

EARNINGS MANAGEMENT AND SHAREHOLDERS WEALTH CREATION OF QUOTED CONGLOMERATES IN NIGERIA

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Abstract

This study assessed the relationship between earnings management and shareholders wealth creation of quoted conglomerates in Nigeria. Specifically, this study ascertained discretionary accruals and cash value added; discretionary accruals and cash flow return on investment. Panel data were used in this study, which were obtained from the annual reports and accounts of five (5) sampled quoted conglomerates for the periods 2010-2020. Ex-Post Facto research design was employed. Descriptive statistics were employed using the mean, standard deviation, minimum and maximum values of the data for the study variables. Panel Least Square (PLS) regression analysis and Hausman test were applied to test the hypotheses of the study. The results revealed that there is a non-significant and negative relationship between Discretionary Accruals and Cash Value Added and a significant and positive relationship between Discretionary Accruals and Cash Flow Return on Investment of quoted Conglomerates in Nigeria at 5% level of significance respectively. The study recommended amongst others that there is need for firms' management to come up with appropriate measures that would guarantee proper management of inventories, accrued payable expenses and accounts payable in order to promote cash value added of the firms.

Keywords: Earnings management, Cash Value Added, and Cash Flow Return on Investment

Introduction

Earnings management has become a topic of increased importance on observation of accounting scandals in different developed and emergent economy. According to agency theory of (Jensen & Meckling, 1976), departure of agent (management) from principal (owners) creates a clash between interests of management and owners. Managers always endeavor to exploit their own interest even at the cost of owners and other stake holders which insisted for exercise of monitoring measurement over the managerial decision making. This situation gives birth to the earnings management as preparation, presentation and disclosure of financial statements are under close monitoring of management, wherein managers exercise their discretionary powers while reporting the earnings which would benefit their own interest.

Amahalu, Egolum, Nweze and Obi (2018) point out that increasing shareholder value over time is the bottom line of every move a company makes. Shareholder wealth maximization principle is the driving force behind corporate finance. Firm's basic financial resources are the streams of cash flows produced by its assets and operations and when the firm uses purely equity capital, the cash flows generated by the assets and operations of the firm belong entirely to the equity-holders. On the other hand when there is a mix of debt and equity, the cash flows generated by the firms' assets and operations are split into two, a relatively safe stream that goes to the debt holders and a more risky one that goes to the equity holders. In this way, no matter the financing option chosen by the firm, the risky cash flow stream that goes to the equity holders must be maximized. It is therefore, against this backdrop that this study sought to determine the relationship between earnings management and shareholders wealth creation of quoted conglomerates in Nigeria.

In an attempt to filling the gap in literature, this present study closed the variable gap by measuring shareholders' wealth creation with cash value added and cash flow return on investments which are contemporary performance measurements, quite unlike prior studies that majorly measured shareholders' wealth creation using return on equity, return on assets, earnings per share and so on. Again, the sectorial gap was bridged by considering the conglomerates, contrary to previous studies that the predominant focus was on manufacturing sector and banking industry (to the best of my knowledge). Furthermore, the financial period of prior studies ended in 2019 as against this study that was extended to 2020 financial year, thereby resolving the currency/periodic gap.

The main objective of this study is to ascertain the relationship between earnings management and shareholders wealth creation of quoted conglomerates in Nigeria. The specific objectives are to:

- i. Ascertain the degree of relationship between discretionary accrual and cash value added of quoted conglomerates in Nigeria
- ii. Assess the magnitude of relationship between discretionary accruals and cash flow return on investment of quoted conglomerates in Nigeria.

Theoretical Review

Earnings management

Earnings management is the use of managers' discretion over operating decisions and accounting choices to present favorable financial performance of a company by reducing, stabilizing or increasing reported earnings (Michal & Reznakova, 2020). Earnings management is the deliberate altering of financial information to either mislead investors on the underlying economic status of a firm or to gain some contractual benefits that depend

largely on accounting numbers (Sook & Hong, 2017). 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 economic numbers (Yang, Riepe, Moser, Pull & Terjesen, 2019). Management can manage earnings through individual judgment. For example, they can apply their judgment to estimate depreciation. Secondly, they can mislead the different stakeholders regarding the true economic outcomes of the firms. It may occur when the management access information and alter it from unethical motives that are not accessible by outsiders. Companies achieve their institutional imprint through financial statements (Rak, 2016).

Amahalu, Abiahu, Obi & Nweze (2018) defined earnings management as a gray area where the accounting is being perverted; where managers are cutting corners; and, where earnings reports reflect the desires of management rather than the underlying financial performance of the company. Rahman, Moniruzzaman and Sharif (2013) defined earnings management as reasonable and legal management decision making and reporting intended to achieve stable and predictable financial results. As such earnings management, creative accounting, financial engineering or aggressive accounting as they are being called are considered to be a deliberate attempts make by the management to arrive at a desired level of earnings, through whatever means, is an unethical practice (Akhor & Oseghale, 2017).

Cash Value Added (CVA)

Cash value added (CVA) is a measure of a company's ability to generate cash flow above and beyond the required return to its investors (Omar & Issor, 2019). Cash value added is the measure of company performance that looks at how much money a company generates through its operations (Mahmood & Narbaev, 2019). A high cash value added figure is beneficial for both companies and investors, as it demonstrates a company's ability to generate cash from one financial period to another (Nelli & Ningsih, 2020). The cash value added metric is one way to measure the real profitability of a business, beyond what is required to pay the bills and satisfy the investors (Songtao, Liu & Liao, 2021).

$$\text{CVA} = \text{gross cash flow} - \text{economic depreciation} - \text{capital charge}$$

Where:

- Economic depreciation is $[\text{WACC} / (1 + \text{WACC})^n - 1]$
- Gross cash flow is adjusted profit + interest expense + depreciation
- The capital charge is the cost of capital x gross investment
- Gross investment is net current assets + historical initial cost

A value of more than 1.0 indicates that a company is profitable, while a value below 1.0 suggests it is failing to return a profit (Jankalová & Kurotová, 2020).

Cash Flow Return on Investment (CFROI)

CFROI is the indicator that helps a firm to evaluate the performance of an investment or product. It can also be termed as the calculation that helps the stock market to set prices on the basis of cash flow (Lal, 2017). Cash flow return on investment can be compared with the hurdle rate which is referred to the sum of capital that is calculated by adding up the cost of debt financing and return on the equity of the investment. It may also be referred to as the ratio that is used to measure performance which might influence the decisions of the managers regarding financial responsibilities other than depreciation and investment structures. It is the percentage rate of return of cash flow over the market value of the capital that has been employed. The calculation of Cash flow returns on investment guides a

manager to target more sales by keeping the cost low and all this is achieved by making small investments (François, Rathnayake, Louembe & Ding, 2019).

Cash flow return on investment helps a business to determine the returns on the investment that has been made and that return must be greater than the cost of the capital. Only then the return on the investment will be positive. If the return is less than the cost of the capital then it is obvious that the Cash flow return on investment will be unfavorable (Jakub, Suler, Kollmann & Marecek, 2020).

CFROI = Cash Flow / Market Value of capital employed.

Where:

Cash Flow = Net income + Depreciation/Amortization – Change in Working Capital – Capital Expenditure

Market value of capital employed = Capital Employed = Total Assets – Current Liabilities

Earnings Management and Cash Value Added (CVA)

Cash value added is very important issue in today's marketplace with regards to shareholders wealth. Businesses seek to enhance their performance and create value for through increasing wealth for their shareholders and increasing satisfaction to their customers and other stakeholders. Earnings management is defined as the process by which the management can potentially manipulate the financial statements to represent a favorable one in the interests of themselves, investors and stakeholders. The demand for earnings management derives from current shareholders' desire to influence prospective investors' perceptions of the firm's value (Mercedes, Gras-Gil & Santos-Jaen, 2019). Firms seek to create value must provide a higher return in excess of the cost of capital over a period of time. Firm must achieve a positive economic profit after deducting expenses and a capital charge from the revenue generated, the result should be greater than zero. Value creation occurs when the company generates more wealth for their shareholders that they could not have been able to generate for themselves (Van Horne, 2002). Consequently, the creation of value by a conglomerate translates to increase or enhancement of the worth of its stakeholders. Earnings management is to be performed by the management through applying different accounting methods or changing specific accounting estimations. For the purpose of deceiving the shareholders or to influence the decision of third party that will be involved in an contractual agreement with the company like a bank in case of a loan or even just for improving or enhancing the benefits to be received by the managers (Lee & Hong, 2017). Wenfang and Ayisi (2020); Hwa, Lee and Shawn (2015) found a positive relationship between earnings management and financial performance. Oppositely, Karas and Reznakova (2020); Franz, Hassan and Lobo (2014) demonstrated the existence of a negative relationship between earnings management and financial performance.

Earning Management and Cash Flow Return on Investment (CFROI)

Dimitropoulos (2020) claimed that simultaneous use of cash flows and earnings were more useful to market participants to interpret earnings and stock valuation. Dimitropoulos (2020) suggests that analysts are more likely to estimate cash flows when cash flows are useful in interpreting net income and assessing firm performance. Campa (2019) studied the relationship between the operating performances of Korean industrial firms and earnings management. Campa (2019) found that Korean industrial firms manage earnings. Their results showed that when operating performance was low, the firm managers had an incentive to select earnings-increasing forms. According to Costin (2018), it is difficult for investors to assess a firm's future performance via current financial reporting of cash flows from

operations, because it does not present individual sources of these cash flows. Costin (2018) research results shows that the unusual individual cash flow items contain a significant incremental predictive ability for future cash flows. Brad and Munteanu (2012) reports that current reporting of cash flows from operations could mislead investor about firms' cash generating abilities and proposed that investors could benefit from a more explicit presentation of cash flows from operations. Bostan, Carmen and Anca (2018) concluded that there was a positive relationship between cash flows management and earnings management. Lee (2012) showed that operating cash flows was distinct from earnings management and some firms could not manage operating cash flows because of accruals manipulation.

Empirical Review

Adut, Holder and Robin (2013) examined the association between earnings management and corporate governance with observations from 1993 to 2010. The multiple regression tests showed that CEO compensation levels (measured by salary, bonus, and other forms of compensation) are positively related to predictive earnings management and negatively related to opportunistic earnings management. The result also suggested that predictive earnings management is positively associated with future returns, whereas opportunistic earnings management is negatively associated with future returns. Kazemian and Sanusi (2015) examined the relationship between ownership structure and earnings management in Jordan. Earnings management was measured by discretionary accruals, while, ownership was measured by; insiders, institutions and block-holders. The study used the Generalized Method of Moment (GMM). The ordinary least square regression result showed that there is a positive and significant relationship between insiders' ownership and earnings management. This finding indicated that Jordanian insiders tend to make discretionary accounting choices. Purwanti, Triyuwono, Irianto and Riduwan (2015) examined the relationship between earning management practices and perspective of the users of financial statements in Indonesia. By utilizing a qualitative approach, the study collected data based on the experience and perception of informants. The study exhibited that, earnings management is a creativity of management in manipulating and engineering accounting numbers with an intention to present a beautiful and attractive profit to external users. It is a sort of fraud that functions as cosmetics and tricks to deceive others for the benefits of manager or management. Hedwigis, Markonah and Muljanto (2015) investigated the influence of corporate governance implementation on earnings management practical in Indonesia. Analysis data were processed using Partial Least Square (PLS). Primary data was also used, collected by 70 respondents. The respondents were all experts, manager, decision maker and the owner. The result showed that implementation of corporate governance reduced the bad impact of earnings management. Kurawa and Abdulrahman (2016) examined the relationship between corporate governance and earnings management of the six petroleum and petroleum products distributors out of the nine petroleum products distributors that are listed on the floor of the Nigeria Stock Exchange. Descriptive statistics, correlation as well as panel data analysis (Random-effect GLS regression techniques) were utilized as analytical tools in the study. The results indicated that going concern is significantly and positively driven by board composition and management equity holding while board composition, CEO duality, and ownership concentration show an insignificant (2%) negative relationship. Bortoluzzo, Sheng and Gomes (2016) studied the relationship between earnings management and financial performance using sample of 123 banks in the Brazilian market between 2001 and 2012. It was ascertained that credit provisioning was used as an earnings management mechanism to smooth the net income of Brazilian financial institutions. Brazilian banks tend to avoid not only negative net income pre-loan loss provisions and taxes, but also negative net income pre-loan loss provisions and taxes in relation to the previous period.

Abata and Migiro (2016) investigated the effects of corporate governance variables on earnings management among selected listed firms from the manufacturing and banking sectors in Nigeria. A sample of 24 listed companies from the 2 sectors' population of 63 was examined to gather empirical data from 2008 to 2013 using multiple regression tools. Employing the panel data analysis approach, board independence, audit committee independence and audit committee size were insignificantly positively correlated with earnings management. Board size is insignificantly negatively correlated with earnings management while ownership structure is insignificantly negatively correlated with earnings management. Audit quality is positively correlated with earnings management, though not statistically significant. Hosseini, Chalestori, Rezahi and Ebrahimi (2016), investigated the possible relationship between earnings management incentives and earnings response coefficient in Iran. A sample of 100 companies was selected out of companies listed in Tehran Stock Exchange and data required in the timeframe of 2007 to 2013 was extracted based on the sample companies. The correlation coefficient was used to analyze the data statistically at 95% level and hypothesis testing was performed with multivariate linear regression model. The findings, according to the results of the first and third hypotheses suggested no relationship between earnings management incentives and earnings response coefficients, and also the results of the second hypothesis test suggested a negative relationship between earnings management incentives and earnings response coefficient in most of the test sub- hypotheses. Pereira and Alves (2017) analyzed the evidence of earnings management, measured through discretionary accruals, after the adoption of IAS/IFRS by non-financial listed companies on Euronext Lisbon in the period 2005–2015. The Dechow et al. (2003) econometric model was used, and empirical results indicated that non-financial listed companies in Portuguese stock exchange in the period 2005–2015 showed evidence of discretionary accruals as a proxy for earnings management. Obigbemi, Omolehinwa and Mukoro (2017) examined the role of ownership structure on earnings management practices of Nigerian companies. Earnings management was measured using the magnitude of the discretionary accruals. The study tested the effect of ownership structure on earnings management. The OLS regression technique was used to measure the research model as well as the Pearson Moment Correlation Coefficient. The study showed that ownership structure has a significant relationship with earnings management practices in Nigeria. It further revealed that there is a positive significant relationship between management ownership and family ownership with earnings management. Also, there is a negative significant relationship between block ownership with earnings management practices in Nigeria. Wasiu and Kehinde (2017) investigated effect of earnings management on shareholders wealth maximization with secondary data gotten from annual reports of the eight selected firms covering five years from 2011-2015 in Nigeria. The study employed econometric analysis through panel regression to estimate the model built for the study, Modified Cross Sectional Jones Model (1995) was used for calculation of discretionary accruals. Earnings per share and Dividend per share were used as proxies for dependent variables; discretionary accrual was used to proxy independent variable (Earnings management). The empirical results deposited that earnings management (discretionary accruals) has no significant effect on earnings per share and dividend per share. Moslemamy and Nathan (2019) investigated the relationships between ownership structure and Earnings Management (EM) of Egyptian companies. A sample of 50 companies listed on the Egyptian stock market for twelve years (2004: 2015) was used in the study employing the ownership and financial data of the companies listed on the Egyptian stock market for the stated period. The samples were identified according to the firm rank in the market, the top 50 firms were chosen for the current study. The data came from the annual reports of these companies ranging from 2004 to 2015. The statistical results indicated that there is a positive relationship between the Block

holder ownership and the degree of earning management. However, no relationship was found between the Managerial Ownership and the Public Ownership on level of Earning Management. Apollos, Jerry and Olajumoke (2019) examined the effect of earnings management on the survival of manufacturing entities in Nigeria. The population of the study was the 66 manufacturing companies listed on the Nigerian Stock Exchange as at 31 December 2016. The study was for a period of 12 years (2005 to 2016) and secondary data drawn from published financial statements of sample companies were used. Data were analyzed using descriptive and inferential (OLS regression) statistics. Appropriate diagnostic tests were conducted on the data set. For the main hypothesis (HO1), Earnings management (EM) proxied by discretionary accruals jointly with corporate governance (CG) proxies exerted significant effect on corporate survival. Kjærland, Haugdal, Søndergaard and Vågslid (2020) examined the relation between Nordic corporate governance practices and earnings management from 2010-2018. Using correlation and multiple regression analysis, the study found that the presence of employee representation on the board and the presence of an audit committee are both practices that reduce the occurrence of earnings management. Moreover, they found that both board independence and share ownership by directors positively affect earnings management, while board activity and directors as majority shareholders show an insignificant relation to earnings management. Carp, Pavaloaia, Toma, Georgescu and Afrasinei (2020) analyzed the influence of sustainable growth (SGR) and earnings management (magnitude of discretionary accruals—DAC) on investment performance in Poland from 2012-2018. Using regression models, the results reflected a significant influence of sustainable growth (SGR) and earnings management on investment performance. The relations were also tested by introducing certain control variables into the analysis, such as: the intangible ratio, quick ratio, company size. The obtained results showed an insignificant relation between earnings management and investment performance. Moardi, Salehi Poursasan and Molavi (2020) investigated the relationship between earnings management and chief executive officers' (CEOs) compensation in Iran. The statistical population of the research consisted of all listed companies on the Tehran Stock Exchange during 2009–2016. Panel data method was applied in order to estimate the research model. Thus, accruals quality was described against future cash flow. The empirical evidences suggested that a positive relationship between discretionary accruals and future cash flow provides predictive elements for earnings management, whereas a negative relationship between discretionary accruals and future cash flow. Findings of the study showed that there is no significant relationship between discretionary accruals and future cash flow in pharmaceutical and food industries. Osioma, Okoye, Ezejiofor and Okoye (2020) determined the effect of operating cash flow on earnings management of Nigerian Banks. The study adopted *Ex post Facto* research design. Sample of fifteen (15) Nigerian banks from 2010 to 2019 was used. Data for the study was collected from annual reports and accounts of the banks. Regression analysis was used to test the hypothesis with the aid of E-view 9.0. Based on this, the study revealed that operating activities are not statistically significant and have a negative effect on total accruals earnings of Nigerian banks. The study concludes that the importance of risk management activities is aimed at reducing future cash flow. Abdullahi, Norfadzilah, Umar and Lateef (2020) explored the effect of Earnings Management on profitability of listed companies in Nigeria. The objective was to investigate the level of financial determinants of Earnings Management on the profitability of companies. The study employed a panel data approach on 84 listed companies on the NSE with 756 firm-year observations for the period 2010-2018 financial years. The study employed secondary method. The data were analyzed using multiple regression to examine the model. The study revealed that earnings ability showed a significant and positively related to the profitability, which was measured using ROA. The result from the study indicated that the more the earnings ability of a company, the

profitability of the listed companies in Nigeria will increase. Financial structure ability showed a significant negative association with the ROA. Okeke, Ezejiolor and Okoye (2021) examined the effect of leverage on cash ratio of Nigerian conglomerates firm. The study adopted Ex-Post facto research design, and data were extracted from the annual reports and accounts of the sampled firms and analyzed using Pearson correlation and Ordinary Least Square (OLS) regression analysis with aid of E-Views 9.0 statistical software. The study found that leverage has a significant negative effect on cash ratio of conglomerates firm Nigeria at 5% level of significance. Wil, Prem and Maryam (2021) ascertained the effect of corporate governance on earnings management practices across 22 frontier market countries in Europe from 2000–2017. The multiple regression result showed that financial disclosure and legal environments reduced levels of earnings management (EM). The impact of wealth, GDP growth, firm size, and the use of Big-4 auditors were also associated with reduced earnings management. Ndum and Ezejiolor (2021) examined the relationship average payment period on operating cash flow consumer goods manufacturing firms in Nigeria. *Ex-post facto* research design was adopted. The sample size of the study was twenty quoted consumer goods firms purposively drawn from all the manufacturing firms. Data were obtained from annual financial reports and accounts and panel data regression was employed for testing the data. The study results showed that average payment period had a negative significant effect on investing cash flow. Gratiela, Eleftherios, Mirela and Irina,(2021) evidenced the role played by board characteristics (skills, diversity, structure, independence) in supporting risk management disclosure and shaping the financial performance of European companies operating in the financial services sector. The study exploited data selected from Thomson Reuters Eikon database in 2020 for the last fiscal year 2019 on a longitudinal sample of 144 companies with the head offices in Europe (25 countries). Following econometric techniques, namely structural equation modelling (SEM) and network analysis through Gaussian graphical models (GGMs), the research endeavor outlined the decisive importance of an optimal board size, enhanced management skills, upward gender diversity (encompassed by women participation on board management), and structure (mainly a two-tier type, one management board, and a distinctive supervisory board) as fundamentals of risk management strategies, leading to improved financial achievements and a higher profitability for the analyzed companies.

In an attempt to filling the gap in literature, this present study closed the variable gap by measuring shareholders' wealth creation with cash value added and cash flow return on investments which are contemporary performance measurements, quite unlike prior studies that majorly measured shareholders' wealth creation using return on equity, return on assets, earnings per share and so on. Again, the sectorial gap was bridged by considering the conglomerates, contrary to previous studies that the predominant focus was on manufacturing sector and banking industry (to the best of my knowledge). Furthermore, the financial period of prior studies ended in 2019 as against this study that was extended to 2020 financial year, thereby resolving the currency/periodic gap.

Methodology

Research Design

This study utilized *Ex-post Facto* research design in conducting the research. *Ex-Post Facto* seeks to find out the factors that are associated with certain occurrences, conditions, events or behavior by analyzing past events or already existing data for possible casual factors (Brooks, 2019).

Population of the Study

The population of this study consists of the six (6) conglomerates listed on the floor of the Nigerian Stock Exchange (NSE) as at 31st December 2020. The conglomerates include: A.G. Leventis Nigeria Plc; Chellarams Plc; John Holt Plc; SCOA Nigeria Plc; Transnational Corporation of Nigeria Plc; UACN Plc.

Sample Size and Sampling Technique

The sample size of this study consist of five (5) conglomerates that were continuously listed and actively trading in the Nigerian Stock Exchange (NSE) during the period 1st January 2010 to 31 December 2020 and whose financial statements are available and have been consistently submitted to NSE for the period under study. Purposive sampling technique was adopted to select five (5) conglomerates with up to date and complete annual reports and accounts for the studied period (2010-2020). The sampled conglomerates include: A.G. Leventis Nigeria Plc; John Holt Plc; SCOA Nigeria Plc; Transnational Corporation of Nigeria Plc; UACN Plc.

Source of Data

Primarily, this study made use of secondary data. The data were sourced from publications of the Nigerian stock exchange (NSE), fact books and the annual report and accounts of the sampled quoted conglomerates.

Measurement of Research Variables

Table 1 Variables Definition and Measurement Units

Variable Type	Indicators	Variable Symbols	Definition and Measurement
Independent Variable (Earnings Management)			
	Discretionary Accruals	DAC	Measured by absolute values of the residuals (discretionary accruals) using Modified Jones model by Dechow, Sloan and Sweeney, (1995)
Dependent Variable (Shareholders' Wealth Creation)			
	Cash Value Added	CVA	Gross cash flow - depreciation - capital charge
	Cash Flow Return on Investment	CFROI	$\frac{\text{Cash Flow}}{\text{Market Value of capital employed}}$

Method of Data Analysis

This study applied the quantitative approaches and ratio analysis to ascertain the relationship between earnings management and shareholders wealth creation of quoted conglomerates in Nigeria during the period 2010-2020 and it includes the ratio analysis of the study variables using the panel data obtained from Nigeria Stock Exchange (NSE) on the sampled firms. This study adopted the cross-sectional modified Jones model to estimate earnings management. In employing the modified Jones model, total accruals (*TAC*) are decomposed into non-discretionary accruals (*NDAC*) and discretionary accruals (*DAC*), as shown in equation (1). *NDAC* are estimates that represent changes in the underlying economic performance of the company, while *DAC* are open to managers' discretion and hence are operationalized as a proxy for earnings management.

$$TAC_{i,j,t} = NDAC_{i,j,t} + DAC_{i,j,t} \quad (1)$$

where $TAC_{i,j,t}$ is the total accruals for company i in industry j in year t ; $NDAC_{i,j,t}$ and $DAC_{i,j,t}$ are the non-discretionary accruals and the discretionary accruals respectively for company i in industry j in year t . $TAC_{i,j,t}$ is computed using the cash flow approach, instead of the balance sheet approach. The cash flow approach provides more accurate accruals' estimates, because measurement errors in accruals estimates introduced by the balance sheet approach can be substantial when non-operating activities like mergers and acquisitions, divestitures and foreign currency translations are present (Hribar & Collins, 2002). The cash flow approach involves deducting the operating cash flows ($OCF_{i,j,t}$) from the net income ($NI_{i,j,t}$).

$$TAC_{i,j,t} = NI_{i,j,t} - OCF_{i,j,t} \quad (2)$$

Then, DAC_{it} is computed as the difference between TAC_{it} and $NDAC_{it}$, using the modified Jones model equation (3):

$$DAC_{it} = \frac{TAC_{it}}{TA_{i,t-1}} - \left\{ \alpha_t \left(\frac{1}{TA_{i,t-1}} \right) + \beta_{1t} \left(\frac{\Delta REV_{it} - \Delta REC_{it}}{TA_{i,t-1}} \right) + \beta_{2t} \left(\frac{PPE_{it}}{TA_{i,t-1}} \right) \right\} \quad (3)$$

where:

$TA_{i,t-1}$ is the total assets for company i at the end of the prior year;

ΔREV_{it} is the change in revenue for company i between year t (current year) and $t-1$ (prior year);

ΔREC_{it} is the change in receivables for company i between year t (current year) and $t-1$ (prior year);

PPE_{it} is the gross property, plant and equipment for company i in year t ;

α_t is constant

β_{1t} and β_{2t} are the company-specific estimates of coefficients

Descriptive Statistics was employed to summarily describe the mean, median, kurtosis, skewness, maximum and minimum values of the variables. Inferential statistics was also utilized in this study with the aid of E-Views 10.0, using:

Panel Least Square (PLS) regression analysis: was used to predicts the value of the dependent variable based on the value of the independent variable

Hausmann Test: helps to choose between fixed effects model or a random effects model. The null hypothesis is that the preferred model is random effects; the alternate hypothesis is that the model is fixed effects.

Model Specification

This study adapted and modified the Okafor, Ezeagba & Onyali (2018):

$$ROE = \beta_0 + \beta_1 DAC_{it} + \mu_{it}$$

$$ROCE = \beta_0 + \beta_1 DAC_{it} + \mu_{it}$$

Where:

DAC = Discretionary Accruals

ROE = Return on Equity

ROCE = Return on Capital Employed

Thus, the specific constructs for this study's model are:

$$CVA_{it} = \beta_0 + \beta_1 DAC_{it} + \mu_{it} \quad \text{Model 1}$$

$$CFROI_{it} = \beta_0 + \beta_1 DAC_{it} + \mu_{it} \quad \text{Model 2}$$

Where:

β_0 = Constant term (intercept)

β_{it} = Coefficients of Earnings Management for conglomerate i in period t
 μ_{it} = Error term/unexplained variable(s) of conglomerate i in period t
 DAC_{it} = Discretionary Accruals of conglomerate i in period t
 CVA_{it} = Cash Value Added of conglomerate i in period t
 $CFROI_{it}$ = Cash Flow Return on Investment of conglomerate i in period t

Decision Rule

Accept the null hypothesis (H_0) if the p-value of the test is greater than 0.05, otherwise reject.

Data Presentation and Analysis

Data Analysis

Table 2: Descriptive Statistics

	CVA	CFROI	DAC
Mean	0.588182	0.626364	0.145455
Median	0.640000	0.710000	0.140000
Maximum	0.890000	0.870000	0.290000
Minimum	0.330000	0.000000	0.040000
Std. Dev.	0.179934	0.269120	0.084305
Skewness	-0.072157	-1.360190	0.272926
Kurtosis	2.061236	3.749173	1.763159
Jarque-Bera	0.413464	3.649126	0.837710
Probability	0.813237	0.161288	0.657800
Sum	6.470000	6.890000	1.600000
Sum Sq. Dev.	0.323764	0.724255	0.071073
Observations	55	55	55

Source: Researcher's computation (2021) using E-Views 10.0

Interpretation

This study considered descriptive statistics (mean, standard deviation, minimum and maximum) for the panels for 55 observations (that is, 5 conglomerates x 11 years). Table 2 depicts EPS to have an average mean of 58.73% with a minimum of 18%, a maximum of 90% and at a standard deviation of 0.257181. CVA has an average mean of 58.81% with a standard deviation of 0.179934, a minimum of 33% and a maximum of 89%. On the average, CFROI stood at 62.63%, the minimum CFROI stood at 0% while the maximum CFROI stood at 87% of the conglomerates under study. Similarly, on DAC, the results showed that on the average the mean value is approximately 14.55%, with a standard deviation of 0.084305, a minimum value of 4% while the maximum value for DAC stood at 29%.

Test of Hypothesis I

H₀: There is no significant relationship between discretionary accruals and cash value added of quoted conglomerates in Nigeria.

H₁: There is significant relationship between discretionary accruals and cash value added of quoted conglomerates in Nigeria.

Table 3: Panel Least Square (PLS) regression analysis showing the relationship between DAC and CVA

Dependent Variable: CVA

Method: Panel Least Squares

Date: 09/12/21 Time: 12:48

Sample: 2010 2020

Periods included: 11

Cross-sections included: 5

Total panel (balanced) observations: 55

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.758591	0.216512	3.503699	0.0009
DAC	-0.447168	0.957352	-0.467088	0.6424
R-squared	0.244100	Mean dependent var		0.673934
Adjusted R-squared	0.204691	S.D. dependent var		0.871969
S.E. of regression	0.878351	Akaike info criterion		2.614145
Sum squared resid	40.88951	Schwarz criterion		2.687139
Log likelihood	-69.88898	Hannan-Quinn criter.		2.642372
F-statistic	0.218171	Durbin-Watson stat		2.169076
Prob(F-statistic)	0.642352			

Source: Researcher's computation (2021) using E-Views 10.0

Interpretation of Regression Result

Table 3 shows the regression result of discretionary accruals and cash value added. It shows that, given a unit increase in DAC, CVA will decrease by 44.72% approximately. Table 3 shows that, the t-value for DAC is -0.467088 with a probability value of 0.6424, suggesting that discretionary accrual exerts non-significant and negative influence on CVA at 5% significant level.

$$CVA = 0.758591 - 0.447168DAC$$

The implication of this model is that holding other factors constant, one naira increase in DAC will cause CVA to reduce by 44.72%

The R-squared of 0.244100 suggests that variation in CVA is explained by DAC fluctuation by 24.41% while the remaining 75.59% is explained by other factors outside the model.

Decision

The value of t-calculated of -0.467088 with the associated probability of 0.6424 is greater than the significance level of 0.05; the null hypothesis (Ho) is therefore accepted at 5% level of significance implying that there is a non-significant and negative relationship between discretionary accruals and cash value added of quoted conglomerates in Nigeria.

Table 4: Fixed Effect Model regression analysis showing the correlation between DAC and CVA

Dependent Variable: CVA

Method: Panel Least Squares

Date: 09/12/21 Time: 12:49

Sample: 2010 2020

Periods included: 11

Cross-sections included: 5

Total panel (balanced) observations: 55

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.798882	0.235915	3.386311	0.0014
DAC	-0.659986	1.081202	-0.610419	0.5444

Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.397016	Mean dependent var	0.673934
Adjusted R-squared	0.304875	S.D. dependent var	0.871969
S.E. of regression	0.869841	Akaike info criterion	2.661657
Sum squared resid	37.07456	Schwarz criterion	2.880638
Log likelihood	-67.19556	Hannan-Quinn criter.	2.746339
F-statistic	1.052907	Durbin-Watson stat	2.378608
Prob(F-statistic)	0.397793		

Source: Researcher's computation (2021) using E-Views 10.0

Table 5: Hausman Specification 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	0.113249	1	0.7365

Source: Researcher's computation (2021) using E-Views 10.0

The Hausman test result in table 4 demonstrates that the preferred model is the Random Effect Model implying that there is no significant correlation between Discretionary Accruals and Cash Value Added of quoted Conglomerates in Nigeria, as indicated by the p-value of $0.7365 >$ which is greater than 0,05, hence, H_0 is accepted.

Test of Hypothesis II

H_{02} : There is no significant relationship between discretionary accruals and cash flow return on investment of quoted conglomerates in Nigeria.

H_2 : There is significant relationship between discretionary accruals and cash flow return on investment of quoted conglomerates in Nigeria.

Table 5: Panel Least Square (PLS) regression analysis showing the relationship between DAC and CFROI

Dependent Variable: CFROI
 Method: Panel Least Squares
 Date: 09/12/21 Time: 12:53
 Sample: 2010 2020
 Periods included: 11
 Cross-sections included: 5
 Total panel (balanced) observations: 55

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.423152	0.062137	6.809968	0.0000
DAC	0.565586	0.274753	2.058526	0.0445
R-squared	0.274034	Mean dependent var		0.530229
Adjusted R-squared	0.256563	S.D. dependent var		0.259527
S.E. of regression	0.252080	Akaike info criterion		0.117546
Sum squared resid	3.367853	Schwarz criterion		0.190540
Log likelihood	-1.232528	Hannan-Quinn criter.		0.145774
F-statistic	4.237531	Durbin-Watson stat		1.515109
Prob(F-statistic)	0.044470			

Source: Researcher's computation (2021) using E-Views 10.0

Interpretation of Regression Result

Table 5 shows the regression result of discretionary accruals and cash flow return on investment. It shows that, given a unit increase in DAC, CFROI will increase by 56.56% approximately. Table 5 shows that, the t-value for 2.058526 is -0.467088 with a probability value of 0.0445, suggesting that discretionary accrual exerts a significant and positive influence on CFROI at 5% significant level.

$$CFROI = 0.423152 + 0.565586DAC$$

The implication of this model is that holding other factors constant, one unit increase in DAC will exert 56.56% increase on CFROI. The R-squared of 0.274034 suggests that variation in CFROI is explained by DAC fluctuation by 27.40% while the remaining 72.60% is explained by other factors outside the model.

Decision

The value of t-calculated of 2.058526 with the associated probability of 0.0445 is less than the significance level of 0.05; the alternate hypothesis (H_1) is therefore accepted at 5% level of significance implying that there is a significant and positive relationship between discretionary accruals and cash flow return on investment of quoted conglomerates in Nigeria.

Table 6: Fixed Effect Model regression analysis showing the correlation between DAC and CFROI

Dependent Variable: CFROI
 Method: Panel Least Squares
 Date: 09/12/21 Time: 12:54
 Sample: 2010 2020
 Periods included: 11
 Cross-sections included: 5
 Total panel (balanced) observations: 55

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.358499	0.062634	5.723678	0.0000
DAC	0.907092	0.287054	3.160006	0.0027

Effects Specification

Cross-section fixed (dummy variables)			
R-squared	0.481493	Mean dependent var	0.530229
Adjusted R-squared	0.408176	S.D. dependent var	0.259527
S.E. of regression	0.230939	Akaike info criterion	0.009339
Sum squared resid	2.613298	Schwarz criterion	0.228320
Log likelihood	5.743190	Hannan-Quinn criter.	0.094021
F-statistic	3.839401	Durbin-Watson stat	1.404443
Prob(F-statistic)	0.005159		

Source: Researcher's computation (2021) using E-Views 10.0

Table 7: Hausman Specification 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	8.677421	1	0.0418

Source: Researcher's computation (2021) using E-Views 10.0

The Hausman test result in table 7 demonstrates that the preferred model is the Fixed Effect Model implying that there is significant correlation between Discretionary Accruals and Cash Flow Return on Investment of quoted Conglomerates in Nigeria, as indicated by the p-value of $0.7365 >$ which is greater than 0,05, hence, H_1 is accepted.

Discussion on Findings

The regression result for hypothesis I that the t-value for DAC is -0.467088 with a probability value of 0.6424, suggesting that discretionary accrual exerts non-significant and negative influence on CVA at 5% significant level. The implication of this model is that holding other factors constant, one naira increase in DAC will cause CVA to reduce by 44.72%. The R-squared of 0.244100 suggests that variation in CVA is explained by DAC fluctuation by 24.41% while the remaining 75.59% is explained by other factors outside the model. The value of t-calculated of -0.467088 with the associated probability of 0.6424 is greater than the significance level of 0.05; the null hypothesis (H_0) is therefore accepted at 5% level of significance. The findings of this study is consistent with the results of Mihaela, Valentina,

and Silvia (2021); Mahdi and Grzegorz (2021); Hussain, Akbar, Khan, Akbar, Panait and Voica (2020), but contradict the results of Hyunmin and Sambock (2021); Kjærland, Haugdal, Søndergaard and Vågslid (2020)

The R-squared of 0.274034 for hypothesis II suggests that variation in CFROI is explained by DAC fluctuation by 27.40% while the remaining 72.60% is explained by other factors outside the model. The result also shows that given a unit increase in DAC, CFROI will increase by 56.56% approximately. The result shows that, the t-value for 2.058526 is -0.467088 with a probability value of 0.0445, suggesting that discretionary accrual exerts a significant and positive influence on CFROI at 5% significant level. The implication of this model is that holding other factors constant, one unit increase in DAC will exert 56.56% increase on CFROI. The findings of this study is consistent with the findings of Park, Kim, and Lee (2021); Okeke, Anike and Onuora(2021); Hernawati,Ghozali, Yuyetta and Prastiwi (2021) Olaoye and Akinleye (2020), but negate the findings of Onuoha, Okpanachi, Jim-suleiman, and Agbi (2021); Hussain, Akbar, Khan, Akbar, Panait and Voica (2020); Carp, Pavaloaia, Toma, Georgescu and Afrasinei (2020); Wil, Prem, and Maryam (2021).

Conclusion

This study assessed the relationship between earnings management and shareholders wealth creation of quoted conglomerates in Nigeria. This study obtained data from annual reports and account and publications from Nigeria stock exchange for the conglomerates that that operated during 2010-2020. In addition, the correlation of specific earnings audit committee variables such as discretionary accrual and dependent variable measures such as earnings per share, cash value added and cash flow return on investment were assessed. To determine the relationship that exists amongst the variables and the effect thereof, Pearson correlation coefficient, panel least square regression estimate and Hausman test were employed. This study revealed that there is a non-significant and negative relationship between Discretionary Accruals and Earnings per Share; a non-significant and negative relationship between Discretionary Accruals and Cash Value Added and a significant and positive relationship between Discretionary Accruals and Cash Flow Return on Investment of quoted Conglomerates in Nigeria at 5% level of significance respectively.

Recommendations

Based on the study findings, it is recommended that

- i. There is need for firms' management to come up with appropriate measures that would guarantee proper management of inventories, accrued payable expenses and accounts payable in order to promote cash value added of the firms.
- ii. Accounting oversight body such as Nigeria Stock Exchange, International Financial reporting Standards to develop appropriate measures that would enable them address the loopholes that arise out of the flexibilities of earnings management for the benefit of enhanced financial performance of the firms.

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