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Original Research Article

Corporate Governance and Audit Fees of Listed Pharmaceutical Firms in Nigeria

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Abstract

This study aimed at ascertaining those corporate governance variables that determine the audit fees of listed pharmaceutical firms in Nigeria for a 6-year period from 2012 to 2017. The study adopts ex-post facto and Panel research design and secondary data are obtained from the annual audited accounts of the sample of seven (7) out of the population of eleven (11) listed pharmaceutical firms based on a purposive sampling technique. Descriptive statistics, correlation, and multiple regression techniques are used to analyse the effect of corporate governance attributes on the audit fees paid by the sampled firms. The study found that board diligence has positive significant effect on audit fees, while board size and board independence have a negative insignificant effect on audit fees. Thus, the study concludes that the directors of listed pharmaceutical firms in Nigeria should always consider their degree of diligence in determining the amount of audit fees since the extent of their thoroughness in addressing reporting issues would play a role in how much external auditors would accept as their fees. Consequently, the study recommends that listed pharmaceutical firms should ensure efficient management of their total asset, maintain an average number of meetings annually, and maintain an audit tenure in line with statutory requirements to curtail excess fees.

Keywords: Board Size, Board Independence, Board Diligence, Audit Fees, Pharmaceutical Firms.

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1.0 INTRODUCTION

Globally, firms that are publicly quoted are managed by a group of individuals who are not owners of these firms. This implies that shareholders have a residual claim on the resources of the firm, and consequently, management is obliged to render the result of their stewardship on the resources of the firm to the shareholders. This is usually achieved through the preparation of periodic financial statements (Securities and Exchange Commission [SEC], 2000). These statements are usually subjected to independent examination by a statutory auditor, who expresses an opinion as to the true and fair view of the statements. In addition, the external auditor is charged with the responsibility of ensuring consistency in the financial report with accounts prepared, ascertain the safeguard of assets, as well as prevent and detect fraud and material errors. The fact that the auditor is not an employee of the firm he audits; his remuneration is limited to the fee paid to him for such services provided by him. Audit fees is one of the major elements that can affect and serve as a threat to audit independence, especially when the amount charged and paid is too high or too low to cover the risk and cost of the audit assignment. This is because, audit fees determine the extent of services provided by the auditor (Callaghan, Parkash, & Singhal, 2008; Frino, Palumbo, & Rosati, 2013; Karimpour, 2013; Suseno, 2013).

In determining his remuneration, the professional accountant in public practice may quote whatever fee deemed to be appropriate. However, section 361 of the CAMA Cap C20 LFN 2004 states that the remuneration of the auditors may be fixed by the directors, registrar or whosoever appointed them subject to negotiation between them. The remuneration of the auditor may be fixed at the time of appointment or left to be decided at the completion of the audit. This is because it is not easy to determine the complexity of an audit at the initial stage. Where the fee is to

be decided upon completion of the audit, it is advisable for the auditor at the time of appointment to state some basis of remuneration (Urhoghide & Izedonmi, 2015; Nwabueze, 2000). Nevertheless, there may be threats to compliance with the fundamental principles arising from the level of fees quoted. For instance, a self-interest threat to professional competence and due care is created if the fee quoted is so low that it may be difficult to perform the engagement in accordance with applicable technical and professional standards for that price (ICPAK, 2006). Low audit fees can restrain audit firms, by restricting compensation to audit staff. Part of the problem is that many clients fail to recognise the intrinsic value of an audit, and they therefore regard it purely as a compliance exercise (Picconi & Reynolds, 2013; Bedard & Johnstone, 2010; Mellett, Peel, & Karbhari, 2007). Therefore, the audit engagement letter must provide the basis of charging fees by the auditor (ICPAK, 2006).

In the governance of firms, the board of directors are the main driving force. Thus, in pursuing the primary goal of wealth maximisation on behalf of the shareholders, the directors are duty bound to ensure adequate communication of all activities relating to shareholders' investments (Securities and Exchange Commission [SEC], 2016; Basuony & Mohamed, 2014; Huafang & Jianguo, 2007). Thus, the board has to maintain a comprehensive and cost-efficient communication channel for disseminating relevant information, which are crucial for informed decision-making by investors, stakeholders, and other interested users. To ensure reliability and confer credibility to the financial statement so presented by management, such are subjected to auditing to test transactions, interview and observe the client, and evaluating the internal controls and systems used within the firm. Consequently, if such independent auditors are being appointed by the directors, it becomes obvious that

determining the fees paid to the statutory auditors may be the function of some attributes of the board of directors.

Therefore, this study investigates the impact of corporate governance attributes in the determination of audit fees paid by pharmaceutical firms listed on the floor of the Nigerian stock exchange. Specific objectives include to: examine whether the size of the board determines the audit fees paid by listed Pharmaceutical firms in Nigeria; investigate the extent to which board independence affect the amount of audit fees paid by listed Pharmaceutical firms in Nigeria; and assess the impact of board diligence on the audit fees paid by listed Pharmaceutical firms in Nigeria.

2.0 LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

Agency theory is the most prominent and widely used audit theory as it is applied when resolving two issues that can be likely seen or experienced in agency relationship. The first issue is when the goal of the agent is not aligned with the goal of the principal which results in conflicts of goals achievement and the principal is unable to examine the appropriateness of the agent's conduct. The second is the problem of risk issue. This can occur when principal and agent acted differently toward risk preference (Eisenhardt, 1989). These problems are generally solved by agency costs when agents do not decide in the best interest of the principal with the goal of pursuing their own interest. Agency problems tend to occur in firms with lower growth rate and higher level of free cash flows because they are more likely to involve in unethical activities. Therefore, as audit risk increases, auditors have to perform more audit service.

On the conceptual perspective, audit fee is the level of fees (wages) charged for the audit service by the auditor based on service conducted, time spent, and the number of employee involved in the audit procedures

(El-Gammal, 2012). Agoes (2012) defines audit fees as the amount charged which depends among others, on the risk of the assignment, the complexity of the services provided, the level of expertise required to carry out the services of proficiency level, the cost structure of the firm concerned and other professional considerations. Audit fee is important to the existence of auditors and audit firms and has been explained in many different aspects by researchers around the world (Vakilifard, Ebrahimi, Sadri, Davoodi & Allahyari, 2014). Amba & Al-Hajeri (2013) explained that the audit fee is one of the fees paid by a company for the audit service, which is conducted by independent auditors. El-Gammal (2012) and Tober (2014) have identified audit fees as the salary paid to the auditors based on the audit process of one company and the audit fees is determined based on the contract between the auditors and the audit client on the basis of time, condition and the number of auditors for the audit task. From the perspective of agency theory, Ask and Holm (2013) identified audit fees as one of the important factors of monitoring costs. The monitoring cost is one of the factors of an agency fee and the result of the agency relationship between the shareholders (principals) and the managers (the agents).

However, from a quantitative perspective, Ali and Lesage (2010) have explained the definition of audit fees by summarizing the formula of Simunic (1980) as follows: $AUDFEE = p \cdot q + E(L)$, where AUDFEE is the Audit Fees; p is the cost per unit of audit service; q is the audit time; and $E(L)$ is the cost of risk to compensate for the expected loss. Ali and Lesage (2010) explained that the first component ($p \cdot q$) in the formula would represent the number of audit tasks that are dependent on many factors like the size, profitability or risk of the audit client. And the second component ($E(L)$) represents the compensation for the expected risk of auditors and audit companies in the case that a failure in an audit is declared. However, Xu (2011) stated that besides the

amount of audit tasks and the cost per unit, the audit fees had to include the necessary input costs for the auditors to conduct the audit process, and the profit. Audit fee is measured as the natural logarithm of the audit fees (Ask & Holm, 2013; Hribar, Kravet & Wilson, 2011; Xu, 2011).

Corporate governance is a set of processes, custom, policies, laws, and institutions affecting the way a firm is directed, administered, and controlled. It is aimed at allocating corporate resources in a manner that maximizes value for all stakeholders. The variables which indicate an effective incorporation of corporate governance provision and which are believed to affect audit fees are board size, board independence, and board diligence as they impact on audit fees. Board size refers to the number of directors; both executive and non-executive that makes up the members of the board. It is measured by the number of individuals on the board (Thinggaard & Kiertzner, 2008). The code of corporate governance in Nigeria however stipulates that the size of the board should not be less than five (5) and not more than fifteen (15) persons. Empirical evidences have proven that there is a positive association between audit fees and management entrenchment. Hassan, Hassan, Iqbal, and Khan (2014) and Urhogbide and Izedonmi (2015) posit that large boards are likely to yield higher audit fees. However, Yatim, Kent and Clarkson (2006) found that external audit fees are not related with the board size. This is also consistent with the findings of Dillian (2007) who also found that board size is not significantly associated with external audit, resulting to mixed findings. Consequently, the hypothesised board size has no significant effect on the audit fees of listed Pharmaceutical firms in Nigeria.

In addition, the board of a firm should include a balance of executive and in particular non-executive directors such that no individual or small group of individuals can dominate the board's decision making.

The UK corporate governance code states that except for smaller listed firms, there should be a minimum of 50% independent non-executive directors in its board excluding the chairman while in smaller listed firms there should be at least two independent non-executive directors. Board independence is therefore represented by the number of independent non-executive directors in the company's board in contrast to the total number of board members (Uwuigbe, 2011). It is measured by ratio of non-executive to the total number of directors on the board. Board independence leads to more effective monitoring and controlling of firm activities to reduce any opportunistic behaviour of management and misappropriation of firm resources (Fama & Jensen, 1998). This is because boards dominated by outside, non-affiliated directors, are known to play more effective monitoring roles because of their fiduciary duty towards shareholders and their independence from management; in contrast to a board dominated by internal directors who have less incentive to monitor management, due to their dependence on the CEO/organization boards (Daily, 1995). Hay, Knechel, and Wong (2006) stated that an independent board will be more concerned about discharging its monitoring role and therefore, will put pressure on management to enhance the external audit function, resulting to a less tasking audit function hence low fees charge. This is because, independent board members are more concerned about their exposure if managers misbehave and therefore, are more interested in an extensive audit testing to minimize the risk of managerial misbehaviour that could affect their liability. This will result to a higher amount of audit assessment; consequently, increasing the auditors risk assessment. Hence a higher fee will be charged. On his part, Rajpal (2015) and Urhogbide and Izedonmi (2015) found a positive and significant relationship between board independence and audit fees. As a result, the second proposition for the study is established, which states that board

independence has no significant effect on the audit fees of listed Pharmaceutical firms in Nigeria.

Furthermore, board diligence is another corporate code that affects audit fees. The diligence of the board includes components such as the number of board meetings and the behaviour of individual board members surrounding such meetings (Uwuigbe, 2011). It is measured by the numbers of meetings held by the board. Lipton and Lorsch (1992) suggest that a major impediment to board effectiveness is a lack of time to complete board duties. In addition, prior studies (Conger, Finegold, & Lawler, 1998; Pound, 1995; Vafeas, 1999) suggest that an increase in the number of board meetings can increase board effectiveness. One view is that a board that demonstrates greater diligence in discharging its responsibilities as measured by the number of board meetings will seek an enhanced level of oversight of the financial reporting process. As such, it is expected that more diligent boards will

support the purchase of a greater amount of external auditing services, resulting in higher audit fees. This is in support of the finding of Urhogbide and Izedonmi (2015) that board diligence has a positive and significant effect on audit fees. However, Li and Wang (2006) assert that how diligent the board of directors are from the point of view of the frequency of their meetings does not significantly affect the determination of audit fees. It is against this backdrop this study hypothesised that board diligence has no significant effect on the audit fees of listed Pharmaceutical firms in Nigeria.

3.0 METHODOLOGY

This study adopts the ex-post facto and panel research design. As a result, the technique for data analysis is the Generalized Least Square (GLS) multiple regression technique. The population of this study comprises all the eleven (11) pharmaceutical firms listed in Nigeria as at 31st December, 2017. The population is presented in Table 1.

Table 1: Population of the Study

S/N	FIRM	YEAR LISTED
1	AFRIK PHARMACEUTICAL PLC	1979
2	EKOCORP PLC	1994
3	EVANS MEDICAL PLC	1979
4	FIDSON HEALTH PLC	2008
5	GLAXO SMITHKLINE CONSUMER NIG PLC	1979
6	MAY AND BAKER NIGERIA PLC	1994
7	MARISON INDUSTRIES PLC	1978
8	NEIMEITH INTERNATIONAL PLC	1979
9	NIGERIAN-GERMAN CHEMICAL PLC	1979
10	PHARMA-DEKO PLC	1969
11	UNION DIAGNOSTIC AND CLINICAL SERVICES PLC	2008

Source: www.nse.com.ng, 2018.

The study adopts the purposive sampling technique. However, due to the unavailability of trend records, Afrik Pharmaceutical Plc, Evans Medical Plc, and Nigeria – German Chemicals Plc are eliminated from the study. In addition,

Union Diagnostic and Clinical Services Plc is eliminated since the firm is a mere service rendering company. This leads to the sample size of seven (7) listed pharmaceutical firms as presented in Table 2.

Table 2: Sample Size of the Study

S/N	FIRM
1	EKOCORP PLC
2	FIDSON HEALTH PLC
3	GLAXO SMITHKLINE CONSUMER NIG PLC
4	MAY AND BAKER NIGERIA PLC
5	MARISON INDUSTRIES PLC
6	NEIMEITH INTERNATIONAL PLC
7	PHARMA-DEKO PLC
Source: Generated from Table 1.	

Secondary data are collected from the published annual reports and accounts of the sampled listed pharmaceutical firms in Nigeria from the year 2012 to 2017. These include audit fees paid, board size, number

of non-executive directors, and number of board meetings. These data are used to measure the dependent and independent variables as seen in Table 3.

Table 3: Variable Definition and Measurement for the Study

S/N	VARIABLE	DEFINITION	MEASUREMENT
Dependent Variable			
1	Audit fee (AUDFEE)	This is the amount paid to the auditor or audit firm for audit services rendered to the audit client (Kemeli, 2016).	This is measured as the Logarithm of fees charged by and paid to the auditor for an audit service (Ln audit fee).
Independent Variable			
2	Board Size (BSIZE)	This refers to the total number of directors; both executive and non-executive that makes up the members of the board (Thinggaard & Kiertzner, 2008).	This is measured by the logarithm of the number of individuals on the board.
3	Board Independence (BINDE)	This refers to the number of independent non-executive directors in the company's board in contrast to a total number of board members (Uwuigbe, 2011).	It is measured by Ratio of non-executive directors to the total number of directors on the board.
4	Board Diligence (BDILI)	This refers to the number of board meetings and the behaviour of individual board members surrounding such meetings (Li & Wang, 2006).	It is measured by the logarithm of the numbers of meetings held by the board.

The model for this study is specified as follows:

$$\text{AUDFEE}_{it} = \alpha + \beta_1 \text{BSIZE}_{it} + \beta_2 \text{BINDE}_{it} + \beta_3 \text{BDILI}_{it} + \varepsilon_{it} \dots \dots \dots (1)$$

Where:

AUDFEE = audit fees of firm i for period t;

BSIZE = board size of firm i for period t;

BINDE = board independence of firm i for period t;

BDILI = board diligence of firm i for period t.

α = constant/intercept;

$\beta_1 - \beta_3$ = coefficients of independent variables; and

ε_{it} – error term of firm i for period t.

Sequel to the specific objectives of the study, the following hypotheses are stated in the null, which are tested and form the basis of addressing the stated:

Descriptive statistics conducted show the details of the dependent and independent variables respectively in terms of their minimum (MIN), maximum (MAX), mean, standard deviations (STD, DEV.), skewness (SKEW.) and kurtosis (KURT.). This is presented in Table 4.

4.0 ESTIMATION OF RESULTS AND DISCUSSION OF FINDINGS

Table 4: Descriptive Statistics

VARIABLE	OBS	MEAN	STD. DEV.	MIN	MAX	SKEW.	KURT.
AUDFEE	42	15.7194	0.72098	14.50866	17.14771	0.225067	2.358936
BSIZE	42	8.95238	1.20876	6	11	-0.15987	3.335653
BINDE	42	0.65347	0.13116	0.44444	0.81818	-0.21622	1.641625
BDILI	42	4.59524	0.82815	3	7	0.866213	3.31987
Source: STATA 13.0 Output, 2018.							

Table 4 shows the mean AUDFEE for listed pharmaceutical firms during the period of study as 15.7194 with standard deviation of 0.720976. This indicates that there is a large variation of 72.1% in AUDFEE paid by the sampled listed pharmaceutical firms in Nigeria during the period. This is also shown by its kurtosis of 2.3589 and skewness of 0.22251, an indication that AUDFEE data falls on the right hand side of the normal curve. The table also showed minimum and maximum values of audit fees as 14.50866 and 17.14771 respectively, resulting to a range of 2.63905.

The mean board size is 8.952381 which indicate that the average board size for the sampled firms is approximately 9 with a minimum and maximum of 6 and 11 directors. The standard deviation also shows a value of 1.208756 which implies some degree of differences in the board size of the sampled firms as also shown by its kurtosis

of 3.3357. The skewness for BSIZE as shown in Table 4 is -0.1599, which indicates that data for BSIZE falls on the left hand side of the normal curve. Also, the table shows that BINDE has a mean of 0.6534666 and a standard deviation of 0.1311551 which suggest that an average 65.35% of the board members of the sampled firms are external directors. The minimum and maximum values are 6 and 11. It also shows that BINDE has a kurtosis of 1.6416 and skewness of -0.2163 which is an indication that its data falls on the left hand side of the normal curve. Finally, the mean BDILI which is measured by the number of meetings held by the board as seen in Table 4 is approximately 5 with standard deviation of 0.82815 and minimum and maximum values of 3 and 7. It also has a kurtosis of 3.3199 and skewness of 0.8662 which also shows that its data falls on the right hand side of the normal curve.

Moreover, the study conducts the pairwise correlation among the dependent and independent variables. The result is presented in Table 5.

Table 5: Correlation Coefficients

VARIABLE	AUDFEE	BSIZE	BINDE	BDILI
AUDFEE	1.0000			
BSIZE	0.0192 0.9037	1.0000		
BINDE	-0.1115 0.4821	0.4388 0.0037	1.0000	
BDILI	0.2921 0.0605	0.029 0.8553	0.3029 0.0512	1.0000

Source: STATA 13.0 Output, 2018.

Table 5 presents the result of the association among independent variables (BSIZE, BINDE and BDILI) and the dependent variable (AUDFEE) of listed pharmaceutical firms in Nigeria.

BSIZE has a positive insignificant correlation with AUDFEE with a coefficient value of 0.0192 at 90.37% level of significance. This implies that BSIZE has an indirect influence on AUDFEE, which means that an increase in BSIZE by one member will lead to an insignificant increase in AUDFEE. Furthermore, BINDE has an insignificant negative correlation with AUDFEE -0.1115 with a significant level of 48.21%. BINDE also shows a positive significant correlation with BSIZE at the correlation coefficient of 0.3607 and a level of significance of 1.89%. This implies that BINDE is inversely related to AUDFEE such that an increase by one non-executive director on the board will lead to an

insignificant decrease in AUDFEE by -0.1115; and has a direct influence on BSIZE.

The table also shows that BDILI is insignificantly and positively correlated with AUDFEE, BSIZE and BINDE at a correlation coefficient of 0.2921, 0.0290, and 0.3029 with a level of significance of 6.05%, 85.53%, and 5.12% respectively. This implies that BDILI has an indirect influence on AUDFEE such that an increase in meetings by one will lead to an insignificant increase AUDFEE by 29.21%

The study also conducts the Shapiro-wilk test for data normality to test the null hypothesis that data for the variables of the study is not normally distributed, at a 5% level of significance. The result of the test is shown in Table 6.

Table 6: Result of Shapiro-wilk Test for Data Normality

VARIABLE	OBS	W	V	Z	PROB>Z
AUDFEE	42	0.96853	1.292	0.54	0.29449
BSIZE	42	0.96175	1.57	0.952	0.17059
BINDE	42	0.95295	1.931	1.389	0.0824
BDILI	42	0.95793	1.727	1.153	0.12451

Source: STATA 13.0 Output, 2018.

Table 6 shows that AUDFEE, BSIZE, BINDE, and BDILI have the Z coefficient

of 0.54, 0.952, 1.389, and 1.153, which are insignificant at the p-values of 0.29449,

0.17059, 0.0824, and 0.12451 respectively. Thus, the study rejects the null hypotheses that data values for AUDFEE, BSIZE, BINDE and BDILI are not normally distributed and accepts the alternative hypotheses, which state that AUDFEE, BSIZE, BINDE, and BDILI are normally distributed.

In addition, the Variance Inflation Factor (VIF) test is conducted to the presence of multicollinearity among explanatory variables of the study. It is expected that the VIF for all independent variables should be less than 5, while their tolerance levels (1/VIF) should be greater than 0.10. The result of the VIF test is shown in Table 7.

Table 7: Result of Variance Inflation Factor (VIF) Test for Multicollinearity

VARIABLE	VIF	1/VIF
BSIZE	1.38	0.723219
BINDE	1.26	0.795582
BDILI	1.12	0.894914
Mean VIF	1.25	
Source: STATA 13.0 Output, 2018.		

In table 7, the model shows that BSIZE, BINDE, and BDILI have the VIFs of 1.38, 1.26, and 1.12 as well as the tolerance levels of 0.723219, 0.795582, and 0.894914 respectively. Moreover, the mean VIF stood at 1.25. This implies that there is absence of perfect multicollinearity among independent or explanatory variables of the study since they display a VIF and mean VIF of less than 5 and tolerance levels of greater than 0.10. In the same vein, the result of heteroscedasticity (hettest), Hausman specification and random effects is presented in Table 8.

Table 8: Results of Hettest, Fixed-Random Specification and Random Effects

TEST	STAT	P-VALUE
Hettest	0.85	0.3571
Hausman Chi ²	0.1	0.9921
Random Effect Chi ²	77.87	0.0000
Source: STATA 13.0 Output, 2018.		

The Breusch-Pagan/Cook-Weisberg test for heteroscedasticity was conducted to test the null hypothesis that there is presence of heteroscedasticity among the standard errors of the data variables at a 5% level of significance. The hettest for the model in Table 8 shows a Chi² of 0.85, which is insignificant at a p-value of 0.3571. Thus, alternate hypotheses which state that there is absence of heteroscedasticity among the data values for BSIZE, BINDE, and BDILI respectively is accepted, while null hypotheses, which state that there is presence of heteroscedasticity among the data values are rejected. Moreover, the fixed and random effects GLS regression is conducted, which the residuals therefrom are used to the Hausman fixed and random

specification test. From Table 8, the result of Hausman Specification shows a Chi² of 0.10, which is insignificant at a p-value of 0.9921. This indicates that random effect robust regression analysis is more appropriate for this study. Furthermore, the Breusch and Pagan Langragian Multiplier test for random effects is conducted to decide between random effect and Ordinary Least Square (OLS) regression. The result in Table 8 shows the Random Effect Chi² of 77.87, which is significant at the p-value of less than 1%, indicating that the random effect GLS regression is more appropriate. Table 9 shows the result of the random effect GLS regression for fitted values of AUDFEE.

Table 9: Result of GLS Random Effect Regression for Fitted Values of AUDFEE

VARIABLE	COEFFICIENT	Z STAT	P-VALUE
CONST	15.70212	51.61	0.0000
BSIZE	-0.0150017	-0.38	0.7060
BINDE	-0.2634403	-0.039	0.6960
BDILI	0.075357	2.03	0.0430
Adj. R Sq.:		0.1028	
Wald Chi Sq.:		4.21	
Prob>Chi Sq.:		0.2398	
Source: STATA 13.0 Output, 2018.			

Table 9 shows the coefficient of the intercept (CONST) as 15.70212 with a z-value of 51.61 and a p-value of 0.0000. BSIZE also shows a coefficient of -0.0150017 with a z-value of -0.38 and a p-value of 0.706, which implies that BSIZE negatively and insignificantly affects AUDFEE at 29.4% confidence level. This means that an increase in BSIZE leads to an insignificant decrease in AUDFEE by -0.0150017BSIZE. Similarly, Table 9 also shows that BINDE has a coefficient of -0.26334403 with a z-value of -0.039 and a p-value of 0.696. This implies that, all things remaining constant, BINDE negatively and insignificantly affects AUDFEE by -0.2634403BINDE, which means an increase in BINDE leads to an insignificant decrease in AUDFEE. Lastly, the table shows that BDILI has a coefficient of 0.075357, with a z-value of 2.03 and a p-value of 0.043. This implies that BDILI has a positive and significant effect on AUDFEE at a confidence level of 95.7%. This implies that an increase in BDILI leads to a significant increase in AUDFEE by 0.075357BDILI.

Also the table presents the overall result for fitted values of AUDFEE, which shows that 10.28% variation in the AUDFEE paid by pharmaceutical firms are explained by BSIZE, BINDE, and BDILI, while 89.72% is explained by other variables not captured in this study as shown by the Adjusted R^2 of 0.1028.

Test of Hypotheses

Hypothesis 1 states that: Board size has no significant effect on the audit fees of listed Pharmaceutical firms in Nigeria. Table 9 shows that BSIZE has a coefficient of -0.0150017 and a z-statistic of -0.38, which is insignificant at the p-value of 0.7060. As a result, the study rejects the alternative hypothesis, which states that board size has a significant effect on audit fees and accepts the null hypothesis that board size has no significant effect on the amount of audit fees paid by listed pharmaceutical firms in Nigeria. This implies that an increase in the number of members of the board in line with corporate code of conduct for firms, will though insignificantly, increase the level of monitoring of the operations of the sampled firms and ensure less misrepresentation in the books of account, as they are also stakeholders of the firm. This will reduce to some extent, the amount of audit fees paid to the sampled pharmaceutical firms; as the number of examination will also reduce. This finding is consistent with the earlier reports of Yatim, et al. (2006) as well as Dillian (2007) that board size is not a determinant of audit fees. However, the finding contradicts those of Hassan, et al. (2014) and Urhogbide and Izedonmi (2015) that board size has a positive and significant effect on audit fees.

Hypothesis 2 states that: Board independence has no significant effect on the audit fees of listed Pharmaceutical firms in Nigeria. The GLS regression result in Table 9 presents the coefficient of BINDE

as -0.2634403 and the z value of -0.039, which is insignificant at the p-value of 0.6960. Thus, the study rejects the alternative hypothesis, which states that board independence has a significant effect on audit fees and accepts the null hypothesis that board independence has no significant effect on the amount of audit fees paid by listed pharmaceutical firms in Nigeria. This implies that an increase in the independence of the board as represented by the number of non-executive directors; will increase in the effective monitoring and controlling of firm activities as well as a reduction in the any opportunistic behaviour of management and misappropriation of firm resources. As a result, a lower amount of audit assessment will be conducted; consequently, decreasing the auditors risk assessment. Hence a lower audit fees is charged and paid. This finding agrees with the finding of Hay, et al. (2006) that an increase in board independence will result to an increase in checks and balances, leading to decrease in audit fees. However, the finding contradicts with the earlier report of Raijpal (2015), who finds a positive and significant relationship between board independence and audit fees.

Hypothesis 3 states that: Board diligence has no significant effect on the audit fees of listed Pharmaceutical firms in Nigeria. From the result in Table 9, BDILI has a coefficient of 0.075357 and a Z value of 2.03, which is significant at the p-value of 0.0430. Therefore, the study rejects the null hypothesis, which states that board diligence has no significant effect on audit fees and accepts the alternative hypothesis that board diligence has a significant effect on the amount of audit fees paid by listed pharmaceutical firms in Nigeria. This implies that an increase in board diligence will enhance the level of oversight of the financial reporting process and increase purchase of a greater amount of external audit services, which results to a higher audit fees. This result is consistent with the findings of Conger, et al. (1998), Pound (1995), and Vafeas (1999) which states that

an increase in board diligence will increase the audit fees paid. However, this finding contradicts the position of Li and Wang (2006), who also find an insignificant relationship between audit fees and the number of board meetings.

5.0 CONCLUSION AND RECOMMENDATIONS

The main objective of this study is to investigate the role of corporate governance attributes that determine audit fees of listed pharmaceutical firms in Nigeria. Based on the analyses and findings reached, it can be concluded that the major and key determinant of the amount which listed pharmaceutical firms pay as audit fees are the number of annual board meetings held as it entails a higher purchase of external audit services and an enhanced level of oversight of the financial reporting process. Thus, the directors of listed pharmaceutical firms in Nigeria should always consider their degree of diligence in determining the amount of audit fees since the extent of their thoroughness in addressing reporting issues would play a role in how much external auditors would accept as their fees. Other factor which to an insignificant level determines the audit fees paid by listed pharmaceutical firms are its board size as well as the independence of such board. Based on the findings and conclusion reached, the study therefore recommends that listed pharmaceutical firms should maintain an average number of meetings held each year and ensure that issues discussed are that which are relevant in maintaining effective and enhanced level of oversight of the financial reporting processes, so as not to prolong irrelevant issues that will increase the number of meetings held.

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