Journal of Investment and Management
2016; 5(6): 99-106
http://www.sciencepublishinggroup.com/j/jim
doi: 10.11648/j.jim.20160506.12
ISSN: 2328-7713 (Print); ISSN: 2328-7721 (Online)

Effect of Cash Conversion Cycle Management on the Profitability of Industrial and Domestic Product Firms in Nigeria

Madubuko Cyril Ubesie*, Anastasia Duru

Department of Accountancy, Enugu State University of Science and Technology, Enugu, Nigeria

Email address:

ubesiemadubuko@yahoo.com (M. C. Ubesie)

*Corresponding author

To cite this article:

Madubuko Cyril Ubesie, Anastasia Duru. Effect of Cash Conversion Cycle Management on the Profitability of Industrial and Domestic Product Firms in Nigeria. *Journal of Investment and Management.* Vol. 5, No. 6, 2016, pp. 99-106. doi: 10.11648/j.jim.20160506.12

Received: September 4, 2016; **Accepted**: September 22, 2016; **Published**: October 15, 2016

Abstract: The study examined the effect of cash conversion cycle on the profitability of Industrial and Domestic product firms in Nigeria. Receivable ratio, payable ratio and Inventory ratio, were the variables studied in this study. Data were sourced from the annual reports of the selected Industrial and Domestic companies in Nigeria. Generalized least square multiple regression analytical tool was used to test the Hypotheses. The findings show 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.

Keywords: Cash Conversion, Profitability, Multiple Regressions

1. Introduction

Cash conversion cycle measures the number of days between actual cash expenditures on purchase of raw materials, and actual cash receipts from the sale of products or services [6]. Since every corporate organization is extremely concerned about how to sustain, and improve profitability, hencethey have to keep an eye on the factors affecting the profitability. The length of cash conversion cycle is an important measure of efficiency of working capital management. It is also 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. It also indicates that the firm is collecting the receivables as quickly as possible, and delaying the payments of suppliers as slowly as possible. This leads to high net present value. Cash conversion cycle is an addictive measure of funds that are committed, that is tied inventories and receivables less payments that are deferred to suppliers. It has been interpreted as the cash outlays that arise during the production of output, and cash inflows that result from the sale of the output, and the collection of accounts receivables. [1], described cash conversion cycle as the length of time from the payment for the purchase of raw materials to manufacture products until the collection of account receivable associated with high profitability, because it improves the efficiency of using the working capital.

1.1. Statement of Problem

Some of the manufacturing firms that are still in business and are listed in Nigeria stock exchange cannot pay dividend to share holder in their companies. For example Champion Breweries has not paid since1988 and Golden Breweries has also not paid since 1997. Some Nigeria workers were forcefully disengaged from their services for instance, Ajaokuta steel industry reduced their staff from 5000 to 1000 in2007. It is as a result of the above problem that the researchers deemed it necessary to examine the effect of cash conversion cycle on the profitability of Industrial and Domestic product manufacturing companies quoted in Nigerian stock exchange.

1.2. Objectives of the Study

The general objective of this study is to examine the effect of cash conversion cycle on the profitability of Industrial and

Domestic product firms in Nigeria, while the specific objectives include;

(1) To examine the effect of Receivable ratio on profitability.
(2) To ascertain the effect of Payable ratio on profitability.
(3) To determine the effect of Inventory ratio on the profitability of Industrial and Domestic product firms in Nigeria.

1.3. Hypotheses

(1) Receivable ratio has no effect on profitability.
(2) Payable ratio has no effect on profitability.
(3) Inventory ratio has no effect on the profitability of Industrial and Domestic product firms in Nigeria.

1.4. Literature Review

[15] studied the Effect of cash conversion cycle on profitability. She attempted to examine the effect cash conversion cycle has on profitability of Sri Lanka in six Industrial and Domestic product companies in Nigeria. Data from annual Reports of the companies under study were used, while multiple regression analytical tool was used to test the Hypotheses. Results showed that there is negative relationship between return on equity and cash conversion. Furthermore, cash conversion cycle also had negative impact on net profit.

[2] in their study empirically investigate the effect of working capital management on firm's financial performance in an emerging market. They hypothesized that working capital management leads to improved profitability. Their data set consists of firms listed in the Cyprus Stock exchange for thePeriod 1998-2007. Using multivariate regression analysis, their results supported their hypotheses. Specifically, their results indicated that the cash conversion cycle and all its major components namely, days in inventory, days in sales outstanding and creditor's payment-period were associated with the firms' profitability. They opined that the results of this study should be of great importance to managers and major stakeholders, such as investors, creditors and financial analysts, especially after the recent global financial crisis and the latest collapse of giant organizations worldwide.

[4] have investigates relationship between working capital management and corporate profitability for a sample of 1009 large Belgian non financial firm for the period 1992-1996. The result from the analysis showed that there was a negative relationship between profitability that measure by gross operating income and cash conversion circle as well as number of days accounts receivable and inventories. He suggested that mangers can increase corporate profitability by reducing the number of day's Accounts receivable and inventories less profitable firms waited longer to pay their bills.

[9] seek to extend Tryfonidis findings regarding the relationship between working capital management and profitability. A sample of 88 American firms listed on New York stock Exchange for a period of 3years from 2005-2007. They found statistically significant relationship between the cash conversion cycle and profitability.

[8] in his study on the field of working capital management focuses on the routines employed by firms. The research showed that firms which focus on cash management were larger, with fewer cash sales, more seasonality and possibly more cash flow problems. While smaller firms focused more on stock management and less profitable firms were focused on credit management routine. It was suggested that high growth firms follow a more reluctant credit policy towards their customers, while they tie up more capital in the form of inventory. Account payables will increase due to better relations of suppliers with financial institutions which divert this advantage of financial cost to their client.

[7] examined the working capital management and corporate, profitability; Evidence from panel data: analysis of selected quoted companies in Nigeria. They used the sample of Nigerian quoted non-financial firms for the period 1996-2005. The study found a significant negative relationship between net operating profitability and the average collecting period inventory turnover in days, average payment period and cash conversion cycle for a sample of fifty Nigerian firms listed on the Nigeria stock Exchange. Furthermore, the study found no significant variation in the effects of working capital management between large and small firms. These result suggest that management can create value for their working capital in more efficient way by reducing the number of day accounts receivable and inventories to a reasonable minimum.

[10] examines the empirical relationship between efficiency of working capital management and corporate profitability of selected companied in the Istanbul stock exchange for the period of 2005 – 2009. The panel data methods were employed in order to analyze the mentioned relationship. The cash conversion cycle (CCC) was used as a measure of working capital management efficiency, and return on assets (ROA) used as a measure of profitability. He found out that reducing cash conversion circle (CCC) positively affects return on assets.

[16] in his study also studies on the trends in working capital management and its impact on firms' performance: analysis of Mauritian small manufacturing firms, to identify the causes for any significant difference between the industries. The dependent variable return on total assets is used as a measure of profitability and the relation between working capital management and corporate profitability was investigated for a sample of 58 small manufacturing firms, using panel data analysis for the period 1998-2003. The regression result shows that high investment is inventories and renewable is associated with lower profitability. The key variable used in the analysis was inventories days, accounts receivables days, accounts payable days and cash conversion cycle. A strong significant relationship between working capital management and profitability has been found in pervious empirical work. An analysis of the liquidity, profitability and operational efficiency of the five industries trend in the short – term component of

working capital financing.

[13] investigate the cash conversion cycle and liquidity position of the food industry in cycle as a liquidity level indicator of the food industry in Greece and tried to determine its relationship with the traditional liquidity measurement and profitability measurement on return on investment, return on equity and net profit margin, they found significant, positive relationship between cash conversion cycle and payable deferred period. The relationship between liquidity measurement variables and profitable measurement variable was not statistically significant and there was no relationship between cash conversion cycle and leverage ratio. To determine the solvency level of firms according to existing obligation of firms different techniques may apply as measurement of liquidity Current ration, quick ratio and cash ratio are among the most traditional liquidity measurement techniques and the most recent dynamic techniques, cash conversion cycle is applied for measurement of liquidity level of firms. The relationship of these traditional and modern liquidity measurement techniques are studies by [13] for small U.S companies for the period 1984 – 1988 and they found that cash conversion cycle was negatively related with the study revealed difference between current ratio but positively related with quick ration. In addition, the study revealed difference between the concept of cash conversion cycle in manufacturing retail, wholesale and Service industries. The advantage of using modern liquidity measurement technique is that it will help to evaluate working capital change and it facilities the monitoring and controlling of its components, receivable inventories and payable. The smaller value of cash conversion cycle shows that, the quicker the firms can recover cash from sales of finished products and the more cash will have hence this will lead to have more liquid assets by firms. If cash conversion is high, it will take longer time recover cash, thus high cash conversion cycle implied an existence of problem in liquidity, [13].

[12] have also investigate the relationship between working capital management and profitability of listed company in the Athens Stock Exchange. A sample of 131 listed companies for a period of 2001- 2004, was used to examine this relationship. The result from regression analysis indicated that there was a statistical significance between profitability measured through, operating profit and the cash conversion cycle. From those results they claimed that the managers could create value for shareholders by handling correctly the cash conversion cycle and keeping each different component to an optimal level.

[14] in their study analyzes the influence of working capital management on firms' profitability in Kenya. They used fixed panel data of 232 firms. The result indicated that the average debtor day, stock turnover period and the cash conversion cycle are significantly affecting the profitability of the firms. They found out also that the manufacturing firms are in general facing problems with their collection and payment policies. Moreover, the financial leverage, ratio of current asset to current liability and firm size also have significant effect on the firm profitability. The study also concluded that SMES in Kenya are following conservative working capital management policy and payment policy. They suggested that the effective polices must be formulated for the individual component of working capital and that efficient management and financing of working capital (current assets and current liabilities) can increase the operating profitability of manufacturing firms. For efficient working capital management, specialized persons in the field of finance should be hired by the firms for expert advice on working capital management in the manufacturing sector.

[17] have selected a sample of 94 Pakistani firms on Karachi stock exchange for a period of 6 years from 1999-2004 to study the effect of different variables of working capital management on the net operating profitability. From the result of the study, they showed that there was a negative relationship between variables of working capital management including the average collection period, inventory turnover in days cash conversion cycle and profitability. Besides, they also indicated the size of the firm. Measured by natural logarithm of sales and profitability had a positive relationship.

2. Methodology

2.1. Research Design

The Research Design used in this study was Ex-post facto research design. It was used because it involved events that had taken place in the past.

2.2. Population and Sample Size of the Study

The population of this study is all the companies in Industrial and Domestic Products manufacturing in Nigeria, while the sample size is dependent on Data availability**.**

2.3. Nature and Sources of Data

Thestudy used only secondary data extracted from annual report and statement of accounts of the companies under study. The data for this study include, Receivable, Payable, Inventory and profit before tax.

2.4. Description of Variables

Dependent Variable (Profitability)

The dependent variable in the study is firm's profitability. In order to analyze the effect of cash conversion cycle on the firm's profitability, the return on assets will be used as dependent variable. This is because the return on assets (ROA) is an indicator of managerial efficiency. ([12], [4], [7], and [10]).

$$\text{ROA}=\frac{\text{PBT}}{\text{Total Assets}}$$

2.5. Independent Variables

Accounts Receivables Ratio.

Accounts receivables are customers who have not yet made payment for goods or services, which the firm has provided. 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. This variable represents the receivable that the firm will collect from its customers. ([1], [7])

The above authors examined the influence accounts receivable have on profitability in their different countries.

$$\text{Accounts Receivable} = \frac{\text{Receivable}}{\text{Sales}}$$

2.6. Inventory Ratio

Inventories are list of Stock-raw materials, working-in-progress or finished goods waiting to be consumed in production or to be sold. Inventory ratio (INV) is calculated as inventories/Purchases or cost of sales. This variable represents the rates stocks are held by the firm. Longer storage represents a greater investment in inventory for a particular level of operation. ([7] and [3]).

$$\text{Stock turnover/Inventories ratio} = \frac{\text{Inventories}}{\text{Purchases/cost of sales}}$$

2.7. Accounts Payable Ratio

Accounts payable are suppliers whose invoices for goods or services have been processed but who have not yet been paid. Organizations often regard the amount owing to creditors as a source of free credit. Accounts payable ratio (AP) represents the rates of payables of firms to their suppliers. Accounts payable ratio is calculated as accounts payable/purchases or cost of sales. The higher the value, the longer firms take to settle their payment commitment to their suppliers. ([2], [11], and [17]).

$$\textit{Accounts Payable} = \frac{\text{Payables}}{\text{Purchases/cost of sales}}$$

2.8. Technique for Analysis

The Analytical tool used in this study for the test of Hypotheses was multiple regressions.

Multiple regression is a statistical tool for understanding the relationship between two or more variables, it allows for much more flexibility. Since we know that life is so complicated that it takes more than two variables to even begin to explain/predict why things are the way they are, and a new tool is needed i.e. multiple regression statistical tool.

This tool allows us to examine how independent variables are related to a dependent variable. Once you have identified how this multiple variables relate to your dependent variable, you can take information about all of the independent variables and use it to make much more powerful and accurate predictions about why things are the way they are. This process is known as multiple regressions. Multiple regression is very advanced statistical tool and it is extremely powerful when you are trying to develop a "model" for predicting a wide variety of outcomes. It is more amenable to ceteris paribus analysis because it allows us to explicitly control for many other factors that simultaneously affect the dependent variable. This is important both for testing economic theories and for evaluation policy effect when we must rely on non-experimental data. Multiple regression models can accommodate many explanatory variables that may be correlated, we can infer casualty in cases where simple regression analysis would be misleading. It can also be used to build better models for predicting the dependent variable. Since return on total Asset will be used to measure dependent variable (Profitability of the study and the independent variables which are; receivables, payables and Inventory. Multiple regression technique is used to measure the effect the independent variables have on the dependent variable

$$Y = B_0 + B_1 + B_{2+}.B3 + U_i$$

2.9. Model Specification

In this study, the independent and dependent variables are used into an equation called multiple regressions. To express the model of multiple regressions in equation modified to suit the respective hypotheses. This study is a time series study that covers 2000 – 2011.

$$Y = B_0 + B_1 + B_{2+}.B_3 + U_1$$

Where,

Y=profitability

B_1= Receivable

B2=Payable

B3=Inventory

Bo = the intercept of the regression line,

U1 = the error term

To test the competing views on the (cash conversion cycle, sales growth rate and Debt ratio) in Nigeria, we modify the multiple linear regression in equation

$$\text{Profitability} = B_0 + B_1(AR) + B_2(AP) + B_3(INV) + U_i$$

2.10. Computing the Multiple Regression Analyses

First, values of critical indices in the management of the cash conversion cycle of six Industrial and Domestic products Nigerian manufacturing firms in Nigeria obtained from Nigeria Stock Exchange were recalculated using the formulae listed in above to achieve the final data used for this study. Secondly the computed data were further subjected to multiple regression analysis. In analyzing the computed data for the variables involved in the study. Linear regression model was used.

Linear regression model:

Profitability= Bo + B1(AR) + B2(AP)+ B3(INV) + Ui

The coefficients of multiple determination (R^2) were employed in the study to quantify extent of variation in the dependent variable (profitability ratio) caused by the explanatory (independent) variables considered in the study.

3. Data Presentation

Table 1. *Raw Data for Aluminum and Extrusion Company Plc.*

Years	Return on Asset Ratio	Accounts Receivable Ratio	Inventory Turnover Ratio	Accounts Payable Ratio
2000	-0.17457	0.029729	0.470203	0.920084
2001	0.027075	0.012892	0.375608	0.590613
2002	NA	0.030048	0.428695	0.72257
2003	-0.10002	4.18E-08	0.39171	0.897196
2004	-0.00359	0.020822	0.02797	0.294801
2005	0.025307	0.017938	1.244713	1.63882
2006	0.069129	5.012375	0.084038	0.309787
2007	0.123379	2.240985	0.112309	0.232824
2008	0.132689	0.003673	0.093191	0.374516
2009	0.183129	0.00763	0.092482	0.298306
2010	0.107863	0.00465	0.115071	0.03435
2011	0.08267	0.002038	0.178404	0.042439

Source: Author's Computation from Annual Accounts of Firm 2000-2011.

This company did not make enough profit especially in 2002 where they made no profit. They have up to 5.012 as their receivable ratio in 2006 and lowest of 0.002 in 2011. Their inventory turnover ratio is high in 2005 but low in other years.

Table 2. *Raw Data for BOC Cases Plc.*

Years	Return on Asset Ratio	Accounts Receivable Ratio	Inventory Turnover Ratio	Accounts Payable Ratio
2000	0.189275	0.129458	1.109496	0.985073
2001	0.168305	0.113898	0.534775	0.576817
2002	0.22658	0.138085	0.546158	0.641237
2003	0.204921	0.172972	0.53871	0.65538
2004	0.105303	0.132226	0.47935	1.304705
2005	0.070344	0.164616	0.344353	1.158746
2006	0.114355	0.191811	0.314032	0.102248
2007	0.148103	0.181155	0.222247	0.081418
2008	1.608196	0.180411	0.216783	0.509058
2009	2.137864	1.921697	0.204774	4.716995
2010	0.244451	0.154894	0.298365	0.070862
2011	0.230765	0.227649	0.26413	0.080281

Source: Author's Computation from Annual Accounts of Firm 2000-2011.

BOC Cases Plc did well in 2009 because it made more profit and in other years it did not do well. The highest receivable ratio is 1.921 while the highest payable ratio is 0.985 and lowest of 0.071.

Table 3. *Raw Data for First Aluminum Plc.*

Years	Return on Asset Ratio	Accounts Receivable Ratio	Inventory Turnover Ratio	Accounts Payable Ratio
2000	0.034205	0.132706	0.458108	0.554159
2001	-0.05427	0.166345	0.302798	0.574776
2002	-0.07504	0.219035	0.322809	0.781648
2003	0.060228	0.224367	0.31564	0.595556
2004	0.029809	0.14952	0.252935	0.459725
2005	0.039676	0.141898	0.243504	0.427539
2006	0.00423	1.475335	0.4414	0.66276
2007	0.013302	0.152696	0.449109	0.76377
2008	0.054515	0.110184	0.47579	0.804198
2009	0.005564	0.110547	0.412092	0.507059
2010	-0.02837	0.068609	0.372038	0.141473
2011	-0.02823	0.049816	0.340095	0.122823

Source: Author's Computation from Annual Accounts of Firm 2000-2011.

This company did not make enough profit. The highest return on asset ratio is 0.034 in 2000. The receivable ratio is low while that of payable is higher.

Table 4. *Raw Data for Nigeria Enamelware Plc.*

Years	Return on Asset Ratio	Accounts Receivable Ratio	Inventory Turnover Ratio	Accounts Payable Ratio
2000	0.055609	0.01741	0.20302	0.228862
2001	0.046812	0.019345	0.256754	0.277148
2002	0.044657	0.06316	0.238739	0.295182
2003	0.035341	0.11977	0.231017	0.490015
2004	0.027997	2.796533	0.275529	0.450197
2005	0.040731	0.202927	0.2981	0.446521
2006	0.037447	0.09133	0.257648	0.4743
2007	0.031938	0.055467	0.253461	0.686061
2008	0.032037	0.016147	0.231522	0.759021
2009	0.091262	0.114505	0.132662	0.395962
2010	0.087434	0.013886	0.167634	0.01001
2011	0.121361	0.021459	0.264007	0.027001

Source: Author's Computation from Annual Accounts of Firm 2000-2011.

The return of asset ratio of this company is low, None of the companies got up to 20% of profit. They have more to receive then to pay.

Table 5. *Raw Data for VitaFoam Nigeria Plc.*

Years	Return on Asset Ratio	Accounts Receivable Ratio	Inventory Turnover Ratio	Accounts Payable Ratio
2000	4.91608	0.019497	0.238571	0.412514
2001	0.790495	0.029334	0.169614	0.325117
2002	0.705918	0.701703	1.672614	3.511045
2003	0.696921	0.069525	0.196427	0.55307
2004	0.267607	0.070609	0.229983	0.358249
2005	0.089483	0.072786	0.332352	0.307538
2006	0.125305	0.071339	0.302631	0.392664
2007	0.172302	0.044743	0.522885	0.567299
2008	0.089192	0.045076	0.600511	0.604295
2009	0.101853	0.048116	8.0196	6.538124
2010	0.134751	0.071099	0.292533	0.10704
2011	0.140849	0.063647	0.472434	0.487577

Source: Author's Computation from Annual Accounts of Firm 2000-2011.

Vita foam Plc made enough profit of 4.914 in 2000 but little in other years. It also had more o pay than more to receive.

Table 6. *Raw Data for Vono Products Plc.*

Years	Return on Asset Ratio	Accounts Receivable Ratio	Inventory Turnover Ratio	Accounts Payable Ratio
2000	0.049152	0.320705	0.313411	0.68763
2001	0.009833	0.364824	0.50508	0.914108
2002	0.056677	0.185077	0.519558	0.708302
2003	0.06283	0.151616	0.588987	0.636499
2004	-0.80435	0.402993	0.284609	0.692139
2005	-0.21107	0.079839	0.479424	1.074428
2006	0.035496	0.092677	0.782238	3.427611
2007	-0.48964	0.108948	0.093453	0.554162
2008	-0.12629	0.097411	0.248673	1.116453
2009	-0.12209	0.247299	0.167828	2.390098
2010	-0.18286	0.206023	0.215318	2.984274
2011	-0.13616	0.222578	2.289354	2.493004

Source: Author's Computation from Annual Accounts of Firm 2000-2011.

This company did not make profit in 2004, 2006, 2007 and 2008 but made little profit in other years. The company had more to pay than to receive. Inventory turnover ratio is low.

4. Data Analysis

Industrial and Domestic Products Firms

Multiple Regression Analysis showing the relationship between Profitability ratio and AR, STO, AP, CCC, LQ, DT and SL of Industrial and Domestic Products firms in Nigeria

Table 7. *Multiple Regression Output.*

Variables	Linear Regression	Semi Log Regression	Double Log Regression	Exponential Regression
Constant	-0.143**	0.234	-0.622***	-0.753***
	(-2.580)	(1.262)	(-3.428)	(-7.273)
Accounts Receivable Ratio	0.001***	0.026	0.081	0.000
(AR)	(5.371)	(0.234)	(0.754)	(1.317)
Inventory Turnover Ratio (INV)	-0.130***	-0.323	-0.096	-0.009
	(-2.816)	(-1.146)	(-0.347)	(-0.106)
Accounts Payable Ratio (AP)	0.265***	0.115	0.049	0.155
	(5.282)	(0.670)	(0.290)	(1.662)
R^2	0.846	0.113	0.143	0.133
Adjusted R^2	0.830	0.016	0.049	0.038
F-Ratio	50.357***	1.161	1.524	1.406

NB: 1.Profitability=B1(AR) + B2(INV)+ B3(AP)+ Ui

2. Also, 1%, 5%, 10% levels of significance are represented by***; ** and * respectively

3. Values in brackets are coefficients while those outside brackets are t-values of the variables

The results of multiple regression analysis for the variables influencing the profitability ratio of Industrial and Domestic products firms in Nigeria were summarized in Table above. From the resultsit could be observed that out of the four functional models of the multiple regression calculated, the Linear Regression model was chosen because it has the highest number of significant variables as well as a very significant F-ratio (50.357***) value which indicated that the model chosen best fitted the analysis. Furthermore, the results of the analysis revealed an R^2 value of 0.846 thus indicating that 84.6% variation in the profitability ratio (dependent variable) of Industrial and Domestic products firms in Nigeria was accounted for by the explanatory (independent) variables considered in the analysis. Specifically the results showed that AR and AP had significant positive effect on the industries' profitability ratio at 1% level of significance. This implies that a unit increase in values of AR and AP shall bring about corresponding increases in the profitability ratio of Industrial and Domestic products firms in Nigeria. On the other hand, the industries' INVhad significant but negative effect on the profitability ratio at 1% levels of significance. This means that unit increase in the variable shall bring about corresponding decrease in the profitability ratio of Industrial and Domestic products firms in Nigeria.

Test of Hypotheses

Hypothesis 1

H_0 There is no significant effect of cash conversion cycle ratio on profitability of Industrial and Domestic product companies in Nigeria.

H_i There is a significant effect of cash conversion cycle ratio on profitability of Industrial and Domestic product companies in Nigeria.(See the table above)

Hypothesis 2

H_0 There is no significant relationship between debt ratio and profitability ratio.

H_i There is a significant relationship between debt ratio and profitability ratio.(See the table above)

Hypothesis 3

H_0 Sales growth has no significant effect on corporate profitability

H_i Sales growth has significant effect on corporate profitability.(See the table above)

5. Conclusion

Cash conversion cycle was described as the length of time from the payment for the purchase of raw materials to manufacture products until the collection of account. Cash conversion cycle, sales growth rate and debt ratio, are the variables studied in this study. Data were sourced from the Annual Reports of the selected Industrial and Domestic Product companies in Nigeria. Generalized least square multiple regression analytical toolswereused to test the Hypotheses. The findings show 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% levels of significance.

References

[1] Besley, S. and Brigham, E. (2005), "Essentials of Managerial Finance", 13 th ed., Thomson, Washington, DC.

[2] Charitou. M. S. Elfani, M. Lois, P. (2010). *The effect of marking capital management on firm's profitability:* Empirical Evidence from an Emerging market, Journal of Business and economic Research, 8, (12).

[3] Ching, H. Y. Novazzi, A. and Gerab, F. (2011). *Relationship between working capital management and profitability in Brazilian listed companies*. Journal of global Business and Economics, 3, 75.

[4] Deloof, M. (2003). Does working capital management affect profitability of Belgian firm? Journal of Business finance and Accounting 30, (3 and 4), 573-587.

[5] Duru, A, N, and Okpe (2015). Cash Conversion Cycle Management on the performance of Health-Care Manufacturing company in Nigeria. Journal of Research in Humanities and Social Science. 3, (10), 07-13.

[6] Eljelly, A. M. A. (2004), "Liquidity - profitability tradeoff: an empirical investigation in an emergingmarket", International Journal of Commerce and Management, 14(2), 48–61.

[7] Falope, O. I. and Ajilore, O. T. (2009). *Working capital management and corporate profitability* Evidence from panel Data Analysis of selected Quoted companies in Nigeria, research Journal of business management, 3, 73–84.

[8] Howorth, C. P. (2003). The *focus of working capital management in Uk small firms*. management accounting research, research 14, 97-111, Blackwell publishing.

[9] Gill, A. Biger, N. and Atnur, (2010). *The relationship between working capital, management and profitability Evidence from the United state*, Business and Economic Journal, vol. 2010, Bej–10, 1-9.

[10] Karaduman, H. A. Aknas, H. E. Caliskan, A. O. and Durer, S. (2011). *The relationship between working capital management and profitability*. Evidence from an Emerging market, International research Journal of Finance and Economics, Issue 62-67.

[11] Kwasi, S. K. (2010). *Working capital management and firms performance*. An Analysis of Ghanaian oil marketing firms, INTEQ. GH. Tel: 233-205600002/233-24-9276087.

[12] Lazaridisi, I. and Trynidis, D. (2006). *Relationship between working capital management and profitability of listed companies in the Athens stock exchange*", Journal if financial management and Analysis, 19, (1), 26-35.

[13] Lyroadi, and Lazadis, (2000). *Short term financial management of business increases and in Cyprus Business and Economic society international*.

[14] Muchina, S. and Kiano, E. (2011). *Influence of working capital management on firms profitability*: A case SMES in Kenya, International Business management, 5, (5), 279–286.

[15] Murugesu, T. (2013). Effect of cash conversion cycle on profitability: Listed Plantation Companies in Sri Lanka, Research Journal of Finance and Accounting, 4(18), 132-137.

[16] Padachi, K. (2006). *Trends in working capital management and its impact on firm's performance*: An analysis of Mauritian small manufacturing firms. International review of business research papers. 2, (2), 45–58.

[17] Raheman, A. and Nasr, M. (2007). *Working capital management and profitability. Case of Pakistani firms*, international review of business research papers 3, (1), 279-300.