

Effect of Ownership Structure on Working Capital Management of Listed Downstream Oil and Gas Companies in Nigeria

Moses Babatunde Olanisebe¹ Department of Accounting, Bayero University Kano, Kano, Nigeria

Rabiu ADO

Department of Accounting, Bayero University Kano, Kano, Nigeria

Abstract

This paper examines the effect of ownership structure on working capital management of listed Downstream Oil and Gas Companies in Nigeria. The study uses panel data for eight (8) companies for the period 13 years (2005 - 2017). There are several aspects and dimensions of ownership structure, which may influence a firm's working capital management but this study focuses on three characteristic of ownership structure: namely ownership concentration, managerial shareholding and institutional ownership. Firm's working capital management has been measured through Cash Conversion Cycle (CCC). Findings indicate that there is a positive significant relationship between ownership structure and firm's working capital management as measured by CCC. This paper recommends that the code on owner's equity of listed downstream oil and gas companies in Nigeria should be sustained and encouraged so that the firms can have a perpetual life, because the stake of this owners could serve as a check and balance mechanism to further strengthen the corporate governance of the downstream oil and gas companies in order to give room for enhanced effective working capital management.

Keywords: Ownership structure, WCM, downstream oil and gas companies.

Cite this article: Olanisebe, M. B., & ADO, R. (2019). Effect of Ownership Structure on Working Capital Management of Listed Downstream Oil and Gas Companies in Nigeria. *International Journal of Management, Accounting and Economics*, 6(11), 831-843.

¹ Corresponding author's email: walemose@gmail.com



Introduction

Insolvency and bankruptcy in the businesses both developed and developing country can be attributed to inability to plan and control working capital and understanding those factors mitigating its effectiveness. Smith (1973) concluded that majority of businesses that failed was as a results of inability of financial managers to plan and control current assets and current liabilities in their companies. Iyer (2013) suggested that insolvency of the businesses can be attributed to poor cash flow and one of the essential factors that lead to poor cash flow in businesses is the issues that related to inefficiency of working capital management; which means, the longer the cash flow cycle, the poorer the cash inflow.

Companies were mostly owned and finance by family members in the early 20th century. Nowadays, the growth and development of these companies make it difficult for owners to directly control the affairs of their companies alone. This lead to the separation of ownership from control and has brought about the agency conflicts between management and shareholders in developed and developing countries. Hence, the decision making concerning the affairs of these companies has been delegated to management by shareholders. Jensen and Mecckling (1986) suggest that one way to reduce agency conflict is to ensure that stakeholders' interests are fully protected.

Ownership structure refers to the ratio of shares held by manager, debt and equity holder to total numbers of company share issued. It also refers to proportion of a company shares possessed by one or a few shareholders which is adequate to give them the power to control the affairs of the company

Abel and Okafor (2010) defined ownership structure as the percentage of the shares held by institutions (Institutional ownership), manager (Managerial ownership), government (State ownership) and foreign investors (Foreign ownership). In today's world various types of ownership structures exist, these are state ownership, managerial, institutional and concentrated, state ownership, governmental, foreign and family ownership among others. More over Jensen and Mecckling (1976) classify ownership structure in terms of capital contributions that comprise inside investors (managers), and outside investors (debt holder and equity holder). Consequently, the question of the type of ownership structure that actually influences working capital management has remained unsolved.

The separation of ownership and control raised serious concerns leading to conflict among the management and the shareholders. However, higher managerial and institutional ownership better align the interest of different stakeholders. Farinha (2002), this is because institutional investors provide a valuable monitoring service and also serve as a restraint to opportunistic tendencies of the managers. When the ownership of a company is highly diversified, individual investors would have few incentives to control the actions of the managers and if they do, the result is high costs for the company. On not share, ownership structures affect the overall decision of the company and working capital management decision is one of the decisions that must be made by the company.

Based on modern financial management theories, agency cost is one of the determinants of working capital management whereas corporate governance is structured



to alleviate agency conflict. Hence ownership structure as a mechanism of corporate governance and working capital management are linked through their association with agency costs. Corporate governance has been a growing area of management research. A comprehensive review of literature reveals that empirical work is mostly focused on the impact of corporate governance on working capital management or examines the influence of ownership structure on working capital management (Achchuthan & Rajendran, 2013 and Ali & Shah, 2017).

However, relationship between ownership structure and working capital management has not been fully explored. According to Achchuthan and Rajendran (2013) and Ali and Shah (2017) only few studies have discussed the influence of ownership structure on the working capital management decisions of companies for developed and developing countries, such as United States, United Kingdom, Sri Lanka, Pakistan, Nigeria among others.

A number of studies have been conducted on corporate governance and working capital management, some on determinants of working capital management efficiency across the globe. For instance, Kajananthan (2012), Iftikhar (2013), Abbadi and Abbadi (2013) and Wasiuzzaman and Arumugam (2013)

In Nigeria, there are many studies in the area of working capital management decision these are; Akinlo (2012), Owolabi and Alu (2012), Salawu and Alao (2014), Onaolapo and Kajola (2015) and Sabo (2017). The above studies did not cover aspect of ownership structure variables expect Sabo (2017) who included managerial ownership and blockholders ownership. Thus, this study used wider proxies of ownership structure which include managerial share ownership and ownership concentration as well as institutional share ownership in order to have a more concise result. In addition, most of the studies on working capital management decision in Nigeria do not focus on the downstream oil and gas companies on the Nigeria economy despite the relevance and importance of this sector to the economy.

Though the results are mixed, both locally and internationally the studies have been conducted on firms listed in various security exchanges. There is a yawning gap exists since none of them have conducted a study on the companies that have not been listed. Corporate governance measurements studies conducted have only dealt with the boards structures. Interest to shareholders has not been used judiciously as a corporate governance mechanism. Shareholders are the owners of the firms and are affected by the how the directors manages the firm. The shareholders want efficient and effective utilization of resources to maximize their wealth.

More so, none of the studies on ownership structure and working capital management decision in Nigeria cover a period of 13 years starting from 2005 to 2017. Therefore, this study intends to fill this gap by conducting a research on the effect of ownership structure and working capital management of downstream oil and gas companies listed on the Nigerian Stock Exchange (NSE) during the period of 2005-2017. In an attempt to fill the gap, this study intents to answer the question that say: what is the impact of ownership concentration, managerial ownership and institutional ownership on working capital management of listed downstream oil and gas companies in Nigeria?



Objectives of the Study

- i. To determine the effect of ownership concentration on working capital management,
- ii. To identify the effect of managerial ownership on working capital management, and
- iii. To examine the effect of institutional ownership on working capital management of listed downstream oil and gas companies in Nigeria.

Literature Review

This section reviews the empirical studies on ownership concentration and working capital management. Large numbers of studies have analyses the impact of corporate governance on working capital management but only few have examined the effect of ownership concentration on working capital management.

Ownership Concentration

In corporate governance one of the major mechanisms that affect working capital management is the ownership structure. According to Jensen and Meckling (1976) ownership structure is defined as capital contributed by individual who are shareholders. Improvement in company, director election and modifications in company status, appointment of auditors and approval of extraordinary transactions are the important matters on which shareholder has full command and influence (Ahmad, Akhter, Siddiq, & Iqbal, 2018). As mentioned by Abel and Okafor (2010) ownership structure is the ratio of shares held by Manager (Managerial ownership), institutions (Institutional ownership), government (State ownership), foreign investors (Foreign ownership) etc. As steered by Jensen & Mackling (1976) ownership structure the combination of shares held by manager, debt and equity holder.

Ownership Concentration and Working Capital Management

Ownership concentration is a corporate governance mechanism that could be used to protect interest of shareholders. It refers to the shareholders that held 5 percent and above of shares in a company. There is evidence that ownership concentration has no relationship with or in fact reduces working capital management. Fiador & Fiador (2016) and Kamel (2015) report insignificant results of ownership concentration as a determinant factor of cash conversion cycle proxy for working capital management efficiency in the European region.

Poshakwale and Thapa (2011) opine that concentration of ownership in companies shows weakness in investor protection. Therefore, shareholders that have the largest shareholding are likely to misappropriate the firm's resources at the expense of the other shareholders. Since, ownership concentration, as a dimension of corporate governance, is a key management monitoring mechanism of working capital management Palombini and Nakamura (2012) found that in the Brazilian market ownership concentration (a dummy variable that assumes ownership concentration to occur if one investor owned over 20% of the company shares) is not a statistically significant determinant of working capital management. Nevertheless, they write that their results show that the nature of the relation



between ownership concentration and each of the following: CCC, accounts receivable days, accounts payable days, and inventory days held, is negative, which suggests that companies with large investors can inhibit decisions concerning excess current assets beyond the company's needs. They explain that such findings might be affected by the insufficient public data in Brazil on proxies for management monitoring mechanisms.

Moreover, the fact that insider ownership provides executives with a motive to efficiently operate the company (Tian & Twite, 2011) leads one to expect that ownership concentration will have a significant positive relation with WCME. Also, large shareholders may overcome the free-rider problem of a corporation with many small owners who find it not worth their efforts to absorb the costs of monitoring management; large shareholders would possibly be more encouraged to monitor and thus ensure that managers are aligned with their interests to increase the value of their shares (Shleifer & Vishny, 1986). Additionally, ownership concentration is associated with better governance practices, whereby the alignment of insiders and outsiders is improved (Isidro & Raonic, 2012). Consistently, Ferreira and Vilela (2004) found that cash holdings are negatively affected by ownership concentration.

However, ownership concentration may be viewed as a source of agency problems, given that it grants power to those large shareholders who may have the interest to abuse minority shareholders (La Porta, *et al.*, 1999). This agency problem applies to certain European countries, where agency problems mainly arise from conflicts between controlling shareholders and minority owners, as opposed to the typical agency problem between shareholders and management (Alimehmeti & Paletta, 2012). Given, the contradicting ideologies of monitoring and expropriation effect of ownership concentration on the working capital management of firms, the expectation is that ownership concentration to have a significant effect on working capital management.

Management's Ownership and Working Capital Management

Managerial share ownership refers to the total percentage of share held by the firm's management either through their natural presence or representation in the board of directors, or through the undertaking of managerial tasks or through a combination of the two (Yarram, 2013). It is measured as the proportion of equity held by insiders as disclosed in annual financial reports. Management's ownership helps resolve the agency problems and improve the decision regarding the working capital management. However, some studies support the view that managerial share ownership does not always have a positive effect on working capital management because the managers who own enough stock to dominate the board of directors could confiscate corporate wealth while some of scholars refused to supported the result.

In an attempt provide explanation between managerial share ownership and working capital management, Lee and Lee (2009) investigate the impact of corporate governance structure and firm valuation on cash holdings of five Asian countries namely; Malaysia, Philippines, Indonesia, Singapore and Thailand for the period of five years (2010 to 2014). The result showed positive association between management ownership structure and cash holdings. This means, if managerial ownership is increased to a higher level, it will increase their entrenchment and cash holding of the firms will increase. Basheer



(2014) also documented a positive impact of management ownership on cash holdings. The above studies were not in line with the result of Abdioglu (2016), who documented negative relationship between management ownership and cash holdings.

Moreover, Pouraghajan, Pourali and Akbari (2015) examine the relationship between ownership structure and cash holdings of the companies listed on Tehran Stock Exchange for five years (2008 to 2012). The study established positive but insignificant relationship between management ownership and cash holdings.

Managerial ownership affect working capital management of company as argue by Chueh and Chien (1999) and Hasan and Butt (2009) that when management obtains an equity stake in the firm, higher managerial self interests in long term sustainability of the company may induce managers to increase the firm's working capital policies which translate to effective working capital management. Monitoring by outsider shareholders, especially the blockholders may likely induce management in making company's decisions of which working capital is an integral part (Chueh & Chien, 1999). Chueh and Chien (1999) investigate the influence of managerial ownership on corporate capital policy of 192 firms in Taiwan for the period 1993 to 1998. The result showed a positive and significant influence between managerial ownership on corporate capital policy. Rashidi and Mosavi (2015) examine the relationship between ownership structure and inventory management of 112 companies listed on Tehran Stock Exchange for the period of five years (2009 to 2013). The result from the findings showed that managerial ownership has a positive and significant impact on inventory management.

Although, there is no enough empirical studies that investigate the influence of managerial ownership on working capital management but those that available believed to have a relationship as agued by Chueh and Chien (1999) and Hasan and Butt (2009) and others.

Institutional Ownership and Working Capital Management

Institutional investors are specialized financial institutions which consist of pension funds, insurance firms, mutual and funds (Davis & Steil, 2001). This is measured as the percentage of shares held by institutions to the total numbers of shares issued in a particular company. This includes both foreign and local shareholders. The presence of institutional shareholding in a company helps in taking vital decision that regards to working capital management. They also serve as effective monitoring devices over the company's strategic decisions. They bring down the company's agency costs and also reduce managerial opportunism. Institutions serve a monitoring role in mitigating the agency problem between shareholders and managers because the managers are saddle responsible of making decision

Dastgir and Honarmand (2014) examined the impact of corporate governance mechanisms on the efficiency of working capital management. The corporate governance mechanisms are the proportion of institutional ownership, ownership concentration, the number of board members, board independence and CEOs Duality. Results showed these variables affect the working capital management efficiency in the study.



Similarly, Rahimian and Janfada (2014) conducted a study on impact of corporate governance systems and financial restrictions (sensitivity of investment to cash flow) of listed companies on the Tehran Stock Exchange over the period of five years (2007 to 2011), a sample of 102 companies were used. The results showed that the number of major shareholders and board independence had a significant incremental impact on financial restrictions for the sampled size for the period. Palombini and Nakamura's (2012) investigate the key factors that affect working capital management of 2976 public firms in Brazilian market between 2001 and 2008 periods. Nevertheless, findings show that institutional ownership affect working capital management. Pouraghajan, Pourali and Akbari (2015), established a positive and significant relationship between institutional ownership and cash holdings.

In summary, the limited availability of literature on the subject matter indicates that ownership structure affect the working capital management. It is clear that managers could treat investment decisions carelessly, adopting a more flexible working capital policy, with a high level of inventory or a generous credit policy beyond operational needs. Therefore, ownership concentration, managerial ownership and institutional ownership formed ownership structure variables which are expected to improve the efficiency of working capital management positively or negatively. Hence following hypotheses:

H1: All else being equal, ownership concentration is positively related to on working capital management,

H2: All else being equal, managerial ownership is positively related to on working capital management, and

H3: All else being equal, institutional ownership is positively related to on working capital management of listed downstream oil and gas in the Nigeria.

Methodology

The present study is partly an exploratory research, although it was based on consolidated theories of corporate finance. In order to address its hypotheses, this study considered the listed downstream oil and gas companies in Nigeria Stock Exchange as its population. Secondary data were collected in order to obtain a balanced panel result. Twelve companies were listed as downstream oil and gas; eight companies make up the sample size because of missing data for the period study 2005 to 2017.

Table 1. Variables Study and their Measurement

Variable	Nature	Defination
CCC	Dependent	This study measured working capital management using the concept of cash cycle, also known as cash conversion cycle (CCC). It measures the period of time in days between the payment for raw materials and the receivables of finished product sold (number of days of inventory plus number of days of accounts receivable minus number of days of



accounts payable). Cash conversion cycle combines the working capital components related to operational processes, reflecting the purchasing, production and sales processes which was used in many studies (Kajananthan, 2012; Achchuthan & Rajendran, 2013; Iftikhar, 2013; Abbadi & Abbadi, 2013; Wasiuzzaman & Arumugam, 2013 and Ali & Shah, 2017). Proportion of shareholders with 5% shares and above as **OWC** Independent used by (Kamel, 2015; Fiador & Fiador, 2016 and Ali & Shah, 2017). This is measured as the proportion of shares held by managers and directors to the total number of shares issued Independent **MSH** as used by (Hasan & Butt, 2009; Yarram, 2013; Basheer, 2014 and Abdioglu, 2016). This is measured as the proportion of shares held by institutions to the total number of shares issued as used by Independent **INOW** (Dastgir & Honarmand, 2014; Rahimian & Janfada, 2014 and Pouraghajan, Pourali & Akbari, 2015). Total number of board at the end of fiscal year as used by BZControl (Gill & Biger's, 2013; Kajananthan & Achchuthan, 2013; Wasiuzzaman & Arumugam, 2013 and Kamel, 2015). Log (Total Assets) as used by (Gill, 2011; Salawu, 2014; FΖ Control Onalapo & Kajola, 2015 and Qurashi & Zahoor, 2017).

Model Specification

This study used panel data to measure the overall impact of ownership structure on working capital management. Therefore, the study used the following regression equation which was adopted from the works of Iftikhar (2013), Kamel (2015), Ali and Shah (2017), Qurashi and Zahoor (2017) and Sabo (2017) with a modification.

$$CCC = \alpha_0 + \beta_1(OWC)_{it} + \beta_2(MSH)_{it} + \beta_3(INOW)_{it} + \beta_4(BZ)_{it} + \beta_5(FZ)_{it} + \epsilon_{it}$$
(ii)

Where: CCC = Cash conversion cycle, OWC = Ownership Concentration, MSH = Managerial Shareholding, INOW = Institution Ownership, BZ = Board Size, FZ = Firm Size, α_0 : Constant term, β_1 β_5 : represents the coefficients regression model in the independent variables and ϵ_{it} : Error term

Results and Discussion

The aim of this study is to find the "The impact of ownership structure on working capital management of listed downstream oil and gas companies in Nigeria. Table 2 present the summary statistics for dependent and explanatory variables. Descriptive statistics like mean and median mainly provide the location of data and the standard deviation provide the deviation of data from its mean while minimum and maximum represent the least value and the highest value in the data.



Table 2. Descriptive Statistics

Variables	OBS	Mean	Std. Deviation	Minimum	Maximum
CCC	104	20.7471	8.0695	-4.9848	46.5842
OWC	104	47.8403	21.3345	5.12	77.47
MSH	104	0.1310	0.2275	0.0001	0.7331
INOW	104	0.3390	0.2594	0.0005	0.82

Source: Computed by the Authors from Annual Report of the Sampled Companies (2005-2017), Using STATA 14.00 Version

Table 2 shows that the mean value of cash conversion cycle (CCC) is 21 days. This implies that it takes on average 21 days for the capital that is tied down in working capital to convert into cash. Cash conversion cycle is in line with the standards. According to the Charted Institute of Management Accountants (improving cash flow using credit management), over 85 days denote the high risk in the working capital management. In this study, cash conversion cycle has the period which is below the standard days. The minimum number of days it takes for the capital in the cash conversion cycle to convert into cash is -4 days and the maximum number of days is 47.

Mean value of ownership concentration is 47.8403 and standard deviation is 8.0695. This means that in the sample companies an average 47.8403% of shareholdings are concentrated or hold by the largest block holders and 8.0695% deviation from the mean while the minimum and maximum share held based on concentration are 5.12 and 77.47 respectively. Mean value of managerial ownership 0.1310, this means sample firms have an average about 0.1310% holdings by the management of the company, the minimum and maximum share held management are 0.0001 and 0.7331 respectively. Mean value of the institutional ownership is 0.3390 means that in the sample firms an average of 0.3390% shares is held by the institutions both financial and none financial 0.2594 deviation from the mean.

Correlation Matrix

The results of the correlation matrix between the dependent and explanatory variables are presented in table 3.

Table 3 Correlation Matrix

Variables	CCC	OWC	MSH	INOW	VIF
CCC	1.0000				·
OWC	-0.4783	1.0000			1.00
MSH	-0.1424	0.0542	1.0000		1.19
INOW	0.0624	-0.0068	-0.3988	1.0000	1.19

Source: Computed by the Authors from Annual Report of the Sampled Companies (2005-2017), Using STATA 14.00 Version

Table 3 shows the correlation coefficient on the degree of correlation between the proxy to the dependent variable (cash conversion cycle) and explanatory variables



(ownership concentration, managerial ownership and institutional ownership). The values of the correlation coefficient range from -1 to 1. The sign of the correlation coefficient indicates the degree of the relationship (positive or negative); the absolute value of the correlation coefficient indicates the strength, with larger values indicating stronger relationships. The correlation coefficients on the main diagonal are 1.0000, because each variable has a perfect positive linear relationship with itself.

From Table 3, it can be seen that cash conversion cycle (CCC) has a negative relationship with the ownership concentration and managerial ownership with the exception of institutional ownership which shows positive relationship. Furthermore, the correlation table indicates that correlation between explanatory variables is generally moderate thus, suggest absence of Multicollinearity. The variance inflation factor tolerance of the variables ranges between 1.00 and 1.19 and therefore since none of the VIF exceeds 10 the results could be predicted and relied upon (Gujirati, 2004).

Regression

The null hypothesis for homocedasticity was rejected using White's Test. Therefore, the multiple linear regressions of feasible generalized least squares (FGLS) were applied to correct the heterocedasticity problem. Next, the multiple linear regressions for both dynamic and static panel data (with fixed and random effects) were calculated. Three tests were conducted, and their results used as the basis to compare the regression equations with regard to their explaining power. The first test was conducted in order to choose between the ordinary least squares. Next to it is general least squares which is combination of random and fixed effect panel data model. Hausman test, which compares random and fixe effects were also conducted, excluding the hypothesis of random effect. Therefore, the random effect model was found to have more explanatory power over fixed effect from the Hausman specification test. Lagrange multiplier test of Breusch-Pagan of random show that the result of ordinary least squares robust. Table 4 shows a summary of the results of the ordinary least squares robust for the model.

Table 4 Regression Results

Ordinary Least Square (OLS) VCE(robust)					
Variables	Coef.	Robust Std. Error	T	P> t	
OWC	-0.1786	0.0554	-3.22	0.002	
MSH	-3.9286	2.0413	-1.92	0.006	
INOW	0.4665	0.1995	2.34	0.001	
Constant	10.9762	3.7026	2.96	0.004	
R-Squared 0.2426					
Pro>F 0.0000					
VIF	VIF 1.13				
Heteroskedasticity	0.000				
Hausman Test (Prob>Chi2)				0.0764	
Breusch and Pagan Lagrangian Multiplier Test for Random Effects				0.0057	



The OLS regression results show that cumulative R-Squared (R2) is 0.2426, which implies that the independent variables, ownership concentration, managerial shareholding and institutional ownership accounts for about 24% changes in working capital management of listed downstream oil and gas companies in Nigeria. Therefore, the remaining variation, that is, 76% is determined by variables not capture in the model. Therefore, the model is fit and the variables are properly selected and used in the model to explain the variation in the working capital management of sample size. This is justifiable by the value of F-statistics of 0.0000 at a 5% level of significant. Hence, the findings of the study could be relied upon.

Table 4 shows that ownership concentration (OWC) has a negative significant influence on cash conversion cycle (CCC) of the listed downstream oil and gas companies in Nigeria at 5% significant level. This means that the higher the ownership concentration the lower the cash conversion cycle of the listed downstream oil and gas companies in Nigeria and vice versa if all things are equal. The finding is consistent with that of Tian and Twite (2011), Dastgir and Honarmand (2014) and Abdioglu (2016) but inconsistent with the findings of Alimehmeti and Paletta (2012), Kamel (2015) and Fiador and Fiador (2016). Generally, a significant negative influence between ownership concentration and working capital management implies that block holders taken effective decision in regard to working capital for shareholders interest.

The result also provides evidence about the existence of negative significant relationship between managerial shareholding and cash conversion cycle (CCC) of the listed downstream oil and gas companies in Nigeria. This implies that the higher managerial ownership the lower the working capital management of the sample size and vice versa if all things been equal. This finding is in line with Yarram (2013) and Abdioglu (2016). On the other hand, it contracts Bodaghi and Ahmadpour (2010), Basheer (2014), Pouraghajan, Pourali and Akbari (2015) and Rashidi and Mosavi (2015). Generally, a significant negative relationship between managerial ownership and working capital management implies that managerial ownership implement a decision that lead to an effective working capital because of their investment in the business.

Also, institutional ownership has a positive significant impact on cash conversion cycle (CCC) of the listed downstream oil and gas companies in Nigeria. This means that lower institutional ownership the higher the working capital management of the sample size and vice versa if all things been equal. This finding is in line with Palombini and Nakamura's (2012), Dastgir and Honarmand (2014) and Pouraghajan, Pourali and Akbari (2015). On the other hand, it contracts Davis and Steil (2001). Generally, a significant positive relationship between institutional ownership and working capital management implies that institutional ownership help to prevent managerial opportunistic behavior which in turn to effective in working capital management in day to day running of the business.

Conclusions and Recommendation

The present study aimed to contribute to the understanding of working capital management decisions in the literature by investigating the impact of ownership structure on working capital management of listed downstream oil and gas companies in Nigeria.



It used a sample of eight listed downstream oil and gas companies in Nigeria for the period from 2005 to 2017. After reviewing the existing literature, the researchers found that few scholars have explored key dimension of ownership structure against working capital management. Their studies were conducted in many different countries with different economic situations, and they were based on different econometric models, leading to no clear consensus. This study found evidence that ownership concentration, managerial ownership and institutional ownership have significant impact on working capital management of listed downstream oil and gas companies in Nigeria. Therefore it can be enclosed that ownership structure affect working capital management of listed downstream oil and gas companies in Nigeria.

On the conclusion of this study, it is recommended that policy makers should check the behavior of managers towards the organization to ensure that they act in good faith on effective working capital management decision, because the ownership structure affect the effective working capital management decision of listed downstream oil and gas companies in Nigeria. Also, further study should be conducted to cover all listed upstream oil and gas companies in Nigeria since the study only listed downstream oil and gas companies in order to aid generalization.

References

- Abdioglu, N. (2016). Management ownership and corporate cash holdings: Insights from an Emerging Market. *Business and Economics Research Journal*, 7(2), 29-41.
- Ahmad, H., Akhter1, N., Siddiq, T., & Iqbal, Z. (2018). Ownership Structure, Corporate Governance and Capital Structure of Non-Financial Firms of Pakistan. *Information Management and Business Review*, (10)1, 31-46.
- Akinlo. O. O. (2011). The Effect of Working Capital Management on Profitability of firms in Nigeria. Evidence from General Method of Moments. *Asian Journal of Business and Management Sciences*, 1(2), 130-135.
- Ali, B., & Shah, S. (2017). The Impact of Corporate Governance on Working Capital Management Efficiency: A Quantitative Study Based on Pakistani Manufacturing Firms. *City University Research Journal*, 7(2), 272-284.
- Basheer, M. F. (2014). Impact of corporate governance on corporate cash holdings: An empirical study of firms in manufacturing company in Pakistan. *International Journal of Innovation and Applied Studies*, 7(40, 1371-1383.
- Dastgir, M., & Honarmand, M. (2014). The impact of corporate governance mechanisms on the efficiency of working capital management of listed banks in Egypt. *Quarterly of Accounting Management*, 2(2), 90-107.
 - Fiador, V., & Fiador, V. (2016). Does corporate governance influence the efficiency of working capital management of listed firms: Evidence from Ghana? *African Journal of Economic and Management Studies*, 7(4), 482-496.



- Gill, A. (2011). Factors That Influence Working Capital Requirement in Canada. *Economics and Finance Review*, 1(3), 30–40.
- Gill, A. S., & Biger, N. (2013). The impact of corporate governance on working capital management efficiency of American manufacturing firms. *Managerial Finance*, 39(2), 116–132.
- Kajananthan, R., & Achchuthan, S. (2013). Corporate Governance Practices and Its Impact on Working Capital Management: Evidence from Sri Lanka. *Research Journal of Finance and Accounting*, 4(3), 32-53.
- Kamel, S. R. (2015). The impact of Corporate Governance and Firm Maturity on Working Capital Management Efficiency: Evidence from Listed European Firms. Being A Thesis Submitted to the Department of Management in partial fulfillment of the requirements for the degree of Master of Science in Finance. The American University in Cairo School of Business.
- Lee, K. W., & Lee, C. F. (2009). Cash holdings, corporate governance structure and firm valuation. *Review of Pacific Basin Financial Markets and Policies*, 12(03), pp. 475-508.
- Njoku, G. C. (2017). The Impact of Corporate Governance on Working Capital Management in Nigerian Organizations. A dissertation Submitted in Partial Fulfillment of the Requirements for the Degree of Doctor of Philosophy Management: Finance Walden University.
- Oladipupo, A. O., & Okafor, C. A. (2013). Relative contribution of working capital management to corporate profitability and Dividend payout ratio: Evidence from Nigeria. *International Journal of Business and Finance Management Research*, 2053-1842, 11-20.
- Palombini, N. V. N., & Nakamura, W. T. (2012). Key factors in working capital management in the Brazilian market. *Revista de Administração de Empresas*, 52(1), 55–69.
- Pouraghajan, A., Pourali, M. R., & Akbari, L. (2015). Relationship between ownership structure and corporate cash holdings in Iran. *Applied Mathematics in Engineering, Management and Technology*, 3(1), 771-778.
- Rahimian, N., & Janfada, R. (2014). Corporate governance system and financial constraints (investment sensitivities to cash flows). *Knowledge of Investment*, 10(2), 39-51.