

EFFECT OF WORKING CAPITAL MANAGEMENT ON THE FINANCIAL PERFORMANCE OF FIRMS IN NIGERIA

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Abstract

This study investigated the effect of working capital management on the financial performance of natural resource firms listed on Nigeria exchange limited from 2017 to 2022. The specific objectives of the study were to determine the effect of average payment periods, average collection period, inventory conversion period, cash conversion cycle and current ratio on the financial performance of firms listed on Nigeria exchange limited. The hypotheses synchronized with the objectives and the cause and effect research design was adopted for the study. Secondary data was collected from the annual reports of the entire four firms listed in that sector, which was analysed using descriptive statistics, correlation and ordinary least square regression estimation. The study found that all the components of working capital management studied have statistical significant effect on the financial performance (Return on Assets) of firms listed on the natural resources sector of Nigeria exchange limited. The study therefore recommends amongst others that the firms should as a matter of fact be tactful in handling accounts payables to ensure that days of accounts payables must be higher than the days of accounts receivables, which will provide them with additional capital that will facilitate higher turnover and increased profitability.

Keywords: Average Payment Periods, Average Collection Period, Inventory Conversion Period, Cash Conversion Cycle, Current Ratio

1. INTRODUCTION

Working capital is a vital element in any organizational setting that requires cogent attention, proper planning and management. As resources available to organizations are scarce, it is believed that the business has pivotal role to play in the management of its working capital to achieve better profitability and overall performance of the entity (Singhania & Mehta, 2017). Working capital is the resources (net current assets) which a firm has at hand to run its daily operations (Bhatia & Srivastava, 2016), and which also measures the liquidity position of the business (Aktas, Croci, & Petmezas, 2015). In addition, current assets represent cash and other assets which are expected to be converted to cash in the ordinary course of business within one year (Singhania & Mehta, 2017). High levels of current assets may have a negative effect on the firm's profitability whereas low level of current assets may result to liquidity problem and stock outs resulting in difficulties in maintaining smooth operations (Khatik & Varghese, 2015; Emery, Finnerty & Stowe 2004).

Substantial financial performance is mostly attained by investing in capital or long term projects. However injecting too much fund into long term assets to the detriment of current assets, in the quest to realize higher returns on investment will be detrimental to the business organisation (Knauer & Wohrmann, 2013). In which case, the enterprise would have a balanced policy in its management of inventory, receivables, payables and cash in order to remain in business. Odubuasi et al. (2022) reported that the reoccurring corporate failures across the globe including Lehman Brothers, Enron, Cadbury Nig Ltd, and Oceanic bank Nig. emanated from liquidity problems to liquidation, and are all working capital originated problems. Hence, working capital directly affects firm liquidity (Knauer & Wohrmann, 2013) and influences the firm value or profitability (Kieschnick, Laplante, & Moussawi, 2013). Several studies on this topic in Nigeria had covered Agricultural sectors, Oil and Gas sector, consumer goods sector, Service sector and Financial service sector, but none had studied the Natural Resources sector, which is an important sector to Nigeria. Again this study intends to add to existing literature by engaging updated data of 2022, from financial statements of the sector under study. To this end, the study was established to achieve the following specific objectives;

1. To investigate the effect of average payment periods on the financial performance

- of firms in Nigeria,
2. To ascertain the effect of average collection period on the financial performance of firms in Nigeria,
 3. To investigate the effect of inventory conversion period on the financial performance of firms in Nigeria,
 4. To determine the effect of cash conversion cycle on the financial performance of firms in Nigeria,
 5. To ascertain the effect of current ratio on the financial performance of firms in Nigeria.

Research hypotheses

Ho₁- Average payment period has no significant impact on the financial performance of firms in Nigeria,

Ho₂- Average collection period does not have significant period on the financial performance of firms in Nigeria,

Ho₃-Inventory conversion period does not have significant impact on the financial performance of firms in Nigeria,

Ho₄ – Cash conversion cycle does not have significant impact on the financial performance of firms in Nigeria,

Ho₅- Current ratio has no significant impact on the financial performance of firms in Nigeria.

Study usefulness

The result of this study would be beneficial to the firms' Management as they would reaffirm the usefulness of the components of working capital in order to balance liquidity and profitability by the management of Natural Resources Industry in Nigeria. Research Scholars would have it as added reference material to any researcher that embarks research on this area especially as it taps on unexplored area. Finally the

Sector and regulatory bodies would be provided with insights to moderate the industrial standard ratios to form benchmark for analysis.

2. REVIEW OF RELATED LITERATURE

Financial Performance

Return on asset (ROA): RO Allows one to focus on the profitability of operations without any effect on the way in which the assets were financed. This ratio (ROA) explains how efficient a company is to utilize its available assets to generate profit (Odubuasi et al. 2021). It calculates the percentage of profit a company is earning against per naira of assets. The higher value of ROA shows the better performance and it can be computed as follows:

Working capital and working capital management

Working capital refers to the amount of capital, which is readily available to an organization which is the difference between resources in cash or readily convertible into cash (current assets) and the organizational commitments for which cash will soon be required (current liabilities). In literature, working capital is defined as the resources which a firm has at hand to run its daily operations (Farounbi, 2005). Also, it provides a measure of business's liquidity, or its ability to meet its short term obligations as they come due (Emery, Finnerty & Stowe, 2004).

Working capital management is closely linked with the management of cash, and invariable entails short-term decisions that is generally relating to the next one year period which are reversible. It also involves making appropriate investments in cash, marketable securities, receivables, and inventories as well as the level and mix of short-term financing (Emery, Finnerty & Stowe, 2004). The components of working capital that are considered in this study are discussed as resented below:

Average number of day's of inventory

The average number of days' of inventories represents the period that inventory is held by the companies before they are sold. In order to help shorten the cash conversion cycle, a lower number of days are better. The average amount of inventory is received

by taking the sum of the beginning and ending balance of inventory for a year, and divide with two, to get the average (Lantz, 2008). Boisjoly (2009) found an increase in inventory turnover over a period of fifteen years that indicates that companies have improved their inventory management.

Average number of days accounts receivable

The average number of day's accounts receivable is used as a measure of accounts receivable policy. It represents the average number of days that the company spent to collect payments from its customer (Lantz, 2008). Deloof (2003) find the significant negative relation between the average number of days accounts receivable and gross operating income as a measure of profitability

Average number of days accounts payable

The average number of days account payable is used as a measure of account payable policy. It represents the average number of days the company takes to pay its suppliers. While the two previous metrics is preferred to keep short, more number of day's accounts payable is considered better for shorter cash conversion period (Lantz, 2008). Deloof (2003) show an inverse association between average number of day's accounts payable and profitability which indicates that profitability has an effect on accounts payable policy as a company with less profit takes longer payment period.

Cash conversion cycle

Gitman (2009) explains that a cash budget is a forecast of the future cash inflows and outflows of the business and how cash has been used for business operational activities. But the "cash conversion cycle" is the duration of time that cash is tied up in accounts receivables and inventory before its turned back to cash. Prior empirical studies summarize a mixed outcome, claiming that there is a strong negative relationship between profitability, measured through gross operating profit, and the cash conversion cycle (Afza & Nazir, 2007; Deloof, 2003; Dong & Su, 2010; Sharma & Kumar, 2011). Cash Conversion Cycle (CCC) is concerned with the amount of time a firm's resources are tied up.

Current ratio is defined as the relationship between current assets and current liabilities. It is a measure of general liquidity and it is the most widely used to make

the analysis for short term financial position or liquidity of a firm (Fabozzi and Peterson, 2003). Current ratio can be calculated by dividing the total current assets by total current liability. It is the true liquidity refers to the ability of a firm to pay its short term obligations as and when they become due.

Theoretical Review

Theory of Working Capital Management

Working capital management theory was propounded by Bhatia and Srivastava (2016) which provides the basis for research on working capital management. The theory upholds that adequate working capital is vital for liquidity and sustainability demands of any enterprise. Sagan (2015) advocated that the management of accounts receivable, accounts payable, inventories and cash is vital for the operational functions of a firm. Working capital management further argues that the outstanding task of a money manager is to provide finance when needed and to invest surplus funds in short term investment that are very profitably. For this connectivity, the study is anchored on this theory since it buttresses on the importance of working capital management.

Empirical Review

Panigrahi and Sharma (2013) similarly took firms listed on Indian stock market to investigate the relationship between working capital and firm performance ranging from 2001 to 2010 accounting years. Secondary data was collected from the annual reports of the firms, analysis was done using descriptive statistics, Pearson correlation and regression analysis, which produced the results that implies that account receivables have negative significant relationship with firm profitability. Again, inventory conversion period has negative significant relationship with profitability and account payables periods have negative significant relationship with profitability. Nonetheless, cash conversion cycle has positive relationship with the firm's profitability.

Organdie (2012) investigated working capital management on firm performance using Nigeria firms as sample. He found that current liabilities to total assets ratio has significant positive relationship with profitability. Again, the study reported negative relationships between liquidity and profitability.

Usama (2012) determined the impact of working capital on enterprise performance of firms listed on Karachi stock exchange that ranged from years 2006 to 2010. The study tool samples of 18 firms of the food sector on Karachi Stock Exchange and gathered such variables as average collection period, inventory turnover in days, cash conversion cycle, average payment period, debt ratio, firm size, current ratio, and financial asset to total asset. The study applied ordinary least square regression technique and common effect model in data analysis and made the findings that working capital management has significant positive association with firm's profitability and liquidity. The study more so found that firm size and minimum inventory turnover in days has positive influence on firm's profitability.

Akinlo (2012) sampled Nigerian firms in investigating the association between working capital and firm performance. The result of his study revealed that firm's profitability is reduced by lengthening the number of day's accounts receivable, number of days of inventory and number of days accounts payable. The result further displayed that reducing the Cash Conversion Cycle improves the profitability of the Nigerian firms sampled.

Olufisayo (2011) in his study reported that that sales growth, cash conversion cycle, account receivables and inventory period have positive effect on firms, but leverage and account payable have inverse effect on firm's profitability.

Alipour (2011) investigated the effect of working capital management on corporate profitability of 1063 companies listed on Tehran stock exchange. Analytical techniques used in data analysis include correlation analysis with Pearson method, ordinary least square regression technique. The study found that sale and profit of the company is affected by the working capital management. Moreover, the result displayed that working capital management has significant effect on the profitability of the company. Finally cash conversion cycle, average collection period, and inventory turnover in days have negative and significant effect on the profitability of the companies sampled.

Bhunja, Khan and Mukhuti (2011) also took up the study and investigated the association between liquidity management and firm performance of steel companies of private sector in India. The study concentrated on the liquidity factors and working

capital management that can balance the tradeoff between liquidity and profitability of the organisations under study. The outcome of the study indicated that firm value has positive effect on optimal working capital management. They drew conclusion on that premises that liquidity and profitability are positively and significantly associated.

Koperunthevi (2010) found out that working capital management affects the profitability of the manufacturing entities in Sri Lankan as well as increase the cash conversion cycle which lead to lower operating returns. The Sri Lankan Manufacturing firms data were analysed with panel data technique which also indicated that current ratio and Quick ratio are positively related to the profitability.

Mohamad and Noriza (2010) investigated 72 listed companies in Bloomberg's for 5 years from 2003-2007 on the association between Working capital management and company profitability. Working capital variables used were Cash Conversion Cycle, Current Asset over Total Assets Ratio, debt to asset ratio, Current Ratio and current liabilities over total asset ratio, while profitability was proxy by Tobin's Q ratio, return on capital invested and ROA. Analysis was done with Multiple Regression. It was found that working capital variables used have significant negative association on company's performance.

Mathuva (2010) conducted research in Kenya firms on the effect of working capital management and firm performance. The study conveyed that Kenyan firms have more profit when taken shortest time to collect cash from their customers. Again high inventory levels reduce costs of possible interruptions in the production process and loss of business due to scarcity of products. Additionally the research reports that the longer a firm takes to pay its creditors, the more profitable it will records.

Uyar (2009) investigated industry benchmarks for cash conversion cycle of merchandising and manufacturing companies and found that merchandising industry has shorter cash conversion cycle than manufacturing industries. The study further determined the association between the length of the cash conversion cycle and the size of the firms. The result of the investigation indicated that a significant negative association between the length of cash conversion cycle and the firm size, in terms of both net sales and total assets. The study more so showed that significant negative correlation existed between the length of cash conversion cycle and the profitability.

Marc Deloof (2003) took a sample of 1,637 Belgian firms and investigated the effect of working capital on firm performance. He modified the ROA and ROS ratios used hitherto and investigated a negative correlation with the Cash Conversion Cycle. He found that the number of accounts receivable, inventory and accounts payable days correlate inversely with firm performance.

Research gap – the review done observed that lots of researches have been undertaken on working capital management in different climes like America, India, Kenya, Ghana, South Africa, Malaysia, Tehran, Morocco alongside various sectors like Consumer goods sector, Oil and Gas, Financial Service and Conglomerate of the economies, although no study was done on a left out sector, Natural resource sector. Hence, it becomes paramount to investigate the effect of working capital management on the financial performance of Natural resource firms listed on Nigeria exchange limited which is the knowledge gap this study is set to fill.

3. METHODOLOGY

The study used cause-effect research design as it made it easier to establish the cause and effect relationship that existed between the dependent and the independent variables. The population of the study covered the four firms quoted under the Natural Resources Sector of Nigeria exchange limited (Aluminum Extrusion Industry Plc., B.O.C Gases Plc., Multiverse Mining and Exploration Plc. and Thomas Wyatt Nig. Plc.). However all the four firms form the sample size. Secondary data was collected from the audited financial statement of the companies under investigation for 6 years, from 2017 to 2022 financial years. Descriptive statistics was used to determine the mean, median and maximum distribution of the data gathered, Pearson's correlation analysis was used to measure the direction of the linear relationship among the variables as well as to measure the strength of association among the variables (Tabachnick & Fidell, 2007), whereas the Ordinary Least Squares (OLS) Regression analysis was used to estimate the causal relationships between the dependent and independent variables.

MODELSPECIFICATIONS

The impact of working capital management on firms' performance was estimated by using similar quantitative models of Raheman & Nasr, (2007), Panigrahi & Sharma

(2013), where they used ICP, APP, CCC and ARP as proxy for the independent variable but our research will add another variable CR to the model for a modification. The functional model is presented thus;

$$ROA = f(CCC, ICP, ARP, APP, CR)$$

This equation above is written in a stochastic form as expressed below;

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \epsilon_r \dots \dots \dots Equ \quad (1)$$

If the equation is presented in its econometric forms , we will have:

$$ROA_{it} = \beta_0 + \beta_1(CCC)_{it} + \beta_2(ICP)_{it} + \beta_3(ARP)_{it} + \beta_4(APP)_{it} + \beta_5(CR)_{it} + \epsilon_{rit} \dots \dots Equ. \quad (2)$$

Where;

ROA_i = Return on Asset of a firm at time t;

CCC = Cash Conversion Cycle

ICP = Inventory Conversion Period

ARP = Accounts Receivable Period

APP = Accounts Payment Period

CR = Current Ratio

β_0 = the intercept of equation

β_i = Coefficient of the independent variables

t = Time from 1, 2..., 5 years ϵ_r = error term

VARIABLE SPECIFICATION

<u>DEPENDENT VARIABLE</u>	<u>PROXY</u>	<u>MEASUREMENT</u>
Firm performance	Return on Assets (ROA)	EBIT/Total Assets
<u>INDEPENDENT VARIABLE</u>		
Working capital management	Cash Conversion Cycle (CCC)	Average Accts Receivable + average Inventory – Average Accts Payable
	Account Receivable Period (ARP)	$\frac{\text{Average Accts Receivable} \times 365}{\text{Net Sales}}$
	Account Payable Period (APP)	$\frac{\text{Average Accts Payable} \times 365}{\text{Cost of Goods Sold}}$
	Inventory Conversion Period (ICP)	$\frac{\text{Average Inventory} \times 365}{\text{Cost of Goods Sold}}$
	Current Ratio (CR)	Current Assets/Current Liabilities

Source: Researchers' compilation (2023).

Decision Rule

If the computed P-value (sig.) is lesser than the 0.05 critical value at 95% confidence level, we reject null hypothesis and accept alternate hypothesis. But if the computed P-value (sig.) is greater than the 0.05 critical value at 95% confidence level, we reject alternate hypothesis and accept null hypothesis

4. DATA ANALYSIS AND RESULT DISCUSSION

Table 4.1 Descriptive Statistics

stats	roa	app	arpicp	ccc	cr	
-----+-----						
mean	.5896475	124.7038	129.8035	114.5354	119.6164	.85125
max	18.84336	346.26	485.95	404.02	652.294	3.34
min	-12.70714	9.04	2.01	19.01	-189.808	.02
sd	8.779967	107.1858	133.9568	99.77971	215.3748	.7949805
skewness	.0141018	.6788424	1.074831	1.928847	.7750302	1.260593
kurtosis	2.081397	1.962064	3.234943	5.45353	3.127977	4.889147

Source: Generated by the researcher from annual reports sampled using stata (version 13)

From the table 4.1 above it is seen that the average Return on Assets of the companies sampled is 0.589, the highest Return on Assets recorded within the period is 18.843 while the lowest is -12.707. The table shows that the average Account Payment Period for the sector is 125 days, the firm that has the highest APP is within 346 days and the firm with the lowest APP pays within 9 days. Again it takes the sector the average of 130 days to collect their debts, but the firm with the highest days of collecting debts does that within 486 day, yet some firms' do the same debt collection within minimum of 2 says. The average period for inventory conversion is 115 days, maximum is 404 days and minimum is 19 says. The mean period for cash conversion cycle is 120 days, the maximum days for cash conversion is 652 days, whereas the minimum is -190. The average

Current Ratio is 0.85 the maximum among all the firms is 3.3 and the minimum is 0.02.

The table also indicated that the variables were normally distributed as the skewness was all not up to 5.

Table 4.2 Correlation analysis

	roa	app	arpicp	ccc	cr	
roa	1.0000					
app	0.1507	1.0000				
arp	-0.6502	0.1762	1.0000			
icp	-0.1730	-0.1422	0.3371	1.0000		
ccc	-0.5597	-0.4540	0.6905	0.7437	1.0000	
cr	0.7517	0.0821	-0.6317	-0.3258	-0.5848	1.0000

Source: Generated by the researcher using stata (version 13)

From the table above, it is observed that Account Receivable Period, Inventory Conversion Period and Cash Conversion Period have an inverse relationship with Return on Assets, which means that increase in the these variables will cause decrease in ROA and vice versa. In the same vein, the result shows that Account Payment Period and Current Ratio have positive relationship with Return on Assets, which implies that the Return on Assets will increase whenever any of the variables increases. The degree of association among all the independent variables did not show a strong relationship up to 80% therefore, presents the view that there is no problem of multicollinearity among the independent variables, because they moderately relate to themselves.

Table 4.3 Regression Result

Source	SS	df	MS	Number of obs = 34		
				F(5, 18)	=	10.43
Model	1318.14433	5	263.628866	Prob> F	=	0.0001
Residual	454.875348	18	25.2708527	R-squared	=	0.7434
				Adj R-squared	=	0.6722
Total	1773.01968	23	77.087812	Root MSE	=	5.027

roa	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
app	-27.63442	11.8515	-2.33	0.032	-52.53349	-2.735354
arp	27.62214	11.85051	2.33	0.032	2.725139	52.51915
icp	27.66388	11.85078	2.33	0.031	2.766306	52.56145
ccc	-27.6497	11.85096	-2.33	0.031	-52.54764	-2.751767
cr	4.976789	1.811193	2.75	0.013	1.171613	8.781965
cons		-4.12	3.087289	-1.33	0.199	-10.60615 2.366154

Source: Generated by the researcher using stata (version 13)

The result of the ordinary least square show that the coefficient of determination R^2 shows a value 0.6722, which means that the independent variables in the model accounted for 67% of the change in the dependent variable (ROA) while the remaining 33% should be explained by variables outside the model. The figure of regression

coefficient at 67% is a pure indication that the independent variables were properly selected and combined, in that case the model is of best fit to explaining the dependent variable and can be relied upon. The result also shows that the model is statistically significant at $P > F = 0.0001$.

TEST OF HYPOTHESES

H₀₁- Average payment period has no significant impact on the financial performance of firms in Nigeria,

From the table, APP has coefficient -27.63 and $P > /t/ = 0.032$ which indicates that APP has negative and significant effect on ROA of firms within Natural Resources Sector. It shows that if every other independent variable is held constant, a unit change in Account Payment Period could cause inverse change of 27.63442 on the ROA of the firms. That is to say that APP has negative and statistical effect on the ROA of firms in performance of Natural Resource Sector of the economy. As the result of this, the alternate hypothesis is accepted and we say that average payment period has significant effect on performance of firms under Natural Resources sector. The study agrees with the previous works of Panigrahi and Sharma (2013), Akinlo (2012) that average account payable periods have significant inverse association with the firms' profitability but the result did not concur with the work of Mathuva (2010) who found that average account payable period has positive effect on profitability.

H₀₂- Average collection period does not have significant period on the financial performance of firms in Nigeria,

It is also observed that, Average Account Receivable Period has coefficient of 27.6622, which shows that it can cause a change of 27.666 on the Return on Assets if the other variables should be held constant, hence average collection period has positive effect on the profitability of firms. The result is in conformity with the past study by Olufisayo (2011) that Account receivable has positive effect on firm performance but disagrees with the work of Panigrahi and Sharma (2013). The P statistics of $P > /t/ = 0.032$ shows that Average collection Period is statistically significant in explaining the changes in Return on Assets and by implication, the P value 0.032 is lesser than the critical value at 5%, hence we reject null hypothesis and

accept that Average collection period is statistically significant to explaining effect on firm performance.

H₀₃-Inventory conversion period does not have significant impact on the financial performance of firms in Nigeria,

In the same vein, Inventory Conversion Period have coefficient of 27.663 which indicates that it has positive effect on Return on Assets of Natural Resource firms. The result also maintains that ICP has statistically significant effect on ROA because their p-value 0.031 is lesser than the critical value of 0.05. The result is agreement with the work of Olufisayo (2011). However, as the P statistics value is greater than the critical value of 0.05 at 95% confidence level, we accept the alternate hypothesis that affirm that inventory conversion period has significant impact on the financial performance of firms in Nigeria.

H₀₄ – Cash conversion cycle does not have significant impact on the financial performance of firms in Nigeria,

Pertinently, the result provides that Cash Conversion Cycle has a coefficient of -27.64 meaning that CCC can cause a negative change of 27.649 on the ROA when other variables are held constant. The CCC is also seen to have a significant effect on the ROA since its P value 0.031 is less than critical value of 0.05, in that case, we make a decision by accepting alternate hypothesis that affirms that cash conversion cycle has significant effect on the financial performance of firms in Nigeria. Our findings conform to that of Uyar (2009), Panigrahi and Sharma (2013) and Akinlo (2012) that cash conversion cycle have negative and significant effect on profitability of firms.

H₀₅- Current ratio has no significant impact on the financial performance of firms in Nigeria.

Finally Current Ratio as shown by the result has coefficient 1.8111, which indicates that a unit change in current ratio will cause 1.8 unit changes in Return on Assets. The P value $P > t = 0.013$ is greater than the critical value of 0.05 at a confidence level of 95% which means that Current Ratio is significant in explaining changes in the dependent variable (Return on Assets) and the finding is in agreement with that of Kopernthevi (2010). As a basis for our decision making, we reject null hypothesis and

accept alternate hypothesis that affirms that Current Ratio has significant effect on the financial performance of firms in Nigeria.

5. CONCLUSION AND RECOMMENDATIONS

This study, the effect of working capital management on the performance of firms in Nigeria has investigated the reaction of the independent variables that includes Account payable period, account receivable period, inventory conversion period, cash conversion period and current ratio on the dependent variable (Return on assets), has empirically shown that proper management of working capital components as studied, is the beginning of success in any entity's performance. A lag in proportionate handling of those working capital components could lead to reduced profit for the organisation. The result implied that accurate inventory management for instance will help eliminate overstocking of inventory, stock-out, and that the account receivable period must be less than account payable period, otherwise the firm will run into illiquidity challenge, thereby entering the financial trap of meeting up with current liabilities as at when due. The study there from recommends as follows;

1. The firms should as a matter of fact be tactful in handling accounts payables, more importantly to ensure that days of accounts payables must be higher than the days of accounts receivables, which will invariably provide them additional capital that will facilitate higher turnover and increased profitability.
2. The firms should device policy that might help them reduce account receivables as much as possible by the use of cash discount policies, which would oblige the customers to make prompt payments so as to benefit from the cash discounts provided.
3. Inventory conversion period is also significance in explaining the dependent variable, therefore, it is important that the firms consider every means that will make them increase their turnover, by ways of reduced selling prices, offering cash and quantity discounts and commissions to sales persons.
4. The firms in Nigeria would maintain a good position on cash conversion cycle if they have made a possible proportionate policy on average accounts receivable periods, average accounts payable periods and inventory conversion periods. This is because the cash conversion cycle is a function of these three variables mentioned. So their perfect management would inadvertently ensue a perfect

management of cash conversion cycle.

5. The firms should strive a balance on their liquidity position, having known that illiquidity can lead a firm to litigations as it may not be able to pay its current liabilities as at when due, and over liquidity might mean investing money meant for capital projects in short term investment. In which case a low profitability might arise therefore, companies are encouraged to maintain a balanced current ratio position suitable for their operation.

Suggestion for further study

The study witnessed stifled business transactions within the covid 19 pandemic outbreak in Nigeria hence; it would be nice if researchers could establish whether capital management offers the same profit conditions in such challenging periods.

References

- Afza, H., & Nazir, M. (2007). Capital policies. *Journal of Financial and Strategic Decisions*, 11, (2), 11-13
- Akinlo, O. (2012), "Effect of Working Capital on Profitability of Selected Quoted Firms in Nigeria", *Global Business Review*, Vol.13, No.3, pp. 367–381, 2012.
- Aktas, D., & Croci, G., & Petmezas, U. (2015). *Fundamentals of financial Management*. USA Dow Jones and company incorporated Chicopee.
- Alipour, A. (2011). Working capital and performance of firm in agriculture. *International Journal of Business and Social Research (IJBSR)*, 3 (2), 234-245.
- Bertoneche, P., & Knight, L. (2001). Fundamental of small businesses financial management for start- ups, survival, growth and changing economic circumstances, managerial finance. Vol. 19. Editions, Englewood Cliffs, New Jersey. Educ., 8 : 37:45
- Bhatia, M., & Srivastava, C. (2016). Working Capital Management: The Effect of Market Valuation and Profitability in Malaysia".
- Bhunja, K., Khan, M., & Mukhuti, M. (2011). Small business failure and bankruptcy: A survey of the Literature *European Small Business Journal*, 1(4), PP 47-59.
- Boisjoly, R.P. (2009). The cash flow implications of managing working capital and capital investment. *Journal of Business and Economic Studies*, 15(1), 98-108. Boston, MA: Pearson Education.
- Deloof, M. (2003). Does working capital management affect profitability of Belgian firms? *Journal of Business Finance & Accounting*, 30(3/4), 573-587.
- Emery, D. R, Finnerty J. D. & Stowe J. D. (2004): *Corporate Financial Management* 2nd Ed. New Jersey: Pearson Education Inc.
- Fabozzi, F. J. & Peterson, P. (2003). Financial management and analysis", 2nd ed, John Wiley and Sons, Inc., publisher, New Jersey Canada. Financial Management. Spring, pg. 32- 41.

- Farounbi, M. (2005). Corporate Finance (Redirected from Working Capital Management); Retrieved on 27th July 2011. York: McGraw-Hill/Irwin
- Gitman, L. J. (2009). Principles of Managerial finance (12th ed.). Bostons, MA: Pearson Prentice Hall. Gujarati, D. 2004, "Basic econometric" 4th ed McGraw–Hill Companies.
- Khatik, M., & Varghese, M. (2015). An analysis of working capital management efficiency in Telecommunication equipment
- Kieschnick, R., LaPlante, M. & Moussawi, R., (2008). Working capital management, agency costs, and Company value, University of North Texas University Press, Austin
- Knauer, N., & Wohrmann, T. (2013). Working Capital and financial management Practices in small firm sector. *International Small and Business Journal* , 14 (2),52-68.
- Koperuntthevi, H. (2010). Effect of working capital on performance of industrial sector. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 3 (3), 352–364, © 2010 HRMARS
- Lantz, T. (2008). The effect of working capital policies management on firms' profitability Addis Ababa University, Ethiopia School of Business and Public Administration. Ohio: South- Western/Thomson Learning.
- Mathuva, V. (2010). Corporate finance (2nd ed.): Thomson/South- Western.
- Mohamad, S., & Noriza, M.S. (2010). Working capital management: The effect of market valuation
- Nazir, H., & Afza, M. (2008). Working Capital Management, Firms' Performance and Market Valuation in Nigeria. *International Journal of Social and Human Sciences*, 6, pp. 143-147, 2012.
- Odubuasi, A.C., Obi, A.V., & Osuagwu, B.O. (2021). Effect of risk management committee and enterprise risk management on performance of banks in Nigeria. *JETMASE*, 3(1), 222-233.

- Olufisayo, O. (2011). "The Effect of Working Capital on Profitability of Firms in Nigeria: Evidence from General Method of Moments (GMM)", *Asian Journal of Business and Management Sciences*, Vol. 1, No. 2, pp. 130-135, 2011.
- Organdi, T. (2012). Working Capital and financial management Practices in small firm sector. *International Small and Business Journal*, 14(2), 52-68.
- Panigrahi, P., & Sharma, G. (2013). *Företagsekonomiska forskningsmetoder*. 1st edition. Malmö: Liber Ekonomi.
- Raheman, B., & Nasr, T. (2007). *Financial Decision Making Concepts, problems and Cases* 4th Edition
- Sagan, J. (2015). *Essential of working capital management*. New Jersey: John Wiley & Sons. 1st edition, Pp.133
- Sharma, S., & Kumar, S. (2011). Working capital intensity. *Proceedings of Singapore Economic Review Conference (SERC)*, August 01-04, pp.97-98.
- Singhanig, V., & Mehta, N. (2017). Industry practice relating to aggressive conservative working capital management
- Tabachnick, B., & Fidell, M. (2007). The merchandising ratio: A comprehensive measure of working capital Strategy. *Issues Account. Educ.*, 14(2): 255-267
- Usama, B. (2012). *Liquidity Management, Operating Performance, and Corporate Value: Evidence from Japan and Taiwan*.
- Uyar, Ali, (2009) The Relationship of Cash Conversion Cycle with Firm Size and firm performance. *Journal of European Nations*, 4(1), 38-51.