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POSSESSION FORMATION AND EARNINGS MANAGEMENT OF LISTED CHEMICAL AND PAINTS FIRMS IN NIGERIA

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Abstract

Almost two decades after the global financial crises of 90's blamed on the pervasiveness of earnings management, the concept still dominates financial literature. Ownership spread and control, otherwise known as Possession Formation ought to play an immeasurable role in mitigating management excessiveness and opportunistic behaviour in misrepresentation of underlying economic reality of a firm, Thus, the study examines the influence of Possession Formation on Earnings Management of listed Chemical and Paints in Nigeria. Possession Formation was proxy by managerial ownership, institutional ownership, Block-holding and Foreign Ownership, while Earnings management was represented by modified Jones (Dechow, Sloan and Sweeney, 1995) model. Using 56 firm-year paneled observations, Fixed and Random effect were estimated. Secondary data was collected from the eighth

firms listed under the Chemical and Paints sectors of the Nigeria Stock Exchange for the period of 2006-2012. The findings revealed that, managerial ownership is positively and significantly influencing the earnings management of listed chemical and paints firms, while Institutional ownership, and foreign ownership were found to have negative and significant influence on earnings management of listed chemical and paints firms in Nigeria. However, Block Holdings were found to have an insignificant contribution to earnings management of listed Chemical and Paints firms in Nigeria. From the findings, the study recommended that the proportion of share held by management should be reduced to an average of 15%, while the proportion of share held by both Institutional investors and foreign investors should be increased to an average of 50 and 30% as this will constrain managers from abusive accounting and guarantee great reliance by investors on the quality of financial reports.

1.1 Introduction

Earnings management has dominated the literature of finance since the witness of the financial scandals around the world by various institutions most especially Eron Corporation, Adelphia, Global Crossing, Cendant, Vivindi, Hollinger, Ahold, Adecco, TV Azteca, Royal Dutch Shell, Seibu, China Aviation, Tyco, HealthSouth, Parmalat, WorldCom, Cardbury, A.P. and Xerox. Similarly, the Central Bank of Nigeria's discovery on banks has aroused the interest of many among practitioners, the regulators, academicians and others stakeholders in finding out the cause and the possible solution. Most of these accounting scandals centered on earnings management due to opportunistic behavior exhibited by managers who are at the helm of affairs in these organizations.

In Nigeria, the Security and Exchange Commission (SEC) has made it mandatory for public companies to publish and make available their audited financial statement annually which must conform with guidelines, formats, and regulations issued by the apex accounting institution and other regulatory and supervisory agencies, yet management of corporate organizations often embark on earnings management in order to increase market value and thus maximize shareholders wealth (Ekoja, 2002). The regulatory inconsistency and the choice available in accounting policies have often called for the exercise of judgments in preparing financial statements. The implication of exercising such judgments is that information provided by management which invariably arouses a certain decision by different users that may make those users to take wrong decision when preparers decide to convey self-serving information. The self-serving information provided by managers may be as a result of manager's intention to influence a particular contractual outcome among others that relies on reported earnings or to

mislead the stakeholders about the underlying economic performance of its organization. The issue of occasional judgment in accounting has come to stay rather than its possible elimination as it has become an unimaginable situation to have accounting systems that are totally rule based (Bello, 2002).

The Nigerian governance structure is characterized by the dominance of the largest shareholders who typically exercise significant influences on management decisions directly or indirectly (Shehu, 2012). Available literature in this area suggests that Possession Formation decreases the incentives to manage earnings and also provides the opportunities and incentives to manipulate earnings. Possession Formation of a company involves distribution of control and ownership in the company. Control entails the ability to affect decisions and for shareholders, it is represented by voting power. Possession is regarded as the right to cash flows of the company and it is proportionate to the shareholdings. Possession Formation is also known as ownership structure consisting of managerial ownership, institutional ownership, block holdings and foreign ownership.

The link between Possession Formation and earnings management has been the subject of importance and ongoing debate; it is however believed that diffusion of a firm's ownership structure plausibly serves the firm's shareholders better than a concentrated ownership structure would (Isenmila & Elijah, 2012). A general believe exist amongst the public that abusive accounting is employed opportunistically by management of firms for their selfish private gain rather than the interest of the shareholders and other stakeholders in the industry. This misrepresentation of managers' and shareholders' interest have often been referred to as basis for suspicion of the occurrence of manipulative accounting as managers could employ the flexibility provided by the accounting standards, regulatory inconsistencies, dearth in regulations and choices available to managers in accounting to manage earnings opportunistically, thereby creating falsehood in the reported earnings.

Prior empirical investigation of the relationship between Possession Formation and Earnings Management has produced very vast literature that used different samples, covered many time-periods and revealed mixed and Inconclusive results. Such as (Isenmila and Elijah 2012; Soongso 2012; Shehu & Jibril 2012; Hadi, 2012; Koh, 2007; Omar & Hind, 2012; Salsiah et al., 2008; Sandra, 2012) and to the best of our knowledge, there is no study in Nigeria that have attempted to resolve the mixed result especially in listed Chemical and Paints firms in Nigeria. Therefore, to what extent does Possession Formation Influence earnings management and in what direction?

The study has proven to be different because in Nigeria, researches in this area are few and also unique considering the domain of the study i.e. the listed chemical and paints firms in Nigeria. The decision to focus on the Chemical and Paints firms stems from the fact that these firms are one of the vibrant sectors within the economy as almost every household makes use of its products; there is thus the need for adequate focus on such firms. The global financial crises of 2009 that have exposed many companies of their opportunistic behavior in a bid to secure larger part of the market has really put the financial statement of these companies into question of which the Chemical and Paint firms may not be totally exonerated.

Objectives of the Study

The major objective of this study is to examine the extent to which Possession Formation influences earnings management of listed Chemical and Paints firms in Nigeria. The specific objectives are to:

i. Examine the impact of managerial ownership on earnings management of listed Chemical and Paints firms in Nigeria;
ii. Ascertain the effect of Institutional ownership on earnings management of listed Chemical and Paints firms in Nigeria;
iii. Determine the contribution of Block-Holding on earnings management of listed Chemical and Paints firms in Nigeria;
iv. Investigate the influence of foreign ownership on earnings management of listed Chemical and Paints firms in Nigeria.

Based on the highlighted objectives, the following hypotheses were formulated:

Ho_1: Managerial Ownership has no significant impact on Earnings management of listed Chemical and Paints firms in Nigeria

Ho_2: Institutional Ownership has no significant effect on Earnings management of listed Chemical and Paints firms in Nigeria

Ho_3: Block Holdings has no significant contribution on Earnings management of listed Chemical and Paints firms in Nigeria

Ho_4: Foreign Ownership has no significant influence on Earnings management of listed Chemical and Paints firms in Nigeria

2. Literature Review and Theoretical Framework

2.1 Managerial Ownership and Earnings Management

Managers with 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, Salamon & Smith, 1982). Jensen and Meckling (1976) theorized that as management

ownership increases, their interests will be more closely aligned with owners and the need for intense monitoring by the board should decrease.

The analysis of Salsiah, Salleh and Hassan (2008) showed that managerial ownership is negatively associated with the magnitude of accounting accruals after examining the association between the level of managerial ownership and earnings management activities, this research was conducted in Malaysia though using a reasonable sample size of 1,001 out of 1484 firms listed. But the study period is considered too short as it only investigated two years between 2002 to 2003. Sandra (2012) in her research which was conducted in Portugal documented that, in all models, the managerial ownership is significantly negatively related with earnings management which is consistent with the alignment of interest hypothesis, the negative relationship suggests that the higher managerial ownership, the lower the magnitude of discretionary accounting accruals. Her research is panel in nature but it was not establish if issue of heteroscedasticity was taken care of to avoid making wrong inferences. Zhao et al. (2008); Petra (2002); Vafeas (2000) provides an evidence that firms with a higher share ownership by management report earnings numbers of higher quality, which support the agency theory's and the alignment hypothesis's contentions that both managers and shareholders' interests will be converged when management own a higher stack of shares. Bradbury et al. (2006); Saleh et al. (2005) provide similar findings in which their results indicate that the reliability of financial information improves as managerial ownership increases. Sanchez-Ballesta and Garsa-Meca (2007) examine the relationship between Managerial Ownership and discretionary accruals for a sample of Spanish non-financial companies. Their results support the hypothesis that insider ownership contributes to the constraining of Earnings Management when the proportion of shares held by insiders is not too high.

The level of managerial ownership affects both the informativeness of earnings and the magnitude of discretionary accounting accruals. Results from empirical works shows that managerial ownership is positively associated with earnings explanatory power for returns. For example, managerial ownership could have negative effect on earnings management (Warfield, Wild & Wild, 1995) or a positive effect due to entrenchment or expropriation effects (Cheng & Warfield, 2005). Also, Isenmila and Elijah (2012) in their research observed that managerial ownership is positive and statistically significant at 5% level. When there is little separation between owners and managers, management face less pressure from capital market to signal the firm value to the market and they pay less attention to the short-term financing report (Jensen, 1986; Klassen, 1997) therefore, highly invested managers are more likely to manipulate earnings, since this lack of

market discipline may lead insiders to make accounting choices that reflect personal motives rather than firm economies. In this situation, the entrenchment hypothesis states that high levels of insider ownership can become ineffective in aligning insiders to take value maximizing decisions, which may lead to earnings management to increase (Morck et al., 1988).

From another dimension, other researchers documented that managerial ownership has no significant effect on increasing the integrity of the financial reporting (Abd Al Naseer, 2012); in similar vein empirical studies on the relationship between managerial ownership and the reporting quality of earnings numbers have reported insignificant findings. Such as a research conducted by Korczak (2004); Velury and Jenkins (2006), while Chang and Sun (2008) also reveals that management ownership and Earnings Management is not significantly correlated. In line with the above, Hafiza and Susela (2005) in their study failed to find any significant association between managerial ownership and earnings quality. Liu and Lu (2007); Gabrielsen et al. (2002) do not find any significant impact of managerial ownership on the reliability of earnings information.

2.2 Institutional Ownership and Earnings Management

Given the considerable sums of money that institutions invest, it is not surprising that they tend to be much more knowledgeable than the average investor when it comes to the companies and industries in which they have invested. Institutional portfolio managers often meet personally with a company's top executives, and in many cases the research they conduct is further supported by equity analysts known as "buy side" analysts who evaluate prospective companies and industries in great depth before making specific investment recommendations.

Empirical evidence supports the hypothesis of increased institutional investors' ownership as an effective corporate governance mechanism in constraining earnings management. It is considered as an important channel through which minority shareholders are protected against expropriation of controlling shareholders in emerging markets (Oehl, 2000). These literatures argue that institutions have greater resources, are more sophisticated than individual investors and have more relevant expertise and experience to monitor management. Therefore, they are able to compel effective disclosure of information. While on the other hand the advocates of the strategic alliance hypothesis argue that Earnings Management of firms with high institutional shareholdings is low. This argument is premise on the fact that institutional investors are expected to force firms' management to focus on current earnings, rather than long-term earnings, to avoid reporting disappointing earnings to interested parties.

Abd Al-Naseer (2012) in his study fined a significant negative relationship between institutional investors' ownership and the likelihood of earnings management. This research did not mention the techniques and tools adopted for the research to ascertain the appropriateness and otherwise of the findings. The active monitoring hypothesis views institutional investors as long-term investors with raving incentives and motivations to closely monitor management action (Jung & Kown, 2002). This idea is consistent with that of Velury and Jenkins (2006) whose study provides evidence that firms' with high stock ownership by institutions experience earnings numbers of high quality. Hadi (2012) findings suggest that the proportion of institutional investor's ownership negatively affect the magnitude of earnings management while Park and Shin (2004); Koh (2007); Omar and Hind (2012) documented similar findings in which they conclude that active institutional investors are more likely to effectively constrain unethical behavior of earnings management and enhance the credibility and reliability of financial reporting. Jean and Zhang (2002) found that institutional shareholding has a negative coefficient and it is significantly related with the positive discretionary accruals, and, this effect has increased significantly in the post-code period. The result implies that institutional investors are more effective in reducing positive discretionary accruals. But the institutional investors who only hold a fraction of shares in Chinese listed companies are not willing to invest in such monitoring resources or challenge the dominance power of the controlling shareholder. In the same vein, Hamdi et al. (2005); Omar and Hind (2012); Hafiza and Susela (2005) also found a negative relationship which they argue may be as a result of superior skills.

On the other hand, Empirical study's findings revealed that the quality of financial reporting is impaired as institutional ownership of equity increases (Bradbury et al., 2006). Soongso (2004) empirically revealed that a positive relationship exist between outside institutional shareholdings and earnings management. Therefore, the magnitude of discretionary accruals and the standard deviations of Dechow-Dichev residuals decrease in the level of institutional ownership after controlling for firm size, book-to-market, risk, leverage, sales growth and regulatory environment. In the same vein, Sandra (2012), investigation suggests that the coefficient of institutional ownership variable is positive and significant, consistent with hands-off hypothesis which suggests that institutional investors may increase managerial incentives to engage in earnings management. However, the result obtained does not corroborate in one of the model used as the coefficient of institutional ownership is negative, but statistically significant. Thus, it is not possible to conclude that firms having institutional ownership have higher flexibility to use accruals to manage earnings.

Hong-Bok (2009) investigated the percentage of shareholdings by institutional investors to test whether this factor has a monitoring effect on opportunistic behavior by CEOS. The result show no significant relationship between the percentages of shares held by institutional investors and earnings management. Monitoring variable (Institutional Investors Shareholding) is not linearly related to opportunistic behaviour. In addition, existing studies on the relationship between institutional ownership and financial reporting quality have reported insignificant results. This is evidenced in the research conducted by Petra (2002) which does not provide any significant effect of institutional ownership of equity on reported Earnings Management. Sirger and Utama (2008) and Lin et al. (2009) document similar findings in which they provide no empirical support of the high equity holdings by institutions in enhancing the reliability of financial information.

2.3 Block-Holder Ownership and Earnings Management

Block holder ownership may take the various form including individual investors, private equity firms, banks and trusts. Shleifer and Vishney (1986) suggest that large shareholders have a strong incentive to actively monitor and influence firm management to protect their significant investments. Large shareholders are expected to monitor managerial behaviour actions effectively, which reduce the scope of managerial opportunism to engage in earnings management (Dechow, Sloan & Sweeney, 1996). In addition there will be less pressure on management to meet short-term earnings expectations because controlling shareholders focus more on the long-term. Shehu and Jibril (2012) concluded in their research that ownership concentration indeed moderates the practice of earnings management as the result shows a significant negative relationship between ownership concentration and earnings management. Sandra (2012) found in all models, a negative relationship between ownership concentration and earnings management, suggesting that earnings management is significantly lower for firms with higher ownership concentration. The period of the two studies above are not too current as events after their study period must have overtaken their research. Bolton et al. (2006) find that higher ownership concentration is associated with higher earnings management. This thread of literature argues that ownership concentration is associated with introduction of agency problem between majority shareholders and minority shareholders.

On the other hand, Isenmila and Elijah (2012) finds that the analysis of the slope coefficients of the explanatory variables indicative of the direction of relationship and their respective t-values or P-values indicative of their statistical significance reveal the existence of a positive relationship between external block ownership and earnings management. Also, prior literature found a strong link between

Ownership Structure and earnings management. Bolton et al. (2006) find that higher ownership concentration is associated with higher earnings management.

2.4 Foreign Ownership and Earnings Management

As a result of the ongoing globalization, foreign ownership has subsequently become major institutional shareholders in Nigeria and the world at-large. The role of foreign shareholders as an institutional shareholder has often been categorized by two conflicting views: i. Active monitoring and ii. Transient hypotheses. As posited by the advocates of active monitoring hypothesis, they regards institutional investors are long-term investors with significant incentives to actively oversee managers. Sachs and Warner (1995) contend that foreign investors plays important roles in monitoring management similar to the roles played by large outside shareholders in developing countries because foreign investors have positive incentive to protect their wealth. It is believed that external monitoring by foreign investors can restrain the opportunistic tendencies by managers for discretionary choices of management in providing financial accounting information, thus, increasing their earnings quality.

Khanna and Palepu (2000) find that interest held by foreign investors in an organization is positively correlated with firm value, which therefore connotes that the foreign investors have incentives to monitor a firm's activities and also have an advanced firm monitoring mechanism. Choi et al. (2004) also finds a significant positive association between foreign ownership and the earnings response coefficient, suggesting that foreign shareholders consider earnings quality (measured as discretionary accruals) in their investment decisions. The role of foreign investors as external monitors of corporate activities may be even bigger because foreign investors are less likely to be related to controlling shareholders. Also, foreign investors are saddle with higher liability of monitoring costs as a result of greater information asymmetry (Kang & Stulz 1997; Choe, Koh, & Stulz 2005). Foreign investors will as a result positively strengthen their monitoring role to resolve information asymmetry. Ahn, Shin, and Chang (2005) find that foreign investors prefer firms with lower discretionary accruals and forecast errors and larger analyst coverage. In order to protect their wealth and to reduce monitoring costs, foreign shareholders have stronger incentives and expertise to independently monitor firms. Thus, higher proportions of foreign ownership induce firms to improve transparency and to decrease opportunistic managerial accounting choices and decisions.

2.5 Theoretical Framework and Model Development

There exist many theories that underpin Possession Formation and Earnings Management which includes amongst others: the agency theory, stakeholder theory and signaling theory. The section discusses each of these theories and relates it to the study. Given that firms' financial statement as required by law (CAMA 2004), certain quality can be compromised by the management to achieve a given desired results. Thus, to measure the level of Earnings management we posit that Earnings Management as represented by Discretionary accruals is a function of Managerial Ownership and Block Holdings. This can be symbolized as follows:

$$DACC = F(MGOS, BLOS) \quad \text{(i)}$$

The firm Managerial Ownership and Block Holdings represent Possession Formation variables which could have an effect on Earnings Management as explained by the Agency theory. Despite the enactment of corporate governance which aims is ideally to control the behaviour of top corporate executives and also to protect the interest of company owners (Shareholders), problem still arises as a result of the separation between ownership and company management. Authority to use corporate resources is entirely at the disposal of the executive because the supplier of capital has delegated their authority of the management of the company to professional managers. Therefore, shareholders expect management to act in a professional manner to manage the company such that any decision taken by management should be centered on the interests of shareholders. But most often than not, decisions taken by management are not solely for the benefit of the company but the interest of the executives themselves. Moreover in several situations, decisions and actions taken only often become the benefits but also harms for the corporate executives. It is believed that, the nature and type of managerial ownership and block holdings maintained by firm can play a significant role in monitoring firm's management, increasing quality of financial reporting. So therefore the study adopt the agency theory to underpin the managerial ownership and block holding due to its importance in resolving conflicts that may arise between manager (agent) and shareholders (principal) of the companies.

In addition, the firm Institutional ownership variable is posited to be function of Earnings Management because they are believed to be capable of checkmating manipulative accounting activities by management. This can be symbolized mathematically below:

$$DACC = F(INOS) \quad \text{(ii)}$$

A study on Institutional Ownership as a determinant of earnings quality documents that larger institutional shareholding is associated with lesser earnings management (Farber, 2005). Corporate monitoring by institutional investors can constrain managers' behaviour. Large institutional investors have the opportunity, resources, and ability to monitor, discipline and influence managers. Corporate monitoring by institutional investors can force managers to focus more on corporate performance and less on opportunistic or self-serving behaviour. If institutional ownership enhances monitoring, it might be associated with lower use of discretionary accruals.

This Possession Formation (Institutional ownership) is anchored by the stakeholders' theory. According to Donaldson and Preston (1995), the concept of agency theory is narrow. This is because they identify shareholders as the only interest group of a corporate entity necessitating further exploration. By expanding the spectrum of interested parties, Mitchel, Wood and Agle (1997) argued that, the stakeholder theory stipulates that, a corporate entity invariably seeks to provide a balance between the interests of its diverse stakeholder in order to ensure that each interest's constituency receives some degree of satisfaction.

Furthermore, the foreign ownership variables which could have an impact on the quality of financial reports as explained by signaling theory associates managers to exercising accounting discretion in an efficient manner such that in the long run firm value is maximized and as such will attract the foreign investors. Thus, financial reporting quality is posited to be function of foreign ownership.

This is also symbolized mathematically below:

DACC = F (FROS) ……..... (iii)

Signaling theory in finance is a term used to describe the behaviour of two parties that have different information. It states that corporate financial decisions are signals that are sent by managers to investors so as to shake them up. Signaling theory is useful for describing behavior when two parties (individuals or organizations) have access to different information. Typically, one party, the sender, must choose whether and how to communicate (or signal) that information, and the other party, the receiver, must choose how to interpret the signal. Accordingly, signaling theory holds a prominent position in a variety of management literatures, including strategic management, entrepreneurship, and human resource management (Brian, Certo, Ireland, & Reutzel, 2011).

Consequently, since Earnings Management is posited to be function of Possession Formation in equation one, two and that of equation three. Therefore, Earnings

Management can be said to be a function of Possession Formation variables. This is mathematically represented below.

DACC = f (MGOS, INOS, BLOS, FROS)……..…….. (iv)

3.1 Methodology

The study adopts the causal-comparative design. The design for the study is considered appropriate, in that it is better in determining the relationship and degree of Possession Formation influence on earnings management in our study which may permit prediction. The study is limited to Chemical and Paints firms listed in the Nigerian Stock exchange as at 31st December, 2012. The number of listed Chemical and Paints firms as at 2012 in Nigeria Stock Exchange (NSE) Factbook were eight. The justification for choosing chemical and Paints firms to the best of our knowledge is premised on the fact that, it is still an area with paucity of studies. All the eight firms were used as there is availability of data for all the firms within the study period. All the firms are the major players within the Chemical and Paints sector. This study used secondary sources of data. Data were extracted from the Published Audited Annual Reports and Accounts of those firms. Panel Fixed effect and Random effect model were conducted to test the model of the study. Longitudinal panel data was used to account for individual heterogeneity of the sample firms. Two steps regression was used in determining the level of earnings management of listed Chemical and Paints firms adopting modified Jones Model by Dechow, Sloan and Sweeney (1995). Fixed and Random effect Regression model was estimated using Stata 10 as a tool of analysis. Various tests were conducted, ranging from multicolinearity test, normality test, heteroscedasticity test, hausman specification test, langrange multiplier test. The choice of this was based on the fact that both the technique and tool are more informative (i.e. more variability, less collinearity, more degrees of freedom), as estimates are more efficient under it. Also they allow the study of individual dynamics (e.g. separating cohort effects). While this technique and tool also gives information on the time-ordering of events and they allow for control for individual unobserved heterogeneity.

3.2 Variable Measurement and Model Specification

Earnings Management

$DACC_{it} = TACC_{it}/TA_{it-1} - [\alpha_1 (1/TA_{it}-1) + \alpha_2 [(\Delta REV_{it} - REC_{it} /TA_{it-1})] + \alpha_3 (PPE_{it}/TA_{it-1})]$

Where $DACC_{it}$ is discretionary accruals of firm i at time t

$TACC_{it}$ is total accruals of firm i at time t

Where TACC = EARN - CFO

TA_{it-1} is the book value of total asset of firm i at the end of year t-1,

$\Delta REV_{it}/TA_{it-1}$ is sales revenues of firm i in year t less revenues in year t-1 scaled by TA_{it-1}
PPE_{it}/TA_{it-1} is gross property, plant and Equipment of firm I at the end of year t scaled by TA_{it-1} and e_{it} is the residual or error term.
The study made use of the absolute measure of discretionary accruals as a proxy for the extent of opportunistic earnings management.

Table 3.1 Explanatory Variable

Variable	Nature of Variable	Proxy (ies)	Measurement
Possession Formation	Independent Variable	Managerial Ownership	% of Total Shares held by Directors
,,		Institutional Ownership	% of Total Shares held by Institutions
,,		Blockholder Ownership	% of Total Shares held by High Blockholdings
,,		Foreign Ownership	% of Total Shares held by Foreigner(s)
Control Variable	Independent Variable	Firm Size	Measured as value of total asset
,,		Firm Growth	Measured as ratio of market-to-book value of share
,,		Leverage	Measures as long term financial liabilities plus debt included in the current liabilities
,,		Performance (ROA)	Profit after tax divide by total asset

Source: Computed by Author

3.3 Model Specification

The equation four of the model build-up under chapter two forms the basis `of arriving at the model of the study using balanced panel data of Fixed and Random Effect model. This equation is represented as follows:

$$DACC_{it} = \beta_{0it} + \beta_1 MGOS_{it} + \beta_2 INOS_{it} + \beta_3 BLOS_{it} + \beta_4 FROS_{it} + \mu_{it}$$

Control variables are therefore introduced into the model to avoid model mis-specification. The control variables are introduced below.

$$DACC_{it} = \beta_0 + \beta_1 MGOS_{it} + \beta_2 INOS_{it} + \beta_3 BLOS_{it} + \beta_4 FROS_{it} + \beta_5 PERF_{it} + \beta_6 SIZE_{it} + \beta_7 GRWTH_{it} + \beta_8 LEV_{it} + \mu$$

Where:
DACC = Discretionary Accruals
MGOS = Managerial Ownership
INOS = Institutional Ownership
BLOS = Block-Holder Ownership
FROS = Foreign Ownership
PERF = Firm Performance
SIZE = Firm Size
GRWTH = Firm Growth
LEV = Leverage
$\beta_1 - \beta_8$ = Coefficient of explanatory variables
β_o = Constant or Intercept
μ = Error Term

4.1 Result and Discussion

This section discusses the results from the regression starting with the cumulative result to the individual results, this was followed by test of hypothesis formulated earlier in section one.

4.2 Summary of Regression Result

Table 4.1: Regression Result

Variables	Co-efficient	Z-Statistics	z-sig.
Constant	19.666	4.47	0.000
MGOS	19.517	5.06	0.000
INOS	-11.545	-3.34	0.001
BLOS	0.831	0.20	0.840
FROS	-30.064	-4.65	0.000
PERF	0.645	0.85	0.393
LN_SIZE	-1.421	-5.93	0.000
GRWTH	0.225	3.68	0.000
LEV	6.709	2.77	0.006
R2			0.7391
Wald Chi^2			133.17
Wald-Significance			0.0000

Source: Result output from STATA 10

The cumulative R^2 (0.7391) which is the multiple coefficient of determination gives the proportion of the total variation in the dependent variable explained by the independent variable jointly. Hence, it signifies 74% of the total variation in earnings management of listed Chemical and Paints firms in Nigeria is caused by

their total asset, profitability, changes in market share, level of leverage, proportion of managerial ownership, proportion of institutional ownership, proportion of block-holder ownership, and the proportion of foreign ownership. This indicates that the model is fit and the independent variables are properly selected, combined and used. This implies that for any changes in Possession Formation of listed Chemical and Paints firms in Nigeria; their Earnings management will be directly affected.

The F-statistics or Wald chi-squared statistics are really the same thing in that, after normalization, chi-squared is the limiting distribution of the F as the denominator degrees of freedom goes to infinity. So therefore, the Wald chi^2 of 133.17 which is significant at one percent indicates that the Earnings management and ownership structure model is fit. The value of Wald Chi^2 which is statistically significant at a level of 0.000 means that there is a 99.9 percent probability that the relationship among the variables is not due to mere chance.

i. Managerial Ownership and Earnings Management

From the table above, it is observed that the z-value for managerial ownership (MGOS) is 5.06 and a coefficient value of 19.517 with significant value of 0.000. This signifies that managerial ownership is positively, strongly and significantly influencing earnings management of listed Chemical and Paints firms in Nigeria. This implies that for every one percent increase (1%) in managerial ownership, the earnings management of listed Chemical and Paints firms in Nigeria will increase by ₦19.52. This may be as a result the argument put forward by the advocate of the entrenchment hypothesis that high levels of insider ownership can become ineffective in aligning insiders to take value maximizing decisions, which may lead to earnings management to increase.

The finding is in line with those of Cheng and Warfield (2005); Isenmila and Elijah (2012); Morck et al. (1988); Jensen. (1986); Klassen (1997) but contrary to those of Dhaliwal, Salamon and Smith (1982); Jensen and Meckling (1976); Salsiah et al. (2008); Sandra (2012); Zhao et al. (2008); Petra (2002); Vafeas (2000); Saleh et al. (2005); Sanchez-Ballesta and Garsa-Meca (2007); Naseer (2012); Korczak (2004); Velury and Jenkins (2006); Chang and Sun (2008); Hafiza and Susela (2005); Liu and Lu (2007); Gabrielsen et al. (2002).

In view of the above result reported in respect of managerial ownership showing that the variable is statistically significant in influencing the earnings management, this therefore provides an evidence of rejecting null hypothesis one of the study. Thus, for hypothesis 1, H_{01} is rejected.

ii. Institutional Ownership and Earnings Management

The regression result reveal that Institutional ownership as depicted in table 4.3 have a t-value of -3.34 and a coefficient value of -11.545 with a significant value of 0.001. This signifies that institutional ownership has negatively, strongly and significantly impacted on earnings management in listed Chemical and Paints firms in Nigeria. This implies that for every one percent (1%) proportionate increase in the institutional ownership of the firms, the earnings management of the listed chemical and paints firms in Nigeria will decrease by ₦11.55. This may be as a result of the vast amount of resources, talent, and research capacity, and the fact that institutional investors are more sophisticated than individual investors and have more relevant expertise and experience to monitor management. Also their investing decisions tend to carry a great deal of weight than smaller investors, many of whom scrutinize the activities of the managers in a bid to protect their huge amount of investment.

The finding is in line with the study of Naseer (2012); Jung and Kown (2002); Velury and Jenkins (2006); Hadi (2012); Park and Shin (2004); Koh (2007); Jean and Zhang (2002); Hamdi et al. (2005); Omar and Hind (2012); Hafiza and Susela (2005) while other research such as Bradbury et al. (2006); Soongso (2004); Sandra (2012); Hong-Bok (2009); Betra (2002); Sirger and Utama (2008); Lin et al. (2009) were in contrast with our findings.

In line with the above result reported as regards Institutional ownership showing that the variable is statistically significant in influencing the earnings management, this therefore provides an evidence of rejecting null hypothesis two of the study. Thus, for hypothesis 2, H_{02} is rejected.

iii. Block-Holder Ownership and Earnings Management

The Block-Holder Ownership has a t-value of 0.20 and a coefficient value of 0.831 with an insignificant value of 0.840. This signifies that Block-Holder Ownership (BLOS) do not significantly influence earnings management of listed Chemical and Paints firms in Nigeria. It implies that whether there is an increase or decrease in the Block-holder ownership, the earnings management may not necessarily change either by increasing or decreasing the opportunistic tendencies exhibited by the managers. This may be as a result of the argument that ownership concentration is associated with introduction of agency problem between majority shareholders and minority shareholders.

The finding is however in contrary to those of Shleifer and Vishney (1986); Dechow, Sloan and Sweeney (1996); Shehu and Jibril (2012); Sandra (2012); Bolton et al. (2006); Isenmila and Elijah (2012).

Owing to the above outcome reported as regards Block-Holder ownership showing that the variable is statistically insignificant in influencing the earnings management, this therefore provides an evidence of failing to reject null hypothesis three of the study. Thus, for hypothesis 3, H_{03} is failed to be rejected.

iv. Foreign Ownership and Earnings Management

The Foreign ownership showed a t-value of -4.65 and a beta value of -30.064 with significant value of 0.000. This signifies that Foreign Ownership (FROS) is negatively, strongly and significantly influencing earnings management of listed Chemical and Paints firms in Nigeria. It implies that when there is an increase in foreign ownership by one percent (1%), the earnings management of listed Chemical and Paints firms will decrease by ₦30.06. This is may be as a result of the fact that foreign investors play an important role in monitoring management similar to the roles played by large outside shareholders in developing countries because foreign investors have positive incentive to protect their wealth.
The finding is in line with those of Khanna and Palepu (2000); Cheon (2003); Kang and Stulz (1997); Choe, Koh, and Stulz (2005); Ahn, Shin, and Chang (2005).

With respect to the result displayed above as regards foreign ownership showing that the variable is statistically significant in contributing to earnings management, this therefore provides an evidence of rejecting null hypothesis four of the study. Thus, for hypothesis 4, H_{04} is rejected.

5.0 Conclusions and Recommendations

5.1 Conclusions

As a result of the foregoing discussion and analysis in the previous chapter, the study concluded as stated below:
First of all the study has statistically and empirically provide an evidence on the usage of four explanatory variables that makes up the Possession Formation; managerial ownership, Institutional ownership, Block-holder ownership and Foreign ownership in elucidating and forecasting earnings management of the sampled firms. Also the study make use of four control variable were also found to be empirically useful in the study.

Secondly, the managerial ownership has positive impacts on earnings management because large proportion of shares held by managers may make them become entrenched as posited by the entrenchment hypothesis and hence they become ineffective in aligning insiders to take value maximizing decisions, which may lead to earnings management to increase.

Third, we found a negative and significant association between the institutional ownership and earnings management. Thus, when the institutional ownership is high, the earnings management will be low. Firms having greater number of institutional investors may be better off in serving as a monitor to the managers opportunistic behaviours considering the vast amount of resources, talent, and research capacity these large money investors have at their disposal, their investing decisions tend to carry a great deal weight with smaller investors.

Fourth, we found an insignificant impact of block-holders on earnings management. Thus, indicating that firms with a higher or lower numbers of block-holders may not necessarily influence the earnings management. This could be for the fact that block-holder ownership is associated with introduction of agency problem between majority shareholders and minority shareholders.

Finally, the foreign ownership was found to have negative and significant impact on earnings management of listed Chemical and Paints firms. It is there concluded that increase in foreign ownership has a decreasing effect on earnings management of firms. This could be as a result of their expertise and the ability to give the firm concrete advice and monitor their interest while on the board because most foreign investors are forward looking, than what their investment can generate them immediately, with this they tend to monitor the activities of the managers closely in a bid to protect their future investment.

On the overall, the study concludes that Possession Formations has significantly reduce the opportunistic behaviours of managers except for managerial and Block-holder ownership that were found to be significantly positive.

5.2 Recommendations

The recommendation of this study are made based on variety of people/organizations that are involved directly or indirectly with Possession Formation and earnings management processes in Nigeria.

The responsibility for monitoring the compliance of Corporate Governance practiced by listed companies in the Nigerian stock exchange is vested with the Nigerian Securities and Exchange Commission (SEC). Therefore, SEC should ensure as much as possible that:

i. The managers who are the helm of affairs do not control up to 50% or more in shares allotted in the company, as it gives them too much power and control over other shareholders which may be responsible for the opportunistic behaviours exhibited by the managers in a bid to get short-term private gains.

ii. The institutional ownership has been identified to be an important monitoring mechanism in the listed Chemical and Paints firms. More room should be given to the institutional investors to own shares so that the higher their interest, the more they will be willing to monitor the activities of the firm. Also, since the firms are aware of the vast knowledge owned by institutional investors about how the accounting system works, the managers will be more careful in manipulating the accounting numbers.

iii. The block-holders inability to constrain earnings management may be as a result of the poor corporate governance practice. Therefore, emphasis should be laid on the number of block-holders an organization should have. Proper checks and balance should be done regularly by the Securities and Exchange Commission to ensure strict adherence.

iv. The foreign ownership is one of the identified Possession Formation that have been proven empirically in our study, the extent to which it can serve as monitoring mechanism to constraining the abusive accounting practice by firm. Therefore, more of the foreigners should be allowed to have more investment and possibly be given a role to be part of the board because their presence only may serve as restriction to managers in manipulating reported earnings.

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Appendix: Results from STATA 10

```
. xtset id year, yearly
      panel variable:  id (strongly balanced)
       time variable:  year, 2006 to 2012
               delta:  1 year
```

```
. su dacc mgos inos blos fros perf size grwth lev, detail
```

dacc

Percentiles		Smallest		
1%	.38	.38		
5%	.85	.66		
10%	.94	.85	Obs	56
25%	1.155	.87	Sum of Wgt.	56
50%	1.585		Mean	4.292143
		Largest	Std. Dev.	6.287577
75%	3.725	18.76		
90%	14.33	19.46	Variance	39.53363
95%	19.46	24.66	Skewness	2.552927
99%	30.55	30.55	Kurtosis	9.136212

mgos

Percentiles		Smallest		
1%	.01	.01		
5%	.01	.01		
10%	.01	.01	Obs	56
25%	.05	.01	Sum of Wgt.	56
50%	.135		Mean	.2319643
		Largest	Std. Dev.	.2133748
75%	.4	.61		
90%	.59	.62	Variance	.0455288
95%	.62	.63	Skewness	.5954083
99%	.65	.65	Kurtosis	1.934553

inos

Percentiles		Smallest		
1%	0	0		
5%	0	0		
10%	.11	0	Obs	56
25%	.35	.11	Sum of Wgt.	56
50%	.46		Mean	.4278571
		Largest	Std. Dev.	.1891677
75%	.56	.7		
90%	.64	.72	Variance	.0357844
95%	.72	.72	Skewness	-.6261191
99%	.78	.78	Kurtosis	2.908775

blos

Percentiles		Smallest		
1%	.16	.16		
5%	.33	.16		
10%	.45	.33	Obs	56
25%	.595	.33	Sum of Wgt.	56
50%	.725		Mean	.6991071
		Largest	Std. Dev.	.1924321
75%	.84	.96		
90%	.96	.96	Variance	.0370301
95%	.96	.96	Skewness	-.905796
99%	.96	.96	Kurtosis	3.663548

fros

Percentiles		Smallest		
1%	0	0		
5%	0	0		
10%	0	0	Obs	56
25%	0	0	Sum of Wgt.	56
50%	0		Mean	.02875
		Largest	Std. Dev.	.095557
75%	0	.35		
90%	0	.35	Variance	.0091311
95%	.35	.35	Skewness	3.116316
99%	.39	.39	Kurtosis	10.9717

perf

	Percentiles	Smallest		
1%	-2.76	-2.76		
5%	-1.25	-2.03		
10%	-.71	-1.25	Obs	56
25%	-.07	-.91	Sum of Wgt.	56
50%	.125		Mean	.1228571
		Largest	Std. Dev.	1.013392
75%	.285	.84		
90%	.7	.86	Variance	1.026963
95%	.86	1.35	Skewness	2.797444
99%	5.92	5.92	Kurtosis	21.57725

size

	Percentiles	Smallest		
1%	9	9		
5%	9.81	9.6		
10%	10.81	9.81	Obs	56
25%	12.865	10.27	Sum of Wgt.	56
50%	13.725		Mean	13.79607
		Largest	Std. Dev.	2.470893
75%	14.155	18.62		
90%	18.17	19.7	Variance	6.105312
95%	19.7	20.1	Skewness	.8100061
99%	20.39	20.39	Kurtosis	3.968549

grwth

	Percentiles	Smallest		
1%	-55.83	-55.83		
5%	.35	-10.12		
10%	.54	.35	Obs	56
25%	1.015	.5	Sum of Wgt.	56
50%	2.315		Mean	4.367679
		Largest	Std. Dev.	12.79147
75%	6.11	13.42		
90%	12.77	20.86	Variance	163.6217
95%	20.86	40.86	Skewness	-.0909738
99%	58.17	58.17	Kurtosis	16.19996

lev

	Percentiles	Smallest		
1%	.13	.13		
5%	.17	.17		
10%	.25	.17	Obs	56
25%	.395	.19	Sum of Wgt.	56
50%	.55		Mean	.5751786
		Largest	Std. Dev.	.2343191
75%	.77	.95		
90%	.92	.96	Variance	.0549054
95%	.96	.96	Skewness	-.0335964
99%	.97	.97	Kurtosis	2.053457

```
. swilk dacc mgos inos blos fros perf grwth lev size
```

Shapiro-Wilk W test for normal data

Variable	Obs	W	V	z	Prob>z
dacc	56	0.59679	20.743	6.510	0.00000
mgos	56	0.86026	7.189	4.235	0.00001
inos	56	0.94476	2.842	2.242	0.01247
blos	56	0.92204	4.011	2.982	0.00143
fros	56	0.58854	21.167	6.553	0.00000
perf	56	0.63411	18.823	6.301	0.00000
grwth	56	0.58978	21.103	6.547	0.00000
lev	56	0.96621	1.739	1.187	0.11756
size	56	0.88832	5.745	3.753	0.00009

```
. pwcorr dacc mgos inos blos fros perf size grwth lev, star (0.05) sig
```

	dacc	mgos	inos	blos	fros	perf	size
dacc	1.0000						
mgos	0.3593*	1.0000					
	0.0065						
inos	0.0870	0.0990	1.0000				
	0.5237	0.4680					
blos	0.0347	0.6806*	0.3510*	1.0000			
	0.7994	0.0000	0.0080				
fros	-0.1543	0.5337*	-0.0745	0.4103*	1.0000		
	0.2562	0.0000	0.5854	0.0017			
perf	-0.2672*	-0.1269	-0.2194	-0.0151	0.0314	1.0000	
	0.0465	0.3515	0.1043	0.9118	0.8181		
size	-0.5512*	0.0029	-0.4438*	0.1207	0.1572	0.0354	1.0000
	0.0000	0.9832	0.0006	0.3756	0.2474	0.7957	
grwth	0.4448*	0.1504	0.2196	-0.0064	-0.0486	-0.7751*	-0.1400
	0.0006	0.2686	0.1039	0.9625	0.7222	0.0000	0.3034
lev	-0.0941	-0.3846*	0.0015	-0.2408	0.0779	0.1038	-0.0793
	0.4902	0.0034	0.9911	0.0738	0.5681	0.4465	0.5612

	grwth	lev
grwth	1.0000	
lev	-0.2234	1.0000
	0.0979	

```
. reg dacc mgos inos blos fros perf size grwth lev
```

Source	SS	df	MS		
Model	1607.14675	8	200.893344	Number of obs =	56
Residual	567.202729	47	12.0681432	F(8, 47) =	16.65
				Prob > F =	0.0000
Total	2174.34948	55	39.5336269	R-squared =	0.7391
				Adj R-squared =	0.6947
				Root MSE =	3.4739

dacc	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
mgos	19.51697	3.859751	5.06	0.000	11.75216	27.28179
inos	-11.54495	3.45532	-3.34	0.002	-18.49616	-4.593741
blos	.8311365	4.111429	0.20	0.841	-7.439992	9.102265
fros	-30.06395	6.460294	-4.65	0.000	-43.06039	-17.06752
perf	.6454419	.7557799	0.85	0.397	-.8749912	2.165875
size	-1.420606	.2397616	-5.93	0.000	-1.902944	-.9382674
grwth	.22501	.0611338	3.68	0.001	.1020246	.3479954
lev	6.70883	2.421016	2.77	0.008	1.838374	11.57929
_cons	19.66571	4.395695	4.47	0.000	10.82271	28.50871

```
. hettest

Breusch-Pagan / Cook-Weisberg test for heteroskedasticity
         Ho: Constant variance
         Variables: fitted values of dacc

         chi2(1)      =    12.25
         Prob > chi2  =   0.0005
```

```
. vif
```

Variable	VIF	1/VIF
mgos	3.09	0.323499
blos	2.85	0.350540
grwth	2.79	0.358818
perf	2.67	0.374052
inos	1.95	0.513579
fros	1.74	0.575769
size	1.60	0.625188
lev	1.47	0.681816
Mean VIF	2.27	

```
. xtreg dacc mgos inos blos fros perf size grwth lev, fe

Fixed-effects (within) regression               Number of obs      =        56
Group variable: id                              Number of groups   =         8

R-sq:  within  = 0.3683                         Obs per group: min =         7
       between = 0.6934                                        avg =       7.0
       overall = 0.5829                                        max =         7

                                                F(8,40)            =      2.92
corr(u_i, Xb)  = 0.1227                         Prob > F           =    0.0116

------------------------------------------------------------------------------
        dacc |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
        mgos |   18.39252   9.663336     1.90   0.064    -1.137809    37.92285
        inos |  -15.63037   6.363416    -2.46   0.018    -28.49131   -2.769428
        blos |   5.700912   6.924294     0.82   0.415    -8.293607    19.69543
        fros |  -24.07861    9.64651    -2.50   0.017    -43.57493   -4.582284
        perf |   .5792623   .9222113     0.63   0.533    -1.284596    2.443121
        size |  -.9835617   .3359931    -2.93   0.006    -1.662629   -.3044944
       grwth |   .1628805   .0750993     2.17   0.036     .0110991    .3146619
         lev |   11.73208   5.024207     2.34   0.025     1.577774    21.88638
       _cons |   9.458685   8.367579     1.13   0.265    -7.452824    26.37019
-------------+----------------------------------------------------------------
     sigma_u |   3.033946
     sigma_e |  3.4011793
         rho |  .44311824   (fraction of variance due to u_i)
------------------------------------------------------------------------------
F test that all u_i=0:     F(7, 40) =     1.29                 Prob > F = 0.2799

. est store fixed


. xtreg dacc mgos inos blos fros perf size grwth lev, re

Random-effects GLS regression                   Number of obs      =        56
Group variable: id                              Number of groups   =         8

R-sq:  within  = 0.3209                         Obs per group: min =         7
       between = 0.9812                                        avg =       7.0
       overall = 0.7391                                        max =         7

Random effects u_i ~ Gaussian                   Wald chi2(8)       =    133.17
corr(u_i, X)       = 0 (assumed)                Prob > chi2        =    0.0000

------------------------------------------------------------------------------
        dacc |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
        mgos |   19.51697   3.859751     5.06   0.000       11.952    27.08195
        inos |  -11.54495    3.45532    -3.34   0.001    -18.31725   -4.772646
        blos |   .8311365   4.111429     0.20   0.840    -7.227116    8.889389
        fros |  -30.06395   6.460294    -4.65   0.000    -42.72589   -17.40201
        perf |   .6454419   .7557799     0.85   0.393    -.8358595    2.126743
        size |  -1.420606   .2397616    -5.93   0.000     -1.89053   -.9506814
       grwth |     .22501   .0611338     3.68   0.000     .1051899    .3448301
         lev |    6.70883   2.421016     2.77   0.006     1.963725    11.45393
       _cons |   19.66571   4.395695     4.47   0.000      11.0503    28.28111
-------------+----------------------------------------------------------------
     sigma_u |          0
     sigma_e |  3.4011793
         rho |          0   (fraction of variance due to u_i)
------------------------------------------------------------------------------

. est store random
```

```
. hausman fixed random
```

	Coefficients (b) fixed	(B) random	(b-B) Difference	sqrt(diag(V_b-V_B)) S.E.
mgos	18.39252	19.51697	-1.124451	8.859029
inos	-15.63037	-11.54495	-4.085422	5.343578
blos	5.700912	.8311365	4.869776	5.571534
fros	-24.07861	-30.06395	5.985343	7.163781
perf	.5792623	.6454419	-.0661796	.5284603
size	-.9835617	-1.420606	.4370439	.2353841
grwth	.1628805	.22501	-.0621295	.0436184
lev	11.73208	6.70883	5.023246	4.402424

```
                b = consistent under Ho and Ha; obtained from xtreg
B = inconsistent under Ha, efficient under Ho; obtained from xtreg

Test:  Ho:  difference in coefficients not systematic

              chi2(8) = (b-B)'[(V_b-V_B)^(-1)](b-B)
                      =          6.43
            Prob>chi2 =        0.5995
            (V_b-V_B is not positive definite)
```