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An Evaluation of Factors Determining Earnings Management in Nigeria

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Earnings management has been a source of concern to the relevant stakeholders in financial reporting in the recent time. Consequences of the practice range from loss of investments to total collapse of the affected firms and ultimately, loss of jobs. Hence, the main objective of this study is to evaluate factors determining earnings management in Nigeria. Specifically, the study assesses the impact of capital market reform on the earnings management and examines how: firm's size; institutional shareholding; board size; independence of the board of directors; and auditors' independence, influence earnings management drive of the managers. The study employed secondary data that covered the period between 2009 and 2013. The data obtained were subjected to panel estimated generalised least square method of regression analysis. The study revealed that firm size, board size, independence of the board; exert significant influence at 5% level of significance on managers' drive to engage in earnings management. The study therefore recommends among others that The Nigerian Security and Exchange Commission should as a matter of policy direct every listed firm to have a stated minimum number of independent directors on its board of directors; and concludes that such measure will reduce earnings manipulation in Nigeria.

Key Words: Auditors' Independence, Board Independence, Board Size, Earnings Management, Firm Size, Institutional Shareholding.

JEL Classification Code: M 41.

1. Introduction

Earnings management has become a global phenomenon, with its negative impacts on humanity which has generated a lot of interest among professionals and academics. Researchers have carried out many studies to unravel the causes and motivation for the earnings management. However, various efforts from different locations at different times have reported varying findings as to the nature and strength of relationship between various factors and the managers' earnings management behaviour. The Nigerian Security and Exchange Commission (SEC) also became concerned with the incidence of manipulation of financial reports and initiated some reforms in 2011; according to Arunma (2012) the reform includes mandatory adoption of International Financial Reporting Standards (IFRSs) for the listed firms and focus on improved disclosure of information in the financial reports.

Almost every country of the world has had its own experience of earnings management and its consequences. Even if there was any country which had not witnessed any case of earnings management, such a country could not claim to be insulated from the effects of earnings manipulations in other countries since there is economic interdependence between countries of the world. Such interdependence of world economies was evident in the recent past

economic meltdown that started in the United States of America and reverberated in other countries of the world. The meltdown was occasioned by the collapse of Lehman Brothers, a United States bank in September 2008 and later spread to every part of the world.

Earnings management occurs when managers use judgment in financial reporting and in structuring transactions to alter financial reports to either mislead some stakeholders about the underlying economic performance of the company or to influence contractual outcomes that depend on reported accounting numbers (Healy & Whalen, 1998).

Many countries of the world have suffered huge consequences for acts of earnings management and these include loss of investments, total collapse of the affected firms, loss of jobs and loss of revenue to the government among others. Earnings management traverses every country of the world, for instance in the United States of America, there are so many popular cases of accounting fraud like WorldCom capitalization of routine expenses; Enron accounting manipulation; Waste Management's Distorted Accounting Methods for Depreciation and Amortization Expenses; and HealthSouth, a case of Accounting Manipulations in the Healthcare Industry.

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In developing economies, we can also mention several cases of collapses, some of which include the Alpha Merchant Bank Ltd, Savannah Bank PLC, Societe Generale Bank Ltd, All States Trust Bank PLC, African International Bank PLC, African Petroleum (all in Nigeria), The Continental Bank of Kenya Ltd, Capital Finance Ltd, Consolidated Bank of Kenya Ltd and Trust Bank of Kenya among others (Akpan, 2007).

In Nigeria, however, the most notable corporate fraud is the case of Cadbury Nigeria PLC. The company was found in October 2006 to have falsified its financial and accounting reports by inflating its profit figure by billions of Naira (Mmadu & Akomolafe, 2014). The company lost billions of Naira to the fraud which also drew series of litigations from the shareholders. The fraud borders on inflation of accounting profit and breach of several provisions of Nigeria code of corporate governance for corporate organizations. The breach include The CEO, finance executive and other executive directors paying themselves offshore remunerations without the authorization of the Remunerations Committee and not recording the remuneration in the company's financial report and account. So, the company's executives filed with the Commission its annual report and accounts for 2002 to 2005 which contained untrue and misleading accounting numbers.

Another similar case to Cadbury's is that of Afribank Nigeria PLC. African Bank's financial statement showed high profits amid accusation by its former managing director that the board of directors colluded with its auditors to cook the books (Suleman & Tosin, 2007). It is suspected that other big companies in Nigeria and other African countries may be doing the same thing in order to influence their share prices and attract investments.

In Nigeria, Generally Accepted Accounting Principles (GAAPs) guide the accounting practices and corporate governance in the country. Every corporate organization in Nigeria is expected to comply with the provisions of the relevant laws, circulars and IFRSs in its financial dealings and reporting.

Lack of uniformity in findings from researches and escalation in financial malpractice in Nigeria became a source of inspiration to this study to evaluate factors determining earnings management in Nigeria. In order to achieve the main objective,

the study specifically evaluate the impact of the Security and Exchange Commission (SEC) reforms on earnings management; the nature and degree of influence of Size of a firm on its managers' drive to engage in earnings management; the extent and nature of influence of the institutional shareholding on managers' drive to engage in earnings management; the effect and level of impact of Size of board of directors on managers' willingness to engage in the act of earnings management; the nature and degree of influence of independence of the board of directors on managers' drive to engage in earnings management; and the effect and level of impact of auditors' independence on managers' willingness to manipulate earnings. Relevant hypotheses were formulated and tested in relation to specific objectives

2. Conceptual and Theoretical Frameworks

2.1. Historical Development of Accounting Reporting Standards in Nigeria

In Nigeria, the development of accounting and accounting standards could be traced to the then Association of Accountants of Nigeria - AAN (now ICAN). The AAN was formed on the 17th of November 1960 and granted official recognition on 28th September 1965, under the Federal Parliament Act number 15 of 1965, to regulate accountancy profession in the country. History suggests that ICAN was responsible for the formation of the Nigerian Accounting Standard Board (NASB) before it was taken over by government in 1985. Thereafter, followed by the development of Statement of Accounting Standard (SAS). The development of a Statement of Accounting Standard is time consuming, painstaking and requires the involvement of members of the Council and the public at large. First, a topic for standardization may be chosen in response to certain suggestions of the business community, member organizations or members of the Council. A steering Committee consisting of at least six experts drawn from the public, private and professional sectors of the economy is set up. It is the responsibility of the Secretariat to prepare a point's outline paper for consideration by the Steering Committee. The point outline paper states in broad terms all the various aspects of the topic that the Committee wishes to cover. It is at this stage that a thorough examination is made of all local regulations, laws, current practices and standards promulgated in other countries. After the approval by the council of the

points outline paper, a preliminary Exposure Draft is produced by the Secretariat for consideration by the Steering Committee. It takes, on the average, about six Steering Committee meetings to produce a Draft that is recommended to the council for consideration. The Council, at a technical session that lasts about three days, held usually outside Lagos, thoroughly considers and finalizes the document. An approval is given for publication and exposure to the public if two third of Council members vote in favor of its exposure. The period of exposure to the public is three months within which comments are invited from those interested in the subject matter. The Exposure Draft may be modified in the light of the comments received before it is issued as a Statement of Accounting Standards (SAS). Where the comments received are at variance with the basic thrust of the Exposure Draft, then a public hearing may be held for respondents to present and defend their positions. So far the Board has held three such hearings on the following subjects. Similarly, International Financial Reporting Standards (IFRS) came to bear in Nigeria. International financial Reporting standards are single set of globally accepted high quality accounting standard. They are issued by the International Accounting Standards Board (IASB) in London. U.K. The Board consists of 14 members from around the world.

In order to allow for effective implementation of IFRS adoption in Nigeria, the former regulatory body in charge of monitoring the reporting system was in 2011 restructured from Nigerian Accounting Standards Board (NASB) to Financial Reporting Council of Nigeria (FRC). Financial Reporting Council of Nigeria is now the body corporate solely responsible for the issuance, monitoring and review of Accounting and Auditing Standards in Nigeria. The council is empowered under section 52(1) of the Act to adopt and keep up-to-date accounting and auditing standards, and ensure consistency between Standards issued under International Financial Reporting Standards as provided under Part VII of FRC Act 2011 which dealt with review and monitoring of standards. Henceforth, the council (FRC) will only be reviewing, monitoring and issuing Standards to ensure consistency with the requirements of IFRS-Framework. Thus, all the standards to be issued or reviewed by the council should be in consistent to IASB guidelines for global reporting, given due consideration to our peculiar customs, business environment, laws and level of

economic development (FASB 2002 and NASB 2003).

2.2. IFRS Adoption and Earnings Management in Nigeria

The Nigerian Accounting Standards Board (NASB) was established with the responsibility of producing national accounting standards to be followed and applied in the preparation of financial statements in Nigeria. However in 2011, the Financial Reporting Council of Nigeria was established by the Financial Reporting Council of Nigeria (FRCN) Act No. 6 of 2011. It is important to note that while the NASB functioned mainly to produce national accounting standards, the FRCN majorly adopts international accounting standards and monitor the compliance with these standards in the preparation of financial statements to achieve fair presentation.

The major argument for the adoption of the International Accounting Standards in Nigeria is the need to act in line with global best practices in financial reporting. These international standards are issued by the International Accounting Standard Board (IASB). The specific benefits that were promised to be derived from the adoption of these standards include high quality financial statements, international comparability of financial statements, improved foreign direct investments and reduced earnings management.

The international accounting standards were expected to reduce the earnings management opportunities that could be explored in the preparation of financial statements using the old national standards in Nigeria in several ways. This expectation was realizable due to the explicit rules for the recognition of provisions, the emphasis on the recognition of the economic substance of transactions over their legal forms and the requirement for fair presentation of the information contained in the financial statements.

Subsequent to the adoption of international Accounting Standards, empirical evidence point to the fact that earnings management has reduced in Nigeria. Onalo, Lizam & Kaseri (2014) assessed the quality of banks financial statement information using earnings management, timeliness of loss recognition and value relevance as proxies for quality. The study found adoption of International Financial Reporting Standards (IFRS) to be associated with minimal earnings management.

Yahaya, Kutigi & Mohammed (2015) studied the effect of the adoption of International Financial Reporting Standards and earnings management behavior of listed Deposit Money Banks in Nigeria. The study concluded that the restrictions to incurred losses under IFRS significantly reduced the ability of banks to engage in earnings management. However, Onalo, Lizam & Kaseri (2015) compared the extent of earnings management in Nigerian and Malaysian Banks since the two countries adopted IFRS in the same year. The study specifically investigated aggressive discretionary accrual, discretionary loan loss provisions, earnings smoothing, loan loss provision earnings management pattern, loan quality and earnings management goals as measures of overall earnings management. It was found that regardless of the reporting standards, Nigerian banks extensiveness in earnings management is far reaching compared to Malaysian banks. Though it was noted that IFRS reduced earnings management of both Malaysian and Nigerian banks, IFRS alone is not adequate in minimizing or eliminating earnings management of corporate firms.

Earlier, Rudra & Bhattachargee (2012) noted that while the quality of IFRS is higher than most domestic accounting standards, higher-quality accounting standards may not warrant lower earnings management. This view concurs with Tendeloo & Vanstraelen (2005) that concluded that mere adoption of IFRS is not sufficient to guarantee a better quality of accounting information through reduced earnings management.

2.3. Theoretical Framework

This study rests on economic and financial theory, according to Cormier & Magnan (1996), research supports the economic and financial theory assumption that managers make accounting choices to maximize their personal interests and well-being. An accounting choice that is economically beneficial for managers will be preferred to manage earnings because they generally do not require disclosure and often will not be questioned by an auditor (Islam, Ali & Ahmad 2011).

Economic and financial theory assumes that managers are, by nature, rational and opportunistic in the pursuit of their personal interests (Cormier & Magnan 1996). These interests are determined by the terms set out in contracts between managers and the company, as well as in contracts between the company and specific external parties such as

suppliers, lenders, governments and regulators. Many of these contracts are based on earnings or other financial information issued by the company. For example, senior executives often receive bonuses based on accounting income; and debt often has covenants that state minimum working capital amounts, establish maximum debt-to-equity ratios or restrict dividends based on the amount of retained earnings. An accounting choice that is economically beneficial for managers will be preferred over a choice with negative repercussions: it is assumed that the manager will adopt a strategic approach in his or her accounting choices (Islam, Ali & Ahmad, 2011).

3. Methodology and Data Analyses

3.1 Earnings Management Estimation

The study used discretionary accrual as a proxy for earnings management. The model developed by Dechow, Sloan & Sweeney (1995) was adopted to estimate the extent of earnings management. Dechow et al. (1995) model is popularly known as Modified Jones. They modified the model developed by Jones (1991). Jones (1991) developed a model to detect earnings management in the period in which it is hypothesised that earnings are managed, the model partition the total accruals into discretionary and nondiscretionary accruals with discretionary component denoting earnings management.

$$NDA_{it} = \alpha_i[1/A_{it-1}] + \beta_{1i}[\Delta REV_{it}/A_{it-1}] + \beta_{2i}[PPE_{it}/A_{it-1}] + \epsilon_{i,t} \dots\dots\dots (1)$$

Jones (1991) used ordinary least squares regression for equation (1) to generate firm specific coefficients for α_i , β_{1i} and β_{2i} . These coefficients were then used to estimate the level of non-discretionary accruals for each sample firm as specified in the above equations. The level of discretionary accruals was then estimated by Jones (1991) using the following model to estimate the extent of earnings management:

$$DA_{it} = TA_{it}/A_{it-1} - (\alpha_i[1/A_{it-1}] + \beta_{1i}[\Delta REV_{it}/A_{it-1}] + \beta_{2i}[PPE_{it}/A_{it-1}] + \epsilon_{it}) \dots\dots\dots (2)$$

$$TA_{it} = DA_{it} + NDA_{it} \dots\dots\dots (3)$$

However, Dechow et al. (1995) modified the model to eliminate the conjectured tendency of the Jones Model to measure discretionary accruals with error when discretion is exercised over revenues, thus they proposed the following model:

$$NDA = TA_{it}/A_{it-1} - (\alpha_i[1/A_{it-1}] + \beta_1i[\Delta REV_{it} - \Delta REC_{it}/A_{it}] + \beta_2i[PPE_{it}/A_{it-1}] + \epsilon_{it}) \dots\dots (4)$$

Where, for (1), (2) (3) and (4),

TA_{it} = Total accruals in year t for firm i;

A_{it-1} = Total assets in year t – 1 for firm i;

ΔREV_{it} = Revenues in year t less revenues in year t – 1 for firm i;

ΔREC_{it} = Net receivables in year t less receivables in year t – 1 for firm i;

PPE_{it} = Gross property, plant and equipment in year t for firm i;

ϵ_{it} = Error term in year t for firm i.

α, β_1, β_2 = Firms-specific parameters

DA_{it} = Discretionary accruals in year t for firm i

NDA_{it} = Non-discretionary accruals in year t for firm i ($TA_{it} - DA_{it}$)

3.2 Model Specification

In order to be able to determine the nature of relationship and the strength of association between the estimated discretionary accruals (earnings management) and the explanatory variables of consideration of this study, the following models were modified to suit the objectives of the study.

$$ADA_{it} = \beta_0 + \beta_1 size_{it} + \beta_2 INSTSHARE_{it} + \beta_3 BOARD SIZE_{it} + \beta_4 BOARDINDP_{it} + \beta_5 AUDINDP_{it} + w_{it} \dots\dots\dots 5$$

Table 1 below contains the variables, their validity sources and measurements.

Table 1: Measurement of Variables

S/N	Variables	Definition	Type	Measurement	Construct Validity Source
1	DA	Earnings Management Indices	Dependent Variable	Residuals of regressions from Dechow et al. (1995) earnings management model.	Dechow et al. (2012)
2	SIZE	Measure of firm's size	Independent	Natural log of total assets	Llukani (2013), Sheu and Abubakar (2012), Okolie (2014) and Swatiska (2013).
3	INSTSHARE	Institutional Shareholding	Independent	The ratio of equity shares of the firm held by institutional investors to the total shares outstanding.	Sheu and Abubakar (2012)
4	BOARDSIZE	Board size	Independent	Number of directors on the board scaled by firm size	Swatiska (2013).
5	BOARDINDP	Degree of non-executive directors participation on the board of directors	Independent	The ratio of non-executive directors to the board size	Sheu and Abubakar (2012) and Swatiska (2013).
6	AUDINDP	Auditors' Independence	Independent	Natural Log of the Audit Fees Paid by the company.	Okolie (2014)

Source: Authors' draft, 2016

While:

β_0 = Intercept;

β_1 , β_2 and β_3 = Gradients/Slope;

i = firm i ;

t = Year t ;

ε_{it} = Composite error term ($\varepsilon_{it} + u_i$);

u_i = Cross-section error term;

ε_{it} = Combined cross-section and time series error term;

Δ = Change operator (between year $t-1$ and year t);

The data collected for this study were analysed through panel estimated generalised least square, the model was set with random effects, this is because Hausman test statistic is not statistically significant hence we cannot reject the null hypothesis that random effects model is consistent and more appropriate for the current study. Table 2 below contains the information on the Hausman test.

Table 2: Hausman Test

Hausman Test	
Test Statistic	4.85
Probability	0.4345

Source: Authors' computation as extracted from results from STATA 11.2, 2016

Secondary data were used in this study; financial variables that were employed in the study were sourced from the relevant financial statements and prospectus of the selected companies from the Nigerian Stock Exchange, Nigerian Security and Exchange Commission and websites: africanfinancials.com, nse.com.ng, sec.gov.ng, nigerialogy.com/about-nigeria/Nigerian-annual-reports/ and various companies' websites.

The population of the study includes all the Nigerian listed companies between 2009 and 2013. As at the end of the last quarter of 2013, a total of one hundred and ninety (190) firms were listed on the floor of the Nigerian Stock Exchange (The Nigerian Stock Exchange, 2013) out of which

twenty seven non-financial services firms whose annual reports as at the end of the year were available for the five consecutive years of the study period (2009-2013) were selected. The sampled companies cut across different sectors that include Conglomerate, Construction/Real estate, Consumer goods, Healthcare, industrial goods, oil and gas and service sectors. A total of one hundred and ninety (190) firms were listed as at the end of the year 2013, out of which fifty-seven (57) were financial services firm (Banks and Insurance firms) while one hundred and thirty-three (133) were non-financial services companies (The Nigerian Stock Exchange, 2013).

Consistent with previous studies (Islam, Ali & Ahmad, 2011 & Llukani, 2013), financial services firms were excluded from the sample due to their distinct industry characteristics. Such characteristics could create estimation issues if financial services firms were combined with non-financial services firms in the analyses. Some of the characteristics include: strict regulatory constraints within which financial firms operate which limits discretion on how they run their businesses and how much capital they need to set aside to keep operating; another characteristic relates to accounting rules for recording earnings and asset values in financial firms which are different from accounting rules for other firms.

The above sampling procedure is summarised as follow:

Population of the study 190 firms (Listed on the floor of the Nigerian Stock Exchange)

Less: Financial firms 57

Less: Unavailable reports 101 (Firms whose reports were not available)

Less: Outliers 5/27 (Firms whose data were exceptionally large)

Above procedure led to a sample size of 27 firm with which 135 firm-year were generated.

3.3 Data and Descriptive Statistics

Table 3 below contains the information on distribution of the data.

Table 3: Descriptive Statistics

Variables	Observations	Mean	Std. Dev.	Min	Max
DAC	135	.120547	.1137191	.0019872	.623
Firm Size	135	7.278451	.6814797	6.191376	8.914067
Board Ind.	135	.7376333	.1171274	.5	.9333333
Board Size	135	1.197925	.2693026	.6819481	1.87403
Inst Share	135	.0715192	.0330148	0	.1433802
Aud Ind.	135	.5797799	.0278505	.5172791	.6618217

Source: Authors' computation as extracted from results from STATA 11.2, 2016

Discretionary Accruals range from 0.0019872 to 0.623 with mean of 0.1205 and standard deviation of 0.1137. These show that the data tend to cluster around the mean value of the series.

Firm size was observed to have minimum value of 6.191376 and maximum value of 8.914067 with a mean value of 7.278451 and standard deviation of 0.6814797 suggesting that the data reasonably tend to the mean value of the series.

Board Independence was observed to range from 0.5 to 0.93333 while its mean value was observed to be 0.7376333 with standard deviation of 0.1171274. This suggests that the data cluster around its mean value.

Board Size was observed to have minimum and maximum of 0.6819481 and 1.87403 respectively. The mean value is 1.197925 and the standard deviation is 0.2693026, this implies that the data is clustered around the mean point of the series.

Institutional Shareholding has minimum point of 0 and maximum point of 0.1433802. The mean value was observed to be 0.0715192 while the standard deviation is 0.0330148; this observation suggests that the data tend to the mean point.

Auditor Independence was observed to have a minimum and maximum value of 0.5172791 and 0.6618217 respectively. The mean value was discovered to be 0.5797799 while the standard deviation is 0.0278505; this implies that the data cluster around its mean value.

Robustness Tests

Some robustness checks were carried out on the data, the table 4.1 and 4.2 contain information on collinearity tests.

Collinearity Diagnostics

Table 4.1: Pairwise Correlation

	Firm Size	Board Ind.	Board Size	Inst Share	Aud Ind.
Firm Size	1.0000				
Board Ind.	0.0398	1.0000			
Board Size	0.2005	0.1564	1.0000		
Inst Share	0.3650	-0.0414	-0.2598	1.0000	
Aud Ind.	-0.3663	0.0707	-0.2272	-0.2438	1.0000

Source: authors' computation as extracted from STATA 11.2 results, 2016

Table 4.2: Variance Inflation Factors

Variable	VIF	SQRT VIF	Tolerance	R-Squared
Size	1.37	1.17	0.7318	0.2682
Inst. Share	1.39	1.18	0.7192	0.2808
Board Size	1.31	1.14	0.7655	0.2345
Board Ind.	1.04	1.02	0.9609	0.0391
Aud. Indep	1.26	1.12	0.7936	0.2064
Mean VIF	1.27			

Source: authors' computation as extracted from STATA 11.2 results, 2016

Table 4.1 contains the results of correlation analysis; the pairwise correlation shows that no explanatory variable has strong correlation with one or more other explanatory variables; this implies that the data is free from the problem of multicollinearity. A further analysis of the variance inflation factors corroborate the result from pairwise correlation analysis, the highest inflation factor is 1.39 suggesting that multicollinearity is not a problem in the data.

Serial Correlation Test**Table 5: Serial Correlation Test**

Wooldridge test for autocorrelation in panel data

H0: no first-order autocorrelation

F(1, 26) = 0.599

Prob > F = 0.4458

Source: authors' computation as extracted from STATA 11.2 results, 2016

The table 5 above contains the information of the Wooldridge test for autocorrelation in panel data, the test statistic is 0.599 while its probability is 0.4458. The test statistic is not significant at any reasonable level of significance and the null hypothesis of no first-order autocorrelation cannot be rejected. This implies that the model is free from the problem of serial correlation.

Heteroscedasticity Test**Table 6: Heteroscedasticity Test**

*Breusch-Pagan Lagrange Multiplier Panel Heteroscedasticity Test

Ho: Panel Homoscedasticity	-	Ha: Panel Heteroscedasticity
Lagrange Multiplier LM Test	=	104.51829
Degrees of Freedom	=	26.0
P-Value > Chi2(26)	=	0.00000

Source: authors' computation as extracted from STATA 11.2 results, 2016

Table 6 above contains the result of the Breusch-Pagan Lagrange Multiplier Panel Heteroscedasticity Test, it was discovered that the test statistic is statistically significant at 5% level of significance, this suggest a problem of heteroscedasticity in the model. In order to control this problem, robust standard errors was considered in the model.

4. Presentation and Discussion of Result**4.1 Discretionary Accruals**

The result of discretionary accruals obtained through regression, using modified Jones model (Dechow, 1995) are presented in the table below for further analysis to enable us assess the impact of the capital market reforms on earnings management drive of the managers.

Table 7: Earnings Management (Discretionary Accruals)

S/N	Firms	Absolute Values of Discretionary Accruals				
		2009	2010	2011	2012	2013
1	ABC Transport	0.2073	0.3360	0.3906	0.3047	0.0953
2	AG Leventis (Nig.) Plc	0.1582	0.1642	0.0178	0.0147	0.0664
3	Airline Services and Logistics Plc	0.0257	0.2810	0.0230	0.0830	0.0021
4	Ashaka Cement Plc	0.1069	0.0039	0.2586	0.0238	0.0103
5	Berger Paints Nig. Plc	0.0872	0.1200	0.0112	0.0140	0.0219
6	Cadbury Nig. Plc	0.2198	0.1011	0.1068	0.0859	0.0130
7	CAP Plc	0.0514	0.0760	0.1004	0.1109	0.0121
8	Dangote Cement	0.0690	0.4788	0.1203	0.0061	0.1141
9	Dangote Flour	0.1532	0.0487	0.2822	0.1928	0.1308
10	Dangote Sugar Refinery Plc	0.0875	0.2105	0.0109	0.2083	0.1308
11	First Aluminium Plc	0.1783	0.0693	0.1237	0.1419	0.1052
12	Flour Mills of Nigeria Plc	0.0020	0.0811	0.0396	0.0586	0.0659
13	Guinness Nigeria Plc	0.0340	0.1900	0.0375	0.1225	0.1407
14	IHS. Nigeria Plc	0.6230	0.1845	0.3666	0.1687	0.4343
15	Julius Berger Nig. Plc	0.0663	0.0672	0.1134	0.1280	0.0531
16	Learn Africa Plc	0.1150	0.0667	0.0734	0.0144	0.0314
17	May & Baker Nig. Plc	0.1061	0.0774	0.1193	0.0446	0.1603
18	MRS Oil Nig. Plc	0.1636	0.0152	0.0944	0.1454	0.1601

19	National Salt Company of Nigeria	0.0358	0.0581	0.1938	0.0246	0.0438
20	Nestle Nig. Plc	0.0477	0.0652	0.0619	0.1239	0.1664
21	Nigeria Breweries Plc	0.0941	0.0887	0.1983	0.0883	0.2171
22	Redstar Express Plc	0.0994	0.0372	0.0452	0.0120	0.0809
23	R.T. Briscoe (Nig.) Plc	0.1640	0.0770	0.4699	0.1374	0.0185
24	Portland Paints & Product Plc	0.1117	0.0118	0.0605	0.2211	0.0312
25	UAC Nig. Plc	0.0051	0.0702	0.3647	0.2182	0.5755
26	Unilever Nig. Plc	0.0351	0.1904	0.1820	0.0628	0.1993
27	University Press Plc	0.1917	0.0460	0.0577	0.0227	0.0351
	Average Discretionary Accruals	0.1200	0.1191	0.1453	0.1029	0.1154

Source: Authors' Computation, 2016

Hypothesis 1

Table 6 above presents the absolute value of discretionary accruals that were obtained through modified Jones model, this study does not concern itself on whether earnings were managed upward or downward, hence the signs were ignored for absolute values. The results contained in the table above shows that 74% (20 firms), 74% (20 firms) 74% (20 firms), 67% (18 firms) and 63% (17 firms) of the sampled firms had substantial level earnings management (above 5% of total assets) in the years 2009, 2010, 2011, 2012 and 2013 respectively. This shows some level of positive attitudinal change by the managers towards earnings management but the change is insignificant. Table 7 below contains the statistics of Mann-Whitney test, the test revealed that Z statistic and its probability are 0.184 and 0.8539 which means that earnings management before and after the reform are not statistically different. This finding implies that the 2011 capital market reforms had no significant impact on the quality of financial reports as the management practice that relate to earnings management cannot be said to have changed significantly overtime between the period before the reforms (2009-2010) and the period after the reforms (2011-2013). Average earnings management also reduced a bit in the year following the kickoff of the reform (2012) but rose again a year after. This result may be due to poor implementation framework. Based on these findings, the first null hypothesis (Ho1) that the capital market reforms of 2011 does not have significant impact on the

earnings management drive of the managers cannot be rejected. Graphical representations of the above findings are in the figures 1 and 2 below.

Table 8: Mann-Whitney Test

Two-sample Wilcoxon rank-sum (Mann-Whitney) test

Period	Obs	Rank Sum	Expected
Pre-Reform	54	3713	3672
Post-Reform	81	5467	5508
Combined	135	9180	9180

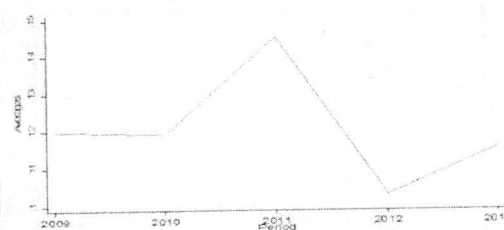
Ho: adac(cid==1) = adac(cid==2)

z = 0.184

Prob > |z| = 0.8539

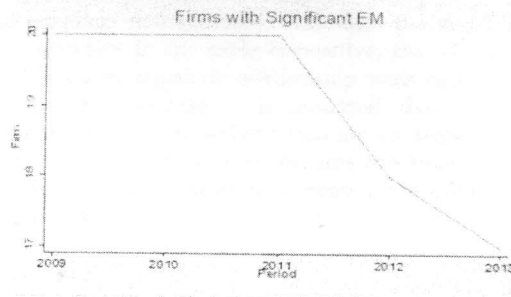
Source: authors' computation as extracted from STATA 11.2 results, 2016

Figure 1: Average Discretionary Accruals



Source: authors' computation as extracted from STATA 11.2 results, 2016

Figure 2: Firms with Significant Discretionary Accruals



Source: authors' computation as extracted from STATA 11.2 results, 2016

4.2 Discussion of Variables

After the discretionary accruals were derived, it was regressed on the variables of interest vis-à-vis firms' sizes; institutional shareholdings; board size; independence of the board of directors; and auditors' independence to know how earnings management relate with them. The study did not look at whether earnings management is upward or downward, the interest is to know whether managers involved themselves in the act of earnings management. So, the signs of the discretionary accruals were ignored and absolute values were used. Table below contains important facts from the regression.

Table 9: Regression Results

Random Effects		Fixed Effects		Fixed Effects (Robust Standard Errors)	
DAC	.0343329		.0279916		.0343329
Firm Size	1.78 0.075		0.39 0.696		3.44** 0.001
Institutional Shareholdings	-.2498319 -0.65 0.514		.1629522 0.24 0.814		-.2498319 -0.65 0.516
Board Size	-.1116674 -2.54* 0.011		-.06481 -0.83 0.409		-.1116674 -2.82** 0.005
Board Independence	-.2451875 -2.62** 0.009		-.2866479 -1.83 0.071		-.2451875 -2.27* 0.023
Auditor Independence	.0640559 0.15 0.881		-1.236445 -1.50 0.137		.0640559 0.19 0.850
Constant	.1660135 0.52 0.605		.9111017 1.50 0.136		.1660135 0.82 0.413
R-squared	0.3601	F-statistic	0.0701	Wald chi2(5)	0.3601
Wald Chi2(5)	17.02		1.55		20.62
	0.0045		0.1799		0.0010

** and * indicate that z or t statistic is significant at 1% and 5% level of significance respectively.

Source: authors' computation as extracted from STATA 11.2 results, 2016

The regressions results revealed that institutional shareholdings, board size, board independence and auditors' independence indicate negative relationships with earnings management while firms' size showed a positive relationship with earnings

management. It is also shown that firms' size, board size and board independence are statistically significant while institutional shareholdings and auditors' independence are not statistically significant at 5% level of significance. There is a need

to exercise caution in the interpretation of the nature of relationship between auditors' independence and earnings management. Although the sign of the coefficient in the table is positive, this will be interpreted as negative relationship with earnings management because it is assumed that when the fees paid to an auditor become so large, his independence of mind may become threatened, so a growth in the auditors fees mean a reduction in his independence.

Hypothesis 2

A significant and positive relationship was found between firms' size and earnings management. It was discovered that a 1% increase in firm's size would yield a 0.03% increase in the level of earnings management by firms and vice versa. The relationship was found to be statistically significant at 5% level of significance. Hence, the study cannot accept the second null hypothesis (Ho2) that firm size does not have significant influence on managers' drive towards earnings management. This outcome may be linked to the fact that big firms' executives usually have a very cordial relationship with the firms auditors, this relationship may lead to a reduced audit procedure and eventually some activities escape undiscovered or even when discovered, the auditors may compromise and fail to report on them. Huge audit fees paid by some big firms could also threaten the independence of an auditor hence, the opportunity for the executive to manipulate earnings. Also the drive by the executive to impress the potential investors in the market can encourage managers of big firms towards positive earnings management. These findings are consistent with that of Degeorge, Patel, and Zeckhauser (1999) who found that large companies manipulated the earnings of the company to avoid the negative earnings. However, the finding is at variance with that of Persons (1995), Kim, Liu and Rhee (2003) and Shehu and Abubakar (2012) who reported evidence of more earnings manipulation amongst smaller firms.

Hypothesis 3

An inverse and insignificant relationship was found between institutional shareholdings and earnings management. It was found that a 1% increase in the ratio of shareholdings of the institutional investors to the total outstanding shares will result in about 0.25% decrease in the earnings management by the firms and vice versa. This nature of relationship

implies that the more of the institutional investors in a firm the better for such firm, it shows that the institutional investors may be better at monitoring the activities of managers and protection of their investments than individual investors. However, this relationship was found to be statistically insignificant at 5% level of significance, hence the study cannot reject the third null hypothesis (Ho3) that institutional shareholding does not have significant influence on the managers' behaviour toward earnings management. This finding could be explained by the fact that institutional investors' interests are usually substantial to give them some level of control over the activities of their investees. Also, institutional investors are usually equipped with good financial expertise and financial means to watch over the activities of the managers and thereby prevent or reduce the incidence of earnings management. This finding is consistent with that of Shehu (2011) and Klai & Omri (2011).

Hypothesis 4

An inverse but significant relationship was found between board size and earnings management. It was revealed that if a board size is increased by one person, it would lead to about 11% decrease in the earnings management. The relationship was also discovered to be statistically significant at 5% level of significance. These imply that a relatively large board size is desirable for a firm. Hence, the study cannot accept the fourth null hypothesis (Ho4) that board size does not have a significant influence on the willingness of the managers to engage in earnings management. These findings could be explained by the fact that as firm's board grows in size, its capacity to monitor and ensure good accounting practice grows with it as more hands join the existing once. Also, it will allow for transparency and exhaustive deliberation on any corporate issue rather than hasty decisions by a few people to the detriment of the larger shareholders. The findings are consistent with that of Beasley (1996).

Hypothesis 5

An inverse but significant relationship was found between independence of the board of directors and earnings management. It was revealed that an increase of 1% in the number of the independent directors on the board would lead to about 0.25% decrease in the earnings management and vice versa. It was also revealed that the relationship is significant at 5% level of significance. These findings

show that the more the number of the independent directors on the board of directors the better in terms of quality of financial reporting. Hence, the study cannot accept the fifth null hypothesis (Ho5) that independence of directors does not have significant influence on managers' earnings management behaviour. These findings come as expected because independent directors are assumed to be free from the influence of the executive directors, they are appointed based on expertise and integrity and it is only rational that such people will want to bring their expertise to bear and also jealously protect their integrity. These findings are consistent with that of Roodposhti & Chashmi (2011), Olayinka (2012) and Swastiska (2013).

Hypothesis 6

An inverse and insignificant relationship was found between the independence of the auditors and earnings management. It was found that an increase of 1% in the auditors' fees which means a decrease in the independence of the auditors by the same rate (1%) would increase discretionary accruals by 0.6% and vice versa. It was also found that the relationship is not significant at 5% level of significance. Hence the study cannot reject the sixth null hypothesis (Ho6) that auditor independence does not have significant influence on earnings management drive of the managers. This finding implies that when an auditor is free from any threat that can hinder him from carrying out his job diligently, auditing exercise could reduce the opportunistic behaviour of the managers and thereby increase the quality of financial reporting. The reason for this result could be linked to the fact that an auditor whose income from a client constitutes a very significant part of his total income may not want to lose such a client and may be ready to compromise; this result is consistent with Okolie (2014).

4.3 Summary of Findings

The findings of the study are summarised as follow:

- i. Capital market reform of 2011 does not have significant impact on earnings management behaviour of the managers.
- ii. Firms' size has a positive and statistically significant relationship with earnings management;
- iii. Institutional shareholding has a negative and insignificant relationship with earnings management;
- iv. There is a negative and statistically significant relationship between board size and earnings management;

- v. Negative and significant relationship was found between board independence and earnings management; and
- vi. There is a negative and insignificant relationship between auditor independence and earnings management.

5. Conclusion, Recommendations and Limitation

Based on the research findings, the study concludes that firm size, board size, independence of the board of directors do exert statistically significant influence on the managers' drives to engage in earnings management. Based on the findings, this study recommends that:

- i. Relevant regulatory bodies like the Nigerian Stock Exchange, Security and Exchange Commission and Corporate Affairs Commission should pay more attention to the financial reports of big firms since this study revealed that they have more propensities and capacity to influence the audit procedures and consequently conceal some financial activities with a view to manipulate earnings opportunistically. This will ensure quality of financial reports of the big firms.
- ii. Security and Exchange Commission should consider fine-tuning part B, paragraph 4.1 and 4.2 of its code of corporate governance for public companies which read: "The Board should be a sufficient size relative to the scale and complexity of the company's operations..." and "Membership of the Board should not be less than five (5)" respectively. SEC should device criteria for determining the scale and complexity of operations and raises the bar of minimum board size for companies with large scale and complex operations. This is because the study reveals that too small board of directors might not be desirable. A board that is large enough will allow for exhaustive deliberation on any corporate issue rather than hasty decisions and will improve the quality of financial reports.
- iii. The Nigerian Security and Exchange Commission (SEC) should review its code of corporate governance for public companies; stipulated minimum number of independent directors should be increased from one to ensure more independent boards and improved quality of financial reports.

It is believed that earnings manipulation could be reduced significantly in Nigeria if these recommendations are implemented.

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