



## CORPORATE ATTRIBUTES AND EARNINGS MANAGEMENT OF NON FINANCIAL FIRMS LISTED ON THE NIGERIA EXCHANGE LIMITED

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### ABSTRACT:

*This study assessed the effect of Corporate Attributes (companies' age and company size) on Earnings Management of non financial firms listed on the Nigeria Exchange limited (NGX). The population of the study covered the ninety-five (95) non-financial firms listed on the Nigerian Exchange Group, covering a period of 11years, (2011-2021). Ex post facto research design was employed, with extensive reliance on secondary data, which include annual reports, corporate website of companies and the Nigerian Stock Exchange Group Fact book. The study used purposive sampling technique to select the sample size of seventy - four (74) non financial firms listed on the Nigerian Exchange Limited. Data collected were tested using Multiple Regression analysis on Statistical Package for Social Sciences (SPSS version 20.0). Empirically, the results revealed that both company size and company size have significant effect on earnings management of non-financial firms in Nigeria. In conclusion, the study established that corporate attributes significantly affect earnings management practices in non financial firms listed on Nigeria Exchange limited (NGX). The study recommended that financial regulatory bodies like Financial Reporting Council and the Securities and Exchange Commission should be proactive in terms of formulation of policies that will help in tightening up security measures prohibiting the serial occurrence of these earnings management practices in Nigeria. Government should also on timely basis organize seminars and workshops on evolving trends as regards this concept of earnings management, for the management teams as well as impose sanctions on any non financial firm found to be involved in earnings management practices, to reduce this manace drastically in Nigeria. These will help build back investors confidence for investment purposes. Firms should also embark on massive innovative strategies in marketing, diversification and re-investing of their profits to increase capital for sustainability..*



## **1. INTRODUCTION**

Many corporate accounting scandals were witnessed at the beginning of the 21<sup>st</sup> century across both developed and developing countries, these include Enron, WorldCom and Xerox among others in developed countries and Cadbury Nigeria Plc, Intercontinental banks Plc, Oceanic bank Plc among others in Nigeria. It was found that the core of these scandals were usually the phenomenon of earnings management (Uwuigbe, Daramola & Anjolaoluwa (2014). Managers might have the incentives to inflate the reported earnings by using various accounting techniques to change the timing and structure of operating, investing, and financing activities that would deceive investors regarding the firm's earnings power (Shittu, S. A. & Amao, B. W 2022). Earnings management embodies a wide array of accounting techniques used by management to achieve a specific earnings objectives. Uwuigbe, Daramola and Anjolaoluwa (2014) described it as efforts of management to manipulate reported earnings by using certain accounting methods or changing methods, recognizing non-recurring items, deferring or speeding up expenses or revenue, or using other techniques designed to influence short-term earnings. Earnings management is described by (Boll, D., Müller, H., & Sidki, M. 2022) as a purposeful intervention by the management in the process of financial reporting in order to gain personal benefit or for the organization.

There were several reasons that have been attributed to the preparation of misleading financial statements which may ranges from the demand for higher returns by shareholders on their investments, the quest to maintain a giant corporate status in the eye of the business community or sporadic changes in competitiveness, the craze to satisfy the greed of company's insiders (Shehu, U.H & Bello, A2013). Earnings management practices and choice of policies resulting from many judgments at the same time are capable of manipulation which produce less reliable accounting earnings that do not reflect a firm's financial performance because it is likely to reduce the quality of reported earnings and their usefulness for investors' decisions, thus reducing investors' confidence in the financial reports (Egolum, & Onodi, 2021). This problem is more pronounced in firms whose corporate structure is shaky, concerning dwindling profitability, risky leverage, and low corporate insolvency. Challenges such as these force managers to engage in earnings management or what they colorfully call window-dressing (Egolum & Onodi, 2021).

Number of studies examined the effect of corporate attributes on earnings management but no distinct research has been carried out to establish the firm attributes effect on earnings management of non



financial firms. Again, studies that examined the effect of firm attributes on earnings management abroad (Abbadi, 2021; Al-Zaqeba & Jordan, 2022; Ashiq, Guoxing, Tabassam & Waheed, 2022) do not suitably represent the peculiarities of the Nigerian business environment. Though their findings may be valid, but they cannot be fittingly applied to listed non financial firms in Nigeria. It was against this backdrop that the study is vital. Hence, the study, effect of corporate attributes on earnings management of non financial firms listed on the Nigeria Exchange limited (NGX).

### **1.1 Objectives of the Study**

Broadly, the study intends to critically assess the effect of Ccorporate Attributes on Earnings Management of non Financial Firms Listed on the Nigeria Exchange limited (NGX). However, the specific objectives are to:

- i. ascertain the effect of company age on earnings management.
- ii. determine the effect of company size on earnings management. firms in Nigeria.

### **1.2 Hypotheses**

The hypotheses (in null form) tested in the study were:

H<sub>01</sub>: Company age has no significant effect on earnings management.

H<sub>02</sub>: Company size does not have significant effect on earnings management.

## **2. LITERATURE REVIEW**

### **2.1 Conceptual review**

#### **2.1.1 Corporate Attributes**

Corporate attributes vary from one business entity to another and they can be determined based on the relevant information disclosed on its financial statements for a particular accounting period (Egolum & Onodi, 2021). Enakirerhi, Ewiwile, & Wobo (2022) posited that corporate attributes are essential determinants of a firm's performance as well as its success in business. Corporate attributes can be defined as the wide varieties of information disclosed in the financial statement of business entities that serve as the predictors of the firm's quality of accounting information and performance (Lang & Lundholm, 1993). They can also be defined as the behavioral patterns of company's operation which enables them to achieve their objectives throughout the period of their operations.

#### **2.1.2 Measures of Corporate Attributes**

Ali and Isa (2018) defined corporate attributes as firm specific features that distinguish one firm from another. Those corporate attributes distinguishes a corporate organization from others, corporate



attributes used in this study include company age and company size, these can influence the level of performance; they can also influence the decision and operations of the firm. For instance older (age) firm is believed by Ericson and Pakes, (1995) to be associated with experience which leads to standardize, coordinate and speed up operation, hence such firm over the years has established standard which help them in determining the level of resources to keep at any point in time compare to younger firms. Older firms due to the standard set for most activities and well established policy for various aspects of operations may perform better than young firms.

### **2.1.3 Company Age**

The age of a company is considered a factor that improves business sustainability and financial performance. It is also conceptualized as the number of years since the firm was listed (Shadrach & Yakura, 2021). Company that has been listed for a longer period is less likely to manage earnings as compared to a newly listed company. But contrary to this view, Muhammad and Shahimi (2013), believe that older firms are not flexible enough to make rapid adjustment, reduce barriers to innovation and make profit owing to the fact that their organizational rigidities limit their growth by inhibiting change as they become harder to change over time. But the findings of Alex, Augustine and Mercedes (2011) counter this assertion with their view that firms improves with age that is, ageing firms experience rising level of productivity since they are able to understand their strength over time. Makoto and Pascal (2011), defines firm age as the number of years after listing. In addition, it is measured by the number of years a firm has existed since incorporation or after its listing on the stock exchange market.

### **2.1.4 Company Size**

Company size has been variously defined in the literature to refer to the total assets, scale of operations and number of employees among others. It reflects how large or small a company is in terms of infrastructure (assets), employment terms., and branch network (Shadrach & Yakura, 2021). Moreso, the size of a company is better reflected by its total asset, sales, or market capitalization. Company size refers to the speed and extent of growth that is ideal for a specific company. Most companies' intent to expand the size of their business operation for them to grow either in revenue, profit, number of employees, or size of facilities.

### **2.1.5 Earnings Management**

Earnings management is recognized as attempts by management to influence reported earnings by using specific accounting methods, accelerating expense or revenue transactions, or using other



methods designed to influence short-term earnings (Isenmila & Afensimi, 2012). Earning management remains an important issue that has come to the front burner in recent debate on corporate failures regarding unethical behaviour (Uwuigbe *et al.*, 2014). It involves the intentional manipulation of financial information to either delude investors on the underlying economic status of an organization or to gain some contractual benefits that depend largely on accounting numbers (Uwuigbe *et al.*, 2014). The term 'earnings management' embodies a wide array of accounting techniques used by management to achieve a specific earnings objective. While there exists no single accepted definition of earnings management, accounting literature provides various descriptions of the practice.

### 2.1.6 Types of Earnings Management:

The vast body of literature on earnings management classifies types of earnings management into two categories: discretionary accruals and real activities manipulations (McVay, 2006). Although real activities earnings manipulation has been aggressively used at recent scandals such as Enron, it has often been overlooked in the literature (Yaping, 2005). This has lead researchers to emphasize the problem of arriving at tentative conclusions about the overall effect of earnings management when investigating one type of manipulation and ignoring the other one (Ernest & Frank, 2022). He attributes the dearth of literature on real activities earnings management to a lack of causal models that accurately measures earnings manipulation through real activities at that time. However, since the introduction of the Roychowdhury (2006) model, a noticeable amount of work that investigates the effect of both types of earnings management has been produced to fill this gap in the literature (Ernest & Frank, 2022). In an attempt to contribute to the above literature, this study investigates the effectiveness of corporate attributes in deterring the harmful effects of both types of earnings management in Nigeria. To accomplish this, it is necessary first to establish the differences between accruals-based and real activities-based earnings management.

Table 1 Distinction between Fraud and Earnings Management

Type of Earnings Management	Accounting Choices Within Accounting Standards
Conservative Accounting (for instance, Income-decreasing choices)	<ul style="list-style-type: none"><li>- Overly aggressive recognition of provisions or reserves.</li><li>- Overvaluation of acquired in-process R&amp;D in purchase acquisition.</li><li>- Overstatement of restructuring charges and asset write-offs.</li></ul>
Neutral Accounting	<ul style="list-style-type: none"><li>- Earnings that result from neutral operation of the process.</li></ul>



Aggressive Accounting (i.e. Income-increasing choices)	<ul style="list-style-type: none"><li>- Understatement of the provision for bad debts.</li><li>- Drawing down provisions or reserves in an overly aggressive manner.</li></ul>
	<b>Violates Accounting Standards</b>
Fraudulent Accounting	<ul style="list-style-type: none"><li>- Recording sales before they are realizable.</li><li>- Recording fictitious sales.</li><li>- Backdating sales invoices.</li><li>- Overstating inventory by recording fictitious inventory.</li></ul>

Source: Dechow and Skinner (2000)

### 2.1.7 Company Age and Earnings Management

Firm age describes how long the company has been in existence and its ability to run the business well (Jenny & Christina, 2018). According to Agustia and Suryani (2018), theoretically, investors will have more confidence in a company that have been around for a long time because it is assumed that they will be able to generate high profits. Therefore, companies that have been in the market for a long time are expected to have a good understanding of corporate governance and a higher exposure to reputation risk, thus they tend to have a low level of earnings management to safeguard their reputation (Khanh & Khuong, 2018). They also recognize that they must obey the codes and regulations governing their practice (Bassiouny *et al.*, 2016).

### 2.1.8 Company Size and Earnings Management

The size of a firm varies in many ways and it's essential to consider how the size affects the quality of reported information. It is argued by (Meek *et al.*, 2007) that based on the information asymmetry theory, large firms have lower information asymmetry as they have strong governance and control so this leads to the reduction of the earnings management practice. While based on the agency theory, large sized firms witness greater agency costs and this means more opportunistic practices (Jensen & Meckling, 1976 in Waweru & Riro, 2013). Several reasons exist to prove a negative relation between firm size and earnings management as explained by (Ahmad *et al.*, 2014 and Kim *et al.*, 2003), Large-sized firms may have stronger internal control system and may have more competent internal auditors as compared to small-sized firms therefore; an effective internal control system helps in publishing reliable financial information to the public, so this will likely reduce the ability of the management to manipulate earnings. Also large firms are usually audited by one of the big four auditing firms and this helps prevent earnings management due to the efficient and effective audit performed. A third reason is the reputation cost, in large firms the reputation cost is higher than that in the small firms as



large firms have better appreciation of market environment, better control over their operations and better understanding of their businesses relative to small-sized firms, therefore this might prevent large firms from engaging in earnings management practices. On the other side, a positive relation exists as large-sized firms face more pressures to meet the analysts' expectations (Barton & Simko, 2002). In addition, large-sized firms have greater bargaining power with auditors so the larger

## **2.2 Theoretical Review**

The following theories relevant to the study are hereby reviewed.

### **2.2.1 Agency Theory**

According to Jensen and Meckling (1976) agency relations is a contract between managers (agents), with investors (principal). Principal is the party that employs agents to perform tasks for the interests of principal, while the agent is the party that runs the interests of principal. One crucial assumption that has been widely examined in the literature which has received evidence is the agency theory. The existence of separation of ownership by principal is controlled by the agent in an organization which tends to cause conflict among principal and agent. The Agency Theory explains that if the company is in poor performance, managers can act opportunistically by raising accounting profit to hide bad performance and vice versa.

### **2.2.2. Stakeholders Theory**

The stakeholder's theory was developed by the Freeman (1984). It is all about identifying the groups who are stakeholders in a corporation and need to be managed, it assumed that the quickest way to destroy shareholder's value is to ignore the stakeholders. According Jensen (2001) stakeholder theory has become more prominent because of researchers recognition that the activities of a corporate entity impact on the external environment requiring accountability of the organization to a wider audience than simply its shareholders.

## **2.3 Empirical Review**

Plethora of studies have been carried out on the firms attributes and earnings management over the last few decades in both developed and developing economies. The studies employed different methodologies and have produced inconsistent findings, resulting in divergent opinions regarding the firm attributes and earnings management. Reviewed below are the studies considered relevant.

Ashiq, Guoxing, Tabassam and Waheed (2022), determined the effect of firm characteristics (firm size and leverage) on the earning management of firms listed on the Pakistan stock exchange. The





study carried out a test using a sample of 139 firms from 2008-2019. This study's tests were carried out using the fixed effect panel least squares regression model. The results indicate that firm size, leverage and institutional ownership show an insignificant relationship that does not significantly affect earnings management.

Enakirerhi, Ewiwile and Wobo (2022), examined the association between leverage and earnings manipulative practice of firms in Nigeria pre and post-IFRS periods and attempt to test the assertion of agency theory that higher leverage will be beneficial to improved earnings quality due to pressure on managers by bondholders. The study incorporated data for 87 listed firms on the floor of the Nigeria Stock Exchange for 10 years, 5 years preIFRS (2007 to 2011) and 5 years post-IFRS (2012 to 2016) making 870 firm-year observations. It disaggregated the periods into pre and post-IFRS to enable the researcher to test for the effect of adoption. The panel regressions estimate (Random effect model) was used to test the effect of the association between the independent and dependent variables. The results showed that increased leverage resulted in increased earnings manipulation after IFRS adoption.

Abolo (2022) examined earnings management and the quality of financial reporting of listed construction companies in Nigeria. The population of the study was the nine (9) listed construction companies in the Nigerian Stock Exchange during the period 2015-2021 (7) years. While the Sample size is 6. The study employed secondary data. The formulated research questions were analyzed with descriptive statistics. The hypotheses were tested using the multiple regression analysis with the aid of E-view (10). The findings of the study were that; there is a positive and significant relationship between accrual earnings and faithful representation of construction companies in Nigeria. Meanwhile, there is a positive but insignificant relationship between earnings persistence and faithful representation of listed construction companies in Nigeria.

Erna and Olivia (2022) examined whether ownership structure has an influence on earnings management using the control variables of leverage, company size, profitability, and company growth. The study used purposive sampling method for the selection of the research samples. The study focused on non-financial companies listed on the Indonesia Stock Exchange from 2016 to 2019 as research objects. Earnings management is measured using discretionary accruals which is a Modified Jones Model. The study found no significant effect of ownership structure on earnings management in Indonesia. Only leverage, company size, and company growth have a significant positive effect on earnings management.





Faisal (2021), investigated the effect of firm attributes on the earnings management of firms in Pakistan. The data was collected for 64 companies other than financial firms which are listed on the Pakistan Stock Exchange (PSE) for a period of one decade from 2009 to 2018. The Modified Jones Model 1995 was applied as a proxy of earning management. The result of the fixed effect model regression applied in the study showed that leverage and firm size have positive but non-significant effects but sales growth has a negative and non-significant effect on the earnings management of firms.

Abbadi (2021), determined the impact of firm size and firm age on the accrual earnings management among Jordanian firms. Data were collected from 42 manufacturing companies listed in the Amman stock market for the period 2013-2018. Analysis of data was then performed using linear regression which revealed that firm size negatively and significantly affects earnings management but firm age has no significant effect on earnings management.

Egiyi, Modesta and Amaka (2021) investigated the Impact of Leverage on Accrual-Based Earnings Management for a sample of Nigerian firms, excluding financial and insurance firms, listed on the Nigerian stock exchange for the period 2000-2020. Secondary data were collected from the Central Bank of Nigeria Statistical Bulletin and World Bank Development Indicators. This study uses the Hribar and Collins (2002) model and the Kothari et al. (2005) model to calculate discretionary accruals. The OLS estimation technique was employed to empirically analyze the effect of firm leverage on earning management practices. Consistent with the ‘control hypothesis’ for debt creation, we find that a significant negative association between leverage and earnings management for Nigerian firms. The empirical results show that leverage limits earning manipulating activities of managers.

Okonkwo (2021) examined the effect of firm attributes on the earnings management of quoted healthcare firms in Nigeria. The study used an ex post facto research design. The population of the study was the ten (10) quoted healthcare firms on the Nigerian Stock Exchange as of 31st December 2017, of which seven (7) firms are taken as the sample size using a purposive sampling technique. The technique for data analysis was multiple regression, as the study used panel data. The variable for earnings management is proxied by the discretionary accruals, discretionary accruals were generated using modified Jones model. The variables for firm attributes are firm size, financial leverage and firm age. The finding reveals first, that there is a positive and statistically significant effect of firm size and



financial leverage on earnings management of quoted healthcare firms in Nigeria. However, firm age has a negative and statistically significant effect on the earnings management of quoted healthcare firms in Nigeria.

Setyoputri and Mardijuwono (2020) examined the effect of managerial ownership, leverage and firm size on earnings management of manufacturing companies listed on the Indonesia Stock Exchange (IDX). The analysis technique used is multiple linear regression analysis method with SPSS version 20. The results of this study indicate that managerial ownership and leverage affect earnings management. But the size of the company has no effect on earnings management.

Bahaaeddi (2020) examined the effect of firm characteristics on earnings management among listed companies in Gulf Cooperation Council (GCC) countries. The study sample consists of 332 listed companies during the period 2010–2015. The study found that the company size and leverage have an insignificant impact on earnings management practices in Gulf Cooperation age and firms' audit quality have an insignificant relationship with earnings management.

### 3. MATERIAL AND METHOD

This research work adopted the ex post facto research design to ascertain the effect of corporate attributes on earnings management of non-financial firms listed on Nigerian Exchange Limited (NGX). The suitability of this choice was based on the fact that the design allows researchers to establish the time sequence of the variables on the basis of logical considerations. It is adequate enough to validly capture changes.

#### 3.1 Model Specification

Real earnings management

Following Roychowdhury (2006), Zang (2012), Cohen et al. (2008), and Cohen and Zarowin (2010), this study examined the following real activities manipulation: increasing incomes by reducing the overproduction costs for inventory (abnormal production costs) and decreasing discretionary expenditures including R&D, sales, advertising, and total and administrative expenditures (abnormal discretionary expenses).

Following Roychowdhury (2006), this study estimated the normal level of production costs as follows:

$$PROD_{it} / Assets_{it-1} = \alpha_0 + \alpha_1 [1 / Assets_{it-1}] + \beta_1 [Sales_{it} / Assets_{it-1}] + \beta_2 [\Delta sales_{it} / Assets_{it-1}] + \beta_3 [\Delta sales_{it-1} / Assets_{it-1}] + \epsilon_{it} \dots \dots \dots eqn1$$



Where:

PROD is the sum of the cost of goods sold in year  $t$  and the change in inventory from year  $t - 1$  to year  $t$ ;

Assets $_{it-1}$  is the total assets in year  $t - 1$ ;

Sales $_{it}$  is the net sales in year  $t$ ; and

$\Delta$  sales $_{it}$  is the change in net sales from year  $t - 1$  to year  $t$ .

This study developed the following regression model and employed the model to fulfill the research objectives:

$$REM = \beta_0 + \beta_1 CAGE_{it} + \beta_2 CSIZE_{it} + e_{it} \dots \dots \dots \text{equ 2}$$

$$REM = f(CAGE \ \& \ CSIZE) \dots \dots \dots \text{eqn 2b}$$

Below is the regression model guiding this study which is adopted from Roychowdhury (2006); Zang (2012); Salleh & Haat 2014; Uwuigbe, Ranti and Bernard (2015) is modified by inserting the variables of this study:

$$REM = \beta_0 + \beta_1 CAGE_{it} + \beta_2 CSIZE_{it} + e_{it}$$

Where:

REM = real earnings management (Abnormal Production Costs)

$i$  = firm;

$t$  = year;

$\beta_0$  = the intercept;

$e$  = the error term;

$\beta_1, \beta_2,$  = the coefficients;

CAGE = Company Age

CSIZE = Company Size;

### 3.2 Decision Rule

As a rule of thumb, the null hypothesis ( $H_0$ ) is rejected if the calculated value of any of the statistical tools adopted in this study is greater than the critical/table value, at 5% level of significance, otherwise  $H_0$  is accepted. Alternatively, if p-value is equal to or less than the chosen significance level (5%), we reject the null hypothesis ( $H_0$ ) and accept the alternative hypothesis ( $H_1$ ), otherwise the  $H_0$  is accepted. When a p-value is  $\leq 0.05$ , it is statistically significant, indicating strong evidence against the null hypothesis.



## 4. RESULT AND DISCUSSIONS

### 4.1 Data Analisis

#### 4.1.1 Descriptive analysis

Summary of statistics such as mean, standard deviation, maximum, minimum, skewness, kurtosis, and Jarque-Bera statistic were used to descriptively analyse the data collected for the purpose of the study.

Table 2 Descriptive analysis of the Variables

	<b>CAGE</b>	<b>CSZE</b>	<b>REM</b>
Mean	25.33453	7.073507	-0.524965
Median	27.00000	6.998305	-0.530000
Maximum	56.00000	9.378765	5.570000
Minimum	0.000000	5.033761	-7.030000
Std. Dev.	13.58115	0.858149	0.672549
Skewness	-0.145215	0.146559	-0.262174
Kurtosis	1.701186	2.596858	40.91513
Jarque-Bera	61.77296	8.664391	50144.39
Probability	0.000000	0.013139	0.000000
Sum	21205.00	5920.525	-439.3960
Sum Sq. Dev.	154198.3	615.6469	378.1415
Observations	837	837	837

Source: Author's Computations, (2023)

Table 2 above shows that mean value of company age under observation is 25.3 years, with a minimum age of 0 and a maximum age of 56. The distribution is slightly skewed to the left, but not significantly so. The kurtosis is moderate, indicating a relatively peaked distribution. The Jarque-Bera test rejects the null hypothesis of normality, indicating that the distribution is not normal. While the mean value for company size is 7.07, with a minimum of 5.03 and a maximum of 9.38. The distribution is slightly skewed to the right and has a moderate kurtosis. The Jarque-Bera test does not reject the null hypothesis of normality (at the 0.05 level).

In the table 2 above, the mean value for earnings management is -0.52 years, with a minimum of -7.03 and a maximum of 5.57. The distribution is slightly skewed to the left and has a moderate kurtosis. The Jarque-Bera test rejects the null hypothesis of normality

Unit Root Test Results Using Augmented Dickey-Fuller



Augmented Dickey-Fuller (ADF) was deployed to examine the Unit Root Test Results of the data. Table 3 shows the test results below.

Table 3 Summary of Unit Root Test Results Using Augmented Dickey-Fuller

Variables	T-ADF	Lag Length	Test critical values:@ 5% Level	Prob.	Remark
CAGE	-6.972221	1(0)	-2.864742	0.0000	Stationary
CSZE	-5.567946	1(0)	-2.864812	0.0000	Stationary
EM	-28.37019	1(0)	-2.864742	0.0000	Stationary

Source: Author’s Computations (2023)

The Table 3 presented the results of the Augmented Dickey-Fuller (ADF) test for each variable. This test is commonly used to determine whether a time series is stationary or not. The ADF test is based on the null hypothesis that the time series has a unit root, which means it is non-stationary. If the p-value is less than the chosen significance level, the null hypothesis is rejected, and the series is considered stationary. The results showed that the variables are stationary at levels since their p-values are less than the chosen significance level of 5%. Therefore, we can conclude that all variables are stationary at levels and do not have a unit root.

### 4.1.3 Analysis of Model Diagnostics: Earnings Management

#### 4.1.3.1 Test for Serial Correlation

There are a number of classical assumptions of least square regression one of which is that residuals should not be correlated across time. Breusch–Godfrey test for serial correlation was used in assessing the serial correlation of the regression model. Table 4 shows the result of the Breusch–Godfrey test for serial correlation.

Table 4: Breusch-Godfrey Serial Correlation LM Test:

F-statistic	0.296974	Prob. F(2,829)	0.7431
Obs*R-squared	0.599251	Prob. Chi-Square(2)	0.7411

Source: Author’s Computations (2023)

The Breusch-Godfrey Serial Correlation LM test was used to test for the presence of serial correlation (autocorrelation) in the residuals of the regression model. The null hypothesis was that there is no



serial correlation in the residuals, and the alternative hypothesis was that there is some form of serial correlation. The test statistic for the Breusch-Godfrey Serial Correlation LM test is an F-statistic of 0.296974 with 2 and 829 degrees of freedom, and the associated p-value is 0.7431. This indicates that there is no evidence to reject the null hypothesis of no serial correlation in the residuals at the 5% significance level.

#### 4.1.3.2 Test for Heteroskedasticity

Heteroskedasticity occurs when the variances of the error terms are not constant. Glejser test of Heteroskedasticity was carried out as reported in Table 6 below.

Table 5 Heteroskedasticity Test: White

F-statistic	4.731439	Prob. F(20,816)	0.0000
Obs*R-squared	86.97758	Prob. Chi-Square(20)	0.0000
Scaled explained SS	20275.56	Prob. Chi-Square(20)	0.0000

Source: Author’s Computations (2023)

Table 5 shows the results of a White's heteroskedasticity test. The test was used to determine if there is evidence of heteroskedasticity in the error terms of the regression model. The F-statistic in this table is 4.731439, which is the test statistic for the White's test. The probability associated with this F-statistic is 0.0000, which is the p-value for the test. This p-value is less than the conventional significance level of 0.05, indicating strong evidence against the null hypothesis of homoskedasticity. Therefore, we can conclude that there is evidence of heteroskedasticity in the error terms of the regression model being tested.

#### 4.1.4 Test for Linearity

Table 6: Ramsey RESET Test

Equation: EM

Specification: CAGE CSZE

Omitted Variables: Squares of fitted values

	Value	Df	Probability
t-statistic	4.292850	830	0.0000
F-statistic	18.42856	(1, 830)	0.0000
Likelihood ratio	18.38068	1	0.0000

Source: Author’s Computations (2023)



The Ramsey RESET test examined whether there is evidence of omitted variables in the regression model. In this case, the model being tested is labeled "DAC" and includes the following independent variables: CAGE and CSZE. The results of the test are reported in Table 6, which shows that the t-statistic for the test is 4.292850. The degrees of freedom for the test are 830, and the probability value is 0.0000. Based on these results, we can reject the null hypothesis that the model is correctly specified and conclude that there is evidence of omitted variables in the model.

#### 4.2. Test of Hypotheses

The Table 7 below shows regression analysis output of the hypotheses test conducted for the study on the effect of company age and company size on Earnings management.

Table 7: Panel Least Square Regression Result for Model A

Dependent Variable: EM

Method: Panel Least Squares

Sample: 2011 2021

Periods included: 11

Cross-sections included: 77

Total panel observations: 837

Variable	Coefficient	Std. Error	t-Statistic	Prob.
CAGE	-105788.2	61693.38	-1.714741	0.0868
CSZE	-3551314.	994206.2	-3.572010	0.0004
C	24117649	7176441.	3.360670	0.0008
R-squared	0.031300	Mean dependent var		-2762296.
Adjusted R-squared	0.025471	S.D. dependent var		24014133
S.E. of regression	23706323	Akaike info criterion		36.80752
Sum squared resid	4.67E+17	Schwarz criterion		36.84143
Log likelihood	-15397.95	Hannan-Quinn criter.		36.82052
F-statistic	5.370130	Durbin-Watson stat		2.150142
Prob(F-statistic)	0.000072			

Source: Author's Computations (2023)





The R-squared value of 0.031300 indicates that the model explains only a small proportion of the variation in earnings management. The F-statistic of 5.370130 and its associated p-value of 0.000072 suggest that the model as a whole is statistically significant. The Durbin-Watson statistic of 2.150142 indicated that there was be some autocorrelation in the residuals of the model.

#### **4.2.1 Hypotheses One**

H<sub>0</sub>: Company age does not have significant effect on earnings management.

H<sub>1</sub>: Company age has significant effect on earnings management.

From the Table 7 above, the analysis shows that company age does not have a statistically significant effect on earnings management, as the coefficient has a p-value of 0.0868, which is higher than the conventional significance level of 0.05. Therefore, null hypothesis is accepted which state that company age does not have significant effect among sample population of non financial firms in Nigeria.

#### **4.2.2 Hypotheses Two**

H<sub>0</sub>: Company size has no significant effect on earnings management.

H<sub>1</sub>: Company size has significant effect on earnings management.

From the Table 7 above, the analysis shows that company size has a statistically significant effect on earnings management, as the coefficient has a p-value of 0.0004, which is lower than the conventional significance level of 0.05. This suggests that larger companies tend to have lower levels of earnings management practices. Therefore, alternate hypothesis is accepted which state that company size has significant effect on earnings management on sample population.

### **CONCLUSION AND RECOMMENDATIONS**

The study empirically examined the effect of corporate attributes on earnings management of non financial firms listed on the Nigeria Exchange Limited for 11 years, spanning from 2011 to 2021.

The study established that corporate attributes (company age and company size) have significant effect on earnings management of non financial firms listed in Nigeria. This study concluded that both company age and company size can influence the earnings management practices in the non financial sector in Nigeria. explanatory variable of corporate attributes were measured in terms of firm size (FSZ) and firm age (AGE). The dependent variable of earnings management was measured



in terms of real earnings management (REM). Firm size has a statistically positive significant effect on earnings management as measured in terms of discretionary accrual of conglomerate firms in Nigeria at 5% significant level.

The study therefore recommended that financial regulatory bodies like Financial Reporting Council and the Security and Exchange Commission should be proactive in terms of formulation of policies that will help in tightening up security measures prohibiting the serial occurrence of these earnings management practices in Nigeria. Government should also on timely basis organize seminars and workshops on evolving trends as regards this concept of earnings management, for the management teams as well as impose sanctions on any non financial firm found to be involved in earnings management practices, to reduce this menace drastically in Nigeria. These will help build back investors confidence for investment purposes.

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