Article

Moderating Effect of External Monitory Mechanism on The Relationship Between Earnings Management and Profitability of Listed Petroleum Marketing Companies in Nigeria

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Abstract – This study investigates the relationship between earnings management and profitability of listed petroleum marketing companies in Nigeria and the moderating influence of external monitoring methods. Data for the years 2012 to 2022 were taken out of the sampled companies' annual reports. The results from the GMM estimator showed that the discretionary accrual, as well as the interaction between audit firm size and discretionary, have a significant impact on gross profit margin respectively. According to the study's findings, auditors are aware of earnings management, but they are far more concerned about it when their choices result in inflated rather than understated earnings. The likelihood of receiving a qualified audit report was unaffected by the interplay between audit firm size and discretionary accrual. However, this does not imply that auditors are ignorant of earnings management. The report suggests that methods for the quick detection of earnings management techniques be adopted to decrease the negative impact of earnings management on the profitability of listed petroleum marketing enterprises in Nigeria.

Keywords: "Earnings Management", "External Monitory Mechanism", "Audit Firm Size", "Audit Independence", "Agency Theory"

1. Introduction

The type of business conducted, and potential legal, political, and environmental regulations, which form an integral part of public policy within the organizations' purview of operations, all impact the profitability of businesses. It also outlines the risks associated with the business and plays a big role in how profitable the firm's operations are. According to the audited published financial statements in Nigeria, petroleum marketing enterprises are the fastest-growing and highest-risk businesses (Etim, et al., 2020), and these characteristics set the sector apart from others.

Making returns on investment is a vital choice for businesses since it greatly affects a company's capacity to earn a profit in a competitive market and, ultimately, its capacity to survive. Any change in the firm's value brought on by operating revenue indicates a rise in the firm's value. The quality of the accounting statistics in the company's financial statement is based on the amount of improved earnings disclosed in the yearly reports (Dechow et al., 2009). Any company that has a decrease in its financial situation will use the "big bath" strategy to mask its losses (Waqas, 2020). Because they must invest depending on an organization's financial status, shareholders and investors place a high value on an organization's earnings. True financial reporting will therefore be advantageous for the company and the investors.

When they forecast a loss in the future, posting incorrect earnings can occasionally help businesses improve their financial situation. Financial managers use earning management approaches to transform the initial data into more advantageous ones (Waqas, 2020). Managers are free to choose which accounting and reporting methods to use when preparing financial reports. In most cases, this results in the selection of reporting methods that could mislead the recipients of the information and present the best possible image to the market by taking advantage of accounting rules' limitations (Bansal et al., 2021; Sayari, et al., 2013). To deceive some stakeholders about the company's actual economic performance or to influence the results of contracts that depend on the reported accounting numbers, managers engage in the practice of "earnings management" (Josep et al., 2013). CEOs have engaged in dishonest behavior, particularly when it comes to the manipulation of accounting information, as a result of organizational drivers of economic activity that have produced an information asymmetry. According to Bowman and Navissi (2013), EM is seen as management's attempts to influence or control financial statements through the employment of specific accounting practices, expediting cost-income transactions, or other techniques aimed at influencing short-term income.

Earnings management, the practice of inflating a company's profitability above and beyond its actual financial performance, has been linked to corporate bankruptcies. This scenario calls for tighter financial reporting regulations (Inaam et al., 2012; Hassan, 2013). It has been seen in the documented cases of First Bank in 2021, where regulators discovered over N150 billion in non-performing insider loans and bad credit decisions, of which N75 billion belonged to the Board Chairman alone (Emefiele, 2021); Worldcom, Enron, and Xerox, to name a few.

According to Dechow and Skinner (2000), earnings management is the self-serving alteration of earnings, which compromises both the quality of earnings and the level of credibility of financial reporting. This happens when management meddles with the financial records of the company to suit stakeholder expectations and the needs of all interested parties (Healy & Wahlen, 1999). When managers can alter accounting procedures and tactics to offer a misleading picture of their company's profitability, they are successful (Beneish, 2001). Sevin and Schroeder (2005) assert that opportunistic earnings management supports the interests of managers at the expense of stakeholders due to the aforementioned reasons.

The practice of earnings management in enterprises aims to produce the appearance of smooth annual results by showing a high profit for the current accounting period at the expense of future earnings or by lowering current earnings to report high earnings in the future (Ronen & Yaari, 2008). Therefore, it is the intentional alteration of financial information reported in the annual financial, either to deceive users about the firm's true economic condition or to obtain certain contractual benefits that depend on the accounting numbers reported in the financial statement (Ahmad & Bakare, 2022; Bergstresser & Phillippon, 2003).

According to reports, the company's managers allegedly utilize a variety of accounting techniques to conceal the true profitability of the business from stakeholders and financial statement users for their financial benefit (Jane, 2016). Because financial reports are the primary instrument used by stakeholders to gauge an organization's progress, their quality is essential. Users of the statements rely on the information in the statements to make financial decisions, evaluate management abilities, and serve as a starting point for future performance projections for the company (Terry, 2015). Earnings management is driven by the strong incentives for managers to exercise judgment in financial reporting when preparing the financial statements as well as in structuring transactions to alter the financial statements to achieve their individual goals, such as increasing managerial compensation, which is closely related to the firm's earnings (Cornett et al., 2008).

When it comes to the dependability and trustworthiness of the data presented by management in the financial statements, the external monetary mechanism plays a role in providing reasonable assurance to the various users of financial statements. However, with the various cases of corporate financial scandals in the country which include that of African Petroleum, Lever Brothers Nigeria Plc, Cadbury Nigeria Plc, and Nampak (Bakare, 2022; Lanouar, et al., 2018; Osisioma et al., 2020) have posed a great challenge on the credibility of audit reports since these cases resulted from audited financial statements where the auditors failed to detect and report financial misstatements and manipulations. This has caused investors and other stakeholders in corporate financial reporting to be extremely disappointed, which has a detrimental impact on the financial decisions of investors.

Despite the growing significance and interest in managers' efforts to manage their employees' wages, this study was spurred on by recent financial scandals that have further highlighted exploitative managerial practices in Nigeria (SEC, 2019). The most recent Oando Oil Plc incident, which saw the company being caught for filing a fraudulent financial statement and paying out a dividend from unrealized profit (Guardian, 2017), also highlights the need to investigate the moderating impact of external monitoring mechanisms on the relationship between earnings management and profitability for the years between 2012 and 2022. Such information is especially required in Nigeria's petroleum marketing sectors, which have experienced significant incidents of revenue loss brought on by managers' dishonest behavior. Since it still generates more than 70% of the nation's revenue, the petroleum marketing industry sector is extremely important (Ishaku et al., 2019).

Research Questions

i. What is the influence of discretionary accrual on the profitability of quoted petroleum marketing companies in Nigeria?
ii. What is the influence of auditors' independence on the profitability of quoted petroleum marketing companies in Nigeria?
iii. What is the influence of audit firm size on the relationship between each of the discretionary accruals, auditors' independence, and profitability of quoted petroleum marketing companies in Nigeria?

The importance of this study stems from the dearth of empirical data on the profitability of petroleum marketing corporations, external monitoring methods, and earnings management, particularly in an emerging economy. Therefore, this study will add to the body of knowledge already available on the issue. The study would also be of great eyes opener to management, shareholders, regulators, and legislators among others. By prohibiting managers from engaging in unethical earnings management tactics, this study will specifically aid in safeguarding the investment made by shareholders. The study would also assist auditors in carrying out their obligations as professionals with care and attention. The report would be helpful to regulators and policymakers in developing a strategy to lessen the management of earnings by Nigerian petroleum marketing businesses.

2. Literature Review

There is currently no accepted definition of "earnings management" in the accounting literature. Earnings management is sometimes referred to as income smoothing (Tucker & Zarowin, 2006), the "accounting numbers game" (Mulford & Comiskey, 2002), and the "large bath" (Bakare, et al., 2022) and "cookie jar" (Balaciu et al., 2009). Different academics define the idea of profit management differently depending on how they see it. Earnings management, according to Healy and Wahlen (1999), is the alteration of financial statements through the use of discretion in financial reporting and transaction structuring to either deceive some stakeholders about the company's actual economic performance or influence the results of contracts that depend on the accuracy of accounting data that has been reported. Earnings management, according to Fields et al., (2001), takes place when managers utilize their discretion in analyzing financial data. It is possible to choose between maximizing firm value (shareholder wealth) and advancing managers' interests (opportunistic earnings management).

Earnings management typically entails actions ranging from honest financial reporting to outright fraud. A practice known as "within-GAAP earnings management" uses the flexibilities in accounting standards (GAAP) to manage earnings. GAAP gives businesses the freedom they need to create financial statements that accurately reflect the underlying economic situation. To exploit these accounting latitudes, some managers, however, distort earnings. Choosing between several inventory valuation procedures and depreciation methods are two examples of GAAP flexibilities (Bauwhede & Willekens, 2003; Zhao, 2012). Some academics view this form of earnings management as acceptable and advantageous to shareholders, particularly when it is fully reported in the financial statements.

Similarly, Ahmad and Bakare (2022) assert that EM occurs when managers use their discretion to alter financial reports to mislead some stakeholders about the company's true economic performance. They assert that although earnings management may be defined differently, the fundamental idea that it distorts a company's actual performance appears to be the same. EM is the technique of modifying a company's results to make its financial statements appear more favorable than they did.

The definition of earnings management varies depending on how one views the practice of managing earnings; those who believe it is beneficial to the company define earnings management as the tools managers use to strengthen the firm's financial position (Healy & Wahlen, 1999). According to those who have a negative view of earnings management (Bergstresser & Phillippon, 2003; Ronen & Yaari, 2008), the practice involves management manipulating earnings to benefit from it or to demonstrate that the company is performing while it isn't at the expense of the wealth of shareholders and investors.

2.1. Size of Audit Firm

Many academics use the size of the audit company as a proxy because it can be difficult to gauge audit quality. Large audit firms should conduct more extensive testing. As a result, bigger audit companies are more likely than smaller ones to be linked to information that is more exact (Bakare, 2022; Titman & Trueman, 1986). The size of an audit firm and the management of a company's earnings have been linked, according to empirical research on audit quality and earnings. This is supported by research by Becker (1998), Tyokoso & Tsegba (2015), and others that found a link between audit firm size and public company earnings management to be unfavorable. Because they invest more in reputation capital and skill than small audit firms do (DeAngelo, 1981; Piot & Janin, 2005), big audit firms are better equipped to restrain earnings management. Big audit companies must consequently offer quality-differentiated audit services to safeguard and preserve their reputation capital investment.

2.2. Auditor Independence

The most challenging and contentious feature of the auditing profession is independence since it strengthens the industry's commitment to objectivity. The numerous rules and regulations that have been developed over time by various professional and regulatory organizations are the cause of their complexity and contentiousness (Bakare, 2022). In light of the benefits of maintaining auditor independence, the European Commission has established rules that must be adhered to throughout the entire European Union. The US passed the Sarbanes Oxley (SOX) Act, which establishes requirements for US auditors' independence (Bowman & Navissi, 2003).

The auditor is tasked with conducting a personal assessment to determine whether or not independence risk may be acceptable. The auditor must first identify, assess, and evaluate any potential threats to independence before accepting an audit assignment. They must then put the necessary safeguards in place to lessen such concerns to a tolerable level. The assurance engagement must be terminated if this assignment is not carried out since failing to do so puts independence and objectivity at risk. The auditor's ability to provide auditing services is often seriously hampered by the serious risks to independence. When the auditor "over-stays" with a client, it becomes even more difficult because these dangers may appear gradually over time, which might compromise independence (Cheng & Warfield, 2010). The independence of the auditor is regarded as the foundation of the auditing profession. It is a crucial step in the statutory financial reporting procedure and a prerequisite for giving all audited financial reports value. According to Izedonmi (2000), independence is a mental state that is demonstrated by the auditor's neutrality and integrity.

2.3. Empirical Review

The effect of leverage on earning management in Pakistan's manufacturing industry is examined by Asim and Ismail (2019). The study chooses 159 non-financial companies that have been listed on the Pakistan Stock Exchange (PSE) for seven years. The results showed a strong positive link between earning management actions and leverage. However, there is no discernible connection between growth and earning management actions.

Bansal et al., (2021) their study, investigated the real bearing of earnings management on the cross-sectional stock return of the weekly and monthly data of firms in the Bombay Stock Exchange and concluded that investors discounted the stock price when they perceived low-quality real earnings management. Utor, Yua, and Epor (2023) in their study titled revisiting real earnings management and financial performance in Nigerian Oil and Gas industries concluded that real earnings management of these firms is not a long-term predictor of their financial performance.

In an emerging market (Egypt), Mostafa and Ibrahim (2019) investigate whether firms with poor performance engage in more earnings management practices than firms with strong performance. The findings indicated that low-performing enterprises have a reduced earnings-to-cash-flow regression coefficient. According to the study, low-performing companies boost their profit management methods more than high-performing companies. The motivating elements underlying the manipulation of earnings are examined by Haider (2020). The size of the company, profitability, financial leverage, and effective tax rate are considered to be the driving forces behind the manipulation of earnings in Pakistan's banking industry. To choose 10 different banks, it made use of the practical sample method. The study found that whenever a company's profit falls, the managers may rely on the anticipated future earnings for the current year to preserve the company's good name. The managers will also fail to submit inaccurate statistics if the debt is used to fund the firm's capital.

The management of earnings was demonstrated to be negatively but not significantly correlated with the tax rate and firm size. The influence of earnings management strategies in banks listed on the Iraq Stock Exchange is assessed in another study by Barzan (2020). Results were contrasted with measurements of earnings management made both before and after the introduction of the IFRSs when the unified accounting system was in use. The study did not discover a correlation between profit management strategies and stock market valuation.

A study on audit quality and earnings management for the listed consumer goods sector in Nigeria from 2010 to 2019 was carried out by Kwarbi and Osho in 2021. A positive correlation exists between audit quality and irregular cash flow from operating activities. Gajdosikova et al., (2022) use a sample of 15,716 businesses from a variety of economic sectors in the Slovak environment over three years to explore the firm-specific characteristics that affect how firms manage their earnings. The study's findings show that small businesses with a public-limited ownership structure frequently employ aggressive (income-increasing) earnings management strategies. Private sector businesses that have these private limited ownership arrangements adopt conservative (income-decreasing) strategies. The results demonstrated that large corporations do not typically change their earnings.

Sani, Nasir, Ahmad, and Bakare's (2023) study revealed that the audit committee's financial expertise and independent auditors have a considerable effect on a firm's performance. Accordingly, auditors' worry about profit management was more about overstated earnings than understated earnings. Akuchi and Egbunike, (2023)'s study examined the moderating role of earnings management on the relationship between environmental responsibility and financial performance. Results of the study showed that earnings management had an insignificant negative effect on the relationship between environmental activities and the return on assets of listed firms in Nigeria.

2.4. Agency theory

After the idea of the company was put forward, Jensen & Meckling (1976) produced the logical foundation for studies on profits management. Owners and managers are divided, which results in an agency relationship. When one or more individuals known as principals hire another individual or individuals known as agents or agents as decision-making specialists to execute a service, an agency relationship is established (Ireland et al., 2011). The employees that top managers have employed may very well be more concerned with their welfare than the shareholders (Berle & Means, 1932). In order to accomplish the main goal of the company, which is to maximize shareholder wealth, the principle delegated some decision-making authority to the agent due to the separation of business ownership from control (Jensen & Meckling, 1976). However, the firm's goal of maximizing wealth is at odds with the managers' interest in maximizing profits, which motivates the management of earnings.

When management prioritizes actions that grow the company's size or diversify it into unrelated industries at the expense of the shareholders, which affects dividends and the stock price, an agency issue occurs. The two primary issues in the relationship between the principals (shareholders) and their agents (the board of directors) are assessed and solved using agency theory. The first is the agency dilemma, which appears when an owner and an agent have different goals or when doing so would be difficult or expensive (Olowookere, 2008).

At every level of an organization, there are agency ties. Any employee may act as the primary on behalf of the shareholder, with the employee's supervisor acting as the agent.

The Board of Directors acts as the principal in the CEO's employment. In order to investigate the impact of contractual incentives and information asymmetry on accounting decisions, agency theory might be used (Eisenhardt, 1985; Baiman, 1990). In circumstances where contractual consequences (such as bonus incentives) depend on reported accounting figures, such accounting decisions may include, but are not limited to, deciding the size and timing of particular period-ending accruals. Watts & Zimmerman (1986) contend that there are unintended consequences associated with bonus incentives, even though the structure of bonus incentives is designed to address risk and effort difficulties. Accounting decisions made by managers may be biased as a result of these effects.

3. Methodology of Study

An ex-post factor research design is used in the study. This type of methodology was chosen because, by first identifying certain current effects and then looking back by examining causal elements, it helps to analyze potential cause and effect correlations. The fourteen (14) petroleum marketing organizations listed on the Nigeria Exchange Group (NXG) as of December 31, 2022, make up the study's target population. Mobil Oil Plc, Anini International Plc, Capital Oil Plc, Conoil Plc, Eternal Plc, Forte Oil Plc, Japaul Oil & Maritime Services Plc, Mrs. Oil Nig. Plc, Oando Plc, Rak Unity Petroleum Plc, Seplat Petroleum Company plc, Total Nig. Plc, Beco Petroleum Product Plc, and Total Nig. As well as Navitus Energy Plc.

3.1 Sample Size and Sampling Technique

Except for Seplat Petroleum Development Company plc, all petroleum marketing businesses were used as samples in the study. This is due to the excluded firm not fitting our definition of a purposeful sample technique. Earnings management, which was represented by discretionary accrual, external monitoring systems, and dependent variables are the independent factors, moderating variables, and dependent variables for this study. Gross profit margin is the dependent variable. The information spanned the eleven (11) years from 2012 to 2022.

Heteroskedasticity, unobserved heterogeneity, and endogeneity are all addressed in the study using the Generalized Method of Moments (GMM) estimate. The correlation of independent variables, moderating variables, and control variables with error terms is referred to as endogeneity. Because the GMM estimator has the greatest ability to handle endogeneity, it is used in this investigation. According to Ullah et al., (2018), the GMM changes data to eliminate the impacts of all endogeneity sources, including simultaneity, dynamic endogeneity, and unobserved heterogeneity. The study chose the lags that best address the endogeneity out of the several lags that GMM gives. Version 14.5 of STATA software was utilized for the analysis in the study.

The model is as specified below:

$$GPMit = \alpha + \beta1DESACit + \beta3AUDINit + \beta4AFS*DESACit + \beta6AFS*AUADINit + \mu i$$

4. Findings and Discussion

This section's main goal is to convey the findings from the inferential analysis of the various variables. Regression analysis is the primary inferential analysis technique used in this study to investigate the moderating impact of external monitoring mechanisms on the link between earnings management and profitability of listed petroleum marketing companies in Nigeria. The outcomes are displayed by the system's generalized method of moment (GMM) estimator. Unit root testing was done before the estimation to determine whether each variable was stationary.

4.1. Unit Root Test

Here are the findings of the unit root test. The test was run to confirm the characteristics of the panel data used in this study's time series, particularly the nature of stationarity. In order to avoid producing erroneous regression findings in the work, the test is important to make sure that variables are stationary or otherwise integrated.

Table 1: Results of Fisher-type Augmented Dickey-Fuller Unit Root Test

Variable	P-statistic	p-value	Z-statistic	p-value	L*-statistic	p-value	Pm-statistic	p-value	Remark
GPM	102.6	0.000	-2.752	0.000	-6.339	0.000	11.35	0.000	Stationary
DESAC	74.32	0.000	-3.145	0.000	-4.765	0.000	7.264	0.000	Stationary
AUDIN	109.3	0.000	-3.389	0.000	-7.063	0.000	12.32	0.000	Stationary

Source: Author's Computations, 2023
Note: P-statistic is Inverse chi-squared statistic; Z-statistic is Inverse normal statistic; L-statistic is Inverse logit t statistic; Pm-statistic is Modified inverse chi-squared statistic. ROA is the return on assets; ROE is the return on equity; NPM is net profit margin; GPM is gross profit margin; DESAC is discretionary accrual; and AUDIN is audit independence.*

The Fisher-type augmented Dickey-Fuller approach produced the unit root test findings displayed in Table 4.3. Inverse chi-squared statistic (P), inverse normal statistic (Z), inverse logit t statistic (L*), and modified inverse chi-squared statistic (Pm) are the four test statistics that are revealed by the test. The test findings showed that each GPM, DESAC, and AUDIN are stationary according to the four test statistics. Looking at the data, it is clear that all test statistics have high statistic values and low p-values, which are sufficient to rule out the presence of unit roots, or non-stationarity, as the test's null hypothesis. Given that these statistics are consistent with stationarity, it can be said that the variable is stationary. Given that the system GMM estimation method was used in this study, both stationary and non-stationary series can be included in a model without risking erroneous results.

Table 2: Result of Variance Inflation Factor (VIF) for Return on Assets Model

Variable	**VIF**	**1/VIF**
AFS*AUDIN	6.01	0.227767
AUDIN	3.31	0.301964
AFS*DESAC	3.3	0.302653
DESAC	3.28	0.304575
Mean VIF	11.56	

Source: Author's Computations, 2023

The VIF result presented in Table 4.5 is for the return on assets model. With each of the VIF values being lower than 10, the model of this study is free from multi-collinearity problems. The tolerance (1/VIF) values also suggest a similar conclusion, as each of the values is well above zero. As a result, the variance inflation factor results showed that none of the model's independent variables exhibited extremely high correlation, which could cause a multi-collinearity issue. The outcome supports the pairwise correlation analysis's conclusion even more.

4.2. Hypotheses Test

Table 3: Result of System GMM for Gross Profit Margin

Variable	Coefficient	Standard Error	z	p-value
GPM (lag)	-0.15055	0.073722	-2.04	0.041
DESAC	0.182404	0.070211	2.6	0.009
AUDIN	-0.92862	1.056989	-0.88	0.380
AFS*DESAC	-0.15101	0.087615	-1.72	0.085
AFS*AUDIN	-0.25308	0.7603	-0.33	0.739
Constant	12.67747	19.69436	0.64	0.520
Sargan test	8.891			0.438
AR test (1)	-1.019			0.308
AR test (2)	-1.008			0.313

Source: Author's Computations, 2023.
Note: GPM is gross profit margin; DESAC is discretionary accrual; and AUDIN is audit independence. AR is autocorrelation test.

As a result of assessing the model of this study in terms of autocorrelation (or serial correlation), the Arellano-Bond test of autocorrelation (AR), which has the null hypothesis of no autocorrelation, is presented. The main assumption of the test suggests that first-order autocorrelation in the GMM result may be acceptable, but second-order autocorrelation raises serious concerns about the result's validity. The outcome reveals a very high first-order autocorrelation statistic value (i.e., -1.872), and the p-value is significantly higher than 0.0.05.

This satisfies the test's requirement and suggests that there is no first-order autocorrelation in the model, supporting the null hypothesis that there is no first-order autocorrelation. The outcome also demonstrates that the p-value is significantly higher than 0.05 and the second-order autocorrelation statistic value is extremely high (i.e., -0.652). This shows that the second-order test, which satisfies the test condition, cannot reject the null hypothesis. As a result, the model passes both first-order and second-order tests without having any autocorrelation issues.

Regarding the test of the validity of the instruments employed for this model, the Sargan test of over-identifying restriction was conducted for this model. This was done to verify if the restrictions placed on the employed instruments in order not to be over-identified are valid. The null hypothesis of this test is that over-identifying restrictions are valid. Given the statistical value of this test result, which is 45.55 and its p-value is greater than 0.01, the results suggest that the null hypothesis of the test could not be rejected for the model. This implies that over-identifying restriction is valid for the model.

Examining the importance of each explanatory variable of the model, the results show audit firm size and auditors' independence interaction have a negative coefficient (-0.2531) not significant with a p-value (0.7390) at 5% level of significance while discretionary accrual, audit firm size, and discretionary accrual interaction have coefficients (0.1824, and -0.15194 respectively) with a p-value of (0.0090 and 0.085). However, the one-period lag of gross profit margin is statistically significant, judging from their p-values being less than 0.5 (5% significant level). Specifically, the significant positive coefficient of lag of gross profit margin indicates that a percent point increase in the first year period lag of gross profit margin will lead to an increase in current gross profit margin by 0.041 percent points. The insignificant negative coefficient of auditors' independence implies that a percent point increase in auditors' independence will lead to a decrease in gross profit margin by 0.380 percent points.

5. Discussions

The major findings of this study revealed a positive and significant effect of earnings management on the financial performance of listed petroleum marketing companies in Nigeria which is in line with the study by (Khan et al., 2020; Rahman et al., 2013; and Shaheen, 2011) but contradict the findings of the study by Al-Sartawi (2013. Specifically, each of the hypotheses was discussed with reference research variables.

GMM regression analysis in Table 5 indicated that discretionary accrual; and the moderating role of audit firm size and discretionary accrual have a significant effect on the financial performance of quoted petroleum marketing companies in Nigeria and this is measured using gross profit margin. This implies that aggressive accrual accounting may indicate a higher risk profile, potentially leading to financial instability. Discretionary accruals can obscure the true financial position and performance of the company, making it difficult for investors and analysts to make informed decisions.

The remaining variables do not have a statistically significant on the gross profit margin. The insignificant effect is in line with the findings (Hohz & Sarlo Neto, 2014; Chaharsoughi & Rahman 2013; Jang & Kim, 2017; Anderson & Frisk, 2016; Okafor & Ezeagba, 2018; Jang & Kim, 2017; Zayol, et al., 2017; Llukani 2013; Hassan & Farouk, 2014; Ching, et al., 2005; while positive significant effect is in line with the study by (Nasir & Ramakrishnan, 2020; Pranesh, 2017; Sholihah, 2013).

6. Conclusions and Recommendations

It has been discovered that earnings management plays a significant role in diminishing the financial performance of petroleum marketing companies. Although there is no violation of any law, it has portrayed the company's image in an unethical manner. This study therefore concludes specifically that audit committee financial expertise, auditors' independence, interaction of audit firm size and audit committee financial expertise, interaction of audit firm size and auditors' independence have statistically significant effects on the return on assets and return on equity of petroleum marketing companies in Nigeria.

Contrarily, discretionary accrual, the interaction of audit firm size and discretionary as well as control variable board size play insignificant effect on the sampled companies. In this, the company with high discretionary accruals may attract regulatory attention, potentially leading to increased oversight and enforcement actions. Moreover, earnings management of financial performance may lead to higher credit ratings, potentially reducing borrowing costs but also increasing the risk of credit rating downgrades if accruals are later reversed.

Similarly, discretionary accrual, audit committee financial expertise, the interaction of audit firm size, and audit committee financial expertise have significant effects on the net profit margin of quoted petroleum marketing companies in Nigeria whereas, auditor independence, the interaction of audit firm size and discretionary accrual, interaction of audit firm size and auditors independence as well as control variable board size does not have a significant effect on net profit margin of quoted petroleum marketing companies in Nigeria.

Auditor concern over earnings management may be greater when decisions are made that lead to inflated rather than underestimated results. Auditors may be aware of earnings management. In terms of the possibility of receiving a qualified audit report, discretionary accrual might not be important. Organizations with extreme earnings performance, whether positive or bad, are more likely to receive a qualified audit report, as would be predicted.

7. Suggestions for Future Research

The study will improve the understanding of the earnings management concept in practice at all levels of organization, especially in the petroleum marketing companies' environment where auditors and regulators when assessing the appropriateness of accounting policy choices by petroleum marketing companies, mitigation of earnings management is highly granted. Auditors should be more concerned with accruals that increase income than those that decrease it. The relationship between earnings management and the financial performance of Nigeria's listed petroleum marketing businesses may suffer if this issue is not taken into consideration. The financial statements of petroleum marketing organizations may be deceptive if the asymmetric impacts of accruals that increase as income rises and decrease as it falls are not addressed.

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