



Impact of Working Capital Management on the Performance of Quoted Agricultural Companies in Nigeria

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Abstract

Available empirical evidences point to the fact that there is apathetic literature in Nigerian Agricultural sector on relationship between working capital management and financial performance, this study therefore provide evidence to bridge this gap by focusing on the impact of working capital management and financial performance of quoted agro-allied firms in Nigeria. To achieve the objective, secondary data were collected from financial statements and analysed over ten (10) years from 2008 through 2017 for the five (5) firms in Agricultural sector giving rise to fifty (50) years financial data. The descriptive and inferential statistics were used to analyse data specifically, mean, mode, standard deviation, minimum and maximum descriptive statistics were used with the OLS regression model that permit inferential judgement. After passing the Multicollinearity and Heteroscedasticity tests, the hypotheses were tested at 5% significance level. Among the findings, the study reveals that account receivable period (used as one of the variables of working capital management) has a significant positive impact on the financial performance of quoted agricultural firms in Nigeria with the t-value of 2.49 and a p-value of 0.017; This implies that proper management of account receivable will lead to improvement in the financial performance of quoted agricultural companies in Nigeria. The study, therefore recommends that all measures leading to continuous improvement of Account receivable period should be put in place and

sustained so that a firm is not affected negatively from all activities of bad debtors

Keywords: *Working capital management, financial performance, Account receivable period, cash conversion period, Payable deferral period, inventory conversion period & return on assets.*

Introduction

Working capital (WC) can be said to be part of a firm's capital structure used for the routine running of the affairs of the organization. Capital is required to fund current assets such as purchase of raw materials, management of receivables, cash, bank, short-term financial. Many studies such as Lazaridis and Tryfonidis, (2006), Alhassan (2012), Kajola, Nwaobia and Adedeji (2014) to mention but few, had established a relationship between WC and financial performance (Liquidity & profitability) of firms and hence the need to manage the components of WC for a desirable liquidity and profitability, therefore working capital management (WCM) becomes imperative for firms.

In the current era in Nigeria where local sources of financing have become limited and inadequate, conscious effort to maximize working capital management is every paramount to organizations of all

sizes and financial conditions, indeed in a business world where *liquidity is king*, it is vital that organisations properly align a working capital management program with the overall [business](#) strategy and objectives. To achieve this, an organization need to put in motion, tools processes required to manage the components of working capital, the principal goal of Working Capital Management is to ensure that organization generates sufficient positive working capital from ongoing business activities to continually fund both debt payments and operating costs (Eya, 2016).

Agricultural industries are established companies with activities in the sector of large-scale farming (plantation, cash crops and food crop farming) and livestock production. These companies also acquire equipment appropriate for processing, packaging and storing food and

beverages to generate revenue and improve per capita food intake, similarly, they are involved in agricultural consulting, fertilizer manufacture and sales, fish import and export, livestock feeds and feed millers, fishing, poultry farms, hatcheries. Furthermore, as documented by Food and Agriculture Organisation (FAO, 1975), agricultural companies are key to the stimulation of the development of the agricultural sector, thereby improving the degree of self-sufficiency of the developing countries, of which Nigeria is a part, and accelerating their economic growth and sustained progress towards eradication of disparities. There is no doubt that engaging in the aforementioned activities involves funding and to be successful in achieving goals, there is need to effectively manage all the resources.

A strong link is believed to exist between working capital management and agricultural business financial performance; this link can be traced to the nature/aspect of agricultural activity undertaken by a given company as earlier highlighted above. For instance, crop farming is undertaken seasonally (mostly during raining season in Nigeria and as such affect the WC requirement, plantation farming requires more working capital at an earlier stage than at maturity. Livestock production involves rearing of animals to maturity in which case the animals need to be disposed alive or find a means of preserving slaughtered animal. Working capital required varies from the early stage of the animal, and increases upward at maturity since there would be a need to incur costs at disposal or on preservation or else additional cost would be incurred to keep feeding the animals on a daily basis without adding to the value of the animal. To the best of the knowledge of these researchers there is none study that deals with the issue of the relationship between WCM and performance of Agricultural firms in Nigeria as most of the work done are in other sectors of Nigerian Stock Market and in developed economies. Some of this work include; Falope and Ajilre, (2009); Ani, Okwo and Ugwunta, (2012); Alhassan, (2012); Ajibolade and Sankay, (2013); Adolphus, (2014); Kalaivani and Jothi (2017); Agha and iZaibi, (2018); Dababrata, (2018); Awodiran (2019); Ali (2019), and Osuji and Agbada (2020) among others who conducted researches on WCM in other areas of studies. Agricultural companies in Nigeria are often neglected in this area of study despite its expected contributions to the Gross Domestic Product and diversification of the Nigerian economy base. To these researchers this is a serious gap that needs to be bridged and hence this study.

The main objective of this study is to examine the impact of working capital management on the performance of quoted Agricultural companies in Nigeria. While the specific objectives are as follows;

1. To determine the effect of Account Receivable Period on Performance of quoted Agricultural companies in Nigeria.
2. To assess the effect of Inventory Conversion Period on Performance of quoted agricultural companies in Nigeria.
3. To examine the effect of Cash Conversion Cycle on Performance of quoted agricultural companies in Nigeria
4. To evaluate the effect of Payable Deferral Period on Performance of quoted agricultural companies in Nigeria

To achieve these objectives the following null hypotheses were formulated and subjected to tests:

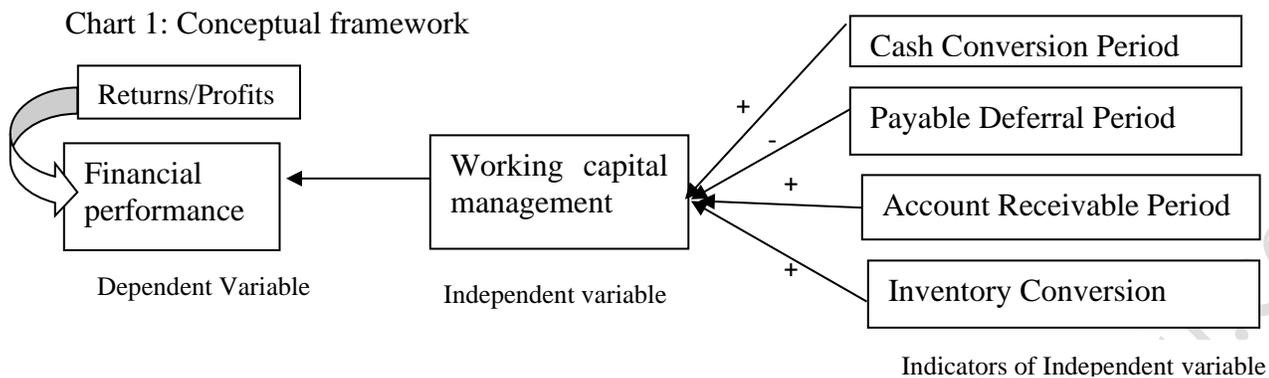
- Ho₁: Account receivable period has no significant effect on the performance of quoted agricultural companies in Nigeria.
- Ho₂: Inventory conversion period has no significant effect on the performance of quoted agricultural companies in Nigeria.
- Ho₃: Cash conversion cycle has no significant effect on the performance of quoted agriculture companies Nigeria.
- Ho₄: Payable deferral period has no significant effect on the performance of quoted agricultural companies in Nigeria.

The study covers four main working capital management components which are; Account Receivable Period, Inventory Conversion Period, Cash Conversion Cycle and Payable Deferral Period. The study covers the period of ten (10) years from 2008 to 2017. The companies selected are all Nigeria quoted agricultural companies engaged in different agricultural activities. The five agricultural companies were selected based on the reason that they were the only ones listed on the stock exchange as at January 2008 and were not delisted as at 31st December 2017. The period of ten years was chosen because it believed that a long period study ensure sound statistical analysis and inferences.

LITERATURE REVIEW

Conceptual frame: concept of working capital management is a main focus of financial decision of corporate firms since it directly affects their performance. Managing working capital takes into consideration the trade-off between risk and return associated with funds with organizations or individuals developing problems that arise in attempting to manage the current assets, the current liabilities and the interrelationship that exists between them (Lazaridis & Tryfonidis, 2006). The fundamental purpose of working capital management is to control a company's current financial resources in such a way that a balance is established between the company's performance and the associated risk. There are two concepts of working capital; Gross Working Capital (GWC) and Net Working Capital (NWC). GWC is the firm's total investment on current assets such as trade receivables, inventory, cash in Hand and at Bank, prepayments and accrued incomes, while NWC is current assets deflated by total current liabilities when expanded the relationship gives rise to working capital cycle (WCC) which is a metric that expresses the length of time in days that it takes for a company to convert resource inputs into cash flows (Youssef, 2006), this metric looks at the amount of time needed to sell inventory, the amount of time needed to collect receivables, and the length of time affordable for the company to pay its bills (Christopher, 2009).

Concept of financial performance, according to, Kaplan and Atkinson (1989), Brealey, Myers and Allen (2006); Oliver and English (2007); Hatten (2008); Gitman, (2009), Cicea and Hincu (2009), Mshelia (2016), Yahaya (2016) assert that financial performance are generally measure with profit/profitability, income, earnings, Return on Assets, Return on Investment, Dividend per share, earnings per share, Return on Equity. The relationship between WCM and financial performance is depicted in Chart 1 below:



Source: Constructed by the Researchers, 2020

The above chart 1 shows the relationship between dependent and independent variables ie financial performance and WCM with the indicators used to measure WCM with expected relationship is positive between WCM and financial performance. The a priori expectation is that cash conversion period (Ccp), Account Receivable Period (Arp) and inventory conversion period (Icp) have a negative relationship with financial performance while Payable Deferral Period (Pdp) has positive relationship. This is so because the shorter the Ccp, Arp, Icp the effective the WCM while the longer the Pdp the better for the organization's WCM.

Theoretical Framework: There are many theories that are related to the objective of these theories such as Tradeoff Theory, M&M theory, Pecking order theory; we however found tradeoff theory to be more suitable and as such adopted to guide this study. The Trade-off theory was founded by Kraus and Litzenberger in 1973 with a philosophy that striking a balance between costs and benefits associated with choice of finance using debt and equity. The central assumption of this theory proposes that there is a trade-off between liquidity and profitability; gaining more of one means giving up some of the other. At one end of the spectrum there are highly liquid firms which are not very profitable while at the other end are firms which are highly profitable but are not very liquid. The basic challenge, therefore is to determine the middle ground where the firm should reside (Bhattacharya, 2001).

This theory is considered suitable to underpin this study because of its closeness with the objective of the study and goes in the same way with a priori expectation of the study, since management of working capital is expected to relate with costs and benefits to an organization. That is, management of an

organization may tend to strike a balance between costs and benefits associated with current assets and liability using one of the different patterns of working capital management.

The gap to be filled in this study is sectorial. Sectorial being that the researcher has not seen the empirical work done in the quoted agricultural companies in Nigeria. Most of the work done were in other sectors of Nigeria Stock Market and in developed economies, this is considered as a serious neglect and hence this study will address this.

METHODOLOGY

The research design used for the study is the ex-post facto research design. This is due to the fact that the cause-effect relationship was established using a regression model run over ten (10) -year. The independent variable of the study is performance while the independent variables are proxies of working capital cycle i.e. Account payable period, cash conversion period, account receivables period, inventory conversion period.

The population of the study is the five (5) - quoted agricultural companies were the only ones listed on the Nigerian Stock exchange, carrying out different agricultural businesses in Nigeria as at 1st January, 2008 and were still in operation as at 31st December 2017. The agricultural companies studied consist of Presco Plc, Okomu Oil Palm Plc, Livestock Feeds Plc, FTN Cocoa Processor Plc and Ellah Lakes Plc. Since the population of the study is not too large, the researcher adopted a census sampling technique where the entire population (Presco Plc, Okomu Oil Palm Plc, Livestock Feeds Plc, FTN Cocoa Processor Plc and Ellah Lakes Plc) were studied (Kothari, 2008). This implies that when a population is not too big, the researcher could decide to study the entire population as the case with this study.

Secondary data for the study were obtained from the annual financial statements of the listed agricultural firms were used. The data collected to cover the period of ten years spanning from 2008 to 2017 financial years of the five firms named above given rise to fifty (50) years financial data. These (10) years were adopted because related studies such as: Ponsian, Chrispina, Tago and Mkiibi (2014), Rafiu and John (2014), Mike (2014) and Eya (2016) all used ten (10) year period. That is, ten (10) year period is generally believed to be enough to reveal causality between dependent and independent variables.

For us to analyse our data empirically, ordinary least squares regression model was estimated in line with the earlier work of Gujarati and Porter (2009). According to Gujarati and Porter (2009) the ordinary least squares regression estimation model takes into cognizance of the heterogeneity and residual errors unobservable in panel data analysis.

Model Specification

The study adopted the generic model of Nwude (2016) to determine the relationship between dependent variable and the independent variables. The model is stated below:

$$Prf = \alpha + \beta(Wcc + Siz + Grw + \sigma) \text{-----Equation 1}$$

Equation 1 was operationalised and used to test all the hypotheses and expressed as follows:

$$Roa_{it} = \alpha + \beta_{11}Arp_i + \beta_{12}Icp_i + \beta_{13}Ccp_i - \beta_{14}Pdp_i + \beta_{15}Siz_i + \beta_{16}Grw_i + \sigma \text{-----Equation 2}$$

Where α is constant for firm i at time t , β is the coefficient of independents 1 to 6 for firm I while σ represent error term

Table 1: Description of Research Variables

Variables	Definition	Model representative	Status
Wcc	Working capital cycle	Arp, Icp, Ccp & Pdp	Independent variable
Roa	Return on assets	Performance	Dependent
Arp	Account receivable period	Wcc	Independent
Icp	Inventory conversion period	Wcc	Independent
Ccp	Cash conversion period	Wcc	Independent
Pdp	Payable deferral period	Wcc	Independent
Siz	Size of the firm	Wcc	Control variable
Grw	Sales growth	Wcc	Control variable

Source: initiative of the researchers, 2020

Dependents, independents and control variables are computed using the following relationship:

Roa = Net income/average book value of assets

Siz = Natural log of total Assets

Grw = (current year sales – previous year’s sales)/previous sales

Arp = (average receivable/total credit sales x number of days in the period.)

Icp = (average inventory/cost of goods sold per day.)

Pdp = (average account payable/cost of goods sold per day.)

Ccp= (average Collection Period + Inventory Turnover in Days – Average Payment period.)

RESULTS AND DISCUSSIONS

Table 2 Descriptive Statistics

Variable	Mean	Standard Dev	Minimum	Maximum
Roa	.376066	.719162	-.87247	.93681
Arp	286.661	101.407	0	398.19
Icp	339.591	27.8668	289.81	433.39
Pdp	333.898	37.4529	260.49	443.98
Ccp	2.42487	.241099	1.3909	2.5884
Siz	6.65699	.547425	5.7579	7.9199
Grw	-.003657	.072842	-.22961	.15052

Source: Output of STATA 14, 2020

From Table 2 the mean of Roa is .37607 representing average Roa across quoted agricultural firms. It is also observed from the table that the difference between the mean of Roa and standard deviation of Roa across quoted agricultural firms is -.34309 indicating small variability around the mean. It implies that the amount of Roa is moderately spread among the quoted agricultural firms in Nigeria. The table also showed that the minimum and maximum Roa are -.87247 and .93681 respectively, indicating a moderate range. This means that Roa is moderate in all years of the study. Thus, agricultural firms tend to record a moderate Roa in all the years of the study.

The mean of account receivable period (Arp) as indicated by table 2 is 287 days, representing the average ARP of the agricultural firms in the study. The standard deviation is 101 days, indicating a very high variability among the variables. It means that most of the agricultural companies are not within the same range in terms of ARP. The minimum and the maximum ARP are 0 and 398 days respectively. This implies that the range is 398 days, indicating a very high range in ARP by the agricultural firms. It implies that the difference between the highest agricultural firm with ARP and the smallest is very high.

Table 2 shows that inventory conversion period (Icp) as indicated by the mean is 340 days, representing the average Icp of the agricultural firms in the study. The standard deviation is 28 days, indicating a very low variability among the variables. It means that most of the agricultural companies are within the same range in terms of Icp. The minimum and the maximum Icp are 290 and 433 days respectively. This implies that the range is 143 days, indicating a moderate

range in Icp by the agricultural firms. It implies that the difference between the highest agricultural firm with Icp and the smallest is moderate.

Table 2 further shows that the mean for the payable deferral period (Pdp) is 334 days indicating the average level of Pdp across the sampled agricultural firms and standard deviation of Pdp is 37 days. The difference between the mean and the standard deviation is 297 days. This is an indication of low variability in the Pdp around the mean. It means that there is a very small variation in the Pdp of the sampled firms. The minimum and maximum are 260 days and 444 days respectively. This is an indication of a moderate range 184 days.

Table 2 also shows that the average cash conversion period (Ccp) as indicated by the mean is 2.425, while the standard deviation is .241 representing the average variability of Ccp among the sampled agricultural firms within the period covered by the study. This implies that the level of Ccp among the agricultural firm is moderately spread. Some firms tend to record relatively high level of Ccp than others. The minimum and the maximum as shown in the table are 1.391 and 2.59. Hence, the range is 1.199 implying that there is a moderate gap between the highest Ccp and lowest loss.

The mean of total asset (Siz) as indicated in table 2 is 6.657, representing the average siz of the sampled agricultural firms in the study. The standard deviation is .547 indicating a wide variation among the variables. It means that most of the agricultural companies are not within the same range in terms of their Siz. The minimum and the maximum Siz of sampled firms are 5.758 and 7.920 respectively. This implies that the range is 2.162, indicating a moderate range in Siz of the sampled firms. It implies that the difference between the firm with the lowest size and the highest size is moderate.

The mean of firm growth (Grw) as indicated by table 2 is -.004, representing the average Grw of the sampled agricultural firms in the study. The standard deviation is .073 indicating a moderate variability among the variables. It means that most of the agricultural companies are within the same range in terms of their Grw. The minimum and the maximum Grw of sampled firms are -.230 and .151 respectively. This implies that the range is -.381, indicating a moderate range in Grw of the sampled firms. It implies that the difference between the firm with the lowest Grw and the highest Grw is moderate.

Table 3: Correlation Result

	Roa	Arp	Icp	Pdp	Ccp	Siz	Grw
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	2020						

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Roa		1.0000						
Arp		0.3475*	1.0000					
		0.0144						
Icp		-0.5366*	-0.1565	1.0000				
		0.0001	0.2828					
Pdp		-0.3915*	0.4381*	0.6321*	1.0000			
		0.0054	0.0016	0.0000				
Ccp		0.4621*	0.3482*	-0.2290	0.2367	1.0000		
		0.0008	0.0000	0.1135	0.1015			
Siz		0.4386*	0.3035*	-0.1759	0.0869	0.3181*	1.0000	
		0.0016	0.0340	0.2267	0.5525	0.0259		
grw		0.0188	-0.3148*	-0.1422	-0.2917*	-0.2438	0.1272	1.0000
		0.8978	0.0276	0.3297	0.0420	0.0915	0.3838	
-----+-----								

Source: output of STATA 14, 2020

The correlation matrix shows the relationships between each pair of variables. The relationship between each independent variable and the dependent variable expected to be strong while the relationship between each pair of independent variable is expected to be low. This is because, according to Gujarati and Porter (2009), a correlation coefficient between two independent variables above ± 0.8 is considered excessive and may indicate the existence of multicollinearity. However, Tables 3 shows that all correlation coefficient between the pairs of the independent variables are less than ± 0.8 . Thus, suggesting that the four independent variables and two control variables can be well fitted into the Regression Models.

Multicollinearity Test Result: Muticollinearity test is conducted to check harmful correlation between the explanatory variables that could distort the regression result. In this study, multicollinearity test was conducted using variance inflation factor (VIF) and tolerance value. According to Gujarati (2004), when VIF value is more than 10 and/or when the tolerance value (TV) is more than 1.00 then there is a strong indication of the presence of multicollinearity.

Table 4: Testing for Multicollinearity among Variables

Variable	VIF	1/VIF
Arp	8.71	0.114811
Ccp	8.02	0.124683
Pdp	7.25	0.137899
Icp	4.34	0.230192
Siz	1.33	0.751551
Grw	1.26	0.792307

Mean VIF | 4.62

Source: output from STATA 14, 2020

The multicollinearity test from table 4 shows that all the VIF values are less than 10 and the tolerance values are less than 1, in addition, the mean VIF as indicated by the table 4 is 4.62. The result means that there is no evidence of multicollinearity among the independent variables.

Heteroscedasticity Test Result

Breusch-Pagan / Cook-Weisberg test for heteroskedasticity

Ho: Constant variance

Variables: fitted values of Roa

chi2(1) = 0.18

Prob>chi2 = 0.6723

In this study, heteroscedasticity test was conducted using Breusch-Pagan/Cook-Weisberg test. The null hypothesis to the test is “constant variance” (presence of homoscedasticity). Thus, if the p-value is less than or equal to 5%, then there is evidence to reject the null hypothesis. The result of Breusch-pagan / Cook – Weisberg test for the study shows chi2 value is 0.18 and the p-value of chi2 is 0.6723 indicating the of absence of heteroskedasticity.

Table 5: OLS Robust Regression result

Linear regression	Number of obs	=	49
F(7, 41)	=	29.84	
Prob> F	=	0.0000	
R-squared	=	0.6554	
Root MSE	=	.45679	

| Robust

Roa	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
Arp	.0068326	.0027951	2.44	0.019	.0011879	.0124774
Icp	.0053509	.0048275	1.11	0.274	-.0043985	.0151003
Pdp	-.0155873	.0046115	-3.38	0.002	-.0249005	-.0062741
Ccp	-.9239098	.8362839	-1.10	0.276	-2.612819	.7649997
Siz	.5625373	.1306708	4.30	0.000	.2986421	.8264324
Grw	-.6399161	1.293606	-0.49	0.623	-3.252407	1.972575
Cons	-.0608037	2.460618	-0.02	0.980	-5.030123	4.908516

Source: output from STATA 14, 2020

The R-square value showed the level at which the explanatory variables explain the dependent variable. Table 5 revealed that the R-square is 65.54%. This means that the working capital variables in the study explained the return on assets (Roa) to the tune of 66%. The value of F-Statistic is 29.84 with probability of $\chi^2 = 0.0000$. The probability of χ^2 is significant at 1%, indicating that the model fits. This serves as a substantial evidence to conclude that the working capital variables selected for the study are suitable for the study of the impact of working capital management on performance of quoted agricultural companies in Nigeria.

The study was designed to test four hypotheses. The hypothesis which was earlier stated in null forms are tested using the result obtained from the OLS regression model as presented in Table 5

Table 6: Test of Hypotheses

Variables	t	p-value
INTERCEPT	-0.01	0.990
ARP	2.49	0.017
ICP	1.15	0.257
PDP	-3.39	0.002
CCC	-1.13	0.263

Source: output from STATA 14, 2020

H₀₁: Account receivable period has no significant effect on the performance of quoted agricultural firms in Nigeria.

The result from Table 6 shows that account receivable period has a t-value of 2.49 and a p-value of 0.017. Thus, indicating that account receivable period is significant at 5%. This result implies the study has found substantial evidence to reject the null hypothesis and accept the alternative hypothesis that account receivable period has a significant effect on the performance of quoted agricultural firms in Nigeria. The implication of the result is that account receivable period has a statistical influence on performance of quoted agricultural firms in Nigeria. The finding concurs with the study conducted by Falope and Ajilore (2009), Mwanahamisi (2013), Rafiu and John (2014) and contradicted the findings of Shahid and Saad (2016) who in their study recorded a non-relationship.

H₀₂: Inventory conversion period has no significant effect on the performance of quoted agricultural firms in Nigeria.

Table 6 shows that inventory conversion period has a t-value of 1.15 and a p-value of 0.257. The p-value indicates that inventory conversion period is not significant at all levels. Hence, the study has established enough evidence, failing to reject the null hypothesis that Inventory conversion period has no significant effect on the performance of quoted agricultural firms in Nigeria. By failing to reject the null hypothesis, the study inferred that inventory conversion period has no effect on the performance of quoted agricultural firms in Nigeria. The finding contradicts findings of Falope and Ajilore (2009), who found a significant negative relationship between net operating profitability and inventory turnover days and Okwo, Ugwunta and Agu (2012) who found that ratios of inventory to cost of goods sold, account receivable to sales, and sales and general expenses to sales have significant impact on gross profit margin of Nigerian beer brewery firms.

H₀₃: Payable deferral period has no significant effect on the performance of quoted agricultural firms in Nigeria

The result from Table 6 shows that payable deferral period has a t-value of -3.38 and a p-value of 0.002. Thus, indicating that payable deferral period is significant at 1%. This result implies the study has found substantial evidence to reject the null hypothesis and accept the alternative hypothesis that Payable deferral period has significant effect on performance of quoted agricultural firms in Nigeria. The implication of the result is that payable deferral period has a statistical influence on performance of quoted agricultural firms in Nigeria, that is, has payable deferral period increases the performance of sampled firms

decreases in term of return on equity. The finding is in agreement with the study conducted by Rafiu and John (2014) that found the average collection period and average payment period positively and significantly related to profitability, while inventory turnover in days cash conversion cycle were significant but negatively related to profitability and net trading cycle was negatively related to profitability but not significant. The finding also agrees with Kajola, Nwaobia and Adedeji (2014) that ifound iworking icapital imanagement i(Cash iConversion iCycle) inegatively iand isignificantly irelated iwith ifirm's ifinancial iperformance i(ROA). iThe finding contradicts the findings of Eya (2016) whose study revealed a positive relationship exist between Current Ratio (CUR), Quick Ratio (QUR) and Return on Asset (ROA).

H0₄: Cash conversion period has no significant effect on performance of quoted agricultural firms in Nigeria.

Table 6 shows that cash conversion period have a t-value of -1.10 and a p-value of 0.276. The p-value indicates that cash conversion period is not significant at all level. Hence, the study has established enough ievidence ito ifail ito ireject ithe inull ihypothesis ithat ireads icash iconversion icycle ihas ino isignificant ieffect ion iperformance iof quoted agricultural firms in Nigeria, by failing ito ireject ithe inull ihypothesis, ithe istudy iinfers ithat icash iconversion period ihas ino ieffect ion iperformance iof iquoted iagricultural ifirms iin iNigeria. This finding is in line with the findings of Ponsian et al (2014) that found positive relationship between cash conversion cycle and profitability of the three manufacturing companies listed on the Dares Salam Stock Exchange (DSE) Tanzania, and Eya (2016) that found a significant positive relationship between Current Ratio (CUR), Quick Ratio (QUR) and Return on Asset (ROA). However, the finding contradicts the findings of Okwo, Ugwunta and Agu (2012) whose outcome iof iianalysis iclearly ipinpoint ithat iworking icapital imanagement ias irepresented iby ithe icash iconversion icycle, isales igrowth iand ilesser idebtors' icollection iperiod iimpacts ion ibeer ibrewery ifirms' iprofitability.

CONCLUSION AND RECOMMENDATION

The study concluded that account receivable period has a significant positive effect on the performance of quoted agricultural firms in Nigeria; this implies that proper management of account receivable will lead to improvement in the performance of quoted agricultural companies in Nigeria. This is so because

proper management of account receivable will reduce the incidence of bad debt and improves firms' liquidity position and consequently their performance.

Secondly, Inventory conversion period has no statistical influence on performance of quoted agricultural firms in Nigeria. This means there is no significant relationship between inventory conversion and performance of quoted agricultural firms in Nigeria. This implies that inventory management is not a serious issue for quoted agricultural firms in Nigeria.

Thirdly, Payable deferral period has a significant negative effect on the performance of quoted agricultural firms in Nigeria. This means that there is an inverse relationship between payable deferral period and performance of quoted agricultural firms in Nigeria. Increase in the payable deferral period will lead to a decrease in performance of quoted agricultural firms in Nigeria.

And, finally, Cash conversion period has no statistical influence on performance of quoted agricultural firms in Nigeria. This means there is no significant relationship between quoted agricultural firms in Nigeria Cash conversion period and performance of quoted agricultural firms in Nigeria. The implication is that working capital management measures such as account receivable, inventory conversion period, cash conversion period and payable deferral period has a significant effect on the performance of agricultural companies in Nigeria.

The implication of this finding is that regular review of working capital management components by operators of agricultural companies in Nigeria is very essential as this will help to improve on the contribution of the WC to performance significantly if strictly adhered to.

Based on the findings, the study puts forward the following recommendations:

- i) That all measures leading to continuous improvement of Account receivable period should be put in place and sustained so that a firm is not affected negatively from all activities of bad debtors
- ii) The inventory conversion period should be improved upon by a reduction in the period so that it can positively contribute to the financial performance of the listed agricultural firms. This can be achieved through robust credit policies that can foster sales and ensure customer loyalty.
- iii) The payable deferral period should be looked into with a view to obtain a little extension to the period so that it can contribute

significantly to the financial performance of the agricultural firms. Quoted agricultural firms in Nigeria should explore to its optimum position the advantage associated with this spontaneous financing while avoiding the debt trap and loss of credit rating.

- iv) Cash conversion cycle should be holistically looked into with a view to reduce it for it to make a positive contribution to the financial performance of the firms. This can be achieved through a pragmatic budgeting system that takes care of the peculiarities of quoted agricultural firms in Nigeria.

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