Ownership Structure and Earnings Management: Evidence from Nigerian Listed Firms

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Abstract
The credibility and reliability of the primary objective of external financial reporting has been questioned by many users of financial reports because of the effect of earnings management on the information content of such reports. Therefore, the study investigates the impact of ownership structure on earnings management in Nigeria. The study makes use of data obtained from secondary source and employs a longitudinal panel research as the research design for a sample of 75 quoted firms for the period 2009 to 2014. Also, descriptive statistics and Pearson correlation analysis were conducted. Relevant residual diagnostic tests were also conducted. The result reveals that managerial ownership is negatively and significantly related to earnings management while institutional ownership and foreign ownership exhibit a positive but insignificant relationship. The study, therefore, recommends that firms should consider improving managerial ownership by issuing policy statement requiring managers and executive directors to have more equity shares. In addition, there may be a need for companies to have a high percentage of institutional ownership especially participatory institutional ownership that can influence efficient monitoring and reduce earnings management.

Keywords: Managerial ownership, institutional ownership, foreign ownership, earnings management, discretionary accruals

JEL Classification Codes: M41 M48

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1.0 INTRODUCTION

According to the Institute of Chartered Accountants of Nigeria (ICAN, 2014) the basic objective of general purpose financial reporting is to provide information about the reporting entity that is useful to present and potential investors, creditors and others in making resource allocation decisions to the entity. However, the reliability and relevance of this objective is being questioned by many users of corporate financial reports because of the probable effects of earnings management on the information contents of such reports. Hence, earnings management has been at the centre of current debates, threatening the credibility of both the accounting and auditing functions.

While the problem is not new, it was one of the key themes in corporate finance and corporate governance in the 1980s (Merchant & Rockness, 1994). By the early 1990s, earnings management was well and truly recognised by national and international regulators as one of the major challenges of financial reporting.

Interestingly, ownership structure has been identified as one of the vital corporate governance mechanisms that curtail earnings management practices by managers (Morck, Shleifer & Vishny, 1988). However, extant research such as: Ho, Wu, and Xu (2010), Isenmila and Afensimi (2012), Euphrasia and Dini (2013), shows that different ownership structures determines the level of earnings management mitigation.

However, existing literature on the subject of ownership structure and earnings management shows no unanimous conclusion regarding what the effect is and how it is achieved. For managerial ownership, studies such as Klein (2002); Ali, Salleh, and Hassan (2008); Banderlipe (2009); Sandra (2012); and Euphrasia and Dini (2013) reveal that managerial ownership is connected with lower levels of earnings management. However, to the extent that the interest of shareholders and managers’ are not fully converged, Cheng and Warfield (2005); Al-Fayoumi, Abuzayed and Alexander (2010) suggest that managers with the high stock ownership can possess more power to pursue their objectives without fear of punishment. It could also suggest that higher managerial ownership may encourage managers to apply discretionary accruals to increase earnings.

The high level of argument identified in managerial ownership has similarly been attributed to institutional ownership as some similar gap in extant literature were also observed by this study for institutional ownership where no clear-cut conclusions were reached on how institutional ownership can constrain earnings management. Be that as it may, institutional investors can provide active monitoring role that may be difficult for smaller, more passive or less-informed investors to sustain (Almazan, Hartzell & Starks, 2005). However, another line of literature argues that institutional investors do not play an active role in monitoring management activities, hence, earnings manipulations (Duggal & Millar, 1999; Claessens & Fan, 2002).

The correlation observed in institutional ownership is not totally different from foreign ownership. Ali et al. (2008) in their study, which was conducted in Malaysia reveals that foreign ownership is negatively and significantly correlated with discretionary accruals. Also, studies such as Bekaert and Harvey (2000); Gillan and Starks (2003); Douma, George, and Kabir (2006); David, Yoshikawa, Shari, and Rasheed (2006); Ho, Wu, and Xu (2010) that investigated foreign ownership and discretionary accruals were conducted outside Nigeria with different capital sophistication. Their conclusion admits that foreign ownership can constrain real earnings management.
Broadly speaking, the need for further studies has become eminent because of the divergent findings and the absence of any clear and unanimous conclusions regarding the effect of ownership structure on earnings management. As a result of the identified gap, the study broadly examines the extent ownership structure influence earnings management for firms registered on the floor of the Nigerian Stock Exchange (NSE). It focuses on the relationship between managerial ownership, institutional ownership, foreign ownership and earnings management.

**Concepts of Earnings Management**
The concept of earnings management has received varying definitions by different scholars. One of such scholars is Schipper (1989:92) who defined earnings management as a “purposeful intervention in the external financial reporting process, with the intent of obtaining some private gain” as different from the assertion of merely facilitating the neutral operation of the process. It is legal if the described gains or profits are modified in line with GAAP, for instance, changing the procedure for inventory estimation and depreciation. Earnings management becomes fraudulent, however, when it goes beyond GAAP, such as accelerating income acknowledgment and deferring cost recognition (Wong, Loo & Shamsher, 2009; Isenmila & Afensimi, 2012).

One of the most widely held definitions of earnings management was given by Healy and Wahlen (1999). They posit that earnings management involves a scenario where managers use judgment in financial reporting and shaping transactions to reflect financial reports alteration to either misinform some concerned stakeholders about what the purported economic performance of the company is or to influence contractual outcomes that may be contingent upon the reported accounting figures.

Earnings management comprises of accounting and real earnings management. Accounting earnings management (AEM) includes the way accounting standards are applied to record given transactions and events, whereas real earnings management (REM) changes the timing or the structuring of actual transactions. It is agreed in literature that AEM refers to the way and manners in which the discretion permitted by accounting standards is exploited, whereas REM affects the timing and structuring of business activities (Roychowdhury, 2006). While accounting choices influence AEM, REM is affected by cash flow choices.

**Approaches to Earnings Management**

**Discretionary Accruals Management**
Dechow, Sloan, and Sweeney (1995) asserts that the analysis of earnings management (EM) often focuses on management’s use of discretionary accruals. There are several accrual-based models for detecting EM. Healy (1985) for instance, estimates discretionary accruals using a two-step process. First is the estimation of non-discretionary accrual by scaling the mean of total accruals by lagged total assets from the estimation. Second is the measurement of discretionary accrual by the difference between current year total accrual scaled by lagged total assets and estimated non-discretionary accruals. Some EM models decompose total accruals into non-discretionary and discretionary accruals. These models first estimate non-discretionary accrual, then subtract the estimated non-discretionary accruals from event year total accruals to yield discretionary accruals (Jones, 1991; Dechow et al., 1995). The Jones (1991) model was modified by Dechow et al. (1995) by decomposing total accruals into non-discretionary and discretionary accruals and also taking into cognisance the change in receivables over total change in revenue.

**Real Earnings Management (REM)**
Roychowdhury (2006:337) states that REM involves real activities manipulation suggesting “departures from normal operational practices, motivated by manager’s desire to mislead at least some stakeholders into believing that certain financial reporting goals have been met in the normal course of operations”. It is important to know that the departure from normal operational accounting practices do not necessarily contribute to firm’s value even though they enable managers to achieve reporting goals. Interestingly, Graham, Harvey, and Rajgopal (2005) maintain that financial executives indicate a greater willingness to manipulate earnings through real activities rather than accruals. There are at least two possible reasons for avoiding earnings manipulation outside real activities. First, accrual manipulation is more likely to draw auditor or regulatory inspection than genuine decisions about pricing and production. Second, relying on accrual manipulation alone involves a risk of losing investors confidence on financial reports.

**Models for Measuring Earnings Management**

**The Jones Model**

Jones (1991) suggests a model that tries to control for the effects of changes in a firm’s economic circumstances on non-discretionary accruals. The Jones Model for non-discretionary accruals in the event year is:

\[ \text{NDA}_t = \alpha_1(\frac{1}{\text{A}_{t-1}}) + \alpha_2(\Delta\text{REV}_t / \text{A}_{t-1}) + \alpha_3(\text{PPE}_t / \text{A}_{t-1}) \]  

(1)

Where:

- \( \text{NDA}_t \) is non-discretionary accruals in year \( t \) scaled by lagged total assets;
- \( \Delta\text{REV}_t \) is revenues in year \( t \) less revenues in year \( t - 1 \);
- \( \text{PPE}_t \) is gross property plant and equipment at the end of year \( t \);
- \( \text{A}_{t-1} \) is total assets at the end of year \( t - 1 \); and
- \( \alpha_1, \alpha_2, \alpha_3 \) are the firm-specific parameters.

**The Dechow Model**

Dechow et al. (1995) are the brain behind the modified version of the Jones model. The modified version of Jones model is designed to disregard the estimated tendency of the Jones Model to measure discretionary accruals with an error when there is the exercise of discretion over revenue (Dechow et al., 1995). More specifically, Dechow et al. (1995) made a comparison between the several existing models for detecting earnings management and came up to the conclusion that adding the change in receivables to the Jones model leads to a stronger and well-estimated model. According to Dechow et al. (1995), the original Jones model tacitly assumes that there is no exercise of discretion over revenue in either the estimation period or the event period whereas, the modified Jones model subtly assumes that all the changes in credit sales in the event period comes from earnings management. Consequently, the idea behind this adjustment is aimed at removing the possible effects of the management’s discretion over credit sales from non-discretionary accruals, and accordingly to improve the model’s power to detect revenue-based earnings manipulation. The modified Jones (1991) model is stated thus:

\[ \text{NDA}_t = \alpha_1(\frac{1}{\text{A}_{t-1}}) + \alpha_2[(\Delta\text{REV}_t - \Delta\text{REC}_t) / \text{At} - 1] + \alpha_3(\text{PPE}_t / \text{A}_{t-1}) \]  

(3)

\( \Delta\text{REC}_t \) is net receivables in year \( t \) less net receivables in year \( t - 1 \). At \( t - 1 \) is total assets at the end of year \( t - 1 \); and \( \alpha_1, \alpha_2, \alpha_3 \) are firm-specific parameters.
Estimates of the firm-specific parameters, $\alpha_1$, $\alpha_2$, and $\alpha_3$, are obtained by using the following model in the estimation period:

$$TA_t / A_{t-1} = \alpha_1(1/A_{t-1}) + \alpha_2(\Delta REV_t - \Delta REC_t/A_{t-1}) + \alpha_3(PPE_t / A_{t-1}) + \epsilon_t \quad (4)$$

where:

- $\alpha_1$, $\alpha_2$, and $\alpha_3$ denote the OLS estimates;
- $TA_t$ is total accruals in year $t$;
- $\Delta REC_t$ is net receivables in year $t$ less net receivables in year $t - 1$. The firm-specific discretionary portion of total accruals is accommodated in $\epsilon_t$ which is the residual.
- Other variables are as in equation (1 & 2). In line with this modification to Jones (1991) model and after a cross-examination of the dechow et al. (1995) model, we consider our measurement of discretionary accruals to be better specified with the modified Jones (1991) model thereby adopting the Dechow et al. (1995) model as our model for measuring discretionary accruals.

**Concepts of Ownership Structure**

The divergence of interests between management and owners of a corporation as a result of these separation of ownership and control (Jensen & Meckling, 1976) has necessitated the monitoring of managerial decision to ensure the protection of shareholders’ interest and that reliable and complete financial reporting is adhered to. Compliance with reliable and complete financial reporting has been linked to the role of corporate governance structure in financial reporting (Bushman & Smith, 2003). Dechow, Sloan, and Sweeney (1996) documented that certain corporate governance mechanisms restrict manager's motivation to engage in earnings management. The implication is that well-structured corporate governance mechanisms are expected to mitigate earnings management. The ownership structure of a firm has been identified in most financial literature to be an essential and effective corporate governance mechanism for constraining the occurrence of earnings management (Alves, 2012). Additionally, it is documented that one of the value determinants of a firm is through a well-designed and effective ownership structure of the firm’s shares (De Miguel, Pindado & De la Torre, 2001).

The ownership structure of a firm can be categorised into two groups: the proportion of shares owned by insiders and outsiders; the proportion of shares owned by institutional versus individual shareholders (Wong, Loo & Shamsher, 2009). There exist two streams of thought regarding an effective structure of ownership. First, insiders or managers of the firm act also as shareholders if there is the acquisition of a considerable portion of the company’s shareholdings by managers, and this is considered to be useful in curtailing agency conflicts and aligning the interests of management and shareholders. Secondly, non-managerial shareholders who own a significant number of the firm’s shares, possess more power and more incentive to checkmate management activity, mainly as it involves the financial reporting, thus reducing the earnings management probability (Ebraheem & Mohamad, 2012).

**Managerial Ownership and Earnings Management**

Managerial ownership is considered an important device of ownership structures for mitigating the conflict between managers and shareholders (Liu, 2012). Managers with a high ownership interest in the firm are less likely to alter earnings for short-term private gains at the expense of outside shareholders. Managers whose interest is consistent with shareholders are more likely to report earnings that reflect the underlying economic value of the firm (Dhaliwal et al., 1982). However, it is evident that managerial ownership is positively associated with earnings explanatory power for returns, and owing to the effects of entrenchment or expropriation (Cheng & Warfield, 2005). Furthermore, Hsu and Koh (2005), Isenmila and Afensimi (2012), and Farouk and Hassan (2014) scientific output reveals a
The positive relationship between managerial ownership and earnings management.

Institutional Ownership and Earnings Management
Institutional investors can be considered as sophisticated investors who typically serve a monitoring role in reducing pressures for myopic managerial behaviour (Bartov, Gul & Tsui, 2001). Recent studies have classified institutional investors into two main groups and what effects they have on earnings management. Firstly, long-term institutional investors engage in investment with the intent of holding their ownership stake for a long duration. Hence, they are occupied with strong incentives to monitor those firms they have invested in. This suggests that the monitoring role of long-term institutional holdings can have a significant negative effect on the levels of earnings management (Habbash, 2010). Secondly, institutional shareholders with short-term orientation or, as popularly referred to as myopic, or transient institutional investors are the more dominant type and their focus are chiefly on present earnings in determining stock prices rather than earnings gained through long-term investments or long-term earnings. This, according to Habbash (2010), implies that short-term institutional holdings can have a positive effect on earnings management. This is also in line with the study by Isenmila and Afensimi (2012); Farouk and Hassan (2014); Ayadi and Boujelbène (2014).

It is, therefore, necessary to conduct more empirical studies to ascertain the effect of institutional ownership on earnings management among firms listed on the floor of the NSE.

Foreign Ownership and Earnings Management
Foreign investors are typically mutual funds or other institutional investors (Dahlquist & Robertsson, 2001). Dahlquist and Robertsson (2001) state that foreign ownership can be seen as one active mechanism that could pair with the governance structure of a firm to monitor the management from engaging in non-value maximising activities because their role is similar to that of institutional investors. Foreign owners can reduce agency costs by constraining REM. Prior research provides evidence that foreign investors can enhance firm value through spreading positive spillover effects (Douma et al., 2006), through reducing firms’ cost of capital (Bekaert & Harvey, 2000), through fostering appropriate investment in R&D (David, et al., 2006), and through initiating changes in corporate governance practices of local firms (Gillan & Starks, 2003). Also, Ho, Wu, and Xu (2010) finds that the greater the foreign ownership in small firms is, the more positive is the relation between Information Technology (IT) investment and firm performance, suggesting that foreign investors may bring IT expertise to help those small firms. This finding is in tandem with Ferreira (2007) and Chien (2008).

From the literature reviewed, we were limited by studies on foreign ownership and earnings management both in developed and developing economies. This becomes more relevant to conduct more studies on how foreign ownership could curtail earnings management in the Nigerian firms.

Control Variables
Board Size and Earnings Management
Jensen (1993) state that the free-riding problems among directors escalate with board size, larger boards are expected to be less effective watchdogs to smaller boards. Conversely, Monks and Minow (1995) suggest that larger boards have that incentive to sacrifice more time and effort to checkmate management, whereas, smaller boards can pay less time and effort to monitor management activities. The study of Yu (2008) reveals that small boards seem more vulnerable and disposed to failure to detect earnings management. However,
Alonso, Palenzuela and Iturriaga (as cited in Habbash, 2010) argue that large boards exhibit poorer coordination and communication among members, and their results display a significant positive association between larger board size and earnings management.

**Firm Size and Earnings Management**

Firm size according to Fama and Jensen (1983) involves the complex, large, and diverse nature of the firm. Boone et al. (as cited in Habbash, 2010) find that, as firms become larger and more diversified, the size of the board increases. Thus, the scale and complexity of a large firm, according to Habbash (2010), can obscure any relationship between board characteristics and earnings management. As the firm’s size increases, the agency costs are projected to rise and allow for greater managerial discretion and opportunities (Jensen & Meckling, 1976). Llukani (2013) argues that for the sake of greater reputation and the fear of loss of reputation coupled with the associated cost, large companies engage less in earnings management, but due to the consolidated structures of internal audit functions, large firms normally engage more in earnings management compared to smaller firms. Thus, the size of the firm is likely to affect corporate governance structures and earnings quality. Hence, in this study, firm size (FSIZE) was included as a control variable to examine the association between ownership structures and earnings management.

**Review of Underpinning Theories**

**Agency Theory**

In providing a theoretical premise for the role of ownership structure in earnings management, we fall back to the basic issues postulated or suggested by the Agency theory. Also, due to the separation of management from ownership, which may result in an agency relationship, problem, and cost, it is necessary to examine theoretically how these issues are reconciled mainly by agency theory. The agency theory holds that the firm can be viewed as a nexus or network of contracts, implicit and explicit, among various parties. Agency problems arise when the interests of agents are not aligned with those of principals owing to the separation of management and ownership. Thus, earnings management may be perceived as a reflection of the existence of agency problems. According to agency theory, “the agent strives to achieve his personal goals at the expense of the principal, that is, managers are mostly motivated by their personal interests and benefits and work to maximize their personal benefit rather than considering shareholders’ interests and maximizing shareholders’ wealth” (Jensen & Meckling, 1976). To curtail the agency problem, there must be better monitoring and controlling mechanisms which help to ensure that managers’ behavioural change should pursue the interests of shareholders rather than only their interests.

The corporate governance system of a firm, such as ownership structure is considered an important managers’ monitoring system and thus its monitoring role can aid in constraining the occurrence of earnings management. The governance mechanisms also, are designed to promote the convergence of agent-principal interest, protect shareholder interests and thus reduce agency costs. Technically, ownership structures as a corporate governance mechanism afford the shareholders the enablement to closely monitor the actions of managers. Nevertheless, feeble monitoring of managers may spur them to pursue their interests through earnings management, indirectly suggesting that effective corporate monitoring through good corporate governance can curb the myopic and deceptive behaviour of management.

**Entrenchment /Expropriation Theory**

The Entrenchment theory shots from the agency theory, but unlike the agency theory which assumes that the agent is in an aggressive relationship with the shareholder...
and therefore exhibits opportunistic behaviour. The Entrenchment theory sees the agent as someone with an active behaviour. This theory, according to Kouaib and Jarboui (2014) begins with the observation that the control mechanisms and incentives to increase managerial efficiency are not sufficient to constrain managers to manage the firm in line with shareholders’ interests. The primary objectives of managers, as posited by this theory, are to make costly their replacement for the firm, allowing them to increase their authorities and their discretionary spaces (Kouaib & Jarboui, 2014). The entrenchment sense applied by managers is geared towards preserving and expanding managerial discretion which can be proof of their opportunistic behaviour. As posited by the expropriation theory, the conflict of interests between managing owners and outside shareholders intensifies when director ownership is high (Fan & Wong, 2002). Higher managerial ownership entrenches Managers’ to indeed first accord priority to their personal interest when they pursue to maximise their income as they place the maximisation of the firm value in a second place, which is detrimental to the company survival. This may suggest that firms with higher director ownership may use earnings management to smokescreen the reported earnings to hide expropriation from outside shareholders.

3.0 METHODOLOGY
3.1 Model Specification and Data Analysis Plan
The model of this study examines the effect of ownership structure and earnings management in Nigeria. To achieve this objective, we firstly propose the following models on panel data. The model identification spells out earnings management as a function of managerial ownership, institutional ownership, foreign ownership, board size (control variable), and firm size (control variable). The absolute value of discretionary accruals was proxied for earnings management. We regressed the explanatory variables including the control variables against earnings management (explained variable) collectively. The model builds on the studies of Jara and Lopez (2011); Ayadi and Boujelbène (2014); Shah and Shah (2014). The model for the study is specified thus;

\[ \text{ERNMGIT}_i = \beta_0 + \beta_1 \text{MANOWN}_i + \beta_2 \text{FSIZE}_i + \beta_3 \text{FSIZE}_i + \mu_i \]  
\[ \text{ERNMGIT}_i = \gamma_0 + \gamma_1 \text{FOROWN}_i + \gamma_2 \text{FSIZE}_i + \gamma_3 \text{FSIZE}_i + \mu_i \]  
\[ \text{ERNMGIT}_i = \phi_0 + \phi_1 \text{MANOWN}_i + \phi_2 \text{FSIZE}_i + \phi_3 \text{FSIZE}_i + \phi_4 \text{FSIZE}_i + \phi_5 \text{FSIZE}_i + \mu_i \]

Where

- ERMGT = Earnings management
- INSTIOWN = Institutional ownership
- MANOWN = Managerial ownership
- FOROWN = Foreign ownership
- BDSIZE = Board size
- FSIZE = Firm size
- \( \mu \) = Stochastic error term
- \( \beta_0, \gamma_0, \phi_0 \) = Intercept/Constant
- \( \beta_1 - \beta_5, \gamma_1 - \gamma_3, \phi_1 - \phi_3 \) = Slope coefficient
- \( i \) = Cross-section of companies
- \( t \) = Time period

As operationalised below, earnings management was measured using discretionary accruals (DACC) as a proxy. The Modified Jones (1991) model was adopted in measuring DACC as introduced by Dechow et al. (1995). The modified Jones (1991) model was stated thus;

\[ \text{DACC}_i = \alpha_1(1 / \text{A}_{t-1}) + \alpha_2[(\text{AREV}_t - \text{REC}_t) / \text{A}_{t-1}] + \alpha_3(\text{PPE}_t / \text{A}_{t-1}) \]

\[ \Delta \text{REC}_t \text{ is net receivables in year } t \text{ less net receivables in year } t - 1 \]

\[ \text{A}_{t-1} \text{ is total assets at the end of year } t - 1 \]

and \( \alpha_1, \alpha_2, \alpha_3 \) are firm-specific parameters. Estimates of the firm-specific parameters, \( \alpha_1, \alpha_2, \alpha_3 \), are obtained by using the following model in the estimation period:
TA_t / A_t - 1 = α1(1/A_t - 1) + α2(ΔREV_t - ΔREC_t / A_t - 1) + α3(PPE_t / A_t - 1) + ε_t

where:
α1, α2, and α3 denote the OLS estimates;
TA_t is total accruals in year t; ΔREC_t is net receivables in year t less net receivables in year t – 1. The firm-specific discretionary portion of total accruals is accommodated in ε_t which is the residual of the non-discretionary portion of total accruals.

3.2 Research Design
This study employs a longitudinal research design that allows the researcher to study the dynamics of change because the nature of the study involves more than a cross section within a short time series. The population of the study covers all non-financial service companies quoted on the floor of the NSE with available data for the study period. Specifically, the total number of non-financial service companies as at the study period was one hundred and thirty-three (133) (NSE, 2014). However, the final sample selected based on companies with available and accessible data on the floor of the NSE covering the study period was seventy-five (75) resulting in 450 observations. The convenient sampling technique was employed in selecting the sample of 75 non-financial companies for 2009-2014 financial years.

The data analysis method employed is the descriptive statistical method. In addition, the Panel data regression was used as data analysis method for the study. We further conducted both the fixed and the random effect estimation and made appropriate choice using the hausman test statistic. However, before the panel regression was conducted, the necessary residual diagnostic tests such as Normality test using Jarque-Bera statistic, Multicollinearity using the Variance Inflation Factor (VIF) test, Serial correlation using the Breusch-Godfrey serial correlation Lagrange Multiplier (LM) test, Heteroskedasticity Using the ARCH test, and Model Misspecification using Ramsey reset test were conducted.

4. ESTIMATION RESULT AND DISCUSSION OF FINDINGS
Preliminary Analysis of Result

Table 1: Descriptive Statistics

<table>
<thead>
<tr>
<th></th>
<th>ERNMGT</th>
<th>INSTIOWN</th>
<th>MANOWN</th>
<th>FOROWN</th>
<th>FSIZE</th>
<th>BDSIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>-10.4444</td>
<td>33.4284</td>
<td>3.0850</td>
<td>4.4404</td>
<td>9.1355</td>
<td>9.7800</td>
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<tr>
<td>Median</td>
<td>58.2337</td>
<td>26.70</td>
<td>0</td>
<td>0</td>
<td>9.0561</td>
<td>10.00</td>
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<tr>
<td>Maximum</td>
<td>32786.55</td>
<td>100</td>
<td>0.64</td>
<td>74.99</td>
<td>13.80</td>
<td>18.00</td>
</tr>
<tr>
<td>Minimum</td>
<td>-59911.57</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>4.7647</td>
<td>0</td>
</tr>
<tr>
<td>Std. Dev.</td>
<td>6650.47</td>
<td>28.8449</td>
<td>12.3923</td>
<td>14.0102</td>
<td>1.6991</td>
<td>3.0457</td>
</tr>
<tr>
<td>Skewness</td>
<td>-1.6337</td>
<td>0.4145</td>
<td>2.0394</td>
<td>3.4512</td>
<td>0.1800</td>
<td>-0.2278</td>
</tr>
<tr>
<td>Kurtosis</td>
<td>26.6756</td>
<td>1.9134</td>
<td>12.9688</td>
<td>14.0984</td>
<td>2.5698</td>
<td>3.4852</td>
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<td>Jarque-Bera</td>
<td>10734.06</td>
<td>35.1025</td>
<td>1256.37</td>
<td>3209.98</td>
<td>5.9139</td>
<td>8.3278</td>
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<td>0.000</td>
<td>0.000</td>
<td>0.0519</td>
<td>0.0155</td>
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<td>450</td>
<td>450</td>
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<td>450</td>
</tr>
</tbody>
</table>

Table 1 presents the result for the descriptive statistics for the variables. As observed, ERNMGT has an average value of -10.44441. The maximum and minimum values are 32786.55 and -59911.57 respectively. The standard deviation which is an indication of the degree of clustering of the distribution about the mean shows a
value of 6650.467 which is large and suggest that the magnitude of ERNMGT firm in the distribution are well dispersed from the mean. The Jacque-Bera statistic of 10734.06 alongside its p-value (p=0.00<0.05) indicates that the data satisfies normality and the unlikelihood of outliers in the series. INSTIOWN has a mean value of 33.43% indicating that on the average institutional ownership of companies in the distribution is about 33.425%. The maximum and minimum values are 100% and 0% respectively indicating that some companies are completely institutional while some of zero institutional presence. The standard deviation is 28.8449 while the Jacque-Bera statistic of 35.1025 alongside its p-value (p=0.00<0.05) indicates that the data satisfies normality and the unlikelihood of outliers in the series.

The MANOWN for the distribution stood at approximately at 3.08% with maximum and minimum values of 64% and 0 respectively also indicating that some companies have zero managerial ownership. The standard deviation shows a value of 12.393 while the Jacque-Bera statistic of 1256.37 with a probability value of p-value (p=0.00<0.05) indicates that the data satisfies normality and the unlikelihood of outliers in the series.

The mean value of FOROWN for the distribution stood at approximately at 4.4% with maximum and minimum values of 74.99 and 0 respectively. The standard deviation is 14.098 while the Jacque-Bera statistic of 3209.998 alongside its p-value (p=0.00<0.05) indicates that the data satisfies normality and the unlikelihood of outliers in the series. For the control variables,FSIZE and BDSIZE both show mean values of 9.135512 and 9.780044 respectively meaning an average board size of ten (10) directors and a firm size with an average value of total assets of nine (9). The Jacque-Bera statistic also indicates that the data satisfies normality and the unlikelihood of outliers in the series.

The test of residuals for normality was conducted to assess the distribution normality of the model residuals. When residuals are not normally distributed, it denotes the presence of significant outliers in the data which affects the standard errors and then the significance levels of the coefficients. From the test result, it indicates that the residuals are normally distributed as the histogram assumes a bell-shape and the probability value of the J-B statistic tends towards zero (0) or having a small probability value. This form the premise to reject the null hypothesis that the residuals are not normally distributed.
Table 2: Pearson Correlation Statistics

<table>
<thead>
<tr>
<th></th>
<th>ERNMGT</th>
<th>INSTIOWN</th>
<th>MANOWN</th>
<th>BDSIZE</th>
<th>FOROWN</th>
<th>FSIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>ERNMGT</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>INSTIOWN</td>
<td>0.04851</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MANOWN</td>
<td>-0.02301</td>
<td>-0.34789</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BDSIZE</td>
<td>-0.03008</td>
<td>0.06625</td>
<td>-0.07569</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FOROWN</td>
<td>-0.01658</td>
<td>-0.32048</td>
<td>-0.13008</td>
<td>-0.04434</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>FSIZE</td>
<td>-0.02175</td>
<td>-0.07239</td>
<td>0.057629</td>
<td>-0.09539</td>
<td>-0.13688</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 2 shows how ERNMGT correlates with ownership structure and the control variables. From the results, INSTIOWN is observed to exhibit positive correlation with ERNMGT (r = 0.04851) while MANOWN negatively correlated with ERNMGT (r = -0.02301). FOROWN is also observed to exhibit a negative correlation with ERNMGT (r= -0.01658). For the control variables, both BDSIZE and FSIZE are observed to exhibit negative correlation with ERNMGT (r= -0.03008) and (r= -0.02175) respectively. From the evaluation of the correlation coefficients, we find that none of the variables exhibits any evidence of strong collinearity and as such the challenge of multicollinearity may be unlikely when conducting the regression analysis. However, the variance inflation factor test was also conducted to ascertain further the collinearity status of the variables.

Table 3: Results of the test of Variance Inflation Factor/Diagnostic Tests

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient Variance</th>
<th>Centred VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>INSTIOWN</td>
<td>1.84E-05</td>
<td>1.415933</td>
</tr>
<tr>
<td>MANOWN</td>
<td>111.032</td>
<td>1.265296</td>
</tr>
<tr>
<td>FOROWN</td>
<td>421.0789</td>
<td>1.264694</td>
</tr>
<tr>
<td>FSIZE</td>
<td>593.1886</td>
<td>1.740004</td>
</tr>
<tr>
<td>BDSIZE</td>
<td>55485.06</td>
<td>1.027970</td>
</tr>
</tbody>
</table>

Heteroskedasticity Test: ARCH
F-statistic = 4.383  Prob. F(1,368) = 0.201
Obs*R-squared = 4.36  Prob. Chi-Square(1) = 0.281

Breusch-Godfrey Serial Correlation LM Test:
F-statistic = 92.674  Prob. F(1,368) = 0.36
Obs*R-squared=78.236  Prob. Chi-Square(1) = 0.38

Ramsey Reset Test
T-statistics=1.577  df= 368  Prob. F(1,368) = 0.115
f-statistics =2.489

The variance inflation factor (VIF) shows how much of the variance of a coefficient estimate of a regressor has been inflated due to collinearity with the other regressors. Basically, VIFs above 10 are seen as an issue. As observed, none of the variables have VIF’s values exceeding 10 and hence,
none gave a serious indication of multicollinearity.

The ARCH test for heteroskedasticity was performed on the residuals as a precaution. The results showed probabilities in excess of 0.05 which lead us to reject the presence of heteroskedasticity in the residuals as hypothesised. The Lagrange Multiplier (LM) test for higher order autocorrelation reveals that the hypothesis of zero autocorrelation in the residuals were not rejected. This was because the probabilities (Prob. F, Prob. Chi-Square) were greater than 0.05. The LM test did not, therefore, reveal serial correlation problems for the model. The performance of the Ramsey RESET test showed high probability values that were greater than 0.05. This means that there was no significant evidence of misspecification.

Regression Analysis

Table 4: Regression Results

<table>
<thead>
<tr>
<th>Variable</th>
<th>Pred. sign</th>
<th>Fixed Effects</th>
<th>Random effects</th>
<th>Pooled OLS</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>+</td>
<td>1322.922*</td>
<td>1163.230</td>
<td>1163.230</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(552.4778)</td>
<td>(2287.154)</td>
<td>(2250.687)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.0173)</td>
<td>(0.6113)</td>
<td>(0.6055)</td>
</tr>
<tr>
<td>INSTOWN</td>
<td>+</td>
<td>2.665</td>
<td>12.888</td>
<td>12.888</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(2.0300)</td>
<td>(13.1928)</td>
<td>(12.983)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.1902)</td>
<td>(0.3291)</td>
<td>(0.3214)</td>
</tr>
<tr>
<td>MANOWN</td>
<td>+</td>
<td>-11.1129*</td>
<td>2.8687</td>
<td>2.8687</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(7.1299)</td>
<td>(21.4623)</td>
<td>(21.120)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.0046)</td>
<td>(0.8937)</td>
<td>(0.8920)</td>
</tr>
<tr>
<td>FOROWN</td>
<td>+</td>
<td>2.2110</td>
<td>-0.3405</td>
<td>-0.3405</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(3.6044)</td>
<td>(25.643)</td>
<td>(25.234)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.5401)</td>
<td>(0.9894)</td>
<td>(0.9892)</td>
</tr>
<tr>
<td>FSIZE</td>
<td>+</td>
<td>-173.876*</td>
<td>-94.2116</td>
<td>-94.2116</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(57.524)</td>
<td>(192.730)</td>
<td>(189.857)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.003)</td>
<td>(0.6252)</td>
<td>(0.6196)</td>
</tr>
<tr>
<td>BDSIZE</td>
<td>+</td>
<td>10.433</td>
<td>-82.5968</td>
<td>-82.5968</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(13.070)</td>
<td>(106.393)</td>
<td>(104.668)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.4254)</td>
<td>(0.4378)</td>
<td>(0.4305)</td>
</tr>
<tr>
<td>R²</td>
<td></td>
<td>0.6429</td>
<td>0.005</td>
<td>0.004</td>
</tr>
<tr>
<td>Adj R²</td>
<td></td>
<td>0.5849</td>
<td>0.001</td>
<td>0.001</td>
</tr>
<tr>
<td>F-Stat</td>
<td></td>
<td>2.8027</td>
<td>0.3664</td>
<td>0.366</td>
</tr>
<tr>
<td>P(f-stat)</td>
<td></td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td>D.W</td>
<td></td>
<td>2.15</td>
<td>1.90</td>
<td>1.90</td>
</tr>
<tr>
<td>Mean dependent var</td>
<td>24.76266</td>
<td>-10.444</td>
<td>-10.444</td>
<td></td>
</tr>
<tr>
<td>S.D. dependent var</td>
<td>7670.021</td>
<td>6650.46</td>
<td>6650.467</td>
<td></td>
</tr>
<tr>
<td>Hausman test</td>
<td>0.037</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: E-views 7.0 (2016) * significant at 5%

Table 4 shows the regression estimates for the effect of ownership structure on earnings management. Specifically, the result clearly provides empirical evidence of the effect of Managerial ownership (MANOWN), Foreign ownership (FOROWN) and Institutional ownership (INSTOWN) on earnings management measured using DACC. The fixed effects, Random effects, and pooled OLS estimation were used.
However, the Hausman test statistics was used in selecting the estimation of preference among the fixed, random and pooled estimations by way of identification test. Using the fixed-effects estimation, the $R^2$ can explain about 64.3% of systematic variations in accrual-based earnings management with an adjusted value of 58.5. The F-stat is significant as the p-values are all less than 0.05. This indicates that the hypothesis of a significant linear relationship between the dependent and independent variables cannot be rejected at 5% level. The D.W statistics indicates the unlikely presence of autocorrelation in the residuals from the fixed effects estimate, because at 2.15 which is a bit higher than the benchmark of 2.0, there is a strong negative correlation, but this is not the case for the random effects estimation. The unlikely presence of autocorrelation can further be justified from the Breusch-Godfrey serial correlation test with 0.36 indicating $p>5\%$, which means the absence of serial correlation. Commenting on the performance of the variables, the slope coefficient and $p$-values are as follows; INSTIOWN (2.665, $p=0.1902$), MANOWN (-11.1129, $p=0.0046$) and FOROWN (2.2110, $p=0.5401$). The result reveals that MANOWN is negative and also significant which suggest that increases in individual and managerial ownership will tend to reduce based earnings management. The thinking is that managers with a high ownership interest in the firm are less likely to alter earnings for short-term private gains at the expense of outside shareholders. The regression output confirms that we reject the null hypothesis that Managerial ownership does not significantly affect earnings management. The study is in line with the study by Sandra (2012); Euphrasia and Dini (2013) amongst others.

Institutional Ownership and Earnings Management
Commenting on the performance of the variables, the slope coefficient and $p$-values INSTIOWN (2.665, $p=0.1902$) reveals that INSTIOWN is found to be insignificant at 5% level. The result suggests that the presence of institutional ownership does not impact significantly in constraining accrual-based earnings management. Thus, we accept the null hypothesis that institutional ownership has no significant effect on earnings management. The finding also appears not to be at linear with the theoretical expectation and a likely reason may be that the dominance of institutional ownership is scarcely observed as depicted by the mean in the descriptive statistics and this suggests that where the level of institutional interest is small, their attention may be less pervasive. Again, those institutions have as their first interest their management rather than that of the companies where they own shares, and this may suggest that these institutions are unlikely to be engaged in the monitoring

Discussion of Results and Hypotheses Tested
Managerial Ownership and Earnings Management
Commenting on the performance of the variables, the slope coefficient, and p-values are as follows; MANOWN (-11.1129, $p=0.0046$). The result reveals that MANOWN is negative and also significant which suggest that increases in individual and managerial ownership will tend to reduce based earnings management. The thinking is that managers with a high ownership interest in the firm are less likely to alter earnings for short-term private gains at the expense of outside shareholders. The regression output confirms that we reject the null hypothesis that Managerial ownership does not significantly affect earnings management. The study is in line with the study by Sandra (2012); Euphrasia and Dini (2013) amongst others.
activities of the companies where they own shares. The study argue that this may unlikely be the case where a company is wholly institutionally–owned. The finding is in tandem with a line of literature that institutional and foreign investors do not play an active role in monitoring management activities (Duggal & Millar, 1999; Claessens & Fan, 2002). However, at variance with this finding are those (Koh, 2003; Ebrahim, 2007; Cornett, Marcus, Saunders & Tehranian, 2008).

**Foreign Ownership and Earnings Management**

The slope coefficient and p-values for FOROWN (2.2110, p=0.5401) discloses that the variable was found to be insignificant at 5% level. The result suggests that the presence of foreign ownership does not impact significantly in constraining accrual-based earnings management. Thus, we accept the null hypothesis that foreign ownership has no significant effect on earnings management. The finding also appears to be at variance with the theoretical expectation, and a likely reason may be about the extent of foreign ownership and the degree of participation in the management of the enterprise. In the Nigerian setting, anecdotal views suggest that most companies simply use foreign affiliation for reputation purposes and to gain some level of credibility and expertise especially in bidding for contracts and other businesses purposes. Thus, if this is anything to go by, it suggests that foreign affiliations may simply just be regarded as introducing a brand and reputation effect rather than engaging in the monitoring and management of the company. The study argues that this may unlikely be the case where a company is wholly foreign–owned. The finding is in tandem with Duggal and Millar (1999) and Claessens and Fan (2002) which found that foreign investors do not play an active role in monitoring management activities.

**Conclusion and Recommendations**

The scenarios resulting in the preponderance of earnings management have long been contextualised in the agency theoretical arguments. Thus, monitoring managerial decisions becomes essential to assure that shareholders’ interests are protected, and to ensure reliable and complete financial reporting. The ownership structure of a firm is valued as an important monitoring mechanism for managers as it has a monitoring role in constraining the occurrence of earnings management. The ownership structure of an entity can take the form of managerial, institutional, foreign ownership, amongst others with effective monitoring potential.

However, different ownership structures imply different incentives to control and monitor a firm’s management and that the quality of earnings is associated with various types of ownership. Using a sample of 75 companies for the period 2009-2014 and conducting a series of preliminary and regression analysis, the study found that; managerial ownership is negative and also significant at 5% which suggest that increases in managerial ownership will tend to reduce accrual-based earnings management, institutional ownership is positive but not statistically significant at 5%, foreign ownership is positive but not statistically significant at 5%, Board Size is positive but not statistically significant at 5% and Firm size is negative but not statistically significant at 5%.

Based on the study findings, the following recommendations were suggested;

First, the study recommends that firms should consider the issue of improving managerial ownership by issuing policy statement requiring managers to have more equity shares. Furthermore, it is necessary that the level of discretion allowed in accounting should be further tightened or reduced by standard setters, that is, it is of necessity that the prevalence of earnings
management should be controlled by formulating effective accounting standards that reduce discretion in accounting practices.

Second, institutional ownership is positive but not statistically significant, and the finding suggests that the presence of institutional ownership may not be effective in reducing accrual-based earnings management. From this study, it is now obvious that it is not an issue of increasing institutional ownership in Nigeria as shown in extant literature, but a necessity and recommendation of increasing the long-term participatory institutional investor in firms’ shareholdings which could be effective in curtailing the likelihood of earnings management practices.

Third, on foreign ownership the study recommends that firms should consider the issue of improving foreign ownership to make robust the monitoring mechanism that could restrain earnings management.

REFERENCES


