Indian Journal of Accounting (IJA)
ISSN : 0972-1479 (Print) 2395-6127 (Online) Vol. XLIX (1), June, 2017, pp. 117-126

IMPACT OF WORKING CAPITAL MANAGEMENT ON FIRM PROFITABILITY: A STUDY OF SELECT FMCG COMPANIES IN INDIA

Reeti Gaur*
Dr. Rajinder Kaur**

ABSTRACT

Working Capital Management (WCM) is one of the pre-conditions for the financial management of the companies. It aims at maintaining an adequate amount of readily available cash resources in the business for carrying out the daily operations of the company. Simultaneously, the managers also need to keep a watch on the profitability position of the company. The corporate managers try to maintain an efficient working capital management by maintaining a good liquidity position in the business without jeopardizing the level of profit earned. It, therefore, becomes important for them to determine a trade-off between profitability and liquidity position of the companies for their smooth running and expansion. In this context, in the proposed paper, an attempt has been made to examine the working capital management of Fast Moving Consumer Goods (FMCG) companies in India and its impact on the profitability of these companies. The analysis is done on the select 5 companies listed on Bombay Stock Exchange (BSE) in India for a period of 15 years during 2000-01 to 2013-14 using panel data regression. The study reveals that there is a positive relationship between working capital and profitability. However, the profitability of the companies is strongly affected by other factors like capital structure, growth and size of the companies.

KEYWORDS: *Working Capital Management, Profitability, Return on Asset (ROA).*

Introduction

The Indian FMCG industry is today, the fourth largest industry in the economy with the revenue generation of USD 47.3 billions during 2015.The industry deals with packaged consumer goods having a shift turnover and relatively low cost. The goods generally, include soaps, beauty products, oral care products, foot wears, dairy products, food and beverages along with non-durables like bulbs, stationary products and plastic products. The basic characteristic of these goods is that they are replaced within a year. The innovative electronic items such as mobile phones, digital camera, Laptops and MP3 players are also included in FMCGs as these are replaced more often than other electronic items. The industry has brought a change in the life of every Indian and has the widest reach among all sectors in India. A major part of the monthly budget of each household is secured for FMCG products. Working capital management is one of the prominent issues being looked upon by the managers of companies in this

* *Research Scholar, Department of Commerce, Punjabi University, Patiala, Punjab, India.*
** *Professor, Department of Commerce, Punjabi University, Patiala, Punjab, India.*

industry nowadays. The reason being the basic characteristics of the products the companies deal with, that require continuous movement of funds in the business without affecting the profit earned. The managers study the concept of working capital in depth and frame policies for managing working capital efficiently. Working capital refers to that portion of capital is invested in current assets such as inventory, finished goods, debtors and cash for daily operations for a short duration generally one accounting period. The two most important objectives while managing working capital are: Profitability and Solvency i.e. meeting the obligations of creditors and lenders.

A company is incorporated with the basic objective of profit maximization. For having a good profitable position, the company may sacrifice its solvency and maintain a low level of current assets. In such a case, firm's profitability will improve as funds are not idle, but used for productive purposes, but its solvency would be endangered. This may lead to problems like cash shortage and stock outs.

On the other hand, to ensure solvency, the firm should be liquid, i.e. it should carry larger current asset holdings. This will ensure no difficulty in paying to the creditors when they become due and ensure smooth production. Maintaining larger asset holdings means a considerable amount of funds will remain idle in the form of working capital and to the extent this fund will be idle, the firm's profitability will suffer. A good liquidity position is the significance of the margin of safety for the creditors. On the other hand, a good profitable position is the significance of a successful running business for the stakeholders. Working capital management aims at maintaining a balance between the liquidity and profitable position of the companies. In this context, the present study is proposed to know the working capital management of the select FMCG companies and its effect on the profitability of these companies.

Literature Review

Following reviews covers research studies conducted on working capital and its relation with profitability:

- **Narware (2004)** examined National Fertilizer Ltd. for the years, 1991-2001 to know the impact of working capital on the profitability of the company. The results showed that there existed both positive and negative associations between working capital variables and profitability. The author also found that the working capital management of the company had low influence over the profitability which was insignificant at 0.05 per cent level of significance and significant at 0.50 per cent level of significance.
- **Toby (2008)** had different findings based on the study conducted on Nigerian manufacturing companies during 1990-2002. The study showed that with a 1 per cent increase in the liquidity, the profitability also showed a tremendous increase. It was concluded that there was a statistically positive and significant influence of liquidity ratios on the profitability.
- **Anandasayanam (2011)** studied 80 Sri Lankan Listed companies for the years 2003 to 2009 and refuted the earlier results. The results of this study were based on panel data analysis and also took into consideration variables like growth, size of company and debt-equity ratio as control variables. The results showed that working capital management had a significantly negative impact on the profitability of the companies. Moreover, the study disclosed that the influence of other variables like growth, size and financial structure should not be ignored. The author suggested the companies to keep their conversion period minimum in order to maximize profits.
- **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.

- **Mansoori and Muhammad (2012)** provided evidences from the Companies listed on Singapore stock exchange after a study done for the period commencing from 2004 to 2011. The results of the study were at parity with the study conducted by Anandasayanam (2012). Taking into consideration the different economic sectors, the results showed the effect of working capital management on the profitability of the companies. The study, therefore, suggested that the managers must efficiently manage their working capital for increasing the profitability.
- **Bamal et al (2013)** made a comparative analysis of chemical and pharmaceutical industries in India from 2002 to 2011 to understand the relationship between working capital management and profitability. The findings depicted that the working capital management variables had a strong positive association with the profitability variables of the chemical industry than that of the pharmaceutical industry. The working capital variables had positive but insignificant influence on the profitability position of the pharmaceutical companies.
- **Lastly, the research works by 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.

The above reviewed literatures included both national and international studies conducted during different time period from 1990 to 2012. Except for Toby (2008), all the international research works showed that the working capital management had a strongly negative effect on the profitability of the companies. In India, however, this generalization could not be made due to the difference in the viewpoints of the researchers based on their studies. The present study aimed at studying the working capital management of the FMCG industry and its impact on the profitability. The study has tried to fill the gaps existed in the earlier studies and provide a more generalized opinion.

Table 1: Tabular view of the Literatures Reviewed

S. No.	Researcher	Company	Time Period	Impact of WCM on Profitability
1	P.C. Narware (2004)	National Fertilizer Ltd., India	1991-2000	Both negative and positive, but insignificant
2	Adolphus J.Toby (2008)	Nigerian Manufacturing Companies	1990-2002	Positive and significant
3	Saradhadevi Anandasayanam (2011)	80 Sri Lankan Listed firms	2003-2009	Negative and Significant
4	Dr. Ashok Kumar Panigrahi (2012)	ACC Ltd., Cement Company	1999-00 to 2009-10	Moderate and Insignificant
5	Ebrahim Mansoori and Datin Dr. Joriah Muhammad (2012)	Companies listed on the Singapore Stock Market	2004-2011	Negative and significant
6	M.S. Turan, Sucheta Bamal, Babita Vashist, Nidhi Turan (2013)	Chemical Industry and Pharmaceutical Industries, India	2002-2011	Chemical Industry- Positive and significant impact Pharmaceutical Industry: Positive and insignificant
7	Dr. John Kwaku Mensah Mawutor (2014)	5 listed manufacturing companies, Ghana	2006-2010	Negative and Significant
8	Sujeewa Kodithuwakku (2015)	20 Manufacturing companies listed on Columbia Stock Exchange	2008-2012	Negative and Significant

Source: *Prepared based on the literatures reviewed for the study*

Objectives of the Study

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

Hypothesis of the Study

H_{01}: There is no significant impact of the Acid Test Ratio (ATR) on Return on Assets (ROA).

H_{11}: There is a significant impact of the Acid Test ratio (ATR) on Return on Assets (ROA).

H_{02}: There is no significant impact of the Current assets to total asset ratio (CTTR) on Return on Assets (ROA).

H_{12}: There is a significant impact of the Current assets to total asset ratio (CTTR) on Return on Assets (ROA).

H_{03}: There is no significant impact of the Current asset to Sales ratio (CTSR) on Return on Assets (ROA).

H_{13}: There is a significant impact of the Current asset to Sales ratio (CTSR) on Return on Assets (ROA).

H_{04}: There is no significant impact of the Current ratio (CR) on Return on Assets (ROA).

H_{14}: There is a significant impact of the Current ratio (CR) on Return on Assets (ROA).

Research Methodology

The research methodology of the study covers:

- **Data Collection:** 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 FY2000-01 to FY2013-14 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 2: 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.

- **Analysis and Interpretation:** Table 3 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 3: 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

Source: *Computed from financial data taken from PROWESS*

According to the Table 3

- **Acid Test Ratio:** The overall mean value of the acid test ratio is 0.31 and theminimum 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.

Panel Data Regression

In order to test the hypothesis the financial data collected is arranged and classified as panel data series on which panel data regression is applied. The models formulated for the panel data regression are as follows:

- **Model 1:** $ROA_{it} = \beta_{1i} + \beta_2 ATR_{it} + \beta_3 DER_{it} + \beta_4 Growth_{it} + B_5 Sizeit + u_{it}$ ---------- (I)
- **Model 2:** $ROA_{it} = \beta_{1i} + \beta_2 CTTR_{it} + \beta_3 DER_{it} + \beta_4 Growth_{it} + B_5 Sizeit + u_{it}$ ---------- (II)
- **Model 3:** $ROA_{it} = \beta_{1i} + \beta_2 CTSR_{it} + \beta_3 DER_{it} + \beta_4 Growth_{it} + B_5 Sizeit + u_{it}$ ---------- (III)
- **Model 4:** $ROA_{it} = \beta_{1i} + \beta_2 CR_{it} + \beta_3 DER_{it} + \beta_4 Growth_{it} + B_5 Size_{it} + u_{it}$ ---------- (IV)

Where,

i is the individual, i.e. company,

t is the time period,

β_1 is the intercept,

β_2, β_3 andβ_4 are the slope co-efficients and

u_{it} is the error term of the company, I at time t.

There are 75 observations on which the regression analysis will run. Prior to this, the best regression model fit for the study is to be determined out of the available options, namely, Pooled OLS Model, Fixed Effect Model and Random Effect Model.

Checking the Model Fit

Before analyzing the results of the regression analysis, it is best to select the best model fitted for the dependent variable, ROA. For this purpose, the R^2 value (test for level of variability in outcome by its predictors) and the Durbin Watson test value (test for auto-correlation) are checked. For further clarity, the two appropriate tests, i.e., Hausman Test and Restricted F-test is used for this purpose. The Hausman test applied to check the appropriateness between the Random effect model and fixed effect model. The restricted –test is used to decide between pooled OLS and fixed effect model. The results of the Models available are below mentioned:

Table 4.1: Results of Regression Models with Dependent Variable, Return on Asset (ROA) and Independent Variable, Acid Test Ratio (ATR)

Model 1: $ROA_{it} = \beta_{1i} + \beta_2 ATRit + \beta_3 DER_{it} + \beta_4 Growth_{it} + \beta_5 Size_{it} + u_{it}$

Model	R-squared	Adjusted R-Squared	Probability (F-Statistics)	Durbin Watson
Pooled OLS	0.50	0.47	0.00	0.34
Fixed effect	0.83	0.81	0.00	1.18
Random effect	0.50	0.47	0.00	0.34
Hausman test			0.00	
Restricted F-test			31.77 (0.00)	

Source: *Computed from financial data taken from PROWESS.*

Comparing the results of the three models (Pooled OLS, Fixed effect and Random effect) for independent variable, ATR in the above table (Table 4.1), it is found that though all the models are highly significant (p-value 0.00), the R^2 value (0.83) in the fixed effect model has increased and the Durbin-Watson test d value (1.18) is higher. This suggests that the other two models (Pooled OLS and Random Effect model) are mis-specified.

Table 4.2: Results of Regression Models with Dependent Variable, Return on Asset (ROA) and Independent Variable, Current Assets to Total Assets Ratio (CTTR)

Model 2: $ROA_{it} = \beta_{1i} + \beta_2 CTTR_{it} + \beta_3 DER_{it} + \beta_4 Growth_{it} + \beta_5 Size_{it} + u_{it}$

Model	R-squared	Adjusted R-Squared	Probability (F-Statistics)	Durbin Watson
Pooled OLS	0.56	0.53	0.00	0.36
Fixed effect	0.85	0.83	0.00	1.19
Random effect	0.56	0.53	0.00	0.36
Hausman test			0.00	
Restricted F-test			30.98 (0.00)	

Source: *Computed from financial data taken from PROWESS.*

Comparing the results of the three models (Pooled OLS, Fixed effect and Random effect) for independent variable, CTTR in the above table (Table 4.2), it is found that though all the models are highly significant (p-value 0.00), the R^2 value (0.85) in the fixed effect model has increased and the Durbin-Watson test d value (1.19) is higher. This recommends that the other two models (Pooled OLS and Random Effect model) are mis-specified.

Table 4.3: Results of Regression Models with Dependent Variable, Return on Asset (ROA) and Independent Variable, Current Assets to Sales Ratio (CTSR)

Model 3: $ROA_{it} = \beta_{1i} + \beta_2 CTSR_{it} + \beta_3 DER_{it} + \beta_4 Growth_{it} + \beta_5 Size_{it} + u_{it}$

Model	R-squared	Adjusted R-Squared	Probability (F-Statistics)	Durbin Watson
Pooled OLS	0.69	0.67	0.00	0.76
Fixed effect	0.83	0.81	0.00	1.21
Random effect	0.69	0.67	0.00	0.76
Hausman test			0.00	
Restricted F-test			13.90 (0.00)	

Source: *Computed from financial data taken from PROWESS*

Comparing the results of the three models (Pooled OLS, Fixed effect and Random effect) for independent variable, CTSR in the above table (Table 4.3), it is found that though all the models are highly significant (p-value 0.00), the R^2 value (0.83) in the fixed effect model has increased and the Durbin-Watson test d value (1.21) is higher. This shows that the other two models (Pooled OLS and Random Effect model) are mis-specified.

Table 4.4: Results of Regression Models with Dependent Variable, Return on Asset (ROA) and Independent Variable, Current Ratio (CR)

Model 4: $ROA_{it} = \beta_{1i} + \beta_2 CR_{it} + \beta_3 DER_{it} + \beta_4 Growth_{it} + \beta_5 Size_{it} + u_{it}$

Model	R-squared	Adjusted R-Squared	Probability (F-Statistics)	Durbin Watson
OLS	0.57	0.55	0.00	0.49
Fixed effect	0.83	0.81	0.00	1.17
Random effect	0.57	0.55	0.00	0.49
Hausman test			0.00	
Restricted F-test			24.63 (0.00)	

Source: *Computed from financial data taken from PROWESS*

Comparing the results of the three models (Pooled OLS, Fixed effect and Random effect) for independent variable, CR in the above table (Table 4.4), it is found that though all the models are highly significant (p-value 0.00), the R^2 value (0.83) in the fixed effect model has increased and the Durbin-Watson test d value (1.17) is higher. This depicts that the other two models (Pooled OLS and Random Effect model) are mis-specified. Finally, for more verification, Hausman Test for Fixed versus Random effect is applied for this. The test tells the most appropriate model for the analysis. In the study, in all the four models, the Hausman test P-value of the test comes to be below 0.05, which means that the null hypothesis (Random effect is appropriate) fails to accept and the fixed effect model is the appropriate one. On the other hand, Restricted F-test signifies the appropriateness of OLS Model versus Fixed effect Model. In the present study, the F-value is highly significant i.e.below 0.05. This symbolizes that the OLS Model (Restricted Regression) is invalid.

Checking the relevant Regression Assumptions

In the regression analysis, there are a few assumptions that may affect the direction and degree of relationship between the selected working capital and profitability variables. They may lead to spurious regression results because of multi-collinearity, serial correlation, non-stationary, not normal data and correlations of error term with dependent and independent variables. Before testing the hypothesis, the relevant assumptions of panel data regressions are to be satisfied. In all the administered models, Durbin Watson is close to 2 showing no serial correlation. The residuals of the models were proved to be stationary and normal after applying ADF test and Jarque Bera test respectively. Further, there was no correlation of residuals with dependent and independent variables and no multi-collinearity between the independent variables. Hence, all the required assumptions are satisfied.

Regression Results

As per table 5, titled "Results of Panel Data Regression (fixed effect model)", R-squared value and the adjusted R-square value signify that the model explains more than 80% of the variation in the dependent variable.

Table 5: Results of Panel Data Regression (Fixed Effect Model)

Independent Variable	Slope co-efficient	P-value	R-squared	Adjusted R-Squared	Result
ATR	0.68	0.8296	0.83	0.83	Positive
DER	-7.43	0.0001			Not Significant
Growth	9.97	0.0007			
Size	4.85	0.0096			
CTTR	17.37	0.0074	0.85	0.83	Positive
DER	-5.93	0.0007			Significant
Growth	7.62	0.0079			
Size	5.53	0.0017			

CTSR	-7.30	0.4582	0.83	0.81	Negative
DER	-7.28	0.0001			Not Significant
Growth	9.62	0.0012			
Size	5.43	0.0053			
CR	0.48	0.8159	0.83	0.81	Positive
DER	-7.38	0.0002			Not Significant
Growth	9.92	0.0008			
Size	4.95	0.0068			

Source: *Computed from financial data taken from PROWESS*

The table (Table 5) shows that only CTTR (R^2= 0.85 and p-value 0.0074 4582 i.e. $p < 0.05$) has a significant positive relationship with the ROA. On the other hand, ATR (R^2= 0.83 and p-value 0.00744582 i.e. $p > 0.05$) and CR (R^2= 0.83 and p-value 0.8159 4582 i.e. $p > 0.05$) have a positive but an insignificant association with ROA and CTSR (R^2= 0.83 and p-value 0.4582 i.e. $p > 0.05$) has an insignificantly negative association. The table depicts that the maximum impact on profitability is explained by the control variables, viz-a-viz. DER, growth and the size of the companies.

Conclusion and Recommendations

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 2000-01 to 2013-14. 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.

References

- Anandasayanam, S. (2011), *Working Capital Management and Corporate Profitability: Evidence from Panel Data Analysis of Selected Quoted Companies in Sri Lanka,* International Conference University of Sairam (2011), pp. 1-10. Retrieved from http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2385940.
- Bamal, S. et al (2013), *Relationship Between Working Capital Management And Profitability: A Comparison of Chemical and Pharmaceutical Industries,* Journal of Accounting and Finance, Vol. 27(1) (October-March 2013), pp. 59-69.
- Chandra, P. (1993), *Fundamentals of Financial Management*, New Delhi, Tata McGraw-Hill.
- Gujarati, D. (2004), Basic Econometrics (4 ed), New York: The Mc-Graw-Hill Companies Higher Education.
- IBEF (2010), *Fast Moving Consumer Goods (FMCG) (Report).* Retrieved from Http://www.ibef.org/download/FMCG_270111.pdf.
- Khan, M.Y. and Jain, P.K. (1998), *Financial Management* (2nded.), New Delhi, Tata McGraw-Hill.
- Khatik, S.K. and Singh, P.K. (2004), *Working Capital Management in Indian Farmers Fertilizer Cooperative Limited- A Case Study*, The Management Accountant, (Jan 2004).

- Kodithuwakku, S. (2015),*Impact of Working Capital Management on Profitability of Manufacturing Companies of Colombo Stock Exchange (CSE) in Sri Lanka*, Proceedings of 12th International conference on Business Management (7-8 December, 2015), pp. 1-13.
- Malhotra, S. (2013), *Working Capital Trends and Liquidity Analysis of FMCG Sector in India,* IOSR Journal of Business and Management, Vol. 9, No.4 (Mar-April 2013).
- Mansoori, E. and Muhammad, J. (2012), *The Effect of Working Capital Management on Firm's Profitability: Evidence from Singapore,* Interdisciplinary Journal of Contemporary Research in Business, Vol. 4(5), pp. 472-486.Retrieved from (http://papers.ssrn.com/sol3/papers.cfm?n abstract_id=2185840 &rec= 1&srcabs= 2385940&alg=1&pos=5.
- Mensah, J.M.K. (2014), *Working Capital Management and Profitability of Firms: A Study of Listed Manufacturing Firms in Ghana,* Research Journal of Finance and Accounting, Vol. 5(22), pp. 122–134.Retrieved from http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2573319.
- Narware, P.C. (2004), *Working Capital and Profitability- An empirical analysis,* The Management Accountant, Vol. 19(6) (June 2004) , pp.491-494.
- Pandey, I.M. (2001), *Financial Management (8thed.)*, New Delhi, Vikas Publication.
- Panigrahi, A.K. (2012), *Impact of Working Capital Management on Profitability – A Case Study of ACC Ltd.,* Asian J. Management, Vol. *3*(4), pp. 210–218.Retrieved from http://papers.ssrn.com /sol3/papers. cfm?abstract_ id=2379986&rec=1&srcabs=2385940&alg=1&pos=10.
- PricewaterhouseCoopers (n.d.), *Fast Moving Consumer Goods (Report)*.Retrieved from Http://www. ibef.org / download/ fmcg_sectoral.pdf.
- Rajdev, A. (2013), *Working Capital Management of Makson Healthcare Pvt Ltd: A Trade -Off Between Liquidity and Profitability, An Empirical Study,* Journal of Arts, Science & Commerce, Vol.4, Issue.3, (July 2013). Retrieved from http://www.researchersworld.com/vol4/issue3/vol4_issue3_1/Paper_09.pdf.
- Saini, A. and Saini, R. D. (2010), *Analysis of Liquidity Management and Trade-Off between Liquidity, Risk and Profitability: An Empirically Study,* The Journal of Accounting and Finance, Vol. 24, No. 2 (April-Sept. 2010), pp. 29-42.
- Toby, A. J. (2008), *Liquidity Performance Relationship in Nigerian Manufacturing Companies (1990-2002),* Finance India, Vol. XXII, No. 1 (March 2008), pp. 117-131.

❐❐❐