

## Ownership Structure and Earnings Management of Listed Pharmaceutical Companies in Nigeria

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### **Abstract**

*The reliability and credibility of financial reporting of companies are regularly being subjected to excruciating scrutiny as a result of the face of unwholesome manipulation of the earning figures by executives of these companies. Thus, this study examine how the ownership composition of listed pharmaceutical companies in Nigeria correlates with the way these companies manage their earnings. Specifically, the goal the research were to investigate the relationship between managerial ownership, institutional ownership and block holder ownership (used as measures of ownership structure) on one hand, and discretionary accruals (proxy of earnings management) on the other hand. Using multiple regression analysis with the aid of STATA 16 output as a tool of data analysis, relevant data was obtained from the 2019 to 2023 annual reports of three listed pharmaceutical companies selected as sample size of this study (out of a population size of seven listed pharmaceutical companies). The study's findings showed that there is a positive and significant association between blockholder ownership and earnings management, while there is a negative and substantial interplay between managerial and institutional ownership. It follows that ownership composition and earnings management of Nigerian listed pharmaceutical businesses have a negative and substantial association. The study's conclusions suggest that pharmaceutical businesses should decrease shareholder ownership while simultaneously increasing managerial and institutional ownership to counteract profit management inclinations.*

**Keywords:** *Ownership structure, Block holder ownership, Managerial ownership, Institutional ownership, Earnings management.*

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### **1. Introduction**

Over the years, especially since the collapse of several notable firms such as Enron, WorldCom, Ranx Xerox, Global Crossing, Cadbury Nig. Plc, and Intercontinental Bank Nig., among others, many consumers of financial reports have questioned the reliability and trustworthiness of the main goal of external financial reporting, and that is because of the seemingly indiscriminate way managers and directors of companies tend to manage and report their earnings, an act that has adversely affected the information content of their financial reports. Ekpulu and Omole (2018) opine that due to the surreptitious activities of directors and managers (who act as agents of the principal, the shareholders) who tend to manipulate financial statements by using judgment in

financial reporting and shaping financial transactions to give a negative signal of the financial status of their organizations, thereby misinforming concerned stakeholders/ shareholders about the true state of affairs of their businesses, such activities, summarily described as earnings management practices, have been at the heart of recent discussions, endangering the reputations of the auditing and accounting departments.

Ganiyu and Araoye (2022) contend that although earnings management is legal as long as adjusted numbers comply with GAAP, it may easily become fraudulent if they don't. According to Ganiyu and Araoye (2022), an organisation's ownership structure may aid in the monitoring and control of aggressive earnings management, which has the prospective to distort a firm's stated financial statement and provide an inaccurate image of the enterprise. According to Ali-Momoh and Ahmed (2022), the ownership structure of a business might have an impact on how well monitoring techniques used to stop profit management work. Accordingly, an appropriate ownership structure could aid in avoiding financial reporting that is deceptive (Azzoz & Khamees, 2016).

Taking into cognizance the seemingly vital role that ownership composition plays in effectively reducing the probability of earnings management practices, According to Bawa and Isah (2018), creating a suitable ownership structure is a useful strategy for lowering financial reporting fraud. Considering how crucial ownership structure is to manipulating profits management strategies. Ali-Momoh and Ahmed (2022) suggest that it has become expedient for companies to set up mechanisms and structures that would not only enhance the practice of reporting earnings quality, but also ensure that manipulations of earnings are done within the ambit of generally acceptable accounting practices, and one way to achieve these objectives is through ownership structure (a component of corporate governance). Mwangi and Nasieku (2022) therefore, indicate that with strong ownership structure, the gaps in upper management's earnings manipulation strategy will ultimately be filled, leading to accurate and high-caliber financial reporting.

### **Statement of the Problem**

Despite the so many improvements that have greeted the practice of the accounting profession via the advancements of accounting standards, which have given rise to improvements in global financial reporting standards, the cases of earnings management seem not to be abating in the slightest. Even in developed economies, accounting manipulations continue to increase by the day, a situation that has led to decline in the market value of companies, as well as massive decline of shareholders' wealth (Kizil & Kaşbaşı, 2018). Developing economies such as Nigeria considered to be in the early phases of capital market development and adoption of international standards have also reported several incidences of earnings manipulation such as the cases of Oceanic Bank, Intercontinental Bank, Cadbury Plc among others. Following several cases of accounting manipulations among corporate organisations in Kenya, Mwangi and Nasieku (2022) published a report that raised concerns about the ability of corporate boards and auditors to provide reliable and credible financial reporting following egregious discrepancies of financial reports. Undoubtedly, there have been severe instances of earnings manipulation worldwide, resulting in significant losses for shareholders. In order to stop the growing number of examples of earnings management, it has been suggested that excellent corporate governance be in place. In particular,

ownership structure has been mentioned as being crucial to promoting accountability and transparency in financial reporting (Mwangi & Nasieku, 2022). Thus, the goal of this research is to explore the connection between ownership composition and earnings management.

Even though a sizable number of studies—both domestically and internationally—have highlighted the interplay between ownership composition and profit management, a general consensus is still elusive. In general, the inconsistent findings and lack of clear-cut, cohesive conclusions on the influence of ownership composition on profit management have intensified the need for deeper investigation. Conflicting results have emerged from research on the link between ownership composition and disclosed earnings management, making it impossible to say with certainty whether ownership structure influences or has any real bearing on earnings management (Farouk & Bashir, 2017). Furthermore, little research has been done on ownership structure and earnings management in Nigerian pharmaceutical corporations, with the exception of Abba et al. 2023. This is despite the fact that many Nigerian researchers and authors have extensively discussed this topic (Abba et al., 2023; Osibuamhe & Ogwumike, 2023; Musa et al., 2023; Shittu et al., 2022; Ali-Momoh & Ahmed, 2022; Bingilar & Bariweni, 2020; Aondoakaa & Joseph, 2020). This research empirically investigates the interplay between ownership composition and profit management of publicly quoted pharmaceutical businesses in the Nigerian Exchange Group (NXG) between 2019 and 2023, in light of the identified gap in knowledge and literature.

### **Objectives of the Study**

The specifically, this study is established to examine the correlation between:

- i. Managerial ownership and discretionary accruals of listed pharmaceutical companies in Nigeria.
- ii. Institutional ownership and discretionary accruals of listed pharmaceutical companies in Nigeria.
- iii. Block holder ownership and discretionary accruals of listed pharmaceutical companies in Nigeria.

It is on this premise that hypotheses are subsequently expressed and formulated.

## **2 LITERATURE REVIEW**

### **Conceptual Review**

#### **Ownership Structure**

According to Kirimi et al. (2022), ownership has several meanings depending on perspective. Legally, company owners may enjoy its advantages and make operational choices. These privileges include the right to the business's revenue, excess value in a sale, control over its operations, and the opportunity to sell all or part of its value (Akinleye & Adebuseye, 2023). According to Lyndon and Yalah (2022), the ownership composition is an internal control constituent that governs how representative privileges distribute corporate capital to persons or

legal organisations. Companies' excellent corporate governance depends on their ownership structure. According to Onuora et al. (2022), ownership structure is a critical part of internal control that directs a company's money to many organisations. According to Abdul et al. (2021), ownership composition includes ordinary shares owned by promoters, private companies, public corporations, individuals, and foreign investors. Alhassan and Mamuda (2020) also interpret ownership structure as a percentage of ordinary company shares owned by various stakeholders. These parties are the corporation's shareholders, so ownership structure varies by organization due to legal or environmental stability, regulations, and economies of scale. According to Alhaji and Sani (2018), ownership composition is the percentage of a firm's shares held by institutions, individuals, or families. Ironkwe and Emefe (2019) assert that a firm's ownership structure method may have a negative impact on its profit management process. They said ownership structure has an impact on company dividend policy and agency concerns. Equity allocation by capital, votes, and equity owners' identities shows ownership structure, according to Alhassan and Mamuda (2020).

According to Omorokunwa and Idubor (2020), ownership composition, as a corporate governance tool for increasing firm efficiency, has typically influenced company performance. According to Affan et al. (2017), ownership arrangement is a key indicator of corporate governance and productivity. A more diverse ownership structure may boost business profitability. According to Edirin (2018), ownership structure is important because board and other employees' remunerations are typically a task of the firm's owners, while employees' salaries meaningfully impact the viability of a given workforce. According to Affan et al. (2017), ownership arrangement is defined as the allocation of equity based on votes, capital, and equity owners' identities. Many economic researchers feel that ownership type may influence business performance, management control, financial reporting quality, and audit quality (Daniel, Nuraddeen & Ahmed, 2021).

Ekpulu and Omoye (2018), cited in Ogiriki and Adole (2023), classify ownership structure in Nigeria as family, institutional, block holder, foreign, managerial, individual, government, and controlling. As of 2024, managerial, institutional, and block holder ownership are common for Nigerian Exchange Group-listed pharmaceutical firms. Thus, this research examines the most typical ownership structures in this area.

### **i. Managerial Ownership**

Managerial ownership is defined by Meilita and Rokhmawati (2017) as the total unsettled shares divided by the amount of the shares held by the managers. In order to boost a company's capital and encourage managers to align their interests with the company's, managerial ownership entails giving managers a share in the business. According to Omorokunwa and Idubor (2020), management ownership is described as the natural logarithm of the equity shares that managers hold as company shareholders; as such, it represents a stake in the company. Alhassan and Mamuda (2020) define managerial ownership as the percentage of directors' stock ownership, including their deemed ownership, whereas Edirin (2018) defines it as the proportion of equity shares held by insiders and promoters.

Management ownership is defined by Mudi (2017) as the portion of a company's ordinary shares held by the CEO, Managing Partner, and Board; similarly, Alsmady (2018) defines it according to previous submissions. Aliyu et al. (2015) define management ownership as the percentage of common shares owned by independent, executive, and director directors. According to Lawal et al. (2018), management ownership promotes equity within the organisation and encourages managers to match their goals with those of the company. They employ the natural logarithm of managers' equity as shareholders to determine management ownership.

## **ii. Block holder Ownership**

According to Onuorah et al. (2022), block holders are people or organisations who own a substantial portion of a company's debt or shares. These shareholders' voting rights may have an impact on the business. Block holders are well-known shareholders because they own a large block of the company's bonds or shares. Block owners often own an arbitrary number of shares. Blockholder ownership is described by Nguyen et al. (2020) and Onuorah et al. (2022) as the division of the total outstanding shares by the number of shares owned by persons who are not related to the firm owner. According to Racha and Demyana (2019), blockholder ownership is defined as an arrangement in which external shareholders control a substantial portion of the shares. To measure it, they count owners/investors who control a sizable block of shares (5%).

## **iii. Institutional Ownership**

In institutional ownership, significant financial institutions, pension funds, and endowments possess a share in a company, according to Omorokunwa and Idubor (2022). Institutions often buy huge chunks of shares of a business and have an impact on its management. Institutional shareholders are generally experts who utilise their knowledge to scrutinise management to ensure their interests coincide with the organization's. Shohreh et al. (2015) define institutional ownership as when major organisations, financial corporations, endowments, pension funds, etc. own a business. Institutions usually buy large chunks of a shares of a business and have an impact on its management.

Institutional shareholders are typically specialists that supervise management to ensure their benefits align with the company's. Institutional equity ownership is the natural logarithm of firm investors' equity. According to Paramitha and Firnanti (2018), institutional ownership refers to corporations and financial institutions owning firm shares. Institutional ownership is defined as the number of shares split by the amount of shares owned by institutions, according to Reyna (2018). Institutional ownership occurs when pension funds, investment firms, banks, etc. hold business shares. The natural logarithm of institutional equity in the company measures institutional ownership.

## **Earnings Management**

There are many ways to describe earnings management. According to Racha and Demyana (2019), it is the deliberate distortion of external financial reporting for personal gain. According to Salaem

(2016), earnings management refers to the practice of managers manipulating financial reports by transaction structure and judgement in order to deceive stakeholders about the business's financial success or to affect contractual outcomes that rely on reported accounting figures. In the opinion of Ogiriki and Adole (2023), earnings management is the strategic manipulation of a company's financial statements, often within the boundaries of accounting rules and regulations, with the primary intent of influencing reported earnings figures to achieve specific financial goals or to portray a desired image of the company's financial performance, thereby potentially affecting investor perceptions, stock prices, and stakeholder confidence. At its core, earnings management revolves around the art of influencing reported earnings, which are a key measure of a company's profitability and performance.

Earnings management, according to Farouk and Bashir (2017), is defined as the deliberate manipulation of reported earnings by managers to their own advantage through the use of specific accounting practices. Alexander (2019) posits that earnings management is the process by which managers or directors of an organisation manipulate financial figures to delude stakeholders and distort the business's financial viability. Nevertheless, earnings management may also be defined as the deliberate implementation of GAAPs to attain a desired level of reported income (Parveen et al., 2016). Bingilar and Bariweni (2020) contend that earnings management is permissible provided that a business modifies its declared results in accordance with GAAP. Modifications to earnings management that contravene GAAP and accounting regulations may be considered deceptive and illegal. Wati and Gultom (2022) propose that earnings management may serve as a method to mitigate debt, influence stock prices, and satisfy analytical expectations. The most frequently employed earnings management strategy involves the modification of accounting procedures and regulations. According and actual earnings comprise earnings management, as per Ekpulu and Omoye (2018). Real earnings management (REM) entails changing transaction timing or structure, whereas accounting earnings management (AEM) entails using accounting rules to record transactions and events.

### **Earnings Management Practices**

The practice of earnings management, as defined by Bingilar and Bariweni (2020), entails the modification of reported earnings figures by employing judgemental discretions in accordance with the Generally Accepted Accounting Principles (GAAP). This functions to deceive users into believing inaccurate earnings figures in order to secure a favourable response (such as increased demand for the firm's shares) or to impact contractual outcomes that are contingent upon the reported earnings (Ogbonnaya et al., 2016). From the foregoing, it can be perceived that earnings management can either be done to the private benefits of the individuals involved or to the benefit of the organization or both. A typical example is a situation where raising new funds from established stakeholders is dependent on the company achieving a given threshold of earnings. Where the company's earning falls below the expected limits, managers may decide to prop up the firm's earnings in order to get the required earnings.

However, the misleading would likely also give a false impression about the performance of the managers or even afford them the right to performance base remuneration and job security which

may have not been if the actual earnings were to be made public. A desire for more consistent profits may serve as an incentive for earnings management, in which case it will engage in income smoothing as part of its earnings management strategy.

## Approaches to Earnings Management

**i. Discretionary Accruals Management:** Earnings management (EM) research frequently concentrates on discretionary accruals, as per Dechow, Sloan, and Sweeney (1995), as cited in Ekpulu and Omoye (2018). A number of accrual-based algorithms are capable of identifying earnings management. Ekpulu and Omoye (2018) offer discretionary accrual estimates that occur in two stages. To estimate the nondiscretionary accrual, first scale the mean of all accruals by the delayed total assets. Discretionary accruals, on the other hand, are the difference between the projected nondiscretionary accruals and the current year total accrual, scaled by lag total assets. Certain EM models classify cumulative accruals as either nondiscretionary or discretionary. In order to determine discretionary accruals, Ekpulu and Omoye (2018) state that these approaches compute non-discretionary accruals and then deduct them from the total accruals for the event year. By separating total accruals into non-discretionary and discretionary accruals and accounting for receivables over revenue, Dechow et al. (1995) updated the Jones (1991) model.

**ii. Real Earnings Management (REM):** Roychowdhury (2006), as cited in Ekpulu and Omoye (2018), posits that REM is characterised by the manipulation of real activities, which implies a departure from standard operational practices. The manager's motivation for acting in this way is to trick at least some stakeholders into thinking that certain financial reporting goals have been met in the regular course of business. Though it enables managers to meet reporting goals, it is important to understand that deviating from traditional operational accounting standards does not always increase the firm's worth. Ekpulu and Omoye (2018) provide an interesting argument, claiming that financial executives are more likely to influence results via accruals than through real actions. Outside of genuine operations, there are at least two potential explanations for refraining from manipulating earnings. First and foremost, auditor or regulatory inspections are significantly more likely to result from accrual manipulation than genuine pricing and production decisions. Secondly, the danger of investors losing confidence in financial reports is present when accrual manipulation is the sole solution.

## Theoretical Framework

### Agency Theory

On a general note, the discourse on ownership structure and earnings management has been anchored on the agency theory, as this is the theory that highlights the contractual agreement between owners of a business and the parties saddled with the responsibility of managing the business. As a result, agency theory establishes the principal-agent relationship between directors and managers. In order to explain the association between the owner of the business and the agent or manager, Jensen and Meckling (1979) and Berle and Means (1932) developed the agency theory. The division of ownership and management in modern businesses serves as the foundation

for agency theory. Separate shareholders, who seldom participate in management, are a feature of modern businesses. When evaluating the implication of governance methods on profit management, it is important to take into account the agency issues that arise from the parting of ownership and control, which lead to interest irregularities between managers and shareholders.

When a company is not owned by managers or directors, self-interest becomes their overriding motivation, hence they tend to satisfy their own desires and objectives to the detriment of the objectives and desires of the organization, and consequently, the interests of the shareholders or owners (Musa et al., 2023). In view of this, agency theory suggests that a separation between ownership and control often results in manager and owner having divergent opinions and interests., which brings about conflicts of interest.

### **Empirical Review**

Using selected quoted healthcare companies in Nigeria, Abba, Hanga, Kakanda and Babarabi (2023) empirically explored at the outcome ownership structure has on earnings management. Based on their thorough annual reports, seven (7) of the ten (10) stated companies were particularly selected for the study (2012–2021). The collected data were examined using multiple regression analysis, while ex-post facto research design was adopted. The results of the study indicated that institutional ownership has a major unfavourable impact on earnings management, whereas block-holder ownership and foreign ownership have favourable and substantial impact on how the healthcare companies managed their earnings. The study consequently suggested that listed healthcare businesses in Nigeria should be discouraged from applying block holder and foreign ownership due to their tendency to encourage earnings management, while institutional ownership should be supported, as this would help to reduce the practice of earnings management in Nigerian healthcare organizations.

Ogiriki and Adole (2023) conducted a study to examine how ownership composition correlates with earnings management of selected industrial businesses in Nigeria. Using data panel data regression to examine the relationship between block holder ownership and controlling ownership (measures of ownership structure) and discretionary accruals (proxy of earnings management). From 2013 to 2022, eleven consumer goods firms quoted on the Nigerian Exchange Group provided their annual reports, which included pertinent data. The results showed that both controlling and block holder ownership would lead to a decline in the frequency of earnings management practices among Nigerian manufacturing enterprises. As a result, the research recommended that businesses work to improve ownership control and prevent holder ownership in order to fortify the monitoring system that may otherwise limit profits management.

Ganiyu and Araoye (2022) assessed the implication of ownership composition on the management of profits for petroleum firm listed in Nigeria. Eight oil and gas companies that were listed as of December 31, 2020, on the Nigerian Stock Exchange Market submitted their annual financial reports and accounts for the years 2011 through 2020. The paper of the data used pooled regression and descriptive statistics. The ownership structure of listed petroleum firm in Nigeria has a positive and substantial impact on the management of profits. The OLS (robust) demonstrated that



explanatory variables had a favourable and substantial implication on earnings management, with the exception of firm size. The research discovered that ownership composition has an impact on earnings management and suggested that management take this into account when formulating guidelines for earnings management in order to avoid aggressive management.

Bingilar and Bariweni (2020) examined how corporate governance and ownership structure affect Nigerian manufacturing company earnings management. The paper used *ex-post facto* approach to evaluate the yearly financial statements of 15 Nigeria Stock Exchange (NSE)-listed industrial businesses from 2009 to 2019. OLS was used to analysis data. Research found a negative association between board composition (BCOM) and discretionary accruals (DSAC) in Nigerian manufacturing enterprises. The audit committee (AUDC) also negatively affected discretionary accruals. DSAC positively correlated with ownership concentration. This suggested that a board with a high proportion of independent directors would decrease profits management. Finally, scattered ownership would enhance profits management over concentrated business ownership. Implement legislation that improve corporate governance.

### 3. METHODOLOGY

The study employed *ex-post facto* design. Data were gathered from annual reports and financial statements of the pharmaceutical corporations selected. From the website of the Nigerian Exchange Group, it was discovered that the number of pharmaceutical companies in the healthcare sector is seven as at September, 2024. This therefore, represented the population size, while the sample size used for this study is three. The reason for selecting three pharmaceutical companies out of the available seven is that although four companies are considered to be listed, one of these four companies was listed in November 7, 2023. As such, this company (Mecure Industries Plc) does not have the relevant data for the period under study (that is, 2019-2023).

The sampling firms are Fidson Healthcare Plc, May & Baker Nigeria Plc, and Neimeth International Pharmaceuticals Plc. Managerial, block holder, and institutional ownership are the independent factors, whereas discretionary accruals created by Jones (1991) and refined by Dechow et al. (1995) are the dependent variable. This research used multiple regression using STATA 16.

#### Model Specification

The regression model for the study is thus, stated as follows:

$$DACC_{it} = \beta_0 + \beta_1 MO_{it} + \beta_2 IO_{it} + \beta_3 BO_{it} + \mu_{it}.$$

Where:

$DACC_{it}$  = Discretionary accruals of firm i time t.

$MO_{it}$  = Managerial ownership of firm i time t.

$IO_{it}$  = Institutional ownership of firm i time t.

$BO_{it}$  = Block holder ownership of firm i time t.

$\beta_0$  = is constant

$\beta_1 - \beta_3$  = are the coefficients  $\mu_{it}$  = is the error term

#### 4. RESULTS AND DISCUSSION

##### Descriptive Statistics

Table 1 displays the descriptive statistics for the variables utilised in the research. It includes information on the minimum, maximum, mean, standard deviation, skewness, and kurtosis of the data.

**Table 1: Descriptive Statistics**

##### *Descriptive Statistics of the Variables*

Variables	Mean	Std. Dev	Min	Max	Skewness	Kurtosis	Obs
DACC	0.228	0.143	0.004	0.611	0.433	2.477	15
MO	0.108	0.077	0.003	0.030	0.508	2.576	15
IO	0.026	0.015	0.003	0.072	0.867	2.911	15
BO	0.208	0.161	0.007	0.731	1.252	4.421	15

**Source:** STATA 16 Output, 2024.

With a standard deviation of 0.143 and lowest and highest values of 0.004 and 0.611, Table 2 shows that the earnings management (DACC) measure of the selected pharmaceutical enterprises in the Nigerian Exchange Group in 2024 averaged 0.228. This indicates that throughout the course of this inquiry, the discretionary accruals of the selected firms averaged 0.228. The fact that the standard deviation is less indicates that the data's divergence from the mean is not too large. The kurtosis of 2.477, the peak of the data, suggests that most values deviate from the mean and hence violate the premise of a normal distribution. The majority of the data with a skewness of 0.433 are positively skewed, meaning they do not satisfy the balanced distribution assumption.

In addition, the table displays the lowest and greatest values of 0.003 and 0.030 for managerial ownership (MO), with a mean of 0.108 and a standard deviation of 0.077. This indicates that the MO of the chosen companies ranged from both sides of the mean by 0.077 and averaged 0.108. The standard deviation shows a wide dispersion of data since it is far from the mean. Given that most values are higher than the mean and defy the assumption of a normal distribution, the kurtosis score of 2.576 shows the peak in the data. Subsequently the coefficient of skewness is 0.508, the data are positively skewed, with the majority falling on the right side of the normal curve. As a result, they do not fit the asymmetrical distribution assumption.

The institutional ownership (IO) ranges from 0.003 to 0.072, with an average of 0.026 and a standard deviation of 0.015 as seen in the table. This indicates that the IO of listed pharmaceutical companies was 0.026 on average, with a 0.015 deviation from either side of the mean. The standard deviation shows a wide dispersion of data since it is far from the mean. Since most values are higher than the mean and the data do not fit the assumption of a normal distribution, the kurtosis of 2.911 shows the peak in the data. The data have a positive skewness, with a value of 0.867, indicating that the bulk of the data fall on the right side of the normal curve, which goes against the assumption of an asymmetric distribution.

Blockholder ownership (BO) ranges from 0.007 to 0.731, with an average of 0.208 and a std. dev. = 0.161 in the table. This indicates that the data deviates from both sides of the mean by 0.161 and that the average BO of the sampled firms throughout this study was 0.208. Given that the standard deviation is far from the mean, this suggests a significant degree of data dispersion. Since most values are higher than the mean and the data do not fit the assumption of a normal distribution, the kurtosis of 4.421 shows the peak in the data. The majority of the data are on the right side of the normal curve, indicating a positively skewed distribution, which refutes the assumption of an asymmetric distribution (coefficient of skewness of 1.252).

### Correlation Matrix

**Table 2: Correlation Matrix**

*Correlation Matrix of the Dependent and Independent Variables*

Variables	DACC	MO	IO	BO
DACC	1			
MO	0.1240 (0.2009)	1		
IO	0.1315 (0.1751)	0.1110 (0.2275)	1	
BO	-0.0535 (0.5823)	-0.1346 (0.1427)	-0.0759 (0.4100)	1 (0.3526)

*P-values in parentheses.*

**Source:** STATA 16, Output 2024

The outcome in Table 2 displays the degree of correlation with the dependent variable (earnings management) of the study in listed pharmaceutical companies in Nigeria, as well as the coefficients and significant values for each pair of independent variables separately, among themselves, and cumulatively. The correlation value of 0.1240, which is not statistically significant, shows that discretionary accruals and management ownership (MO) have a positive association, as shown in the table. This link suggests that the earnings management of listed, hand-picked pharmaceutical businesses diminishes in tandem with a decline in managerial ownership. Additionally, Table 2 displays the relationship—which is positive—between institutional ownership (IO) and discretionary accrual of the listed firms that are the subject of the research. Furthermore, the association does not appear to be statistically significant, based on the correlation value of 0.1315. Consequently, this association suggests that a decline in institutional ownership coincides with a decline in the profit management of listed pharmaceutical firms. Furthermore, the table shows a negative correlation between blockholder ownership and listed pharmaceutical businesses in Nigeria that are selectively accruing discretionary earnings. This is made clear by the association coefficient of -0.0535, which is substantial at all significance levels. This suggests that the listed corporations' ability to control their profits will rise as the proportion of shares owned by block holders diminishes.

### Test of Hypotheses

This section displays all of the study's independent variables and the regression findings for the dependent variable (EM). The study of the link between each independent variable, both singly and collectively, and the dependent variable comes next. Thus, the study's model yielded a summary of the regression outcome.

**Table 3: Regression Analysis**

***Regression Results (Random Effect Model)***

<b>Variables</b>	<b>Coefficients</b>	<b>Std. Err.</b>	<b>Z-Values</b>	<b>P-Values</b>
Intercept	-0.101	0.121	-0.83	0.404
MO	-3.226	0.898	-3.59	0.000
IO	-0.081	0.402	-0.20	0.840
BO	0.769	0.041	18.97	0.000
R <sup>2</sup> overall	0.8092			
Wald chi2	377.91			

Prob>chi2            0.0000

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**Source:** STATA 16, Output 2024

The multiple coefficient of determination, or cumulative R<sup>2</sup> (0.8092), indicates the percentage or amount of the dependent variable's total variance that the independent and dependent variables jointly explain. As a result, it shows that block holder, institutional, and managerial ownership together account for 81% of the variance in earnings management of listed pharmaceutical businesses. This finding also shows that the variables were chosen, merged, and used in the research in a way that makes sense for the model. The probability value (0.0000) provides statistical evidence for this.

According to the regression result in Table 3, management ownership—defined as the proportion of shares held by managers relative to total shareholding—has a significant 1% level of significance, a z-value of -3.59, and a coefficient value of -3.226. This shows that the managerial ownership of some listed pharmaceutical businesses in Nigeria has a statistically significant unfavourable link with earnings management. This suggests that an increase in the proportion of shares owned by managers would reduce the risk of sampled enterprises' profit management discretionary accrual.

Therefore, the null hypothesis regarding managerial ownership and earnings management is rejected in favour of the alternative hypothesis, hence it settled that there is no substantial connection between ownership structure and earnings management of listed selected pharmaceutical businesses in Nigeria.

Also, the Table shows the statistical relationship between institutional ownership and earnings management. The result revealed a coefficient of -0.081, Z-values of -0.20 and p-value of 0.840, which implies that the association between institutional ownership and earnings management of sampled pharmaceutical firms in Nigeria is not statistically substantial. This connotes that an increase in the percentage of institutional shares held by institutions would mitigate against earnings management. This study therefore, rejects the null hypothesis and concludes that there is no substantial correlation between institutional ownership and discretionary accruals of listed selected pharmaceutical companies in Nigeria.

Finally, block holder ownership showed a constant coefficient of 0.769, z-values of 18.97 and p-value of 0.000. This shows that block holder ownership statistically and significantly influences the discretionary accruals of listed selected pharmaceutical companies in Nigeria at 1% level of impact. This suggests that a 1% decrease in block holder ownership of the listed sampled companies in Nigeria equally leads to a decrease in earnings management by 77%. The implication of this is that a decline in the proportion of shares held by one or few individuals would minimize earnings management tendencies, while an increase in block holder ownership would bring about a corresponding increase in earnings management practices among pharmaceutical companies in

Nigeria. This study thus, accepts the null hypothesis that block holder ownership meaningfully correlates with earnings management of quoted selected pharmaceutical businesses in Nigeria.

### **Discussion of Findings**

The regression result in Table 3 revealed that managerial ownership as measured as percentage of shares owned by managers to total shareholding has a z-value of -3.59, coefficient value of -3.226 and is substantial at 1% level of significance. This implies that managerial ownership is adversely, strongly and statistically related with earnings management of listed selected pharmaceutical companies in Nigeria. This infers that a surge in the proportion of shares held by managers would mitigate against earnings management through discretionary accruals by listed selected pharmaceutical businesses in Nigeria.

Also, the Table shows the statistical connection between institutional ownership and earnings management of listed pharmaceutical businesses in Nigeria. The result revealed a coefficient of -0.081, Z-values of -0.20 and p-value of 0.840, which implies that the association between institutional ownership and earnings management of listed selected pharmaceutical businesses in Nigeria is not statistically significant. This infers that an upsurge in the proportion of institutional shares held by institutions would mitigate against earnings management of quoted selected pharmaceutical businesses in Nigeria.

Finally, block holder ownership showed a constant coefficient of 0.769, z-values of 18.97 and p-value of 0.000. This shows that block holder ownership statistically influences the earnings management of quoted selected pharmaceutical businesses in Nigeria at 0.01 alpha. This infers that a 1% decrease in block holder ownership of listed selected pharmaceutical companies in Nigeria will result in decrease in earnings management of the firms in Nigeria by 77%. In other words, a decrease in the proportion of shares held by one or few individuals would minimize earnings management tendencies.

## **5. CONCLUSION AND RECOMMENDATIONS**

This research looked at the association between how ownership composition and earnings management of listed pharmaceutical businesses in Nigeria. In essence, the focus of this study was how ownership structure correlated with the way listed pharmaceutical companies in Nigeria managed their earnings. From the findings of the study as discovered by the regression analysis conducted, the following conclusions in examining the implication of ownership structure and earnings management are stated as follows:

- (i) The correlation between managerial ownership and earnings management of quoted pharmaceutical corporations in Nigeria revealed a adverse and substantial relationship.
- (ii) The relationship between institutional ownership and earnings management of quoted pharmaceutical firms in Nigeria showed a adverse and inconsequential relationship.
- (iii) The correlation between block holder ownership and earnings management of listed pharmaceutical companies in Nigeria showed a positive and significant relationship.

It can therefore, be concluded that although ownership composition has substantial correlation with earnings management, such relationship is negative.

It is common knowledge that pharmaceutical companies, just like every other company, engage in earnings management in order to enhance their overall performance, especially given the need to meet with the demands of the owners of the companies. Similarly, it has been shown that an organization's ownership structure enhances performance as managers are better equipped to protect corporate control from a market takeover threat. Similar to this, understanding a company's ownership structure is crucial for all stakeholders as it provides insightful insights on the efficacy and expansion possibilities of the enterprise. Thus, it has become expedient to monitor the decisions of the management of these companies so as to assure that not only are the interests of shareholders protected, but also to guarantee dependable and comprehensive financial disclosure. From the foregoing, it is evident that the ownership composition of a firm is regarded as a very crucial monitoring mechanism for both owners and managers of a business as it can be used to reduce the incidence of earnings management.

On the basis of the results of this study, it is therefore suggested that:

- i. Pharmaceutical companies in Nigeria should be encouraged to monitor managerial ownership so as not allow directors and managers have much control over the affairs of their companies, which will ultimately allow them misappropriate the resources of these companies. In order to do this, the Financial Reporting Council of Nigeria (FRCN) should, through the code of corporate governance and others relevant regulations, define the range of managerial ownership proportions that companies should maintain so as not allow greater control of investors wealth by agents (managers).
- ii. Pharmaceutical companies in Nigeria should also encourage greater investment in their shares through institutional ownership because an increase in the proportion of institutional shares will empower these institutions to curtail the unwholesome and inordinate activities of the executives. This can be achieved if government through its regulatory agencies, such as the Security and Exchange Commission, make policies that will encourage investment in the private sector. Without a doubt, investment by institutions will provide greater power for them to indirectly control management opportunistic tendencies.
- iii. Furthermore, since findings have revealed that block holder ownership encourages earnings management practices among pharmaceutical companies in Nigeria, the proportion of shares held by one or few individuals should be minimized. This will reduce the controlling power these few individuals have in influencing management decisions especially the ones that would not be of benefits to them.

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