EFFECTS OF WORKING CAPITAL MANAGEMENT ON PROFITABILITY OF QUOTED BOTTLING COMPANIES IN NIGERIA

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Abstract

This study examines the effect of working capital management on profitability of quoted bottling companies in Nigeria for the period, 2001-2014. The quoted bottling companies in the consumer goods sector are seven (7) as at 31st December, 2014. All the companies were studied using census approach. Specifically, the study seeks to assess the impact of inventory turnover days, account receivable days, account payable days and cash conversion cycle on profitability of the companies. The study adopted Correlational Research Design and data were analysed with the aid of OLS multiple regression technique. Using 98 firm-year observations. Data were extracted from the audited annual reports and accounts of the quoted companies. The study found that inventory turnover days have positive and strong impact on profitability of quoted bottling companies in Nigeria at 1% level of significance. Also, account receivable days have a negative and significant effect on profitability of the quoted bottling companies at 5% levels of significance. However, account payable days found to have positive but insignificant influence on profitability of companies, while the cash conversion cycle has a positive and significant influence on profitability of the companies. This implies that, increase in the cash conversion cycle will generate more profits. While increase in inventory turnover days and decrease in account receivable days will generate more profits. The study concludes that, efficient management of working capital affects the performance of quoted companies in Nigeria. The study therefore recommends that, the management of the companies should give due

importance to working capital management, and emphasize an optimal working capital levels in their respective companies, because of the positive impact of cash conversion circle and account payables on the profitability. This may attract more customers and consequently higher profit.

Keywords: Cash Conversion Cycle, Inventory, Payables, Profitability and Receivables

INTRODUCTION

In a dynamic and competitive business environment, business entities around the globe face increased challenges especially in the consumer goods sector where bottling companies play a vital role. Bottling companies are strategically positioned to produce soft drinks to meet the market demand, consumer satisfaction as well as maximizing profit that bring about growth and development to an economy. In the last decade, there has been an increasing realization by most companies on the importance of working capital efficiency especially for bottling companies where a major part of their assets is composed of current assets (Horne & Wachowitz, 19995). Existing empirical literatures such as Deloof, (2003) and Rehn, (2012) have shown the statistical negative relationship between cash conversion cycle and profitability of an industry. Every firm whether, profit oriented or not, irrespective of size and nature of business, requires necessary amount of working capital. Inventory Turnover Days, Account Receivable Days, Account Payable Days and Cash Conversion Cycle as the components of Working Capital are the most crucial element needed for maintaining liquidity, survival, solvency and profitability of business.

In the words of Walter (2014), Working Capital means the amount by which total current assets exceeds current liabilities and is affected by current assets such as cash, stock, bank balance and prepayments as well as current liabilities that include creditors and accruals. There is no doubt that the working capital attracts so many benefits to the Nigerian bottling companies. This is because, the higher the working capital, the more the liquidity of the firm.

Working Capital Management is the process of ensuring and controlling those various working capital components as efficiently and effectively as possible in such a way that it eliminates the risk of inability to meet short term commitments on one hand, delay in payment to suppliers and encourage prompt receive from customers by given them discount on the other hand, and finally to make decision about the amount and composition of working capital and how to finance them (Lazaridis & Tryfondis, 2006). Thus, bottling companies need to manage their current assets and current liabilities effectively and efficiently in order to ensure that they

cater for their day to day expenses. This because, a large number of business failures have been attributed to inability of financial managers to plan and control properly the current assets and current liabilities of their respective organizations (Smith, 1973).

In addition, Working Capital Management is expected to have an effect on firm's profitability. Inefficient management of current assets and current liabilities may leads to a problem such as bad debt and interest charge on overdue account there by reducing profit. It may also reduce sources of funds for borrowing by portraying bad image as a result of poor management of working capital. According to the report of bottling companies in 2003, Nigerian bottling companies had realized that in order for them to survive and continue business as a going concern, they must manage their working capital components effectively and efficiently within which they operate.

This study was motivated by the recent global financial crises which significantly affect the liquidity position and the overall business activities across the world. In Nigeria, where credit is either not available or expensive to obtain, there are corporate issues almost all the firms that, has to do with liquidity problem and consequently their operating performance.

One of the major objectives of working capital management is to ensure that corporate entities have sufficient, regular and consistent cash flow to fund their activities. Therefore efficient working capital management could enable firms in sustaining growth which, in turn leads to strong liquidity and profitability for ensuring effective and efficient customer services. Efficient management of working capital is very vital for a business survival.

However, working capital management has been empirically examined in many different ways, while some authors studied the impact of an optimal inventory management; others have studied the optimal way of managing accounts receivables that leads to profit maximization like Rehn (2012). Others have focused on how reduction of working capital improves a firm's profitability Deloof, (2003) and Rahman and Nasr (2007). In summary, most of these studies concentrated on a single working capital components and the studies are mostly from developed economy, where the market mechanisms and the business environment significantly differ from Nigeria. This provided a gap for this study to fill.

Bottling companies in Nigeria have been facing challenges over the years where by imported raw materials as companies' inputs are affected by an increase in the general price of oil in the world and the increase in demand of raw materials by developed country. The company witnessed a sharp increase in the prices of most commodities such as steel and sugar which affected the company's operational expenses as well as the profitability. This affects the level of productivity in Nigerian bottling companies and delivery of finished goods to customers. Since there might be greater demand of company's products but if the company has inadequate

working capital management, it may not be able to produce enough goods to meet the market demand. This therefore triggers the need for evaluating empirically how relevant working capital efficiency and its determining factors are to the bottling companies in Nigeria.

A lot of gaps exist in the literature regarding the extent of relationship between component of working capital and profitability of firms. The gaps are both geographical and methodological. Geographically, most of the studies are foreign-based such as Rehn (2012) in addition to the fact that they documented conflicting and inconsistent findings. Methodologically, Nigerian-based studies such as Barine (2012) and Adeleke and Mukolu (2013) mostly employed OLS to analyse their panel data thus disregarding the cross sectional effect of the data. In light of the above, and in order to fill these gaps identified in the literature, a study extended to analyse and cover all the components of working capital using two models. This study attempts to fill this gap.

The study is aimed at examining the effect of Working Capital Management on the Profitability of quoted Bottling Companies in Nigeria.

LITERATURE AND THEORETICAL FRAME WORK

Concept of Working capital

Working Capital represents the current assets of a firm which is the portion of financial resources of business that changes from one type of resources to another during the day-to-day execution of business (Gitman, 2003). Current assets comprise cash, prepaid expenses, short-term investments, accounts receivable, inventory and other current assets. Net working capital can be measured by deducting current liabilities of a firm from its current assets. If the value of current assets is less than that of current liabilities then net working capital would have a negative value showing a deficit working capital. When a business entity takes the decisions regarding its current assets and current liabilities then it can be termed as working capital management. The management of working capital can be defined as an accounting approach that emphasize on maintaining proper levels of both current assets and current liabilities. It provides enough cash to meet the short-term obligations of a firm. Working capital management has to do with the administration of all aspects of current assets, namely cash, marketable securities, stock and current liabilities.

Van Horne (1995) defined working capital management as the administration of current assets in the name of cash, marketable securities, receivables and staff advances, and inventories. Walker (1967) demonstrated that good working capital management must ensure an acceptable relationship between the different components of a firm's working capital so as to make an efficient mix, which will guarantee capital adequacy.

Profitability can also be termed as the rate of return on investment. If there will be an unjustifiable over-investment in current assets then this would negatively affect the rate of return on investment (Vishnani & Shah, 2007). The basic purpose of managing working capital is controlling of current financial resources of a firm in such a way that a balance is created between profitability of the firm and risk associated with that profitability (Ricci & Vito, 2000). Every business requires working capital for its survival. Working capital is a vital part of business investment which is essential for continuous business operations. It is required by a firm to maintain its liquidity, solvency and profitability (Mukhopadhyay, 2004). The importance of managing working capital of a business efficiently cannot be denied (Filbeck & Krueger, 2005). Working Capital management explicitly impacts both the profitability and level of desired liquidity of a business (Raheman & Nasr, 2007). If a firm will invest heavily in working capital i.e. more than its needs, then the profits which can be generated by investing these resources in fixed or long term assets will be diminished. Moreover, the firm will have to incur the cost of storing inventory for longer periods as well as the cost of handling excessive inventory (Arnold, 2008).

Working Capital Policies

Following the vital role working capital management is playing a company needs to formulate clear policies concerning the various components of working capital. Key policy areas relate to the level of investment in working capital for a given level of operations and the extent to which working capital is financed from short-term funds such as a bank overdraft (Uyar, 2009). A company should have working capital policies on the management of inventory, trade receivables, cash and short-term investments in order to minimise the possibility of illiquidity and inefficiency (Chittenden, Poutziouris, & Michaelas, 1998).

i.   Aggressive Working Capital Policy

An aggressive policy with regard to the level of investment in working capital means that a company chooses to operate with lower levels of inventory, trade receivables and cash for a given level of activity or sales (Chittenden et al., 1998). According to them an aggressive policy will increase profitability since less cash will be tied up in current assets, but it will also increase risk since the possibility of cash shortages or running out of inventory is increased.

ii.   Conservative Working Capital Policy

A conservative and more flexible working capital policy for a given level of turnover would be associated with maintaining a larger cash balance, perhaps even investing in short-term securities, offering more generous credit terms to customers and holding higher levels of inventory (Chittenden et al., 1998). Such a policy will give rise to a lower risk of financial problems or inventory problems, but at the expense of reducing profitability.

iii.   Moderate Working Capital Policy

A moderate policy would tread a middle path between the aggressive and conservative approaches. It should be noted that the working capital policies of a company can be characterized as aggressive, moderate or conservative only by comparing them with the working capital policies of similar companies (Chittenden et al., 1998). There are no absolute benchmarks of what may be regarded as aggressive or otherwise, but these characterizations are useful for analyzing the ways in which individual companies approach the operational problem of working capital management.

Empirical studies and Theoretical Framework

Filbeck and Krueger (2005) defined working capital management as the difference between resources in cash or readily convertible into cash (current assets) and organizational commitments for which cash will be required soon (current liabilities). The importance of working capital is defined by smith (2004) as important as a measure of liquid asset that provide a safety cushion to creditors. It is also important in measuring the liquid reserve available to meet contingencies and the uncertainties surrounding a company's balance of cash outflows.

This section presents a review of prior studies carried out by different researches in various countries at different times in the area of working capital management and financial performance. It covers how each component of working capital management (IT, AR. AP and CCC) impacts on financial performance of businesses.

Rafiu and John (2014) empirically examined the effect of Working Capital Management on performance of listed manufacturing firms in Nigeria for the period of nine years (2000-2009).

Specifically, the study showed that Inventory Turnover in Days (ITD) is significant but negatively related to profitability. The study concluded that effective management of WC affect performance of manufacturing firm in Nigeria. The data were collected from annual report and account of sixty listed firms out of 237 from Nigerian stock exchange across the sectors in the Nigerian economy. The panel data method was adopted and analyzed using descriptive and inferential statistics.

Using 204 listed manufacturing firms on listed on Karachi Stock Exchange for the period 1998 to 2007,.Abdul, (Talat and Mahmood, 2010), examined the impact of working capital management on firm performance. The performance is the dependent variable proxied by net operating profit while the independent variable is working capital management proxies by inventory turnover account receivable, account payable. The result shows that inventory turnover in days significantly affects the performance of the firms. The study also concludes that firms in Pakistan are following conservative working capital management policy and the firms

are needed to concentrate and improve their collection and payment policy. The period cover should reach up to 2010 since the study was conducted in 2010. The result would have been more robust when many more years are considered.

Mumtaz (2010) used a sample of 22 firms in chemical sector for the period of six years from 2005-2010.The study revealed a positive association between inventory turnover and firm's performance. On the other hand, the finding of Adeleke and Mukolu (2013) used sample a 10 listed companies in the Nigerian stock exchange and make use of multiple regression technique for analysis to examine the effect of working capital on profitability if a firm. But during the period under review working capital of all ten companies does not have positive significant effect on performance. In this study, profitability was measured by return on capital employed of firms. It is expected that there is a positive association between working capital management and profitability.

Mansoori and Muhammad (2012) used 24 listed firms to examine the effect of working capital management on firm's profitability in Singapore. Using panel data analysis, pooled OLS and Fixed Effect estimation, from 2004 to 2011, receivable conversion period and inventory conversion period are the independent variables while the dependent variable is return on asset (ROA). The study showed that managers can increase profitability by managing working capital efficiently. Among other specific findings, the study documents a significant positive impact of inventory conversion period on profitability. The technique of data analysis employed by the study is limited on the basis of the fact that it does no allowed heteroscedasticity test and other related robustness tests.

Similarly, Panigrahi and Sharma (2013) also investigated the relationship between working capital management and the firm's performance in India by taking a sample of five selected Indian cement companies for the period 2001-2010. This study employed multiple regression and Pearson's correlation for data analysis. The dependent variable is performance proxied by return on asset (ROA) while the independent variable is the working capital proxies by inventory. The findings indicate that there is a negative association between Inventory conversion period and profitability. This shows that the lower the inventory conversion period the higher the profitability. The measurement of inventory turnover may be better if it was based on inventory divide by cost of sales which may be spurious in practical situation.

Ademola (2014) investigated the relationship between working capital management and profitability of manufacturing firms listed on the Nigerian Stock Exchange. The study used secondary data of 120 firm-year observations of ten years (2002 and 2011). Survey research design was adopted. The data were analyzed using descriptive statistics, correlation analysis

and multiple regression analysis. The dependent variable is net operating profit while the independent variable is the working capital management proxies by ACP, ICP and APP. The study indicated a positive and significant association between Working Capital management and Net Operating Profit. Inventory conversion Period showed insignificant negative relationship with Net operating profit of food and beverages manufacturing companies in Nigeria.

Moroki and Jagongo (2013) used a sample of five manufacturing and construction firms and analyzed the effect of working capital management on firm's profitability in Kenya for the period 2003 to 2012. They used balanced panel data from annual account of the listed firms on the Nairobi Stock Exchange (NSE). Pearson correlation and Ordinary Least Squares regression techniques were used to establish the relationship between working capital management and firm's profitability. Among other findings, the study documents a positive relationship between profitability and number of days of inventory. The findings indicated that the management can increase the level of sales by increasing their inventories conversion period to a reasonable level. In doing so, the profitability of the firms is expected to increase.

Trade-off theory

Under perfect capital market assumptions, holding cash neither creates nor destroys value. The firm can always raise funds from capital markets when funds are needed, because the capital market is assumed to be fully informed about the prospects of the firm. The trade-off theory explains that firms target an optimal level of liquidity to balance the benefit and cost of holding cash which includes delay in payment to suppliers on one hand and allows company of discounts for prompt or early payment on other hand. These benefits save transaction costs to raise funds and do not need to liquidate assets to make payments and the firm can use liquid assets to finance its activities and investment if other source of funding are not available or are extremely expensive. Considering account receivables, it argued that a flexible trade credit policy with an interest on receivables may increase sales (Deloof & Jegers, 1996). As theory, the use of trade off model cannot be ignored, as it explains that, firms with high management of inventory should hold an economic order quantity of inventory that balances the trade-off between liquidity and profitability. This will attracts high cost of managing the working capital items and it covers different cost such as transport, storage, insurance and damage (Long, 1993) thereby affecting its profitability. But maintaining a low level of inventory may leads to loss of sales and stock-out (Deloof, 2003), thereby having an impact on profitability of Nigerian Bottling company PLC.

METHODOLOGY

Research Design

Correlation research design is used for the study in order to examine the statistical relationship between two or more variables. It is considered suitable for this study because it allows for test of the expected association amongst working capital management proxies and their relationships with profitability as well as making prediction concerning the expected relationships between the variables. The population of the study comprises of all the seven (7) bottling companies in the consumer goods sector listed on the floor of Nigerian Stock Exchange as at 31 December, 2014. The study employed secondary sources of data in extracting the required information needed for this study. The data were extracted from annual reports and accounts of bottling companies in Nigeria for the period (2001-2014) due to availability of data within the period.

Measurement of variables

The study used Return on Asset as dependent variable as a measured of profitability and inventory turnover (IT), account receivable (AR), account payable (AP), cash conversion cycle (CCC), as the independent variables and proxies for working capital efficiency. While sales growth (SG), firm size (FS) and leverage as control variables. The formula and abbreviations used for measurement of all the variables are presented in the following table:

Table 1. Variable Definition and Measurement

Variable Acronym	Name of Variables	Measurement of variables	Definition
ROA	Return on Assets	Profit after tax/ Total Assets	This is because the return on assets (ROA) is an indicator of managerial efficiency in converting the firm's assets under its control into earnings (Lazaridis and trynids, (2006), Delof (2003), Shin and Soenen (1998) Falope and Ajilore, (2009), Singh and Pandey, (2008) and Karaduman et al (2011).
NPM	Net Profit Margin	Profit after tax/ sales	Accounts receivables are customers who have not yet made payment for goods or services, which the firm has provided. (Basley and Bringham 2005, Samilogu and Demirqunes 2008, Falope and Ajilore 2009, and Sharma and Kumar 2011).

ITD	Inventory turnover days	Inventory *365/ cost of sales	Accounts payable are suppliers whose invoices for goods or services have been processed but who have not yet been paid. The higher the value, the longer firms take to settle their payment commitment to their suppliers. (Singh 2004, Adina 2010, Chariton et al 2010, Kwasi 2010, Singh and Pandy 2008, and Raheman and Nasr 2007).
ARD	Account receivable days	Account Receivable* 365/ sales	It is a rate cash flows from the suppliers to inventory to accounts receivables and back into cash. It is an addictive measure of funds that are committed (MeCarty and Lyroudi 1993, Gill, Bigger & Atnur 2010, Karaduman, Kwasi2010 Deloof 2003).
APD	Account payable days	Account payable *365/ cost of sales	Falope and Ajilore, (2009)
CCC	Cash conversion cycle	ARD + ITD –APD	Raheman and Nasr 2007
FSIZE	Firm size	LN of total assets	Sharma and Kumar 2011
LVRG	Leverage	Total liability to total assets	Shin and Soenen (1998)

Model Specification

In order to examine the effect of working capital management on profitability, a multiple linear regression model was built. The model captured the effect of inventory turnover, account receivable days, account payable days and cash conversion cycle on return on asset (ROA). For empirical purposes, the following operational equations were used. Previous study conducted by Rehman et al, (2011) estimated the model in a linear form. This study also estimated the model in linear form.

The full model used for testing firm's a performance in relation to its working capital was as follows:

$Y1,I,t = \alpha + \beta_1 \ X1,i.t + \beta_2 \ X2,I,t + \beta_3 \ X3,I,t + ui$

This was then modified as follows:

$ROA_{it} = \alpha + \beta_1 ITD_{it} + \beta_2 ARD_{it} + \beta_3 APD_{it} + \beta_4 FSIZE_{it} + \beta_5 LVRG_{it} + \beta_1 CCC_{it} + \varepsilon_{it}$ ---------------1

To investigate the extent to which changes in working capital affects firm's NPM, equation 2 was developed; in which the same variables as in equation 1 except that the dependent variable was changed to NPM (Net Profit Margin)

$$NPM_{it} = \alpha + \beta_1 ITD_{it} + \beta_2 ARD_{it} + \beta_3 APD_{it} + \beta_4 FSIZE_{it} + \beta_5 LVRG_{it} + \beta_1 CCC_{it} + \varepsilon_{it} \text{ --------------2}$$

Where: ROA_{it} = Return on assets, NPM_{it} = Net profit margin, ITR_{it} = Inventory turnover days ARD_{it} = Account receivable days, APD_{it} = Account payable days, CCC_{it} = Cash conversion cycle $FSIZE_{it}$ = Firm size, $LVRG_{it}$ = Leverage, $_{it}$ = firm i at period t, ε_{it} = error term of the model α = constant, $\beta_1, \beta_2, \beta_3, \beta_4, \beta_5$ = are the coefficients to be estimated.

Techniques of Data Analysis

In order to achieve the objectives of the study and to test the hypotheses, a functional relationship between the dependent variable and the independent variables has been presented in form of regression equation. The technique used in this study is multiple regressions. A panel regression technique is chosen in order to detect and measure the effect that cannot be simply observed by pure cross-sectional or pure time series data.

RESULTS AND DISCUSSION

Table 2. Correlation Matrix of Dependent and Independent Variables (STATA output)

Variables	ROA(NPM)	ITD	ARD	APD	CCC	FSIZE	LEVG
ROA(NPM)	10000						
ITD	0.3634***	10000					
	(0.2480)****						
ARD	-0.1414	-0.0004	10000				
	(-0.1426)	(-0.004					
APD	-0.0618	-0.772	-0.0888	10000			
	(-0.064)	(-0.077)	(-0.0888)				
CCC	0.1172	0.5184*	0.5696*	0.5103*	10000		
	(0.1711)***	(0.5184)*	(0.5696)*	(-0.511)*			
FSIZE	-0.3729**	-0.0859	0.1158	-0.0311	-0.0144	10000	
	(-0.181)***	(-0.0859)	(0.1158)	(-0.311)	(-0.011)		
LEVG	-0.1855	0.0269	-0.0194	-0.1200	0.1278	-0.0548	10000
	(-0.0701)	(0.0269)	(-0.0194)	(-0.200)	(0.127)	(-0.01)	

The correlation matrix for NPM is in parenthesis

*Correlation is significant at 0.01 levels (2-tailed)

**Correlation is significant at 0.05 levels (2-tailed)

***Correlation is significant at 0.10 levels (2-tailed)

Table 2 depicts that inventory turnover days has a positive correlation of 0.36 with profitability of quoted bottling companies in Nigeria, while account receivable days and account payable day are negatively correlated with profitability with correlations of 0.14 and 0.06 respectively. Cash conversion cycle is 0.117 positively correlated with profitability. Due to the fact that making payments to suppliers, collecting payments from customers earlier and keeping inventories in stock for lesser time are associated with increase in profitability. A negative relationship between account payable days and return on asset further suggests that the quoted companies wait longer to pay their account payable. Delaying payments to suppliers allows a company to assess the quantity and quality of the products bought and can be an inexpensive and flexible source of financing for a companies. The negative correlation between account receivable days and return on asset implies that longer collection period decreases profitability. Granting trade credits favours the companies' sales in various ways. Trade credit can act as an effective price cut. It is an incentive for customers to acquire merchandise at times of low demand. It allows customers to check that the merchandise they receive is as agreed (quantity and quality) and to ensure that the services contracted are carried out (Smith, 1980). However, firms that invest heavily in inventory and trade credit can suffer reduced profitability. In addition, larger inventory reduces the risk of a stock out.

A positive relationship between the cash conversion cycle and return on asset implies that if the companies are able to increase their cash conversion cycle, they can increase their profitability. This positive relationship might not be a surprise because one of the three components of cash conversion cycle has negative association with the profitability and account payable days is subtracted from the sum of average collection period and inventory turnover in days to form the cash conversion cycle. This is in line with the work of Deloof (2003). This signifies that as inventory turnover days is positively and significantly correlated with return on asset, firm size is positively correlated with profitability.

Secondly, in table 3, it was reveals that, the correlation coefficient between NPM, ARD ITD, APD and CCC were recorded from the table 0.25, -0.14, -0.06 and 0.17 respectively. In furtherance to the above results, increasing inventory turnover increases the net profit margin of the bottling companies in Nigeria.

The table also shows that firm size and leverage are negatively correlated with profitability of bottling companies (NPM). The correlation coefficients of firm size and leverage are -0.184 and -0.70 respectively.

Table 3. Summary of Fixed Effect Regression Result (STATA Output)

Variables	First Model		Second model		Multicolinearity test	
					1ST	2ND
	Coef	P-value	Coef	p-value	1/VIF/VIF	VIF/1/VIF
ITD	0.0002	0.001	0.00002	0.0907	0.9860/1.01	2.06/0.485
ARD	-0.0002	0.011	-0.00053	0.012	0.978/1.02	2.34/0.427
APD	0.0006	0.283	0.00011	0.387	0.9706/1.03	1.82/0.548`
CCC	0.00005	0.346	0.00035	0.031	0.9836/1.02	4.54/0.220
FSIZE	0.7750	0.000	-0.46951	0.175	0.9755/1.03	1.03/0.967
LEVG	-0.6463	0.081	-0.08818	0.192	0.9814/1.02	1.04/0.958
CONSTANT	-2.309	0.000	1.48	0.153		
R^2		0.402		0.16		
F-Statistics		5.27		2.86		
F- Sig		0.000		0.012		

POLICY IMPLICATION OF RESEARCH FINDINGS

The findings above have implications to the management of quoted bottling companies in Nigeria. Therefore they should take into cognizance the influence of inventory turnover days, Account receivable days, account payable days and cash conversion cycle as it has an influence on the profitability of the selected bottling companies. The lesser the time a firm need to realize cash from its customers, the better it is for its liquidity position and thus reduces the risk of dependency on external and more expensive sources of capital. It is also believed that longer cash conversion cycle corresponds to defensive working capital management policy.

CONCLUSION AND RECOMMENDATIONS

Based on the key findings of this study, it is concluded that a significant relationship exists between the management of working capital components and the profitability of quoted bottling companies in Nigeria. Specifically, the study concluded that, Account Receivable Days has a negative effect and Inventory Turnover Days has a positive effect in determining as well as influencing profitability of their companies. It is therefore concluded that, the Management of bottling companies in Nigeria can enhance performance by maintaining the number of days in inventories and receivables. The study also concluded that account payable days has insignificant effect in influencing profitability of the Nigerian bottling company. On the basis of that, the managers of Nigerian bottling companies can enhance performance by maintaining the number of days payables. More so, the study also concluded that cash conversion cycle has

positive and significant effect in assessing profitability of the bottling companies in Nigeria. It is therefore concluded that, the management should maintain the cash conversion cycle because higher cash conversion cycle attracts customers and results to higher profit.

The study is limited to it scope that is studying working capital management in the context of Nigerian Bottling company for the period 2011 to 2014, all information used were gotten from annual report from the quoted firms affected. Further studies in the field may look in to some areas like banking sector, communication industry, manufacturing firms etc.

In light of the findings and conclusion of the study, the following recommendations are considered pertinent:

i. The managers of quoted bottling companies in Nigeria should give due importance to working capital management and emphasize an optimal working capital levels in their respective companies. This is because of the positive effect of cash conversion cycle and account payables days on profitability. This may attract more customers and consequently higher profit.

ii. The managers of quoted bottling companies in Nigeria should increase their days' inventory and decrease their days' receivables by instituting adequate control and flexible credit policy.

iii. Managers of quoted bottling companies in Nigeria should employ experts in accounting and finance to help establish and monitor their required liquidity position through efficient working capital management.

iv. Managers of quoted bottling companies in Nigeria should involve in credit terms bargaining with suppliers in order to optimize their account payables efficiency which could improve profitability position.

v. The management of the companies should adopt the daily stock control policy in order to have an optimal inventory level which would reduce the cost of holding and ordering as a result maximizes profitability in turn.

vi. The result suggested that quoted bottling companies in Nigeria should keep optimum level of account receivables and cash conversion cycle to increase profit. This could only be possible when quoted bottling companies give due regard to every components of cash conversion cycle.

REFERENCES

Abdul, R. (2011). Working Capital Management and Corporate Performance Of Manufacturing Sector in Pakistan, International Research Journal of Finance And Economics, 1450-2887 (4)47

Adeleke, O. & Mukolu, M. O, (2013). Working Capital and Organization Performance in Nigeria, International Journal of Business and Management Invention 2 (6), 26-35

Arnold, G. (2008). Corporate Financial Management. Pearson education limited, 4th edition.

Barine,M. N. (2012). Working capital management efficiency and corporate profitability: Evidences from quoted firms in Nigeria Journal of Applied Finance & Banking. 2(2) 215-237

Chittenden, F., Poutziouris, P. & Michaelas, N. (1998), 'Financial Management and Working Capital Practices in UK SMEs', Manchester, Manchester Business School. Capital Practices in UK SMEs', Manchester, Manchester Business School.

Deloof, M. (2003). Does Working Capital Management Affects profitability of Belgian Firms?Journal of Business Finance & Accounting. 30(3) & (4), 306-686

Deloof, M. & Jegers, M. (1996), 'Trade Credit, Product Quality and Intragroup trade: Some European evidence', Financial Management, 25(3), pp. 33-43.

Lazaridis, I. &Tryfonidis, D., (2006).Relationship between Working Capital Management and Profitability of Listed Companies in the Athens Stock Exchange,Journal of Financial Management and Analysis, 19(1), 32-59.

Lingesiya, Y. &nalin.S. (2010). Working Capital Management and firms performance: an analysis of srilinkan manufacturing companies, international journal of commerce and management 13(2), 48-61.

Long, M.S, Malitz, I. B., &Ravid, S.A., (1993), "Trade Credit, Quality Guarantee and Product Marketability", Financial management 22 (4).117-127

Mehdi, R.A.,Esmaeil, M. & Ali, F. Y, (2006). Impact of Working Capital Management on the Performance of the Firms Listed on the Tehran Stock Exchange, international journal of academic research in accounting, finance and management science, 3(3), 352-364

Modigliani, F. & Miller, M. H., (1958). "The cost of capital, corporation finance and the theory of investment," American Economic Review 48, 261-297.

Mumtaz, M., (2010). Impact of Working Capital Management On Firms' Performance: Evidence From Chemical Sector Listed Firms In Kse-100 Index, Iosr Journal Of Business And Management (IOSR-JBM) 93-100

Mukhopadhyay, D. (2004). Working Capital Management in Heavy Engineering Firms-A case study. Management accountant-calcutta-, 39, 317-323.

Myers, S. C. & Majluf, N. S., (1984). Corporate financing and investment decisions when firms have information those investors do not have. Journal of Financial Economics, 13 187 -221.Business Management Dynamics .2(2)10-25

Owolabi, S.A, &Alu, C. N., (2012).Effective working capital management and profitability; A study of selected quoted manufacturing companies in Nigeria. Economics and finance review, 2(6), 55-67

Padachi, K., (2006). Trends in Working Capital Management and Its Impact on Firms' Performance: An Analysis of Mauritian Small Manufacturing Firms", International Review of Business Research Papers, 2 (2) 45 -58.

Pandy, I. M., (2005).Financial Management, New Delhi, India, Vikas Publishing House. Pass, L.C.& Pike, H.R.,(1984). An Overview of Working Capital Management and Corporate Financing, Managerial Finance 10(3) .1-11

Rafiu, O. S. & John. A. A., (2014). Working capital management and the performance of selected quoted manufacturing companies in Nigeria, Research journal of finance and accounting. 5(14)

Raheman, A. & Nasr, M. (2007).Working Capital Management and Profitability: Case of Pakistani Firms, International Review of Business Research Papers, 3(1) 279- 300.

Raheman, A., (2011). "Sector-wise Performance of Working Capital Management Measures and Profitability Using Ratio Analysis",   Interdisciplinary Journal of Contemporary Research in Business, Vol. 3 (8).

Rehn, E., (2012). Effect of Working Capital Management on Companies profitability, Department of Accounting, Hanken school of Economies, Helsinki

Shin, H. & Soenen, L., (1998).Efficiency of Working Capital and Corporate Profitability.

Smith, M. B., &Begemann, E. (1997).Measuring Association between Working Capital and Return on Investment.South African Journal of Business Management , 28 (1)

Smith, K., (1980). Profitability versus Liquidity Tradeoffs in working capital management, readings on the management of working capital. West publishing company, New York, St. Paul.

Soenen, L.A., (1993). Cash Conversion Cycle and Corporate Profitability.Journal of Cash Management. 13, 53-57

Syed, Q. A., (2012).Capital Management And Firms Performance: Evidence From Pakistan, international journal of governance, 2(3)

Talat, A. & Mahmood, S (2010). Working Capital Approaches and Firm's Returns.Pakistan Journal of Commerce and Social Sciences. 1(1), 25-36.

Uyar, A.H. (2009). "The Relationship of Cash Conversion Cycle with firm size and Profitability': an empirical investigation in Turkey". International Research Journal of Finance and Economics, Issue 24 pp.186-193.

Van Horne, J.C, and Wachowicz, J.M., (1995), Fundamentals of Financial Management, Prentice Hall, Englewood Cliffs, NJ.

Vishnani, S, & Bhupesh, K.S., (2007). "Impact of Working Capital Management Policies on Corporate Performance", An Empirical Study. Global Business Review, 8. 267

Walker, E.W.(1967) "Towards A Theory of Working Capital", The Engineering Economist, pp. 21-35.