitability. According to the findings, reduced working capital investment leads to higher profitability. Companies, on the other hand, have an optimal working capital level, according to Banos-Caballero et al. (2010a), which balances costs and benefits to maximise profitability. According to their findings, the level of working capital and profitability have a concave connection. The monitoring of an optimal level of working capital determinants (e.g., inventory, accounts receivables, cash, and current liabilities) is becoming more critical as a result of increased pressure to deliver shareholder value (Afza and Nazir, 2009). Current assets account for half or more of the entire asset value in many businesses, and they are financed from a variety of sources. To some extent, this necessitates the necessity to rationally shape their level. The theoretical importance of the working capital component of the profitability ratio is clear: the less time a company needs to realise cash from customers compared to the time it takes to pay off its creditors, the better its liquidity position is, and the risk of relying on external, more expensive sources of capital is reduced. As a result, organisations with a shorter cash conversion cycle are thought to be more efficient. Many studies have been conducted in this area around the world, with some focusing primarily on optimising accounts receivable management so that firms can maximise profit, as seen in Besley, Scott, and Meyer (1987), others focusing on the relationship between profitability and working capital efficiency, as seen in Lazaridis and Tryfonidis (2006), others focusing on the impact on cash due to working capital component management, as seen in Cote and Latham (1999, p. 261), and still others (2001).

The data was taken from five packaged food firms that are listed on the Bombay Stock Exchange and have the biggest total assets of all food producers in the last five years. Descriptive analysis, correlation analysis, regression, working capital management, and the cash conversion cycle are all included in this research.

2. LITERATURE REVIEW:

2.1 Working Capital Policy and Profitability:

Working capital has a substantial impact on profitability, as well as the danger of losing business and production process delays. Larger stocks, according to Blinder and Maccini (1991), can reduce manufacturing process disruptions and commercial loss owing to product unavailability. Furthermore, granting trade credit boosts sales since customers can inspect the product and service quality before making a payment (Long et al., 1993). Emery (1987) noted that trade credit promotes clients to buy at periods when demand is low. Furthermore, trade credit may aid in the strengthening of long-term supplier-customer relationships. As a result, a high working capital investment is predicted to boost profitability. Deloof (2003), on the other hand, theorises that if enterprises limit their obtained trade credit duration, they may not be able to verify the quality of their products. In addition, Soenen (1993) pointed out that high working capital investments can lead to bankruptcy. Furthermore, inventory holding costs include warehousing costs, insurance, and security costs. As a result, increased working capital investment may have a detrimental impact on the firm's profitability. As a result, there may be an inverted U-shaped relationship between a firm's profitability and its level of working capital (Banos-Caballero et al., 2010a)

2.2 Efficiency of Working Capital Management:

Ganesan (2007) examined the effectiveness of working capital management using days sales outstanding, days inventory outstanding, days payable outstanding, current ratio, cash conversion efficiency (cash flow from operations/ sales), income to total assets, and income to sales ratio. Shin and Soenen (1998) used the net trade cycle as a measure of working capital efficiency, and Raheman et al. (2010) used the cash conversion cycle as a measure of working capital efficiency. For both measurements, the turnover periods are used to calculate the results. To quantify the efficiency of working capital management, Bhattacharya (1997) established performance indexes, usage indexes, and efficiency indexes, which were employed in the study.

3. OBJECTIVES:

- To analysing the Impact of working capital management on profitability of selected food processing companies.
- To analyse the relationship between WCM and Profitability.

4. RESEARCH METHODOLOGY:

Methods used in the research of this study are:

4.1 Data selection:

The population of the present study is 5 food processing companies that are listed in BSE. Those 5 companies are: Britannia industries Ltd, Heritage foods Ltd, Parag milk foods Ltd, Nestle India Ltd and Tasty bite eatables Ltd. The financial data of the companies as been taken from 2015-2019.

4.2 Variables and Techniques used:

4.2.1 Variables:

ICP = Inventory Conversion Period.

DCP = Debtors Conversion Period.

CCP=Creditors Conversion Period.

EBIT=Earning before interest and taxes.

Where, ICP, DCP, CCP are considered as independent variable and EBIT is considered as dependent variable. The detailed analysis is carried out based on the above-mentioned variables.

6.2.2 Techniques used:

The techniques selected for the data analysis of the firms is :

- **Descriptive statistics** which reveal mean, median, standard deviation, standard error, skewness, minimum, maximum have been taken

into the analysis.

- **Regression analysis** has been used to know the impact of variables.
- **Correlation analysis** this analysis shows how the variables are correlated to one another.

5. DATA ANALYSIS:

Table No.01:

Variables	ICP	DCP	CCP	EBIT
2015	53.8	19.4	55	439.804
2016	61.2	22	54.4	636.822
2017	74	19.6	62.4	729.304
2018	73	21.8	67.2	876.636
2019	75.4	21.4	68.2	983.75

INTERPRETATION: The above table shows the average of all the variables (ICP, DCP, CCP, EBIT) selected for the study from the study of five companies from 2015-2019.

6.1 Descriptive analysis:

Descriptive Analysis is the type of analysis of data that helps describe, show or summarize data points in a constructive way such that patterns might emerge that fulfill every condition of the data.

Table No.02:

Variables	ICP	DCP	CCP	EBIT
Mean	67.48	20.84	61.44	733.2632
Standard Error	4.256102	0.55641711	2.922602	94.53419464
Median	73	21.4	62.4	729.304
Standard Deviation	9.516932	1.244186481	6.535136	211.3848854
Kurtosis	-1.40998	-3.084950824	-2.95176	-0.57359694
Skewness	-0.90182	-0.491380929	-0.17183	-0.331097942
Minimum	53.8	19.4	54.4	439.804
Maximum	75.4	22	68.2	983.75

INTERPRETATION: The above table shows the analysis of the given data in the descriptive form. The Mean of ICP=67.48, DCP=20.84, CCP=61.44 and EBIT =733.2633 respectively. The Median of ICP=73, DCP=21.4,

6.2 Correlation Analysis:

Correlation analysis in research is a statistical method used to measure the strength of the linear relationship between two variables and compute their association.

Table No. 03:

Variables		ICP	DCP	CCP	EBIT
	1				
ICP	0.913768	1			
DCP	0.482912	0.296938431	1		
CCP	0.948422	0.900016072	0.283854	1	
EBIT	0.993111	0.915830064	0.564187	0.920087244	1

INTERPRETATION: The above table shows the relationship between the given data. The above data is positively related.

6.3 Regression Analysis:

Regression analysis is a powerful statistical method that allows you to examine the relationship between two or more variables of interest. While there are many types of regression analysis, at their core they all examine the influence of one or more independent variables on a dependent variable.

Table No. 04:

Regression Statistics	
Multiple R	0.987721
R Square	0.975594
Adjusted R Square	0.902374
Standard Error	66.04741
Observations	5

INTERPRETATION: The above table shows that the ability to predict EBIT is (R square is 0.975594) i.e., 97.55% by difference in the activities of ICP, DCP and CCP, with Adjusted R Square of 0.902374 and Standard error of 66.04741.

6.3.1 ANOVA:

Table No.05:

ANOVA					
	df	SS	MS	F	Significance F
Regression	3	174372.0184	58124.01	13.32428526	0.198100355
Residual	1	4362.260714	4362.261		
Total	4	178734.2791			

INTERPRETATION: The above table shows the result of ANOVA with F value 13.32428526 and Significance F value of 0.198100355. Significance F value is less than F value.

7. CONCLUSION

Main purpose of this study is to identify the impact of working capital management on profitability of food processing companies. Ebit is used for the purpose of measuring profitability. The correlation between independent variables (ICP, DCP and CCP) and dependent variable is positively related, which means increase in any of independent variable leads to increase in the dependent variable in this study. If these companies properly manage their cash, accounts receivable and inventories, it will ultimately increase the profitability of these companies. We can also conclude that these results can be amplified as companies manage their working capital more efficiently. If these companies properly manage their cash, accounts receivable, payable and inventory, it will ultimately increase the profitability of these companies.

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