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AN ASSESSMENT OF THE DETERMINANTS OF EARNINGS MANAGEMENT IN NIGERIA

Onoyenure George (MSC Canadidacy)[1] & Ebiaghan Orits Frank, PhD[2]

[1&2] Department of Accounting Faculty of Management Sciences
Delta State University, Abraka, Nigeria

Corresponding Author: Ebiaghan Orits Frank
Corresponding Author Email: frankebiaghan@delsu.edu.ng

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ABSTRACT

This study is based on the assessment of Tax Aggressiveness, Share Price, Return on Assets as determinants of Earnings Management among quoted industrial and consumer goods sectors in Nigeria between the periods of 2012-2022. A sample of thirty-two (32) firms were drawn out of the listed non-financial firms in Nigeria. The study was quantitative in nature and made use of secondary data which was sourced from the Nigerian Stock Exchange (NSE) factbook, National Bureau of Statistics, and annual reports of selected industrial and consumer goods firms. Descriptive statistics and correlation analysis was used to determine the nature of the data as well as the relationship between the independent and dependent variables. The pooled panel regression analysis, the Hausman test and the random effect model (REM) method of model estimation employed was used in the study. The findings revealed that share price and return on assets are the primary determinants that significantly affect the earnings management of publicly traded companies in the industrial and consumer goods sectors during the observed timeframe. Moreover, firm size is perceived as a significant control factor in determining earnings management. Tax aggressiveness on the other hand showed no significant impact on earnings management. Based on the findings the study recommended that Projects that enhance the firms' profitability should be at the center of the investment objective of managers overseeing industrial and consumer goods firms that are publicly

traded. In addition, projects with favourable net present values should be embarked on by managers of industrial and consumer goods firms listed on the stock exchange. Furthermore, cutting edge earnings management strategies should be adopted by managers of industrial and consumer goods firms that are publicly traded. They can as well prioritize the utilization of tax aggressiveness.

Keywords: Earnings Management, Tax Aggressiveness, Share Price, Return on Assets, Hausman Test.

INTRODUCTION

Earnings management is used to distort the true performance of firms (Ubesie, Ogbu and Mbah, 2019). One of the managers' incentives to carry out these unethical practices could be to increase financial performance, which can only occur in the short term due to the fact that in the long term the market penalizes those manipulative companies and they enjoy lower corporate performance (Rangan, 1998). One of the main processes in an organization that provides valuable information about the company's strategies, past events, and current status to the users of financial statements is financial reporting. The provision of information about an enterprise that is useful to a wide range of users in making economic decision is one of the basic objective of financial reporting (Atu et al, 2016). However, due to the probable effects of earnings management on information contents of such reports the validity of this objective is being questioned by main users of corporate financial reports. Hence creating is a growing issue of concern, threatening the credibility of both the accounting and auditing functions (Atu et al, 2016).

Merchant and Rockness (1994) defines earnings management as any action from management which can distort profits and which is not a consequence of the economic reality, it actually represents the privilege of the financial engineering. Thus, the economic entity is presenting to the investors or to the prospective investors financial statement passed through the filter of some techniques capable of generating a more favourable image on the market but also the illusion of some more attractive results. A firm can intentionally alter reported financial results, i.e., income statement and statement of cash flows, or reported financial position, i.e., the balance sheet, in some desired amount and/or some desired direction (Atu et al, 2016).

Earnings management is primarily accomplished through accounting transactions that are designed to achieve desired earnings level. Prior research suggests that managers have both personal and business motivations to display impressive or at the very least satisfactory performance in their reports on a consistent basis (Ebiaghan, Ojugbeli & Okoye 2017;Ebiaghan & Esekhile 2018;DeFond and Park, 1997; Greenfield, Carolyn, Norman, and Wier 2008). However, due to a variety of reason, the sustainability of such a performance is sometimes impossible. In these circumstances managers may decide to use their discretions in the application of accounting principles and procedures which can result in altering the business operations to a more favorable outcome. In the Nigerian corporate environment the presence and negative effect of earnings management on credibility of financial reporting and corporate failure has also been experienced for example, a report of creative accounting scandal in African Petroleum PLC showed that the financial statements of the company did not fairly present the company's financial position (Oyejide and Soyibo, 2001, Ebiaghan 2020).

Research Problem and Statement of Hypotheses

The existing body of literature on earnings management is characterised by its diversity and its focus on a variety of distinct issues. The current state of research on the factors influencing earnings management at the firm-specific and country level appears to be limited, particularly with regards to the African region, and more specifically, Nigeria. Hessayri and Saihi (2015) contend that there exists a dearth of research pertaining to earnings management in developing economies. The prevailing body of literature on the subject of earnings management appears to centre predominantly on its correlation with corporate governance elements (Abanum & Ebiaghan 2022,; Kamel and Elbanna, 2011; Zayol et al., 2017; Callo & Jarne, 2011,Mordi & Ebiaghan 2023). This phenomenon appears to be particularly evident in studies that centre on Nigeria. In addition to corporate governance, a significant area of interest in these investigations pertains to the manipulation of earnings in the period preceding the initial public offering, which denotes the initial sale of a corporation's shares on a public stock exchange.

From the foregoing, the study presents the hypotheses of the study in its null form as follows:

H_0: Tax aggressiveness does not have any significant impact on the earnings management.

H_0: Share price does not have any significant impact on the earnings management.

H_0: Return on assets does not have any significant impact on the earnings management.

LITERATURE REVIEW

Conceptual Review

Earnings Management

The concept of earnings management falls within the purview of the broader category of creative accounting. According to Mulford and Comiskey (2002), the term "creative accounting practises" encompasses various actions that involve the use of aggressive selection and implementation of accounting principles, fraudulent financial reporting, or earnings management. Despite the connotations of fraudulent activity that may be associated with the term "earnings management," it is important to note that this practise is distinct from fraud. This is because earnings management can be conducted by managers in accordance with the flexibility provided by generally accepted accounting principles (GAAP), without contravening these standards. Therefore, it is a lawful practise. Income smoothing can be practised by managers as well. Mulford and Comiskey (2002) have defined a method of managing earnings wherein managers aim to create a more consistent outlook for earnings by eliminating the highs and lows from a typical earnings series. This practise is commonly referred to as earnings management. This entails implementing measures to mitigate and retain earnings in periods of financial prosperity for utilisation in subsequent, less lucrative periods.

Tax Aggressiveness

The practise of reducing tax burden in order to increase profits through the management of earnings presents an opportunity for management to engage in tax aggressiveness. This approach involves the utilisation of company resources for personal needs (Putri, Rohman, & Chariri, 2016; Blaylock, Shevlin, & Wilson, 2012, Ebiaghan 2019, Ebiaghan 2019, Oburota & Ebiaghan 2023, Seiyabo & Ebiaghan 2022). This phenomenon may occur due to the division of ownership in publicly traded companies, which can create opportunities for management to selectively choose accounting methods or policies for their own benefit. According to

Ebiaghan 2020 findings, there is no significant impact of tax aggressiveness on earnings management.

Return on Assets

The Return on Assets (ROA) metric is commonly utilised as a primary indicator for assessing a business's performance and subsequently making informed economic decisions. The impact of the financial performance on the stock price of companies listed on the JSE was investigated by Sihasale (2001). The findings indicate that the combined impact of return on equity (ROE) and return on assets (ROA) has a significant effect on the prices of stocks. The phenomenon of earnings management was identified by Change and Warfield (2005) through the observation of an increase in stock prices.

Firm Size

The magnitude of an enterprise is frequently employed as a substitute for market particulars. It is possible that larger corporations possess greater market access to information in comparison to smaller enterprises. Albrecht and Richardson (1990) suggest that small firms have a greater incentive to smooth earnings compared to large companies. According to the findings of Lee and Choi (2002), the size of a firm has an impact on its capacity to regulate earnings. Firm size which according to Samiloglu, et al. (2017) is a determinate of firm performance and earnings per share.

Empirical Review

Rashwan, Melhem, Nour, and Atout (2023) investigated the impact of earning management on dividend payout, while also examining the moderating influence of financial leverage on this association found a correlation between earning management and dividend payout in the banking industry of Palestine and Jordan indicate a favourable impact of earning management on cash dividend payout. In their study Aqabna, Aga, and Jabari (2023) investigated the correlation between corporate social responsibility (CSR) and the performance of firms in the MENA region, both pre and post the COVID-19 pandemic. Their results indicated that there is a positive correlation between environmental, social, and governance (ESG) scores and return on assets (ROA), which remains significant even after controlling for the effects of COVID-19. With respect to the moderating influence of EM, the findings indicate that Corporate Social Responsibility (CSR) has a statistically insignificant yet positive effect on financial performance.

Chatterjee and Rakshit (2023) conducted an evaluation of the relationship between different corporate governance mechanisms and earnings management. The study utilised panel data regression and Fisher's probability test. They found a robust inverse correlation between earnings management and both the proportion of autonomous directors serving on the board and the conscientiousness of board members. Nonetheless, the conjecture positing that the proportion of promoters on the board exerts a favourable influence on earnings management is not corroborated.

Karjalainen, Kasanen, Kinnunen, and Niskanen (2023) conducted a study utilising a comprehensive sample of small and medium-sized private companies in Finland that paid dividends between 2006 and 2010. The findings of the study indicate that earnings management in these companies is influenced by two simultaneous factors: the desire to distribute tax-exempt dividends and the avoidance of superfluous company income tax. The study conducted by Eiler, Miranda-Lopez, and Tama-Sweet (2022) examined the effects of

transitioning from local GAAP to IFRS in 2012 on the practise of earnings management among publicly traded companies in Mexico. They employed three distinct metrics to gauge earnings smoothing, alongside one metric to assess upwards earnings management. The study employs logistic regression analysis and t-tests to investigate the presence of a significant alteration in the earnings management of Mexican firms during two distinct time periods, namely pre-IFRS (2009-2011) and post-IFRS (2013-2015). The present study posits and ascertains that the adoption of International Financial Reporting Standards (IFRS) is linked to a decrease in earnings management through earnings smoothing in Mexico.

Fang, Francis, Hasan, and Wu (2022) conducted a study utilising a sample of U.S. listed firms spanning from 2000 to 2017. The research indicates that companies with strong connections exhibit a greater degree of assertiveness in manipulating their earnings via both accruals and tangible actions. Furthermore, the findings remain reliable even after accounting for internal executive social affiliations.

In addition, Gajdosikova, Valaskova, and Durana (2022) examined the impact of firm-specific characteristics on earnings management practises among a diverse sample of 15,716 businesses operating across multiple economic sectors in the Slovakian context over a 3-year timeframe. The Kasznik model was utilised to measure the degree of earnings management through discretionary accruals. The study employed a correspondence analysis technique utilising the chi-square distance metric to investigate the interrelationship between earnings management practises and firm-specific characteristics, namely firm size, legal form, and sectoral classification. The findings of the research suggest that small businesses with a public limited ownership structure, primarily operating in sectors R and M (as per the NACE sectoral classification), tend to employ aggressive earnings management practises aimed at increasing their income. The study conducted by Salah and Jarboui (2022) investigated the influence of dividend policy on earnings management within the context of France. They found that the distribution of dividends is a significant factor that influences the practise of earnings management within the French setting. Similarly, Boll, Müller, and Sidki (2022) conducted a study on the determinants of earnings management in German municipal enterprises using annual financial statement data from 1998 to 2014. They found a positive correlation between firm size and leverage with earnings management. With regards to the domain of corporate governance, it has been observed that public enterprises that possess a fragmented ownership structure exhibit a higher tendency to engage in financial statement manipulation.

Conceptual Model

A conceptual model depicting the directional relationship between Accruals-based earnings management and its determinants is presented in figure 2.1. Accruals-based Earnings Management is shown to be determined by Tax aggressiveness, Quoted share price, Return on assets which is a measure of a firm profitability and Firm size which is a control variable.

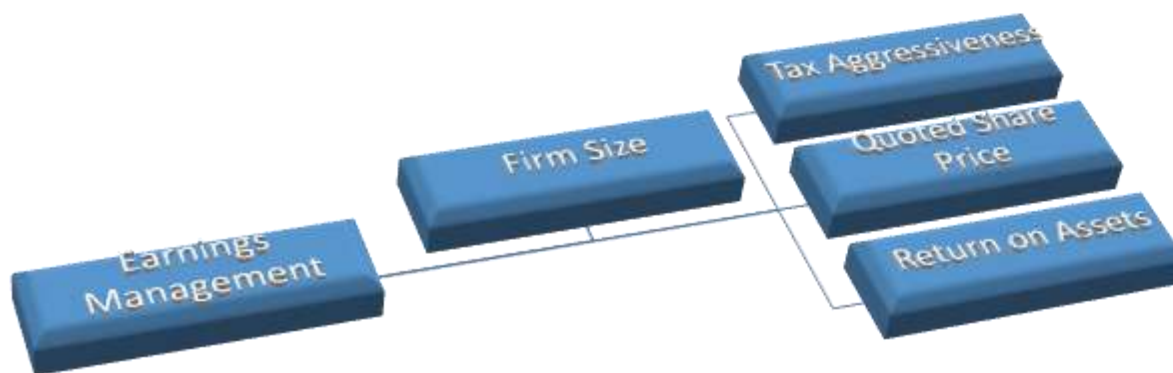

Figure 1: Schematic model
Source: Author's Schematic Model, 2023

METHODOLOGY

This section deals with the methodology of the study. This includes model specification, method of analysis, sources of data and so on. This study is quantitative in nature and will make use of secondary data.

Research Design and Data Source

The study employs the ex-post facto research design, which is a suitable method for conducting research in the fields of business and social sciences hence, it is widely utilized. The study made use of secondary data which were sourced from the annual reports of the listed firms on the Nigerian Stock Exchange (NSE) factbook, National Bureau of Statistics, and annual reports of selected industrial and consumer goods firms that were sampled. The data used spans the period from 2012 to 2022 (11 years), from thirteen quoted industrial goods firms and twenty-five quoted consumer goods firms in Nigeria; totaling thirty-eight (38) quoted industrial and consumer goods firms (Nigerian Exchange Group, 2023) making a 352 observations. The study's population for the timeframe spanning from 2012 to 2022 comprises exclusively of industrial and consumer goods firms that are quoted within the Nigeria Exchange Group. This denotes the complete finite population under investigation in the study which is based on the availability of data. The temporal scope of the study is contingent upon the accessibility of scrutinized financial statements for the enterprises being examined. The study employed accruals-based and real activities-based earnings management as its dependent variables. This study examines the tax aggressiveness, quoted share price, return on assets and firm size of all 32 quoted industrial and consumer goods firms in the country as independent variables.

Model Specification

The model utilised in this study was developed based on the works of Mardnly, Badran, and Mouselli (2021), Boll, Müller, and Sidki (2022), and Fang et al. (2022), with minor adaptations based on the study's objectives. In light of the foregoing, the model in its functional form is given as:

$$ERM = f\,(TAG, SP, ROA, FS) \qquad (1)$$

From the above functional form, the econometric model is specified thus:

$$ERM_{it} = \beta_0 + \beta_1 TAG_{it} + \beta_2 SP_{it} + \beta_3 ROA_{it} + \beta_4 FS_{it} + \mu_{it} \qquad (2)$$

$\beta_1 < 0$, $\beta_2 > 0$, $\beta_3 > 0$, and $\beta_4 > 0$

Where: ERM is Accruals-based earnings management, TAG is Tax aggressiveness, SP is Quoted share price, FS is Firm size, ROA is Return on assets which is a measure of a firm profitability, μ is the Error Term, β_0 is Constant parameters, β_1, β_2, β_3, and β_4, are the Coefficient parameters, t is the period of study, and i is the firms under study.

Data Analysis Procedure

The study employs econometric techniques in estimating the model of the study. After pooling the data in a panel format, preliminary descriptive statistics and correlation coefficients were estimated. This is followed by a panel data regression analysis, and afterwards, the task was to determine if the fixed effect model (FEM) or random effect model (REM) is consistent using the Hausman test. According to Pandey (2010), the financial characteristics of firms from different sectors or industries vary, so the use of either a fixed-effects or random-effects model is justified to investigate the factors that influence earnings management in publicly traded non-financial firms in Nigeria.

RESULTS AND DISCUSSIONS

Data Analysis and Discussion of Results

Here, the results from the model estimation will be presented and discussed starting with the results of descriptive statistics below:

Table 1

Descriptive Statistics

	ERM	TAG	SP	ROA	FS
Mean	13.26522	0.203611	5.377405	1.740862	1.946941
Median	13.14841	0.285179	5.443153	1.671473	1.945910
Maximum	17.67059	2.626117	5.924042	5.172017	2.222459
Minimum	8.391630	-2.040221	4.204991	-1.469676	1.706565
Std. Dev.	2.085713	0.714934	0.477533	1.160391	0.110130
Skewness	0.009455	-0.797432	-1.040441	0.168110	-0.100873
Kurtosis	2.399777	6.506116	3.184894	3.872398	2.546384
Jarque-Bera	1.247163	51.30936	15.09306	3.023009	0.852372
Probability	0.536021	0.000000	0.000528	0.220578	0.652995

Source: Author’s computation (2023)

The summary statistics in Table 1 above helps in presenting us with the feature and characteristics of the variables under study. From the descriptive statistics, it can be seen that Earnings management (ERM) have a mean value of 13.26522, with minimum and maximum values observed as 8.391630 and 17.67059, respectively. Thus illustrating a fairly stable earnings management of quoted industrial and consumer goods firms employed in the study. The mean quoted share price (SP) is 5.377405, exhibiting a range from 4.204991% to 5.924042%. The mean annual value of Tax aggressiveness (TAG) is 0.203611, with a maximum value of 2.626117 and a minimum value of -2.040221.

Return on assets (ROA) has a mean value of 1.740862 which implies that on average, all the firms listed have an aggregated positive return on assets. This is with range of values between a maximum of 5.172017 and a minimum of -1.469676. The mean value of Firm size (FS) is 1.946941which indicates that most firm’s financial statements are dominated by firm’s asset size. The maximum and minimum values are 2.222459 and 1.706565 respectively. The results of the standard deviation indicated an insignificant dispersion of the variables from their respective mean values. From the result of the skewness which is a statistical measure that

quantifies the degree of asymmetry in the distribution of a variable, the share price, tax aggressiveness, firm size exhibit negative skew coefficients (-1.040441, -0.797432 and -0.100873)` respectively, suggesting that their distributions are left-skewed. The earnings management and return on assets exhibit a right-skewed distribution due to their positive values (0.009455 and 0.168110), respectively. Based on the kurtosis result firm size and earnings management have a platykurtic since their values are lower than 3. Share price and return on assets displayed a leptokurtic nature based on their values. While a mesokurtic nature was displayed by tax aggressiveness.

Based on the p-values obtained from the Jarque-Bera test conducted, the null hypothesis of a normal distribution is accepted on various variables including earnings management, return on assets and firm size. The p-values for these variables are 0.536021, 0.220578 and 0.652995, respectively, all of which are above the 5% level of significance. Therefore, the alternate hypothesis that these variables does not follow a normal distribution during the investigated period is rejected. The Jarque-Bera test was conducted on the share price and tax aggressiveness yielded a result of 0.000528 and 0.000000 which fall below the 5% level of significance. As a result, the null hypotheses are rejected, and the alternative hypotheses that the variables are not normally distributed during the time period under study is accepted. Having examined the characteristics of the data, we proceed with another descriptive analysis that is the correlation matrix analysis which is presented below.

Table 2

Correlation Matrix Results

	ERM	**TAG**	**SP**	**ROA**	**FS**
ERM	1.000000				
TAG	-0.208886** [0.0433]	1.000000			
SP	-0.040816 [0.6961]	0.070278 [0.5009]	1.000000		
ROA	0.196491* [0.0577]	-0.091069 [0.3827]	-0.008470 [0.9354]	1.000000	
FS	0.746046 [0.0000]***	-0.109864 [0.2918]	-0.186616* [0.0717]	-0.100059 [0.3373]	1.000000

Source: Author's computation (2023)

[ ] – p-values * - 10% significance ** - 5% significance *** - 1% significance

From the above correlation matrix, the only statistically significant relationships are the ones between earnings management and tax aggressiveness, return on assets as well as firm size. There also exist a statistically significant relationship share price and firm size (which is negative and significant at 10% level of significance). There is a weak negative correlation between earnings management and tax aggressiveness as well as share price. Firm size have a strong positive correlation with earnings management while a weak positive correlation exist between earnings management and return on assets. Having observed all these, it is vital to note that correlation does not necessarily indicate impact or a causal relationship. Next, the study will proceed to present and discuss the panel regression estimates.

In terms of impact and causal effect, the regression analysis here will provide a more meaningful understanding of the impact of the independent variables on earnings management. The estimated model results are presented in the tables below.

Table 3

Pooled Panel OLS Regression Estimates

Dependent variable: LERM				
Variable	*Coefficients*	*Standard Error*	*t Stat*	*P-value*
C	-17.91929	3.564298	-5.027439	0.0000
LTAG	-0.241389	0.221589	-1.089353	0.2794
LSP	0.548194	0.325401	1.684673	0.0960
LROA	0.344704	0.137129	2.513711	0.0140
LFS	14.22011	1.410788	10.07955	0.0000
R-Squared	0.586322	F-Statistics (4, 280)	27.63806	
Adj. R-Squared	0.565107	Prob(F-statistic)	0.0000	
Observations	352			

Source: Author's computation (2023)

The pooled panel regression is presented in table 3 above. From the panel regression estimates we observed that the constant term is negative and significant at the 1% level. This implies that when all the independent variables are held constant, earnings management reduces by about 18%. There exist a positive relationship between tax aggressiveness and earnings management which is in consonance with apriori expectation, although it is insignificant. This implies that a 1% increase in tax aggressiveness reduces earnings management by 24%. Share price have a significant positive impacts on earnings management which conforms to apriori expectation signifying that a 1% rise in share price will increase earnings management by about 55%. Return on assets have a significant positive impacts on earnings management which conforms to apriori expectation implying that a 1% increase in return on assets will lead to a 34% rise in earnings management. Also, firm size have a significant positive impact on earnings management which conforms to apriori expectation implying that a 1% increase in firm size will lead to a 14% increase in earnings management.

The null hypothesis of the study states that firm size, return on assets and share price (SP) does not have any significant relationship or impact on the earnings management of consumer product firms in Nigeria are rejected based on the above estimated results, the null hypothesis stating that tax aggressiveness does not have a significant impact on earnings management cannot be disproved thus we fail to reject the null hypothesis.

The adjusted R-squared value of 0.565107 suggests that about 57% of the variations in earnings management are explained by tax aggressiveness, share price, return on assets and firm size, while the remaining unexplained 43% is captured by the error term. Similarly, looking at the joint significance (F-stat) of the model at 27.63806 with a p-value of 0.0000 reveals that the variables jointly have a strong explanatory power on earnings management.

In econometric theory, cross-sectional or panel regressions can either have fixed or random effects and it is best to find out the appropriate output (either fixed or random) that best explains or estimates the specified model. In order to do this, the Hausman test is usually employed, and this will be done subsequently.

Hausman Test

As already pointed out, the Hausman test helps to determine the appropriate model to choose between the fixed effect and random effect model. This is important because after deciding

which model is appropriate, we take a look at the coefficients of the model and see if their relationships and impacts on the dependent variable are in consonance with the model we estimated earlier.

The null and alternative hypotheses for the test are stated thus;

H_0: Random effect model is appropriate

H_1: Fixed effect model is appropriate

Table 4

Hausman Test

Correlated Random Effects - Hausman Test			
Equation: Untitled			
Test cross-section random effects			
Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	8.488751	4	0.0752

Source: Author's computation (2023)

The Hausman test result is presented in table 4 above. The null hypothesis of the Hausman test states that the random effects model is appropriate and also that there is no systematic difference in the coefficients of the fixed and random effects models. From the test result above, it can be seen that the chi-square test statistic of 8.488751 has a p-value of 0.0752 which is clearly greater than the 5% level so we fail to reject the null hypothesis which states that the random effects model is appropriate. The random effects model is therefore presented in the table below.

Table 5

Random Effects Model

Dependent variable: LERM				
Variable	Coefficients	Standard Error	t Stat	P-value
C	-17.86988	3.884680	-4.600091	0.0000
LTAG	-0.075927	0.246698	-0.307773	0.7591
LSP	0.485229	0.377852	1.284176	0.2029
LROA	0.421575	0.140079	3.009543	0.0035
LFS	14.30958	1.541923	9.280341	0.0000
R-Squared	0.542433	F-Statistics (4, 280)	23.11673	
Adj. R-Squared	0.518968	Prob(F-statistic)	0.0000	
Observations	352			

Source: Author's computation (2023)

It can be seen from table 5 that in terms of direction, magnitude and significance of the independent variables on earnings management, the random effects model and the pooled panel regression model earlier estimated are strikingly similar. Tax aggressiveness maintained the negative relationship with earnings management, while the rest variables maintained the positive relationship with earnings management all as expected. This further strengthened the findings from the Hausman test.

Diagnostic Test

The diagnostic tests of the above panel regression model will feature the normality.

Normality test

The normality test of the residuals is presented in the figure below.

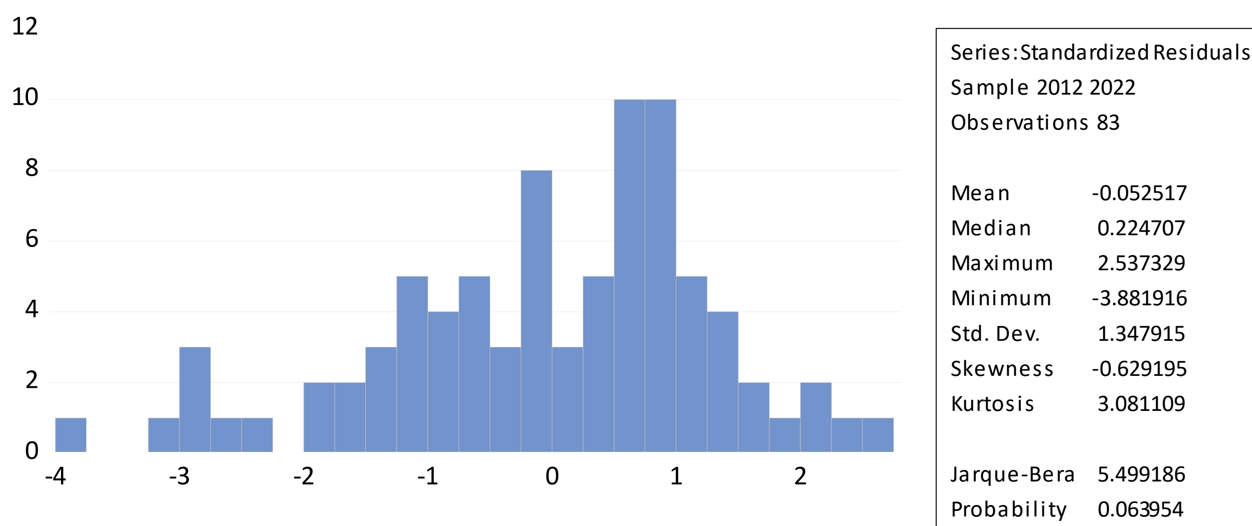

Figure 1: Test for Normality of the Residuals
Source: E-view Output

The Jarque-Bera statistic is used to conduct the normality test. The null hypothesis for this test is that the residuals follow a normal distribution. The observed Jarque-Bera statistic is 5.499186 with a p-value of 0.063954. Since the p-value is greater than the 5% level of significance, we cannot reject the null hypothesis, so this implies that the residuals are normally distributed.

CONCLUSIONS AND RECOMMENDATIONS

This study investigated the impact of some selected determinants of earnings management from thirteen quoted industrial goods firms and twenty-five quoted consumer goods firms in Nigeria; totaling thirty-eight (38) quoted industrial and consumer goods firms. For the purpose of the investigation several independent variables were employed, namely share price, tax aggressiveness and return on assets with firm size as a control variable and employed accrual-based earnings management as the dependent variable. The statistical methods employed in this study include descriptive statistics, correlation analysis, pooled panel Ordinary Least Square test, the Hausman test and Random effect, all of which were conducted at a significance level of 5%.

Based on the findings of the study, the primary determinants that significantly affect the earnings management of publicly traded companies in the industrial and consumer goods sectors during the observed timeframe are the share price and return on assets. Moreover, firm size is perceived as a significant control factor in determining earnings management. Tax aggressiveness on the other hand showed no significant impact on earnings management. The act of minimising tax liability is motivated by the desire to enhance profits via earnings management, which affords management the chance to pursue tax aggressiveness. It can be inferred that investors rely on financial statements, such as return on assets (profitability) that are publicly disclosed in the stock exchange for each economic decision they make. According to Charfeddine et al. (2003),; Afam-mebei and Ebiaghan (2022) a decrease in return on assets is observed in instances of inadequate financial performance. Earnings management has emerged as a means of maintaining a favourable reputation among stakeholders. The present investigation is in concurrence with the tenets of agency theory, as it posits that the probability of earnings management is heightened by the actions of managers, who prioritise the welfare of shareholders.

In light of these findings emanating from the study, the following recommendations are made: Projects that enhance the firms' profitability should be at the center of the investment objective of managers overseeing industrial and consumer goods firms that are publicly traded, this can help to optimise shareholder value in the firm. In addition, projects with favourable net present values should be embarked on by managers of industrial and consumer goods firms listed on the stock exchange since this can enhance their capacity to effectively manage shareholder wealth. Furthermore, cutting edge earnings management strategies should be adopted by managers of industrial and consumer goods firms that are publicly traded. They can as well prioritise the utilisation of tax aggressiveness. This can lead to a significant decrease in the effective tax rate and ultimately result in a reduction of the tax burden for the company.

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