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EFFECT OF FIRM CHARACTERISTICS ON DISCRETIONARY ACCRUAL IN NIGERIAN LISTED OIL AND GAS FIRMS

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Abstract
The study examined the effect of firm characteristics on discretionary accrual in Nigerian listed oil and gas firms. The research adopted a longitudinal research approach. The study populations are the 12 oil and gas companies that were listed as of the last quarter of 2021 on the Nigerian Exchange Group (NGX). The study heavily depended on secondary data from the 2002–2021 annual reports of oil and gas companies listed on the Nigerian Exchange Group. A simple random sampling technique was used to select nine firms out of the twelve firms for the study. The study employed Pooled Ordinary Least Square (OLS) regression analysis as the method of data analysis. Findings showed that the nature of firm characteristics has no significant effect on discretionary accruals in listed oil and gas firms in Nigeria. Based on the above findings, this study concludes that firms in the oil and gas industry use effective earnings management through their discretionary accruals. The study therefore recommended that regulators should mandate that businesses include a brief explanation and disclose in their financial statements how they employ variable components, such as accruals, cash flows, expenses, and total production cost, varying from year to year.
Keywords: Discretionary accrual, Firm characteristics, Financial statements, Oil and gas firms

Introduction

The practice of earnings management has grown more widespread and undermines the originality of factual accounting information (Kim, Lee, & Keun Yoo, 2020); the validity of financial statements has a negative effect on stock price because of investor disappointment (Kovalova & Michalikova, 2020); it impacts the recognition of factual income and diminishes the value of investment decisions (La Rosa, Bernini, & Verona, 2020); has the potential to damage a company's reputation, result in unneeded and undesirable future lawsuits (Lin, Li, Wang, & Yang, 2020), cause confidence to be lost (Liu, 2019), and be unethical. It is a dishonest weapon used by corporations to deceive the public, investors, shareholders, and other interested parties. The study acknowledges the potential consequences of earnings management, including financial scandals, and the dishonest and deceptive nature of its concealment. However, the extent to which firm characteristics like age, size, composition of the board, and auditor firm size influence earnings management is still unknown, particularly for Nigerian-listed oil and gas companies.

The explanation of firm-level earnings quality is believed to be mostly dependent on firm characteristics. According to Abolo (2022), firm characteristics are incentive variables that are comparatively sticky at the firm level over time. Certain factors impact the company's internal as well as outside choices (Shehu, 2012). Among other things, ownership structures, business size, leverage, profitability, liquidity, and firm expansion are examples of incentive variables. Firm attributes are clever in that they prevent managers who compile account information from manipulating the accounting numbers, which will ultimately improve the calibre of reported accounting profits. In the existing research, there have been conflicting opinions and ambiguous results on the role of corporate characteristics in earnings management.

Businesses range widely in size, therefore it's important to take that into account when assessing how reported information quality is impacted by a company's size. According to Ghazali, Shafie, and Sanusi (2018), large organisations have smaller information asymmetry because they have good governance and management, which results in a decrease in the practice of managing earnings. Due to strong governance, internal control, and reputational costs, among other reasons, larger companies are supposed to practice less earnings management than smaller ones; yet the examples of Enron and a few other large companies implicated in financial scandals imply differently. These large companies may also engage in earnings management due to the problem of high agency expenses and the need to satisfy analyst expectations (Iraya, Mwangi, & Muchoki, 2017).

Auditing has a key role in ensuring the quality of financial reporting of earnings and restraining the client from engaging in earnings management, hence the choice of audit firm is important given the many reported cases of corporate accounting scandals, the tendency for earnings management is greater for firms with non-big 4 auditors, which indicates that lower audit quality is associated with higher earnings management (Cudia & Dela Cruz, 2018).

Therefore, because of the significance of the oil and gas industry to Nigeria's economy and the accusations levelled against the oil and gas sector, it is critical to examine the effect of firm characteristics on discretionary accrual in Nigerian listed oil and gas firms.

Literature Review

Total Accruals/ Discretionary Accruals

Earnings consist of two parts: cash flow from operations and total accruals. Total accruals represent management's judgments and estimates about cash flows, aiming to make accounting earnings better reflect a firm’s underlying economic performance. Total accruals can be divided into two components—discretionary accruals and nondiscretionary accruals. Nondiscretionary accruals are accounting adjustments to the firm’s cash flow imposed by accounting standard-setting bodies. On the other hand, discretionary accruals are adjustments to cash flows selected by managers within the flexibility of accounting regulations. Due to this flexibility, discretionary accruals often provide managers with opportunities to manipulate earnings (Dechow, 1994). There is a substantial body of literature focused on detecting earnings management based on discretionary accruals.

Healy (1985) initially introduced discretionary accruals to identify earnings management. He suggested that discretionary accruals are the component subject to managerial discretion, while nondiscretionary accruals represent the expected level of accruals in the absence of earnings manipulation. As both components of accruals are not directly observable, Healy further assumed that the discretionary accruals component in a given year is total accruals scaled by lagged total assets, effectively setting non-discretionary accruals to zero in expectation. He found that managers use accruals to maximize their bonuses. DeAngelo (1986) proposed that nondiscretionary accruals follow a random walk. Her approach to detecting earnings management suggests that the unusual behaviour of the discretionary component of accruals should be reflected in the change in total accruals from year t-1 to year t. This sets the expectation of nondiscretionary accruals in the current year as the prior year’s total accruals. With this approach, she detected systematic understating of earnings by managers before buyouts in a sample of companies whose managers proposed to go private by purchasing all the publicly held common stock. Both the Healy and DeAngelo approaches assumed that the nondiscretionary accruals component is constant and that all earnings management activities can be captured by total accruals. However, this assumption is unlikely to be empirically descriptive.

Kaplan (1985) suggested that the nature of the accrual accounting process dictates that the level of nondiscretionary accruals should change from period to period in response to changes in economic circumstances. Although Healy (1985) and DeAngelo (1986) captured either income-increasing or income-decreasing techniques that managers have incentives to employ, they neglected the changing nature of nondiscretionary accruals and misclassified all accruals as the discretionary component. Therefore, both approaches tend to detect earnings management with error. To address this limitation, Jones (1991) introduced a linear regression approach to control for nondiscretionary determinants of accruals. She used the change in sales to control for non-discretionary accruals of current assets and liabilities, and property, plant, and equipment to control for the nondiscretionary component of depreciation expense. The rationale is that a firm's working capital accruals depend on sales, while its depreciation accruals depend on the level of property, plant, and equipment. She estimated discretionary accruals, the proxy for earnings management, as the residuals from the regression of total accruals on nondiscretionary determinants of accruals. With this estimation procedure, she subsequently detected that managers exercised more negative discretionary accruals to reduce income during the import-relief investigations by the U.S. International Trade Commission (ITC).

Chemweno (2016) noted that although models used to separate total accruals into non-discretionary and discretionary components appear to produce well-specified tests for a random sample, they lack power in detecting earnings management of economically plausible magnitudes. This means that a large number of discretionary accruals relative to earnings is necessary to be detected. They found that the time-series version of the Jones Model can only detect earnings management close to 100% when the induced manipulation exceeds 50% of total assets. When the manipulation equals 5% of total assets, this model can only detect less than 30% of the manipulation.

Firm Characteristics

The term "firm characteristics" can encompass various aspects, including nationality, size, age, ethnicity, education, financial leverage, ownership, and gender. Ghosh and Ansari (2018) define firm characteristics as the representation of ethnic differences on board diversity, reflecting social and cultural identities among people. It can also be defined in a work or market setting, with social and cultural identity referring to personal affiliations with groups that have a significant impact on individuals' major life experiences. These affiliations include gender, race, national origin, religion, age cohort, size, financial leverage, ownership, and work specialization, among others. Primary categories of firm characteristics include age, race, and ethnicity, while secondary categories include education, experience, income, and marital status. In the Nigerian context, the secondary category of firm characteristics is often best qualitatively analysed and reported.

According to Chemweno (2016), a firm's structure, capital, and market-related elements make up its characteristics. Size, ownership, and age of the firm are among the structures associated with them. Structures relating to capital include capital intensity and liquidity, whereas structures related to the market include industry type, market conditions, and environmental uncertainties. Therefore, this study's focus is specifically on firm size, board composition, firm age, and audit firm size as firm characteristics.

Theoretical Review

The agency theory was utilized as the theoretical background for this study. The agency theory is based on the relationship between the principal (owners) and the agent (managers). The separation of ownership from management in modern corporations provides the context for the function of agency theory. Modern organizations have widely dispersed ownership, in the form of shareholders, who are not normally involved in the management of their companies. In these instances, an agent is appointed to manage the daily operations of the company. This distinction between ownership and control creates the potential for conflicts of interest between agents and principals, resulting in costs associated with resolving these conflicts (Okafor & Ezeagba, 2018).

The agency theory suggests that managers are often motivated by their gains and work to exploit their interests rather than considering shareholders' interests and maximizing shareholder value. As a result, management has an incentive to manipulate the company's financial report process to meet or exceed earning targets and receive bonuses tied to the company's earnings (performance-related pay). This creates an information asymmetry where managers can exercise discretion over accruals, reducing the relevance and reliability of reported earnings and financial statements. Therefore, the main challenge highlighted by agency theory is to ensure that managers pursue the interests of shareholders and their own.

Empirical Review

Abolo (2022) investigated the quality of financial reporting and earnings management of Nigerian construction companies that were listed. Among other things, the study's goals were to investigate the connection between accrual earnings and accurate financial reporting of Nigerian listed construction companies. Additionally, to assess the correlation between consistent earnings and accurate financial reporting of Nigerian listed construction enterprises. The research design used in the study was expo facto. The nine (9) listed construction enterprises in the Nigerian Exchange Group between 2015 and 2021 (seven years) comprised the study's population. The sample size, however, was six. The research made use of secondary data. Descriptive statistics were used to examine the research questions that were created. The multiple regression analysis was used to assess the assumptions utilising the help from E-view. According to the study's findings, accrual profits and the accurate portrayal of construction enterprises in Nigeria are positively and significantly correlated. Conclusively, profits persistence and faithful representation of Nigerian listed construction enterprises have a favourable but negligible association. He suggested that accruals earnings for Nigerian construction enterprises be positively and significantly correlated. Therefore, this level of accruals earnings management should be maintained by management. In order to increase the accurate depiction of financial reports, the construction industry should keep an eye on enterprises' adherence to the provisions of the Nigerian code of corporate governance.

Dung, Dang, Le, Nguyen, Nguyen and Darren (2021) investigated how ownership structure affected earnings management in developing nations using Vietnam as a case study. This study investigated the effects of three ownership structure elements on earnings management: the ratio of foreign ownership, the ownership concentration of managers, and the state ownership ratio. It also considered whether ownership structure affects profit management in times of financial hardship. Techniques for regression analysis were used to process the data. The findings indicate that while ownership structures with a percentage of state ownership have a conflicting effect on earnings management, ownership structures with foreign ownership have a beneficial effect. The ownership ratio influences earnings management in the setting of financial constraints, but the degree of ownership concentration has no bearing on profit management. The model's control variables, which include audit quality, growth rate, profitability, business size, and financial leverage, all influence earnings management. Potentially, the findings could serve as a foundation for helping businesses limit their earnings management practices.

Alao and Gbolagade (2019) assessed how audit quality affected the earnings management strategies of oil and gas businesses that were listed on the Nigeria Stock Exchange (NGX) over a five-year period (2014–2018). Because of recent claims of widespread financial misrepresentations connected to Nigeria's oil industry, the analysis focused on oil and gas businesses. In a similar vein, the manipulation of the accounting data reported in the financial statements has been the primary source of multiple accounting scandals that have rocked the world markets in recent decades. The corporate annual reports of twelve (12) listed oil and gas companies for the studied period were employed to meet the study's objectives. The study used both descriptive statistics and Ordinary Least Square (OLS) regression analysis to test the research hypotheses and investigate the relationship between the audit quality proxies—audit firm size, auditor industry specialisation, auditor independence, and earnings management in listed companies and these variables. Discretionary Accruals, a modified Jones model, was used to measure the management of profits, and EViews 8.1 was used for OLS regression data analysis. The findings point to a connection between audit quality and earnings manipulation; auditor independence and earnings management are significantly positively correlated, but the remaining hypotheses suggest that the other variables continue to have a negligible relationship with earnings management.

Okafor and Ezeagba (2018) evaluated the impact of accrual-based earnings management on the financial reports of Nigerian deposit money institutions. The financial sector's failures and company collapse, despite the audit reports being clean, served as the driving force for the research. The ex post facto approach was used. Eighty (80) data points were obtained from the judgmental selection of ten (10) deposit money banks (DMB) over eight years using descriptive and inferential statistics. The primary sources of the data were the publicly available yearly reports of accounts and the comments that went with the financial statements. According to the findings of linear multiple regression and Pearson Product-Moment Correlation, discretionary accruals significantly lowered the returns on the assets of deposit money banks in Nigeria prior to the International Financial Reporting Standards (IFRS). The findings also demonstrated a connection between DMBs' financial performance and accrual-based earnings management. The results of the investigation showed that the DMB engaged in earnings management. It was suggested, based on the findings, that appropriate and sufficient procedures be implemented for the assessment, investigation, and inspection of DMB's financial accounts.

Jegede and Yahaya (2018) examined the impact of corporate governance on the decrease in earnings management of Nigerian listed oil and gas companies. Discretionary accruals, calculated using Jones' modified Model, were used to measure earnings management. During ten years from 2007 to 2016, 11 out of 13 listed enterprises make up the sample. According to the study, board composition and earnings management are negatively correlated. Similarly, the study discovered that board structure and earnings management were negatively correlated. The size of the audit committee and earnings management, however, were positively correlated. The research additionally showed a negative correlation between business size, firm growth, leverage and earnings management. The research expands the understanding of stakeholders regarding the impact of corporate governance frameworks on earnings management in Nigeria.

Zayol, Adzembe and Akaa (2017) investigated the factors influencing earnings management in listed oil and gas companies in Nigeria. The study used a correlational research design to establish the link between these factors and earnings management. Seven (7) oil and gas firms were sampled from a population of fifteen (15) and the study covered the period from 2010 to 2015. Secondary data from the annual reports of the selected firms were analyzed using Stata's multiple regression analysis. The results revealed that external sector specialization has a positive and significant impact on earnings management, while external audit tenure and audit committee gender have a negative and significant relationship with earnings management in Nigeria. However, the study found no significant relationship between external audit fees and earnings management in Nigeria. The study recommended that oil and gas companies should periodically change auditors specializing in the sector, encourage longer audit tenure, and engage more female members in the audit committee.

Yusof (2010) investigated the factors influencing discretionary accruals in publicly traded Malaysian companies. The study used audit committee variables such as independence, expertise, and diligence to assess their impact on earnings management. Through Ordinary Least Square (OLS) regression on cross-sectional data from 122 firms in 2007, the findings indicate that an audit committee with a higher proportion of financial expertise reduces earnings management. However, the research also revealed that audit committees with former senior auditors and audit alumni are linked to higher discretionary accruals. The study's results highlight the importance of having more audit committee members with financial expertise to effectively identify instances of earnings management.

Methodology

The study adopted a longitudinal research approach and heavily depended on secondary data from the 2002–2021 annual reports of oil and gas companies listed on the Nigerian Exchange Group. The population of the study consists of the 12 oil and gas companies that were listed as of the last quarter of 2021 on the Nigerian Exchange Group (NGX). These companies operate in the downstream sector of the oil and gas industry. A simple random sampling technique was used to select nine firms out of the twelve firms for the study. Annual reports filed with the Nigeria Exchange Group by the listed oil and gas companies provided the secondary data that was used. The study's time frame is from 2002 to 2021, and the data for the variables were produced via content analysis. The data analysis method employed in this study was Pooled Ordinary Least Square (OLS) regression analysis, which was used to examine the effects of the explanatory variables (firm age, board composition, firm size, and auditor type) on earnings management.

Results and Presentation of Data

Presentation of Data

Hypotheses Testing

Hypothesis One

Ho_1 The firm characteristics have no significant influence on discretionary accruals in listed oil and gas firms in Nigeria.

Analysis of the effects of firm characteristics on earnings management

Effects of firm characteristics on earnings management (Discretionary Accruals)

The outcome of the type and strength of the impact of firm characteristics on the discretionary accruals earnings management proxy is shown in Table 1. The Discretionary accruals are favourably and significantly impacted by each of the four firm characteristics factors that were examined.

Table 1: Panel OLS effect of firm characteristics on earnings management.

Discretionary Accruals

Variable	Coefficient	Std. Error	t-Statistic	Prob.
FAGE	0.822***	0.19	4.36	0.00
AUD FIRM SIZE	0.437**	0.18	2.42	0.04
BODCOMP	0.472***	0.05	8.77	0.00
FSIZE	4.273**	1.73	2.47	0.01
LEV	1.017	1.25	0.81	0.42
ROA	-1.253	1.84	-0.68	0.94
FER	0.114***	0.04	3.01	0.00
GDPG	0.638*	0.33	1.96	0.07

*Note: *,**,*** indicates significant at 10%, 5% and 1% respectively;*

Independent variables: *FAGE AUFSIZE BCOMP FSIZE indicates Firm Age, Audi Firm dichotomous, Board Composition, Firm size.* Control variables*: LEV ROA FER GDPG indicates Leverage, Return on Asset, Foreign Exchange rate (naira to a dollar) and GDP growth rate.*

Source: Author's computation using EViews 12 (2024)

Leverage does not significantly influence discretionary accruals. Returns on assets not only have an insignificant effect on discretionary accruals but also a negative impact. Additionally, the exchange rate and GDP growth rate have positive and significant effects.

Firm age has a significant impact on earnings management, with each additional year leading to a 0.8% increase in discretionary accruals. This suggests that as a firm ages, management makes accounting adjustments in its favour. The statistical test for company age resulted in a t-value of 4.36 with a significant level of 0.000, indicating a significant impact on earnings management.

Audit firm size has a positive and significant effect on discretionary accruals, with a 1% increase in audit firm type leading to a 0.44% increase in discretionary accruals. The size of audit firms appears to be inconsistent with expectations and was statistically significant in influencing the firm's decision to practice high earnings management strategy.

Board composition, specifically the inclusion of non-Executive/Independent members, has a sensitive impact on discretionary accruals. There is a positive significant relationship between board composition and discretionary accruals, indicating that a higher inclusion of non-executive board members increases the likelihood of Nigerian oil and gas firms engaging in earnings management practices.

Firm size (FSIZE) was found to have a positive and statistically significant influence on a firm's decision to engage in high earnings management. Specifically, a 1% increase in the assets of Nigerian oil and gas firms leads to a 4.3% increase in discretionary accruals, indicating a positive relationship between firm size and high earnings management.

Leverage was found to be positively related to low earnings management practices, with each additional year leading to a 1.017% decrease in discretionary accruals. The statistical test for leverage resulted in a t-value of 0.81 with a significant level of 0.42, indicating an insignificant impact on earnings management.

The profitability, of assets (ROA) was found to have a negative (-1.253) coefficient and statistically insignificant (0.94) effect on discretionary accruals, this suggests that oil and gas firms are less likely to engage in earnings management, which is contrary to previous research that suggests profitable firms are more likely to engage in earnings management.

The foreign exchange rates were found to have a positive significant relationship with discretionary accruals. coefficient of 0.114 and statistically significant (0.04), this suggests that oil and gas firms are more likely to engage in earnings management.

Regarding the statistical properties of the model, the variation in discretionary accruals that can be explained by the regressors is 90%. This suggests that only 10% of the variation in discretionary accruals is explained by factors other than those present in the model. The 90% variation explained by the regressors indicates a good fit, thereby preventing the model from being spurious.

OBSERVATION	180
R-SQUARED	0.89
ADJUSTED R-SQUARED	0.88
DURBIN-WATSON STAT	2.08

Source: Author's computation using EViews 12 (2024)

The Durbin-Watson statistic, which indicates the presence of serial correlation, is 2.08. Although slightly greater than 2, it is within the band of the Durbin-Watson statistical table, indicating no issue of serial correlation in the model. The Jarque-Bera value of 2.55 and the associated probability value of 0.154 indicate that the residual of the model is normally distributed, and the estimation technique is in order.

Diagnostic tests

Tests	Statistic	Probability values
Jarque-Bera	2.55	0.154

The cross-section dependence of residuals, which showed whether the residuals associated with each oil and gas firm are dependent or not, is tested by three approaches: the Breush-Pagan LM, Pesaran Scaled LM, and Pesaran CD.

Cross Section Dependence of residuals

Breusch-Pagan LM	2.61	0.11
Pesaran scaled LM	1.28	0.21
Pesaran CD	3.10	0.51

The null hypothesis for each test is that there is no cross-section dependence of residuals, in which case the happenings in one oil firm tend not to influence the happenings in the other. Further, the cross-section heteroscedasticity tests if the variance of the error term is company-dependent or not.

Cross Section Hetero		
Breusch-Pagan LM	2.61	0.11
Pesaran scaled LM	1.28	0.21
Pesaran CD	3.10	0.51
Period Hetero		
Breusch-Pagan LM	2.61	0.11
Pesaran scaled LM	1.28	0.21
Pesaran CD	3.10	0.51

The null hypothesis is that the model is eschewed by firm-based heteroscedasticity. There are three approaches for testing cross-section varying error terms, and the probability values associated with each test were greater than 10%, implying that the null hypothesis of no firm-dependent variation in the error term cannot be rejected. Hence, it is concluded that there is no cross-section heteroscedasticity. Apart from testing for firm-dependent residuals and variance, a test for the period (year) based heteroscedasticity is performed, and the three alternative tests do not reject the null hypothesis of the absence of period heteroscedasticity.
All diagnostic tests suggest that the estimation technique employed is appropriate and valid, allowing for precision and prediction to be inferred from the result. The result can also be relied upon for policy purposes.

Hypothesis

This study aims to evaluate the effect of firm characteristics on Nigerian oil and gas firms' earnings management. The study considers four different aspects of firm characteristics: firm age, board composition, firm size and audit firm size, Moreover, discretionary accruals, discretionary cash flow, discretionary expense, and discretionary cost of production are the four proxies for earnings management. As a result, the study evaluates how each company's characteristic variable affects each earnings management proxy.
The hypothesis holds that the nature of firm characteristics has no significant effect on discretionary accruals in listed oil and gas firms in Nigeria. Since discretionary accruals are positively and significantly impacted by each of the four firm characteristics variables considered, the alternative hypothesis is accepted, and the null hypothesis is rejected.

Discussion of Findings

The hypothesis holds that the nature of firm characteristics has no significant effect on discretionary accruals in listed oil and gas firms in Nigeria. With regard to the relationship between earnings management proxied by discretionary accruals, we found that, at least in the context of our sample of Nigerian oil and gas firms listed on the Nigerian Exchange Group (NGX), Firm age has a significant impact on earnings management, with each additional year leading to a 0.8% increase in discretionary accruals. This suggests that as a firm ages, management makes accounting adjustments in its favour. The statistical test for company age resulted in a t-value of 4.36 with a significant level of 0.000, indicating a significant impact on earnings management. The study's results align with previous research by Agustia and Suryani, 2018 and by Sakdiyah, Salim, and Rahman, 2020, which also found a significant impact of company age on earnings management. However, it contradicts the research of Nabiilah (2019) and Fahad (2019), which suggested a negative impact of company age on earnings management.
Audit firm size has a positive and significant effect on discretionary accruals, with a 1% increase in audit firm type leading to a 0.44% increase in discretionary accruals. The size of audit firms appears to be inconsistent with a priori expectations and was statistically significant in influencing the firm's decision to practice a high earnings management strategy. This implies that the use of quality audit firms by Nigerian oil and gas firms, such as the Big 4 audit firms, would increase the likelihood of firms engaging in earnings

management practices. This finding is inconsistent with the views of Becker et al (1998) that companies using Big auditors report lower levels of discretionary accruals than firms employing non-Big auditors;

There is a positive significant relationship between board composition and discretionary accruals, indicating that a higher inclusion of non-executive board members increases the likelihood of Nigerian oil and gas firms engaging in earnings management practices. Although the positive relationship was unexpected, we expected that the firm's board independence should be negatively associated with high levels of earnings management. The justification for this might be due to the motivation of the independent board to positively encourage high earnings strategy to allow them to smooth the firm's profitability and same time to maintain a steady director compensation for themselves. These findings contrast with previous studies, such as those of Uadiale (2012), which showed a negative significant relationship between board composition and earnings management practices of Nigerian companies.

Firm size (FSIZE) was found to have a positive and statistically significant influence on a firm's decision to engage in high earnings management. This supports previous research that suggests larger firms are more likely to engage in earnings management. The positive association between high earnings management and firm size implies that the larger the firm, the higher its likelihood of engaging in earnings management activities. In addition, large firms tend to have higher motivations and more prospects to engage in the manipulation earnings and exaggerate earnings due to the intricacy of their operations and the complexity for users to identify overstatements. In essence, larger firms are more susceptible to manoeuvring their current accruals to exaggerate the earnings equity offerings. This outcome is consistent with the findings of Fernandes and Ferreira (2007), Naz et al. (2011) and Olatunji and Fakile (2012). However, this result contradicts the findings of Persons (1995) where a negative relationship was observed between firm size and discretionary accruals.

Leverage was found to be positively related to low earnings management practices, with each additional year leading to a 1.017% decrease in discretionary accruals. The statistical test for leverage resulted in a t-value of 0.81 with a significant level of 0.42, indicating an insignificant impact on earnings management. This implies that an increase in leverage increases earnings management, this outcome is consistent with the findings of Awuye and Aubert (2022) and contrary to previous research that suggests a positive relationship between leverage and earnings management. This may be due to the Debt-covenant hypothesis, which states that companies close to violating accounting-based debt agreements are more likely to engage in earnings management to avoid defaulting on their debt.

As for the profitability of assets (ROA) which was negative and statistically significant at a 5% level, this result is inconsistent with the predictions of several researchers who affirm that earnings management is operated when an extreme performance is achieved. In other words, profitable firms arrange several methods to manipulate earnings (Dechow et al., 1995).

The foreign exchange rate was found to have a positive significant relationship with discretionary accruals. A coefficient of 0.114 and statistically significant (0.04), suggests that oil and gas firms are more likely to engage in earnings management. Fluctuations in foreign exchange rates are a possible factor that trigger discretionary accruals of Nigerian oil and gas firms. Specifically, a 1% decrease (increase) in the exchange rate leads to a 0.1% increase in discretionary accruals. Although this effect is mild, the fact that depreciation in naira allows firms to engage in abnormal accounting adjustments implies an issue of agency problems in Nigeria's oil and gas sector. This outcome is consistent with the findings of Chang et al. (2013) and contrary to the findings of Stein and Wang (2016) who concluded that firms have negative discretionary accruals when they are uncertain about their prospects.

The GDP growth rate was found to have a positive significant relationship with discretionary accruals, which means that, a 1% increase in GDP growth rate causes discretionary accruals to rise by 0.6%. This notable effect implies that economic size contributes to the buoyancy of the oil and gas sector and encourages management to increase the practice of earnings management. This outcome is consistent with the findings of Chen et al., (2019). They found a significantly positive relationship between the manipulation of local GDP figures and EM by local firms. This relationship is stronger when local politicians are under more pressure to perform or have more motivation to seek career promotion. The local politicians are likely to return the favour by giving these companies more government subsidies in the following year.

If the Management wishes to build up accruals, in which case, the accounting adjustment is made (increases) based on the discretion of the Management, whereas returns on assets measure the real situation of the firm's performance, then as discretionary accruals increase, this can be done at the expense of the return on asset. Conversely, if the return on asset increases, it is at the expense of discretionary accruals. It is also not surprising to observe that leverage possesses a negative relationship. The positive relationship between audit dichotomous and discretionary accruals is somehow worrisome. What the positive relationship suggested is that more engagement of the big4 audit firms is positively associated with discretionary accruals, suggesting that the big4 audit firms appear to be unable to checkmate discretionary accruals (preventing their clients from rounding up accounting figures) thereby leading to growth in earnings management practices by Nigerian oil and gas firms.

Concerning the study's hypothesis, firm age, firm size, audit dichotomous, and board composition have positive and significant effects on discretionary accruals, leading to the rejection of the null hypothesis and upholding the alternative hypothesis.

Conclusion and Recommendations

The study examines the influence of firm characteristics and discretionary accrual in listed oil and gas firms in Nigeria. The outcome suggests that firms in the oil and gas industry use effective earnings management through their discretionary accruals. Additionally, it was discovered that earnings management greatly increases the predictability of future earnings for these firms given the positive association between discretionary accruals and the change in the firms' characteristics. As a result, earnings management can be employed as a signaling method to inform stakeholders of pertinent information. This is an important discovery, particularly for investors who look for data on a company to forecast its performance in the future. Utilizing the stated earnings in their financial accounts, which may represent the company's market value and maybe help investors with their investment chances, also inspires trust.

Based on the findings, the study recommended that:

1. Regulators should mandate that businesses include a brief explanation and disclose in their financial statements how they employ variable components, such as accruals, cash flows, expenses, and total production cost, varying from year to year. Users of financial information will be better equipped to respond in the event that such evidence is present because they will have a greater understanding of the intricate nature of its discretionary aspects.
2. Investors may receive further confirming evidence from other trustworthy sources based on the results stated in the financial statements. For example, reliable financial analysts' examination of reported earnings of publicly traded companies might be employed in addition to closely examining financial statement balances and relevant disclosures. Such analysis can reveal patterns, trends, and movements in earnings, which could then give a more definitive indication of earnings management.

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