Research Journal of Finance and Accounting www.iiste.org
ISSN 2222-1697 (Paper) ISSN 2222-2847 (Online)
Vol.6, No.4, 2015

Working Capital Management and Performance of Food and Beverage Industry in Nigeria.

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ABSTRACT
Working capital is a strategic management tool to ensure the success of any organization because it determines its ability to carry out its operations effectively and efficiently so as to improve its performance. This study explored the impact of working capital on the operation of an organisation particularly the food and beverage firms in Nigeria. The study aimed at determining if there is any relationship between working capital management and the performance (efficiency, liquidity and profitability) of the food and beverage industry in Nigeria. The population size used includes the all food and beverages firms quoted on the Nigeria stock exchange. Ratios were calculated from the selected companies annual reports and accounts (such as acid test ratio, current ratio, debtors collection period, creditors payment period, stock holding period, net profit margin, gross profit margin) and the data were presented and analyzed using simple regression and correlation analyses. The results of the analysis showed that a significant impact in Three hypothesis were analyzed which include testing the relationship between working capital management and efficiency; working capital management and profitability; working capital management and liquidity ($p < 0.05$). Positive relationship was revealed between working capital and the efficiency of management in Food and beverages industry in Nigeria ($p < 0.05$), improved accurate cost and profit information ($p < 0.05$), there is a relationship working management and the profitability of food and beverages industry. ($P < 0.05$).. This is evidenced by p-value of 0.000. The study concluded that working capital management affects organizations' performance in terms of their liquidity and also in the aspect of them being efficient however; it does not determine their profitability. In order to achieve its' goals firms in Food and Beverages industry should effectively manage their working capital when carrying out the company's operations since it leads to liquidity in terms of meeting the company's current obligations and efficiency in terms of the company's survival.
Key words: working Capital, Performance, efficiency, profitability, liquidity and management

1. INTRODUCTION
Most organizations places more importance on profitability, however it is widely believed that liquidity is more necessary for growth and survival. The main reason is that, organizations make profit without adequate liquid assets to offset its obligations. Respectively, the company's inability to pay at the due time may have adverse effect on the company's financial growth (Nwankwo, Odi and Osho, 2010).A major indicator of an organization's liquidity and solvency position is its working capital (Pandey, 2006).

Rehn (2012) state, that working capital can be explained in respect of net working capital. He also defined net working capital as current assets minus current liabilities. He further explained it by giving an example that by shortening the collection receivable time, deferred payment and keeping a minimal inventory, a company's working capital may be reduced. He concluded by saying working capital encompasses cash management, and he gave an illustration of how idle cash funds can be invested without losing out on liquidity. Greg and Thomas (2005) defined working capital as the difference between the resources which is easily convertible into cash or already in the cash form (current assets) and the commitments of the firm which will soon require cash payments (current liabilities).

Horne and Wachowicz jnr. (2006), submits that working capital may be classified according to time and components. He explained further that in its classification according to components, it includes stock, debtors or receivables, cash, creditors etc. while in its classification according to time; it is further classified into temporary and permanent working capital.

Permanent working capital was defined as the lowest amount which is invested in current assets that is needed at all times to accomplish the lowest business activities level. Temporary working capital was also defined as the amount of working capital that fluctuates with the business activities from time to time. According to Bender (2009), managing a company's working capital play a vital role in its health maintenance during the ordinary course of a business. He explained further that the short term financing constitutes an important aspect of managing working capital and that the single investment made by a company devoid of the expectation of any assigned yield is working capital. He also stated that investment is required for the purpose of keeping the business in survival and not to generate any yield. And so in respect to this, there were problems in a company's cash flows and also reduction in shareholders' wealth as a result of many companies over investing in working capital.

1.2 RESEARCH OBJECTIVES

The objectives of this research shall include the following:-

1) to examine the relationship between working capital management and the efficiency of food and beverage industry and
2) to examine the relationship between working capital management and the profitability of food and beverage industry .

1.3 RESEARCH QUESTIONS

The followings are the research questions to be analyzed in this study:-

1) What is the relationship between working capital management and the efficiency of the food and beverage industry?
2) What is the relationship between working capital management and the profitability of the food and beverage industry?

1.4 RESEARCH HYPOTHESIS

The following hypothesis shall be tested in the course of the study.

HYPOTHESIS 1

H0:- There is no significant relationship between working capital management and the efficiency of food and beverage industry.

HYPOTHESIS 2

H0:- There is no significant relationship between working capital management and the profitability of food and beverage industry.

2 LITERATURE REVIEW AND EMPIRICAL FRAMEWORK

Ifurueze (2013) carried out a study to examine the effective management of credit sales effect on the profitability and liquidity of Food and Beverage Industries in Nigeria. The study was positioned mainly on the influence of each of the individual components of credit sales, profitability, liquidity and the activity level of the companies being studied which include the credit sales percentage, net profit margin, return on capital employed, gross profit margin, debtors collection period, debtors turnover, acid test ratio and return on current assets. Credit policy variables were also examined which include credit standards, credit terms and collection policy and procedures. The data used was gotten from the Annual reports and Accounts of enterprises selected within the year 2007 to 2011. The required data were subjected to statistical analysis and the hypothesis was tested with the aid of Analysis of variance (ANOVA). The result of the study showed that when credit sales are effectively managed the desired level of profitability is attained. Also the study revealed that when there is a favourable debtor's turnover, the desired level of liquidity is attained.

Bagchi and Khamrui (2012) conducted a research on the relationship that exists between working capital management and the profitability of firms and also identified the variables that most influence profitability. In this study, they made use of a sample size of 10 Fast Moving Consumer Goods (FMCG) companies from CMIE database in India within the period of 2000–01 to 2009–10 which gives a total of 10 years was selected. Profitability was measured using Cash conversion cycle (CCC), ROA (return on assets), debt-equity ratio, age of creditors, age of debtors, interest coverage ratio and age of inventory was used in terms of the explanatory variables. The study made use of Pooled ordinary least squares regression analysis and Pearson's correlation. The result of the investigation showed a strong negative correlation between the working capital management variables and profitability. It was deduced that as there exists an increase in CCC, the firm's profitability decreases, and it assist the managers in the creation of positive values for shareholders through the reduction of CCC to the barest minimum level possible. Likewise, there was a stumpy negative significance of the relationship between profitability and the debts incurred by the firm.

Maija (2012) carried out a research to study the management of working capital strategies in the case company and to discover methods of improving them. Qualitative research methods were used in carrying out the research. The case company hired a consulting company to carry out a project on working capital which is an aspect of the bigger project in which this research will contribute. The consulting company gathered the needed data for internal reporting. Most of the case company's information was considered confidential on the ground that it included vital figures. The findings show that there can be improvement in working capital management through various actions and small efforts; nevertheless, the effect of the chosen action created a more studies that need researching upon. The most necessary processes which need information that was determined in the research include purchasing, invoicing, and credit management. The result showed that the length of receiving payments from customers is reduced by faster invoicing and short payment terms. In the purchasing process it is important to negotiate payment terms with long duration and order of bigger sizes. The study also showed that the risk for bad debt is minimized by collecting and checking credit rating.

Micheal (2012) conducted a research on the efficiency of managing working capital and the corresponding corporate profitability. The Research was carried out by using 22 quoted firms at the Nigerian Stock Exchange. The research result revealed there was an improvement in the gross working capital positions. Also the result gotten from the difference between means method used showed that the working capital cost surpasses the returns on investing in working capital which will affect the corresponding profitability. In order to address the situation of abnormality and also to have a corresponding improvement on corporate profitability and net returns arising from working capital establishment, It was concluded that quoted Nigeria firms should optimally invest their working capital in order to prevent over investment in association with its corresponding excess cash holdings and receivables loss returns, cost of inventory; and under investment in association with its corresponding costs of illiquidity, bad debts and stock-out; the working capital policies should be determined by it to ensure that corporate profitability is improved; investments on working capital is increased with the aid of the capital investment models, also determining the investment viability before execution; and then ascertaining and comparing working capital costs with their benefits to ascertain if there is any gains before investing in the projected working capital.

Onwumere, Imo and Ugbam (2012) carried out a research on Nigeria firms' working capital policies impact on their profitability by using a time frame of 2004-2008. The independent variables used was the policies on investment in working capital and financing that is aggressive in nature while the dependent variable used was the return on assets and controlling for size and leverage. The result of the study showed that aggressive investment working capital policies of Nigerian firms have a significant positive impact on profitability while the financing policies of aggressive nature have a non-significant positive impact on profitability. The research result also shows that firms will become risky in the long-run when aggressive investment working capital policy is pursued because the firm grows and outsiders' contributions also increases as profitability increases. The study also shows that as the firm grows and outsiders' contribution increases; the profitability of the firm decreases through the use of aggressive financing working capital policy. In order for firms to achieve their objectives and also increase the shareholder's value the appropriate management of working capital is therefore essential.

Rehn (2012) carried out a research on the management of working capital effect on company's profitability. It was specified that the cash conversion cycle and the net trade cycle will be administered to determine the effect of managing working capital. The Finnish and Swedish corporations were the sample used in the study and the two variables were tested with corporate profitability. It was seen that the gross operating profitability of the finnish and Swedish corporations can be increased through a reduction in the net trade cycle and the cash conversion cycle. Also the cash conversion cycle different components were research upon. The research result showed that by effectively managing the working capital components there is significant evidence that the net present value of the company's cash flows will increase, thus increasing the value of the shareholder.
Abuzayed (2011) carried out a research on the impact of working capital management on the performance of firms. He made use of a sample small emerging markets listed firms in the Amman Stock Exchange. Analysis of data was done by using a period of 2000 to 2008 to assess if the firm's profitability and value can be improved upon through efficient working capital management. The cash conversion cycles was used in measuring the working capital management skills. In carrying out the study, more than one estimation techniques was used in order to generate more efficient and effective result. They include the panel data analysis, random and fixed effects and moments generalization method. By using more efficient estimation techniques the result of the study showed that the cash conversion cycle affects profitability positively. This means that in getting them to manage their working capital, firms with more profit prospects are less motivated. Also, in respect of working capital management inefficiency in the emerging markets, the financial markets failed to sanction the managers. The paper's uniqueness and worth lies in suggesting that managers and shareholders needs motivation and encouragement by the policy makers with the aid of information transparency improvement and investors awareness improvement in making them give more cognisance to working capital.

Mohammed (2011) conducted a research on the Working Capital position and profitability of Textiles Industries, if Working Capital Management has significant impact profitability and if there is a relationship between them. The study was analysed by using the Regression analysis, Ratio Analysis and the Correlation Matrix to indicate the Working Capital and Profitability status to analyse if there is a relation between them and to see the effect of Working Capital on Profitability. The data used include administered questionnaire, annual reports as well as the official records. The result of the study showed there is no adequate Working Capital Management and Profitability status of the Textiles Industry. It was also revealed in the study that there exists a relation between Profitability and Working Capital Management and that Working Capital Management has a significant impact on Profitability.

Saleem and Rehman (2011) carried out a study on liquidity ratios impact on the profitability of the Pakistan oil and gas companies. The main objective of the study is to ensure that in a firm's daily operations, relationship is maintained. It was revealed in the study that the liquidity ratio has a significant on return on assets but has no significant impact on return on equity and return on investments. The results also revealed that acid test ratios, current ratios and liquid ratio has no significant impact on return on equity but significantly affects return on investments. The study mainly revealed that with varying degrees, each of the variables (ratios) possesses a significant impact on the enterprises financial position having the liquidity ratios as the first place. The study, therefore, recommended that companies need to maintain adequate liquidity as some portion of the firms' profitability will be divided to shareholders.

Sayeda (2011) examined the maintenance of liquidity and efficient working capital management effects on corporations profitability. The data used in the study are the quoted corporations as cement industry in the Dhaka Stock Exchange within duration of 2005-2009. The research purpose is to show a statistically significant relationship and also to show the need why firms should efficiently manage their working capital and also have sufficient liquidity as it relates to them being profitable. The research result revealed a significant relationship between liquidity and profitability and also the elements of working capital.

Abdul,Talat, Abdul and Mahmood (2010) carried out a research on the effect of managing working capital on firm's performance. The research was carried out on the panel data of 204 manufacturing firms quoted on the Karachi Stock Exchange in Pakistan for a duration time period of 1998 to 2007. The result of the research states that the net trade cycle, cash conversion cycle and the inventory turnover numbered significantly in days affects the firm's performance. The also indicated that the manufacturing firms in Pakistan are faced with problems in terms of their collection and payment policies, which need to be improved upon. The result also revealed that the Pakistan firms use the conservative working capital management policies and in amendment to that, effective policies need to be formulated for each elements of working capital.

3. METHODOLOGY

This study covers all *food and beverage firms* listed on the Nigerian Stock Exchange. Five companies were randomly selected. The data for this study was collected using the secondary source of annual Financial Repots and Accounts from five Food and beverages companies listed on the Nigerian Stock Exchange. The annual reports and accounts covered threes -2010-2012 The audited financial ratios of five Food and beverages companies were prepared and compared for a period of three years (2010-2012); through this analysis, facts will be derived in respect of the level of efficient working capital management of the companies being considered through their audited financial statement. These ratios include current ratios, acid test ratio, gross profit margin, stock holding period, creditor's payment period, debtor's collection period, working capital cycle and the working capital trend for three years. The hypotheses were tested using the least square method and ANOVA.

4. HYPOTHESIS TESTING

HYPOTHESIS 1

H0: There is no relationship between working capital management and the efficiency of the food and beverages industry.

H1: There is a relationship between working capital management and the efficiency of the food and beverages industry.

STOCK HOLDING PERIOD

TABLE 4.3.1A(i)

Model Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
.500	.250	-.500	.707

The independent variable is WORKING CAPITAL.

TABLE 4.3.1A(ii)

	Sum of Squares	Df		F	Sig.
Regression	.167	1		.333	.667
Residual	.500	1			
Total	.667	2			

Research Journal of Finance and Accounting
ISSN 2222-1697 (Paper) ISSN 2222-2847 (Online)
Vol.6, No.4, 2015

TABLE 4.3.1A(iii)

Coefficients

	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
WORKING CAPITAL	.167	.289	.500	.577	.667
(Constant)	2.167	.957		2.263	.265

INTERPRETATION

The analysis above which gave R= 0.50 showed a fair direct correlation between working capital management and the stock turnover period since it is within the duration of 0.5 and 0.6 i.e. it showed 50% relationship between working capital management and stock turnover period. The R-square figure of 0.250 indicates 25% level of determination i.e. working capital management determined the stock turnover period by 25%. Also from the ANOVA table it can be seen that the F-calculated i.e. 0.333 is less than the F-critical i.e. 0.667, so for this ratio you accept the null hypothesis and reject the alternate hypothesis.

DEBTORS COLLECTION PERIOD

TABLE 4.3.1B(i)

Model Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
1.000	1.000	1.000	0.000

The independent variable is WORKING CAPITAL.

TABLE 4.3.1B(iii)

Coefficients

	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
WORKING CAPITAL	.333	0.000	1.000		
(Constant)	2.333	0.000			

INTERPRETATION

From the analysis above it was given that R= 1.000 which showed a strong direct correlation between working capital management and the debtors collection period since it is within the duration of 0.7 upward i.e. it showed 100% relationship between working capital management and debtors collection period. It can also be said that it shows a perfect relationship between working capital management and the debtors' collection period. The R-square figure of 1.000 indicates 100% level of determination i.e. working capital management determined the debtors' collection period by 100%.

CREDITORS PAYMENT PERIOD

TABLE C(i)

Model Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
.277	.077	-.846	2.828

The independent variable is WORKING CAPITAL.

HYPOTHESIS 2

H0: There is no relationship between working capital management and the profitability of the food and beverages industry.

H1: There is a relationship between working capital management and the profitability of the food and beverages industry

GROSS PROFIT MARGIN

TABLE A(i)

Model Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate

The independent variable is WORKING CAPITAL.

TABLE A (iii)

Coefficients

	Unstandardized Coefficients		t	Sig.
	B	Std. Error		
(Constant)	3.000	0.000		

The independent variable is WORKING CAPITAL.

TABLE A (iv)

Excluded Terms

	Beta In	t	Sig.	Partial Correlation	Minimum Tolerance
WORKING CAPITAL[a]	0.000	0.000	1.000	0.000	1.000

INTERPRETATION

From the above analysis it was given that R= 0.000 which showed that there exists no correlation between working capital management and the gross profit margin since it falls within the duration of 0.4 downward i.e. it showed that no relationship exists at all between working capital management and the gross profit margin. No value is seen in the ANOVA table because of there is no relationship, so for this ratio you accept the null hypothesis and reject the alternate hypothesis.

NET PROFIT MARGIN

TABLE B(i)

Model Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
.500	.250	-.500	.707

The independent variable is WORKING CAPITAL.

TABLE B(iii)

Coefficients

	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
WORKING CAPITAL	.167	.289	.500	.577	.667
(Constant)	2.167	.957		2.263	.265

INTERPRETATION

From the above analysis it was given that R= 0.500 which showed that there exists a direct fair correlation between working capital management and the net profit margin since it falls within the duration of 0.5 to 0.6 i.e. it showed that there is 50% direct relationship between working capital management and the net profit margin. The R-square figure of 0.250 also indicates 25% level of determination i.e. working capital management determined the net profit margin by 25%.

GROSS PROFIT MARGIN

TABLE 4.3.2C(i)

Model Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
.971	.942	.885	.707

The independent variable is WORKING CAPITAL.

5.CONCLUSION

This study has carried out an investigation and revealed that for a company to be liquid and efficient, it has to effectively manage its working capital which will lead to the overall improved performance of the company. Also profitability which is the primary goal of any company should not be the only concern of companies, because a company might be seen to be profitable but have inadequate working capital which is seen as a metric for liquidity. This might lead to the inability of the companies to meet its current obligations which might make the company loose its investors, public image and other negative effects accrued to it. Also managing working capital involves daily operations and decision making.

The general conclusion is that working capital management improves the performance of a company in terms of liquidity and efficiency; however it does not determine the company's profitability. Researches which support this conclusion include Bagchi and Khamrui (2012), Abuzayed (2011), and Raheman and Nasr (2007).

6.0 REFERENCES

Abdul, R. Talat, A. Abdul, Q. Mahmood, A. B. (2010), Working Capital Managsment And Corporate Performance Of Manufacturing Sector In Pakistan, International Research Journal Of Finance And Econnomics.

Abuzayed B. (2011), Working Capital Management And Firm's Performance In Emerging Markets, Journal of Talal Abu-Ghazaleh College of Business (The German Jordanian University, Amman, Jordan).

Bagchi and Khamrui (2012), Relationship Between Working Capital Management And Profitability, Economic And Business Journal.

Bender, R. (2009), Corporate financial strategy, UK. Elsevier Butterworth-Heinemann.

Grey F. and Thomas M.K. (2005), An Analysis Of Working Capital Management Results Across Industries, 20(2).

Ifurueze M.S.K. (2013) The Impact Of Effective Management Of Credit Sales On Profitability And Liquidity Of Food And Beverage Industry In Nigeria, Global Journal Of Management And Business Research, USA: Global Journal Inc. Publishers, 13(2).

Maija V. (2012), Optimizing Working Capital Management From Processes Perspective, Saimaa University Of Applied Sciences Journal.

Micheal N.B. (2012), Working Capital Management Efficiency And Corporate Profitability, Journal Of Applied Finance And Banking, 2(2), 215-237.

Mohammed M.R. (2011), Working Capital Management And Profitability, ASA University Review Journal, 5(1).

Nwankwo, Odi and Oso (2010), An Empirical Analysis Of Corporate Survival And Growth: Evidence From Efficient Working Capital Management" International journal of scholarly academic intellectual diversity,12(1)2010.

Onwumere J.U.J.,Imo G.I. and Ugbam O.C. (2012), The Impact Of Working Capital Management On Profitability Of Nigeria Firms, European Journal Of Business And Management, 4(15).

Owolabi S.A. and Alayemi S.A. (n.d.), Working Capital Management As Financial Strategy,Asian Journal Of Business And Management Sciences, 2(4),01-08.

Pandey J. M. (2006), Financial Management, New Delhi: Vikas Publishing Company Limited.

Rehn E. (2012), Effect Of Working Capital Management On Company's Profitability, Hanken School Of Economics Journal.

Saleem, Q. and Rehman, R.U. (2011), Impacts Of Liquidity Ratios On Profitability: Case Of Oil And Gas Companies Of Pakistan, Interdisciplinary Journal of Research in Business, 1(7), 95-98.