Cash Conversion Cycle and Profitability of Listed Cement Companies in Nigeria

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Abstract: This study examines the impact of cash conversion cycle on the profitability (ROE and ROA) of listed cement companies in Nigeria. Panel data were extracted from the annual report and accounts of the companies for the period 2008-2017 and are analyzed using descriptive statistics, correlation and multiple regression technique via STATA 13.0 software. Findings from the study revealed that cash conversion cycle has a negative significant relation with return on equity whereby positive significant relationship where found with return on Assets. The study recommends that Nigerian cement companies should maintain a lesser cash conversion cycle as it enhance profitability and Financial managers have to monitor their inventory levels with a view to reduce the number of days inventory are to be sold.

Keywords: *Cash conversion cycle, Return on asset, Return on equity and Cement Companies*

I. INTRODUCTION

The concern of business owners and managers all over the world is to devise a strategy of managing their day to day operations in order to meet their obligations as they fall due and increase profitability and Shareholder's wealth. Cash conversion cycle, in most cases, are considered from the perspective of working capital management as most of the indices used for measuring corporate liquidity are a function of the components of working capital.

Cash conversion cycle is one of the most widely used measures to evaluate and measure the risks and returns associated to liquidity management Since every corporate organization is extremely concerned about how to sustain and improve profitability, hence they have to keep an eye on the factors affecting the profitability. Cash conversion cycle is a very important component of working capital management and financial management because it directly affects the liquidity and profitability of the company (Anser & Malik, 2013).

The length of cash conversion cycle is an important measure of the efficiency of working capital management; the cash conversion cycle is a powerful performance measure for assisting how well a company is managing its working capital. A short cash conversion cycle is indirectly related to firm value. Short cash conversion cycle indicates that the firm is collecting the receivable as quickly as possible and delaying the payments of suppliers as slowly as possible. This leads to high net present value of cash flow and high firm value. Cash conversion cycle is an addictive measure of funds that are committed, that is tied inventories and receivables less payment that are deferred to suppliers. It has been interpreted as the cash outlays that arise during the production of output and the cash inflows that result from the sale of the output and the collection of accounts receivable (Nwakaego & Ikechukwu).

The concept of cash cycle was introduced by Gitman (1974) as a means of managing a firm's working capital and its implications for firm liquidity and profitability. Richards and Laughlin (1980) subsequently operationalised the cash cycle concept into the Cash Conversion Cycle (CCC) theory for analyzing firms' working capital management efficiency. The CCC theory posits that, ceteris paribus, efficient working capital management (i.e. a short cash conversion cycle) will increase a firm's liquidity, profitability and concomitantly its value; while inefficient working capital management (i.e. a long cash conversion cycle) will lead to lower profitability and lower firm value.

Profitability may be regarded as a relative term measurable in terms of profit and its relation with other elements that can directly influence the profit. Profitability is the relationship of income to some balance sheet measure which indicates the relative ability to earn income on assets. Irrespective of the fact that profitability is an important aspect of business, it may be faced with some weakness such window dressing of the financial transactions and the use of different accounting principles. A company should earn profit to survive and grow over a long period of time. Profits are essential, but all management decision should not be profit centered at the expense of the concerns for customers, employees, suppliers or social consequences (Mohamed, 2013).

The main objective of any firm is to maximize the profit. But, preserving liquidity of the firm
is an important objective also, Increasing profits at the cost of liquidity can bring serious problems to the firm. Therefore, there must be a tradeoff between these two objectives of the Firms. One objective should not be at cost of the other because both have their importance. For these reasons Working capital management should be given proper consideration and will ultimately affect the Profitability of the firm. Firms may have an optimal level of working capital that maximizes their Value. Therefore, the main objective of this study is to examine the impact of cash conversion cycle on profitability (ROE and ROA) of listed cement companies in Nigeria.

The findings of studies on cash conversion cycle and profitability of firms yields mixed results for example lin, horng and chou (2016) found negative relationship between cash conversion cycle and profitability indicators. Zakari and saidu (2016) reveals a positive relationship between cash conversion cycle and profitability but Yasir, Majid and Yousaf (2014) found a negative association between cash conversion cycle and return on asset. Augustine and Jacob (2017) found positive relationship between cash conversion cycle and return on assets and return on equity.Majeed, Makki ,Saleem and Aziz (2013) found a negative relationship between performance indicators (return on asset, return on equity and operating profit). Al-shubiri and Aburumman (2013) in their studies found a positive relationship between cash conversion cycle and financial performance characteristics (debt,market, productivity, liquidity and dividend) whereby found a negative relationship between cash conversion cycle and profitability indicators(return on asset and return on equity). Ikechukwu and Nwakaego (2016) found a positive relationship between inventory ratio with profitability, Account payable ratio and cash conversion had a positive and significant effect on firms' profitability. The divergence in corporate governance, financial constraints, and endogenous problems may also influence the relationship between cash conversion cycle and profitability .Thus, hypothesis which indicates negative relationship between cash conversion and profitability has been developed below:

H_{01} Cash conversion cycle has no significant impact on Return on equity (ROE) of listed cement companies in Nigeria.

H_{02}Cash conversion cycle has no significant impact on Return on asset (ROA) of listed cement companies in Nigeria.

The remainder of the paper is organized as follows: Section two (2) provides literature on cash conversion cycle and profitability and previous researches about these concepts. Section three (3) presents methodology of the study. Section four (4) Presents results and discussions and lastly section five (5) discusses conclusions and recommendations.

II. LITERATURE REVIEW

The Concept of cash conversion cycle

Cash conversion cycle is a very important component of working capital management and financial management because it directly affects the liquidity and profitability of the company. It deals with current assets and current liabilities. The traditional link between the cash conversion cycle and the firm's profitability is that shortening the cash conversion cycle increases firm's profitability (Mohamed, 2013).

Cash conversion cycle variables
Account Receivable Period

The objective of debtor management is to minimize the time-lapse between completion of sale and receipt of payment. In this respect accounts receivable ratio (AR) is calculated as accounts receivable/sales (Ubesie & Duru, 2013).Account receivable arises as a result of a company making sales on credit. It represents the total amount that is in the hands of its customers who buy goods on credit

Account Payable Period

Accounts payable are suppliers whose invoices for goods or services have been processed but who have not yet been paid (Ubesie & Duru, 2013). Accounts payable (AP) represents the rates of payables of firms to their suppliers. A company can lengthen this period in order to take advantage for improving working capital.

Inventory conversion period

Inventories are list of Stock-raw materials, working-in-progress or finished goods waiting to be consumed in production or to be sold (Ubesie & Duru, 2013). The variable represents the rate of stocks held by the firm.

The Concept of Profitability

Profitability is the ability to make profit from all the business activities of an organization, company, firm, or an enterprise. It measures management efficiency in the use of organizational resource in adding value

to the business (Mohamed, 2013). The present study focused on return on asset and return on equity as dimensions of profitability. Return on Assets is an overall measure of profitability that reflects both the profit margin and the efficiency of an organization. It measures how well firms use all their assets. Return on assets ratio is a percentage which measures the net income earned on the assets of firms. On the other hand, Return on equity points out the efficiency of using the own capital of the company; that's why its level is important primarily for shareholders, who may thus determine whether the remuneration they get rewards the risk assumed. Managers, in turn, will be motivated to achieve an appropriate level of this rate so as to maintain their positions and to achieve the company's performance criteria. The return on equity points out the remuneration of the shareholders, by the payment of dividends or by other forms of remuneration.

Empirical Studies

Many studies focused on cash conversion cycle and performance from different views and in different environments. It can therefore be deduced that there exists a significant relationship between performance of firms and Cash Conversion Cycle.

Nobanee, Abdullatif and AlHajjar (2011) investigate the relation between the firm's cash conversion cycle and its profitability. The relation between the firm's cash conversion cycle and its profitability is examined using dynamic panel data analysis for a sample of Japanese firms for the period from 1990 to 2004. The findings of the study reveals that strong negative relation between the length of the firm's cash conversion cycle and its profitability is found in all of the study samples except for consumer goods companies and services companies. Abbasi and bosra (2012) examines the effect of cash conversion cycle on profitability of Tehran stock exchange. The study covers the period of 1998 to 2009 of 112 firms using regression and the results of the first model demonstrate that when all of the cash conversion cycle components are entered to the model, the net cash conversion cycle and the number of days inventory holding did not have significant effect but number of days receivable accounts and number of days payable accounts had significant negative effect on operational gross profit to assets ratio and the result of 2- 5 models test demonstrates that each components of the cash conversion cycle alone had significant negative effect on operational gross profit to assets ratio.

Anser & Malik (2013) examines cash conversion cycle and firm's profitability of listed manufacturing companies in Pakistan. The study focus on how about evaluating how cash conversion cycle affects the profitability of manufacturing sector organizations listed at Karachi stock exchange of Pakistan. The study takes return on equity and return on assets as measures of profitability to represent dependent variables. Firm size and debt ratio are taken as control variables. Cash conversion cycle is considered as independent or explanatory variable. Study takes into consideration five (5) years financial statements data starting from 2007 to 2011. Results showed that manufacturing companies are having low average return on asset and high average return on equity with reasonable average cash conversion cycle.

In addition, Murugesu (2013) explore the effect of cash conversion cycle on profitability of listed plantation companies in Sri Lanka between 2008 and 2012. Results revealed that there is negative relationship between return on equity and cash conversion cycle.48.5 percent variation of ROE explained by CCC. Further Cash conversion cycle also had negative impact on Return on asset. In addition cash conversion cycle had 60.2 % negative impact on net profit.

Majeed, et.al, (2013) examine empirically the impact of cash conversion cycle on the performance of Pakistani manufacturing firms. The study used the sample of 32 companies selected randomly from three manufacturing sectors i.e. chemical, automobiles and construction & material for the period of five years ranging from 2006 to 2010. The study found that the average collection period of accounts receivables, inventory conversion period and Cash conversion cycle (CCC) have negative relationship with firm's performance.

In the study of Al-Shubiri and Aburumman (2013), Indicate that there is statistically significant and positive relationship between cash conversion cycle and independent variables, such as: debt, market, productivity, liquidity and dividends indicator at different significant of 11 Jordanian industrial sector listed on the Amman Stock Exchange for the period of 2005-2011.

Yasir , et.al, (2014),examines cash conversion cycle and its impact on firm performance of cement industry in Pakistan. The study used the sample of 16 firms selected from cement industry of Pakistan for the period of six years from 2007 to 2012. Correlation and regression analysis are used to examine the relationship between cash conversion cycle (CCC) and firm's performance i.e. return on assets (ROA). In order to find out the relationship between cash conversion cycle (CCC) and firm's performance the current study examines the impact of different component variables of cash conversion cycle (CCC) which includes receivables collection period (RCP), inventory conversion period (ICP) and payables deferral period (PDP). The findings of the study shows negative relationship between firms cash conversion cycle and profitability.

In Nigeria, Nwakaego and Ikechukwu (2015) examines the effect of cash conversion cycle on the performance of health care companies. Variable studied are cash conversion cycle, sales growth rate and debt

ratio. Secondary sources of data were sourced from the Annual Reports of the 3 selected companies. The findings of the study shows that both cash conversion cycle and debt ratio had negative but significant effect on the profitability of health care companies in Nigeria, while sales growth rate had positive and significant effect on those companies under study.

Along similar lines in Taiwan (china), Lin, et.al, (2016) uses quarterly data of 559 stocks for the period of 8 years to investigate the Relationship of cash conversion cycle and PRGap with firm performance. The study examines whether two WCM variables, namely, the cash conversion cycle (CCC), as well as the gap between days of payables outstanding and days of sales outstanding (PRGap) have any significant effects on firm profitability and operating performance. The findings demonstrate that there are significantly negative relationships between the CCC and performance indicators, whereas there are consistent positive relationships between PRGap and performance indicators.

In the work of Zakari and Saidu (2016) listed Nigerian telecommunication companies are examined in order to determine the impact of cash conversion cycle and profitability. Data are collected for the period of 4 years from 2010 to 2014. The data are analyzed using multiple linear regression analysis and the study findings indicates significant positive relationship between cash conversion cycle and corporate profitability.

In Nigeria, Ubesi and Duru (2016), explore the effect of cash conversion cycle management on the profitability of industrial and domestic product firms in Nigeria. Their study used Receivable ratio, payable ratio and Inventory ratio variables. Data were sourced from the annual reports of the selected industrial and domestic companies in Nigeria. The findings shows that, AR and AP had significant positive effect on the industries' profitability ratio at 1% level of significance. On the other hand, the industries' INV had significant but negative effect on the profitability ratio at 1% level of significance.

Kantudu, Bahamman, and Muhammad (2016) examine the impact of corporate governance mechanism on cash conversion cycle management of listed conglomerates in Nigeria over the period 2004-2013. Sample of five conglomerates firms listed on the Nigerian Stock Exchange was studied. The study makes use of secondary data generated from Annual Reports and Accounts of the sampled firms and the Nigerian Stock Exchange Fact book and revealed that board size and board composition had significant positive impact on Cash Conversion Cycle while Audit Committee Size showed a negative and insignificant impact on Cash Conversion Cycle.

Oseifuah and Gyekye (2016) examine cash conversion cycle theory and corporate profitability evidence from non-financial firms listed on the Johannesburg Stock Exchange. Their study uses Richards and Laughlin's (1980) cash conversion cycle theory to investigate the impact of working capital management efficiency and its separate components on the profitability of a sample of 75 non-financial firms listed on the Johannesburg Stock Exchange (JSE). The data for 10 year period, 2003 to 2012 reveals that: there exists a negative relationship between working capital management and corporate profitability; there exist a negative relationship between inventory conversion period and profitability; there is a negative relationship between accounts receivables conversion period and profitability; and there is a positive relationship between accounts payable deferral period (PDP) and profitability.

Ikechukwu, and Nwakaego (2016), in analysis of effect of cash conversion cycle on the financial performance of building materials/chemical and paint manufacturing companies in Nigeria. Cash conversion cycle, receivable ratio, payable ratio, and inventory ratio are the variables used and data were sourced from the annual reports of Health care companies in Nigeria. The findings using least square multiple regression shows that, Inventory ratio and Accounts receivable ratio had significant and positive effect on firms' profitability, accounts payable ratio and Cash conversion cycle had positive and non- significant effect on firms' profitability.

In a study of 19 cement companies listed in Karachi (Pakistan) stock exchange, Khan, Ayaz, , Waseem, Abbasi, and Ijaz (2016), use profitability and cash conversion cycle as dependent and independent variables respectively. The methodology adopted for the study is secondary source of data for six (6) years of data form 2008-2013. Their Findings suggests that there is a negative relation or result between the variables. The study further reveals that every organization irrespective of its size and nature working capital is important for every organization to maintain the profitability and solvency of the business.

Augustine and Jacob (2017) examine the relationship between cash management and performance of listed firms in Nigeria. The study used ex post factor research design, the secondary data gathered was analyzed using descriptive statistics, correlation matrix, and Pool Ordinary Least Square Regression. In the return on assets model, the result shows a significant positive relationship between cash conversion cycle, Cash holding and return on assets of firms while, cash flow and firm size has a negative relationship with the return on assets. In the model of return on equity, the variables of firm size, firm growth and cash flow indicated a negative relationship with the variable of firm performance. However, only the variable of firm size showed a significant negative relationship at 5% level with the dependent variable. While, there exist a positive relationship between the variable of cash conversion cycle and return on equity.

Chang (2018) explores Cash conversion cycle and corporate performance by adopting enterprises from different countries as samples. The study observe a negative relationship between the CCC and firm's

profitability and value, supporting that an aggressive working capital policy can enhance corporate performance; however, this effect reduces or reverses when firms exist at the lower CCC level. Results remain identical after considering endogenous problems, changes in macroeconomic environments, economic development status, financial crises, corporate governance, and financial constraints.

In Thailand, Linh and Mohanlingam (2018) investigate the relationship between cash conversion cycle and profitability that exists in the agriculture and food industries. The study analyses the data of 34 listed companies in agriculture and food industry in the Stock Exchange of Thailand from 2009 to 2013. Pearson's correlation and the regression analysis approach were used to examine the relationship between cash conversion cycle and profitability. The results indicates that cash conversion cycle (CCC) has a significant inverse relationship with profitability in the agriculture and food companies in Thailand. Further, production cycle and debt ratio were found to have a significant negative relationship with return on assets (ROA) while payment cycle and size have a positive relationship with return on equity (ROE). No significant relationship was found between cash collection cycle and profitability.

Theoretical Framework

The following are the relevant theories to the study the Baumol model of cash Management and pecking order theory. Baumol model of cash management helps in determining a firm's optimum cash balance under certainty. It is extensively used and highly useful for the purpose of cash management. The Baumol model of cash management theory relies on the tradeoff between the liquidity provided by holding money (the ability to carry out transactions) and the interest foregone by holding one's assets in the form of non-interest bearing money.

The pecking order theory (or pecking order model) postulates that the cost of financing increases with asymmetric information. This theory maintains that businesses adhere to a hierarchy of financing sources and prefer internal financing when available, and debt is preferred over equity if external financing is required (equity would mean issuing shares which meant 'bringing external ownership' into the company). Thus, the form of debt a firm chooses can act as a signal of its need for external finance.

III. METHODOLOGY

The study used ex-post facto design as the most suitable method. The selection was made because of the nature of both the dependent and independent variables of the study. Data were obtained from annual report and account of the companies as well as the fact book of Nigerian Stock Exchange for the period of ten years (2008 to 2017).

Population of the Study

The population of this study comprises of all the cement companies quoted on the Nigerian Stock Exchange (NSE) as at 31st December, 2017. There are three (3) listed cement companies on the floor of Nigerian Stock Exchange as at 31st December, 2017 and these companies are Ashaka cement plc, Dangote cement company plc and Lafarge (WAPCO) cement company plc. The study adopted census approach by studying all the firms.

Variables of the Study and their Measurement

The means by which the various variables adopted in this study are measured or computed are shown in Table 3.3

Table 3.1: Variables Measurement

Variables	Type	Measurement
Return on Equity	Dependent	Profit after tax/ total equity Adapted from Anser and Malik, (2013); Murugesu, (2013)
Return on Asset	Dependent	Profit before tax/ total assets following the works of Anser and Malik, (2013); Murugesu (2013); Yasir, Majid and Yousaf, (2014); Zakari and Saidu (2016) ;Ubesi and Duru, (2016)
Cash Conversion Cycle (CCC)	Independent	Accounts receivables period (ARP) + Inventory conversion period (ICP) – Accounts payables period (APP) Where: ARP = (Accounts receivables/sales) × 365 days ICP = (Inventory/cost of goods sold) × 365 days APP = (Accounts payables/sales) ×

		365 days Borrowing from the works of Murugesu (2013); Anser and Malik, (2013) ;Yasir, Majid and Yousaf, (2014),: Zakari and Saidu (2016); Ubesi, Duru, (2016); Augustine and Jacob (2017)
Firm size (Fsize)	Control	Total debt divided by total assets as used by Anser and Malik (2013)
Leverage	Control	Natural log of Total assets as used by Anser and Malik (2013); Augustine and Jacob (2017)

Source: Generated by the Researchers, 2019

Model Specification

The study adopts the model used in study of Anser & Malik, (2013) as shown below:

$ROE_{it} = \alpha + \beta_1 CCC_{it} + \beta_2 FSIZE_{it} + \beta 3 LEV_{it} + \varepsilon_{it}$

$ROA_{it} = \alpha + \beta_1 CCC_{it} + \beta_2 FSIZE_{it} + \beta 3 LEV_{it} + \varepsilon_{it}$

Where;

ROE = Return on Equity

ROA = Return on Assets

CCC = Cash Conversion Cycle

FSize = Size of the firm

LEV = Leverage

α = Constant Term

β = Coefficient Term

i = No of firms

t = Time Period

e = Error term

IV. RESULTS AND DISCUSSIONS

Descriptive Statistics of the Data

The results of descriptive statistics of the variables of the study are presented in Table 4.1.It presents the summary of the descriptive statistics of the variables of the study. Particularly, the mean, standard deviation, minimum and maximum values of all the variables are provided.

Table 4.1: Descriptive Statistics

Variable	OBS	MEAN	STD.DEV.	MIN	MAX
CCC	28	77.5234	44.57298	15.17624	53.05207
ROE	28	3.63604	5.794681	.000697	22.9113
ROA	28	24.27454	51.14373	.0006504	169.4902
LEV	28	15.53162	79.34485	.0003363	42.02446
FSIZE	28	8.45892	1.129052	6.0457	9.8729

Source: Computed by the Researchers Using Stata 13.0

Table 4.1 shows that the mean value of the return on equity was 4% and return on asset was around 24% with standard deviation of 5.7% and 51% respectively; the mean value for cash conversion cycle of all the listed cement companies together is around 76 days with high standard deviation with means that the companies ran their operations for an average of 77 days using supplier's fund. Average firms are having good cash conversion cycle, but the high standard deviation tells that the firms are dispersed widely on it during the study period.

The control variables leverage has a mean 15.5% with 79.3% standard deviation and 33.6% and 42% as the minimum and maximum during the study period. Firm size has a mean of 8.5 and standard deviation of 1.1 indicating a considerable level of dispersion in size of the industry during study period. The minimum value of 6 and 10 indicates that listed cement companies did not differs much in size during the study period.

Table 4.2: Correlation Matrix

Variable	CCC	ROE	ROA	LEV	FSIZE
CCC	1.0000				
ROE	-0.8499	1.0000			
ROA	-0.2117	0.3377	1.0000		
LEV	0.0346	-0.1250	0.5539	1.0000	
FSIZE	0.0319	-0.0037	-0.5019	-0.4301	1.0000

Source: Computed by the Researchers Using Stata 13.0

Table 4.2 shows the correlation coefficient of the relationship between the dependent (ROE and ROA) and explanatory variables (CCC, LEV and FSIZE). The table shows that there is inverse relationship between independent variable (CCC) and dependent variables (ROE and ROA) indicating that the longer the cash conversion cycle the lower the profitability of listed cement companies as measured by ROE and ROA. The account receivable period and inventory conversion period must be delayed to increase profitability of listed cement companies in Nigeria. The control variables LEV and FISZE shows a direct relationship with CCC and this indicates that when LEV and FSIZE increases there is tendency that the CCC of the listed cement companies will increases and vice versa.

The study further conducts heteroscedasticity test (hettest) to test the null hypothesis that there is absence of heteroscedascity among the variables at 5% level of significance. As a result of the abnormality of data for CCC, LEV and FSIZE, which requires that the generalized least square (GLS) is more appropriate in establishing the relationship between dependent and independent variables, The Hausman Specific test was conducted to determine sustainability between fixed effect and random regression. Given that the outcome of the specification test suggesting random effect, the Breusch and Pagan Langrarian multiplier test for random effect was also conducted to choose between the random and ordinary least square (OLS) regression analysis. The decision rule is to adopt GLS random effect regression if the random test is significant, while an insignificant random effect means the robust OLS regression is to be adopted.

Table 4.3: GLS Random Effect Regression Results: Impact of CCC on ROE and ROA

Variables	Coefficient	Std. Err.	Z	P-Value
ROE	-7399	1151	-6.43	0.000
ROA	226.25	132.2	1.71	0.087
LEV	-11.107	10.67	-1.07	0.298
FSIZE	2905	5986.9	0.49	0.627
Cons	-9450.23	58442	-0.16	0.872
R-square: Within	0.7455			
Between	0.9924			
Overall	0.7581			
Wald Chi2	0.0000			

Source: Computed by the Researchers Using Stata 13.0

Table 4.3 shows that ROE and LEV have inverse (negative) impact of -7399 and -11.107 respectively on CCC indicating that longer the cash conversion cycle the lower would be the profitability as measured by return on equity. This inverse relationship signifies unfavorable impact to Nigerian cement companies because CCC is to be as shorter period as possible also means that cement companies take long period of time before it can make conversion of cash. The result is in consistent with the findings of Majid et.al , 2013; Yasir et.al, 2014; Khan et.al, 2016; Oseifuah and Gyekye, 2016; Linh and Mohanlingam, 2018; Chang, 2018. However, ROA and FSIZE have a direct impact (positive) impact of 226.25 and 2905 respectively on CCC. This implies that a unit increase in values of CCC shall bring about corresponding increases in the ROA and FSIZE of listed cement companies in Nigeria. This result is in agreements with the findings of Nobanee et.al, 2011; Zakari and Saidu, 2016, Ubesi and Duru, 2016; Augustine and Jocob, 2018.

Moreover, the result the coefficients of ROE, ROA are significant at 5% level of significance as explained by the p-value of 0.000,0.087 respectively. Furthermore, the result of coefficients of the control variables LEV and FSIZE are insignificant as indicates by the p-values of 0.298 and 0.872.

Furthermore, the results of the analysis revealed an R^2 value of 0.7455 thus indicating that 74.45% variation in the profitability ratio (dependent variable) of listed cement companies in Nigeria was accounted for by the explanatory (independent) variables considered in the analysis while the remaining 25.55% is explained by other factors not included in the model of this study. Similarly, the Wald Chi^2 of suggests that the cumulative effect of the independent variables in the study at 5% level of significance as shown by the p-value of 0.0000.

V. CONCLUSION AND RECOMMENDATIONS

This study examines the impact of cash conversion cycle on the profitability of listed cement companies in Nigeria. The study concludes that cash conversion cycle has an inverse significant relationship with ROE and direct significant relationship with ROA. The control variables LEV and FSIZE show an inverse and direct insignificant relationship with the independent variable (CCC) Respectively .This depicts that shorter cash conversion cycle of the firms will lead towards increased profitability of the Nigerian cement companies.

Based on the conclusions of this study, the study recommends that Nigerian cement companies

Should maintain a lesser cash conversion cycle as it enhance profitability and Financial managers have to monitor their inventory levels with a view to reduce the number of days inventory are to be sold. Managers can create value for their shareholders by investing optimally in current assets to avoid illiquidity.

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