

AUDIT FEE DETERMINANTS: EVIDENCE FROM QUOTED NIGERIAN INSURANCE FIRMS

¹Ogiriki, Tonye (Ph.D) and ²Odogu, Terry Keme Zuode

¹Accounting Department, Niger Delta University, Amassoma, Bayelsa State, Nigeria.

²Accounting Department, University of Africa, Toru-Orua, Bayelsa State, Nigeria.

ABSTRACT

This study seeks to ascertain the determinants audit fee payable by quoted Nigerian insurance firms. It examined financial leverage, board independence, number of subsidiaries owned by auditee firms, profit-after-tax margin, ownership concentration and audit firm size as possible independent variables. It obtained five years secondary data from a sample of 24 quoted insurance firms in Nigeria that consistently published annual reports and accounts between 2016 and 2020. Data were tested using unbalanced panel data regression and Pearson correlation coefficient technique. The findings show that all the independent variables except profit-after-tax margin and ownership concentration are positively related to audit fees. It further disclosed that audit firm size significantly influences audit fee payable, and is therefore, the chief determinant of audit fee payable by quoted insurance firms in Nigeria.

Key Words: Audit fee payable, financial leverage, number of subsidiaries, board independence, profit-after-tax margin, ownership concentration and audit firm size.

INTRODUCTION

The amount professional (external) auditors receive for examining and judging the annual accounts and reports of firms have been severally interrogated by professional and regulatory bodies. Consequently, the audit fee payable by audit client firms has been widely investigated with different statistical and econometric tools by different scholars across the globe. Extant literature and findings from the works of Joshi & Al-Bastaki (2000), Hay, Knechel & Wong (2006), Fleischer & Goettsche (2012), Siddiqui, Zaman & Khan (2013), Kikhia (2014), Musah (2017), Zhang, Xiong & Zeng (2019), Owusu & Bekoe (2019), Musa, Salman, Amoo & Subair (2020), Silva, Inacio & Vioira (2021), etc. suggest a number of factors that determine audit fee payable by different firms. These include: financial leverage, board independence, number of subsidiaries, profit-after-tax margin, ownership concentration and audit firm size. This study is therefore, designed to deploy a unique data analysis method, unbalanced panel regression to analytically ascertain the explanatory variables that determine audit fee payable by quoted insurance firms in Nigeria.

Statement of Problem: The increasing interest of professional and regulatory bodies and scholars in the determinants of audit fee payable calls for a further study to investigate to ascertain how and the extent to which each of the identified variables determine, influence and explain audit fee payable in profit oriented firms. More specifically, there is need to ascertain the principal variable that mostly influence the audit fee payable by firms in the Nigerian service industry. Ultimately, this study is motivated by the existence of a contextual gap, occasion by the lack of study on determinants of audit fee payable in the Nigerian insurance industry.

Objectives of the Study: This study is specifically designed:

- 1) To find out how and the extent to which financial leverage determine audit fee payable in Nigerian Insurance firms.
- 2) To find out how and the extent to which board independence determine audit fee payable in Nigerian Insurance firms.
- 3) To find out how and the extent to which number of subsidiaries owned by audit client firm determine audit fee payable in Nigerian Insurance firms.

- 4) To find out how and the extent to which profit-after-tax margin determine audit fee payable in Nigerian Insurance firms.
- 5) To find out how and the extent to which audit client's ownership concentration determine audit fee payable in Nigerian Insurance firms.
- 6) To find out how and the extent to which audit firm size determine audit fee payable in Nigerian Insurance firms.

Research Hypotheses: The hypotheses of this study are all stated in the null form as follows:

- **Ho₁:** the effect of leverage on audit fee payable is not significant.
- **Ho₂:** the effect of board independence on audit fee payable is not significant.
- **Ho₃:** the effect of number of subsidiaries on audit fee payable is not significant.
- **Ho₄:** the effect of profit-after-tax margin on audit fee payable is not significant.
- **Ho₅:** the effect of ownership concentration on audit fee payable is not significant.
- **Ho₆:** the effect of audit firm size on audit fee payable is not significant.

Conceptual, Theoretical and Empirical Position:

Audit Fee: This is the financial consideration or total amount firms pay external auditors for examining their annual accounts and reports for professional opinion (Hamilton, Ruddock, Stokes & Taylor, 2005; Chersan, Robu, Carp & Mironiuc, 2012). Audit fee is different from fees external auditors receive for performing non-audit services from clients (Aronmwan, Ashafoke & Mgbame, 2013).

Audit Fee Determinants: This study examined six determinants of audit fee:

- **Financial Leverage:** This is the strategic use of financing acquisition of or investment in assets with debt (loans), with the expectation that capital gains from such assets would exceed the cost of borrowing. This is measured as the ratio of debt to asset (Li, 2009). There is a general opinion that firms' financial leverage determines their audit fee payable (Hassan & Hassan, 2014).
- **Board Independence:** This is a corporate governance term that refers to members of board of directors that are not part of the executive team of a company and therefore, do not have material relationship with the company in its daily operations. This can be measured as the ratio of non-executive directors on the board divided by the entire directors on the board. Consequently, it is generally assumed that an independent board is likely to engage Big₄ auditors and pay higher fees to attest to the reliability of financial statements.
- **Number of Subsidiaries:** This refers to the number of subsidiary companies an audit client invest in and has shares and interest in. This is to a large extent defines the size, nature and complexity of an audit client firm, and thus, defines the scope and task of an auditor. Against this backdrop, Hay (2010) and Elgammal (2012) adduced that the nature, scope, complexity and size of an audit client firm which is partly defined by the number of subsidiaries owned by the firm determine audit fee.
- **Profit-after-Tax Margin:** This is synonymous with net profit margin, which is a financial performance ratio that shows how well firms control their operating costs. It is calculated by dividing net income by net assets. It is generally assumed that firms that report high profit – after tax pay high audit fees (Elgammal, 2012 and Hentati & Jilani, 2013).
- **Ownership Concentration:** This is a key corporate governance mechanism that defines the percentage of large-block shareholders in relation to the total percentage of firms' shares held. This is measured as the ratio of accumulated large (block) shareholders to total shares, and is likely to determine audit fee payable by firms (Khan, Hossain & Siddiqui, 2011).
- **Audit Firm Size:** This is defined and or proxied by wealth of audit partners, size of audit partners' client portfolios, and number of audit partners in the firm. Extant literature and conceptual postulations referenced in the works of Owusu & Bekoe (2019) and Silva, et al. (2021) suggest that audit firm size particularly the Big₄s are positively related to audit fee.

The concepts of this study are diagrammatically illustrated in Fig 1.

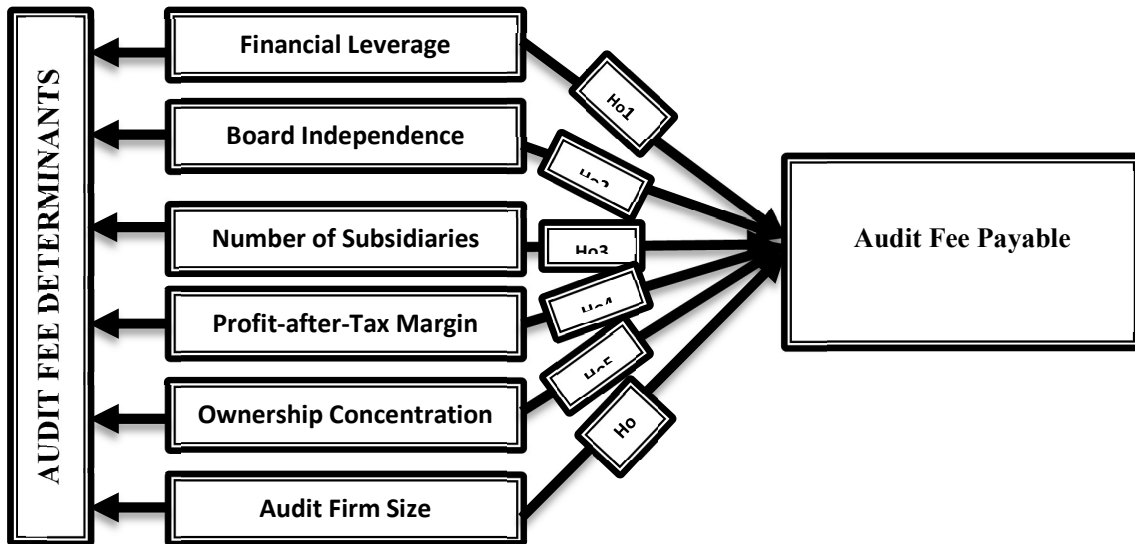


Fig 1: Conceptual Framework of Audit Fee Determinants

Theoretical Frame work: This study is underpinned by “*self-interest theory*”, which is an extension of Adam Smith’s self-interest economic theory of 1759 that says capitalism which is driven by self-interest is the best way to a thriving economy. Truly, audit fee is charged and paid by private practitioners and corporate or government entities who offer and render services for specific interest-driven objectives, in capitalist nations and or societies. This theory therefore, argues that the determination of audit fee is highly political and interest-driven. While the auditor would want to take advantage of reported profit, auditee’s firm size and his reputation to have as much as possible, within the provisions and regulations by his profession, managers, directors and board-member-owners of auditee firms would on the other hand, want to use lean and poor financial situation/position and existing relationship to persuade audit firms to charge less, given the understanding that their reward as managers and owners is tied to availability of profit.

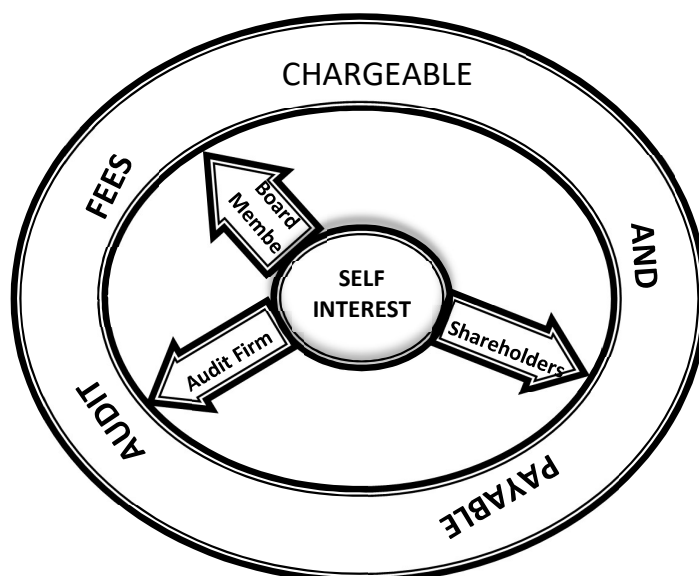


Fig 2: Theoretical Framework: Self-interest and Audit Fee Determination

Empirical Review: A critical scrutiny of very recent and relevant empirical studies conducted between 2015 and 2021 reveal some relationship between audit fee payable and the explanatory variables of interest.

a) Audit Fee Payable and Financial Leverage

A topical empirical study on "financial versus operating liability leverage and audit fees", by Barua, Hossain & Rama (2019) implies that audit fee payable is negatively related to financing leverage. This was evidenced by empirical tests and statistical analyses and findings from 16 years secondary data obtained from listed firms. This is however, contrary to a more empirical submission by Imeni & Daryaei (2021) who sought evidence of the role of financial and operating liability leverage in audit fee determination, and discovered that financial leverage has positive significant nexus with audit fees. This was evident from multivariate regression on secondary data obtained from 113 firms. The statistical indices showed that auditors react and increases audit fees when there is high liability leverage which of cause, increases risk of client failure and auditor litigation.

b) Audit Fee Payable and Board Independence:

Evidence from a recent article on the "determinants of audit fees and the role of board of directors and ownership structure: Evidence from Jordan", by Shakhathreh & Alsmadi (2021) revealed that firms with leadership duality are more likely to pay higher audit fee. This is however, contrary to the conceptual (general) assumption, and was disclosed by a Generalized Least Square Regression on secondary data from annual accounts and reports of 109 manufacturing and service firms listed on the Amman Stock Exchange. A more recent study on "audit fees, board ethnicity and board independence: evidence from South Africa", by Muniandy (2022) implies that audit fee is positively related to board independence in a significant manner. This was found from the panel data analyses of listed firms on the Johannesburg Stock Exchange from 2003 to 2018.

c) Audit Fee Payable and Number of Subsidiaries:

An empirical study by UlHaq & Leghari (2015) on the determinants of audit fees in Parkistan disclosed a direct significant relationship between audit fee and audit client firm size. This drawn from the findings of Ordinary Least Square test on 150 companies. Another study by Kimeli (2016) titled "determinants of audit fees pricing: Evidence from Nairobi securities exchange revealed a positive significant association between audit fee and audit client size. This was evident in the Ordinary Least Square test on secondary data obtained from 41 listed firms in the Stock market of Nairobi. Similarly, Hossain, Yazawa & Monroe (2017) carried out a study on the determinants of audit fees in Japan, and found from estimated regression results and analyses that audit fee is positively related to audit client firm size. This is similar to the findings of Musah, et al (2017), who used Simunic Audit Fee Model to investigate the determinants of audit fees in Ghana, and found from Panel Regression analysis that audit client size significantly determines audit fee. Furthermore, Gul, Hsu & Liu (2017) carried out a survey on "parent-subsidiary investment layers and audit fees", and reported a strong positive relationship between audit fee and parent companies with many subsidiaries. A more recent study titled "determinants of audit fees: The perception of external auditors", by Owusu & Bekoe (2019) disclosed that audit fee is also determined by the nature and scope of audit and audit client size. This was disclosed by Exploratory Factor Analyses on primary data obtained from 339 practicing professional auditors in Ghana.

d) Audit Fee Payable and Profit-after Tax Margin:

The relationship between audit fee payable and profit-after tax margin according to the empirical findings of Ahmed & Abdullah (2016) titled "a framework of audit fees determinants in Kurdistan region" is significantly positive. This was drawn from factor analysis and KMO and Bartlett's test results on primary data obtained from 58 retrieved copies of questionnaire from experienced auditors, accountants and financial officers of client firms and academics in the field. A recent

study on the "impact of firm's specific factors on audit fee of quoted customer goods firms" by Musa, et al. (2020) revealed a significant empirical relationship between profit-after tax margin significantly and audit fee payable. This was discovered from Breusch – Pagan Lagrange Multiplier Test and chi-square results.

e) Audit Fee Payable and Ownership Concentration:

An investigation on "the effectiveness of internal corporate governance and audit quality: The role of ownership concentration in Malaysian by AlQadasi & Abidin (2018) found that large-block shareholders do not advocate for extensive audit services, and therefore, discovered that ownership concentration is negatively related to audit fee. Similarly, Nehme, Michael & Haslam (2020) deployed an empirical model to robustly investigate and test 350 companies in the United Kingdom to ascertain the relationship between "directors' monitoring role, ownership concentration and audit fees. The results revealed that board directors' characteristics is significantly related to audit fee payable.

f) Audit Fee Payable and Audit Firm Size

An empirical study by Owusu & Bekoe (2019) on the "determinants of audit fees: The perception of external auditors revealed a positive significant relationship between audit firm size and audit fee. This was manifested by an Exploratory Factor Analyses from primary data obtained from 339 practicing professional auditors in Ghana. The findings specifically showed that audit firm reputation which is related to audit firm size (Big4 audit firms) is a strong determinant of audit fee payable. This was confirmed by Silva, et al. (2021) who investigated the "determinants of audit fees for Portugal and Spain", and discovered that that among other factors, the major determinants of audit fee in Spain audit firm size (Big4 audit firms). This was revealed by Ordinary Least Square (OLS) test and analyses on 104 listed companies in Spain.

METHODOLOGY

This study adopted unbalanced panel regression research design and obtained five years' secondary data from 24 insurance firms. These were quoted Nigerian insurance firms that consistently published annual reports and accounts from 2016 to 2020. Thus, data were collected based on availability, through an elimination process. This study examined and tested one dependent variable and six independent variables. The dependent variable was audit fee was surrogated by annual cash payments. The six independent were considered as determinants of audit fee, and are: Financial Leverage, Board independence, Number of Subsidiaries, Profit-after-Tax Margin, Ownership Concentration and Audit Firms Size. These constitute the model of the study and are specified as follows:

$$AUFEE = \beta_0 + \beta_1 \text{FILEV} + \beta_2 \text{BODIN} + \beta_3 \text{NOSUB} + \beta_4 \text{PATAM} + \beta_5 \text{OWNCO} + \beta_6 \text{AUFIS}$$

Where:

AUFEE = Audit Fee, surrogated by annual cash payments by quoted insurance firms;

FILEV = Financial Leverage, surrogated by debt to total asset ratio;

BODIN = Board Independence;

NOSUB = Number of Subsidiaries;

PATAM = Profit - after Tax Margin;

OWNCO = Ownership Concentration;

AUFIS = Audit Firm Size, surrogated by the Big4 audit firms.

To ensure adequate observation for statistical testing, this study used an unbalanced panel (least square) analyses (of fixed effect and random effect), due to the time and cross sectional nature of the data. Hausman test was conducted to choose one of the two unbalanced panel results. This was based on related descriptive statistics and correlation test.

Data Presentation, Analyses and Findings

The results of the descriptive statistics of the data on the variables are presented in Table 1 below.

Table1: Descriptive Statistics

Variables	Mean	Min	Max	Jarque-Bera / P-value
AUFEE	20083.91	5036	61674	31.2244 (0.0)*
FILEV	51.58779	11.97	92.87	0.028696 (0.98)
BODIN	64.20442	37.5	90.91	2.44289 (0.29)
NOSUB	1.884956	0	6	8.061334(0.01)*
PATAM	6.208142	47.9	70.48	122.0998(0.0)*
OWNCO	50.0708	6	85	1.761706(0.41)
AUFIS	0.513274	0	1	18.83337(0.0)*
No of Cross Section	24	0		
All data observation	120			

Source: Authors' computation (2022).

Note: * and ** implies 1% and 5% level of significance respectively.

Table 1 shows the mean for each of the variables; their maximum and minimum values as well as the Jarque-Bera (JB) normality test statistics. The statistics provide some insight into the nature of the selected firms that were used in the study. Firstly, it is observed that on the average, over the reference period (2016-2020), all the variables indicate positive values respectively. This implies that there is high level of operating efficiency that can engender performance of the sampled quoted insurance firms in Nigeria. This also means that sampled firms are more inclined to high operating activities (being majorly service providers). Secondly, a cursory look at the audit fees indicator (AUFEE) shows that on the average over the reference period, the audit fees payable appears to run into millions of naira among the sampled firms, and majority of the firms were audited by the Big₄ audit firms. This clearly shows that most quoted insurance firms are not efficiently using their cash flow activities in generating enough profit to enlist them among high audit fee paying firms. The average value of the audit fees payable appears to be one third of the maximum value of the audit fees paid by some of the selected firms. Thirdly, the Jarque-Bera (JB) statistics after adjusting for all missing data and extreme values shows that audit fee, number of subsidiaries, profit-after-tax margin and audit firm size are normally distributed at 1% and 10% levels of significance, except financial leverage, board independence and ownership concentration that failed normality even at 10% level of significance. This is a pointer to a degree of outliers in the data. However, to an extent, the overall distribution of the data justifies the reliability of the data collected for generalisation. To examine the association among the variables above, the Pearson Correlation Coefficient technique was applied as in Table 2:

Table 4.2: Correlation Matrix

	AUFEE	FILEV	BODIN	NOSUB	PATAM	OWNCO
AUFEE	1.0000					
FILEV	0.1842	1.0000				
BODIN	0.1209	-0.0870	1.0000			
NOSUB	0.3681	0.4647	-0.1667	1.0000		
PATAM	0.2135	-0.2194	0.0117	0.0127	1.0000	
OWNCO	0.0967	-0.1554	0.2848	-0.1102	0.0008	1.0000

AUFIS	0.6338	-0.0564	0.3055	0.0705	0.2521	0.4866
1.0000						

Source: Authors' computation (2022).

Table 2 presents the correlation between the audit fee payable (AUFEE) and the identified determinants of audit fee as found in the literature. The result shows that all the explanatory variables have positive association with the dependent variable (audit fee paid as cash by the selected insurance firms). This implies that quoted insurance firms with more leverage, greater board independence, many subsidiaries, high profit-after tax margin, high ownership concentration and are audited by Big4 audit firms are likely to attract higher audit fees. The correlation test also reveals that no two explanatory variables were perfectly correlated. This implies an absence of multicollinearity, which further implies that the explanatory variables do not have wrong signs or implausible magnitudes in the estimated model coefficients. To test the hypotheses of this study, the "unbalanced (fixed effect and random effect) panel data regression analysis" was conducted.

Hypotheses Testing

The hypotheses were tested with outcomes of the unbalanced panel data regression in Table 3, based on the following decision rule:

- 1) Reject Ho, if P value is < 0.05;
- 2) Accept Ho, if P value is > 0.05.

Table 4.3 Estimation Results of Unbalanced Panel Regression

C (Random Effect)	Expected Sign	(Fixed Effect)	
		-238783 (-5.46) [0.00]*	-202801 (-7.27) [0.00]*
FILEV 86.617	+	40.745 (0.47) [0.65]*	- (-1.34) [0.18]*
BODIN	+	21.812 (0.43) [0.66]	44.284 (0.93) [0.35]
NOSUB	+	441.308 (0.73) [0.46]	327.095 (0.66) [0.51]
PATAM 33.386	+	-17.2402 (-0.48) [0.62]	- (- [0.33]
OWNCO 43.171	+	-2.7063 (-0.06) [0.95]	- (-1.06) [0.29]

AUFIS	+	6405.09 (2.95) [0.00]*	8071.72 (4.39) [0.00]*
R-Squared		0.93	0.54
Adjusted R-Squared		0.91	0.51
F-Statistic		39.4669 (0.00)*	17.8354(0.00)*
Hausman Test		-	16.6456(0.01)*
N (n)		113 (24)	113 (24)

Source: Authors' computation (2022).

Note: * and ** implies 1% and 5% level of significance respectively;

() = beta coefficient;

[] = probability (p) values.

The unbalanced panel data estimation result in Table 3 reveals a difference in the magnitude and signs of the coefficients of the research variables. The R-squared and adjusted R-squared values under the fixed effect test are 0.93 and 0.91 respectively. This indicates that all the independent variables jointly explain about 91% of the systematic variations in audit fee payable (AUFEE) across the quoted sampled insurance firms in Nigeria over the five-year reference period (of 2016 to 2020). The explanatory power of the model can be seen as strong, because the F-statistics (39.4669) and its p-value (0.00) both imply that the fixed effect model is generally significant at 1% level.

On the other hand, the R-squared and adjusted R-squared values (0.54 and 0.51) with respect to the random effect technique indicate that all the independent variables jointly explain about 51% of the systematic variations in audit fee payable (AUFEE) across the quoted sampled insurance firms over the five-year reference period. Again, the F-statistics value (17.8354) and its p-value (0.00) imply that the explanatory power of the model is strong, meaning that the model is generally significant at 1% level.

Furthermore, the Hausman test (result) shows a low probability value of 0.01, and this statistically indicates that the random effect model is preferred to fixed effect model, and thus, implies an automatic adoption of fixed effect panel regression results. Accordingly, the findings, conclusions and recommendation of this study are discussed, analysed and made with the fixed effect result outcomes.

Discussion of Findings and Hypotheses Testing

Firstly, the unbalanced panel estimation coefficient of Financial Leverage (FILEV) indicates a positive but insignificant effect on Audit Fee Payable (AUFEE), which implies that, though insignificant, FILEV (measured by debt to total asset ratio) has a positive and direct relationship with AUFEE. This specifically implies that as the debt to total asset ratios of quoted insurance firms increase, their annual cash payments as audit fees also increase. Thus, a unit change in financial leverage of Nigerian quoted insurance firms has the tendency to cause an increase of about (40.7454) units of audit fee. This is rather surprising, because in law and business practice, an indebted firm attracts some degree of sympathy, but the outcome of this study implies that audit fee is absolutely determined by book values of client firm rather than the classification of financing figures in the statement of financial position. But the outcome of this study to a large extent, upholds the empirical finding of Imeni & Daryaei (2021). Ultimately, the finding of this study requires an acceptance of hypothesis one (H_{01}) which states that "the effect of financial leverage on audit fee payable is not significant", as the P value of random effect model (0.18) is > 0.05 .

The empirical findings with respect to the board independence (BODIN) indicates a positive but insignificant impact on audit fee payable by quoted insurance firms in Nigeria. This means that,

though, board independence has a direct relationship with audit fee payable its effect is statistically insignificant. This implies that as board independence increases, audit fee payable is expected to increase but in an insignificant magnitude. This econometrically indicates that, a unit change in board independence has the tendency to cause about 21.8211 unit change in audit fee payable by quoted insurance firms in Nigeria. This further implies that audit firms charge more in situations where board has no influence in choosing who audits its firm. This is logically true and confirms the finding of Muniandy (2022), because if the board cannot influence an audit in anyway, an auditor particularly a Big4 audit firm would be at liberty to unconditionally place its professional charges without mutual consideration. However, this is contrary to the position of Shakhathreh & Alsmadi (2021) who concluded that firms with leadership duality are more likely to pay higher audit fee This is Above all, the outcome of the unbalanced panel regression requires an acceptance of the second hypothesis (H_{02}) which states that "the effect of board independence on audit fee payable is not significant", because the P value of random effect model (0.35) is > 0.05 .

Furthermore, the empirical finding with respect to the third explanatory variable, number of subsidiaries (NOSUB) indicates a positive but insignificant effect on audit fee payable, which implies that the number of subsidiaries an insurance firm has though insignificant, is directly related with audit fee payable. This is a pointer that the more the number of subsidiaries the more the audit fee payable. This is logically true and upholds the empirical propositions of Hossain, et al. (2017), Gul, et al. (2017), Musah, et al (2017), Owusu & Bekoe (2019), because a firm with fifty subsidiaries cannot be charged same amount of audit fee with a similar firm with just one subsidiary. Econometrically, this result implies that a unit change in number of subsidiaries has the tendency to cause an increase of about 441.308 units of audit fee payable. The outcome of the unbalance panel regression requires an acceptance of hypothesis three (H_{03}) which states that "the effect of number of subsidiaries on audit fees payable is not significant". This is because the P value of random effect model (0.51) is > 0.05 .

Moreover, result with respect to profit-after tax margin (PATAM) reveals a negative though insignificant effect on audit fee payable. This means that, though in an insignificant manner, profit-after tax margin has an inverse relationship with audit fee payable. This simply means that as profit increases the audit fee payable decreases too. The outcome is surprising as it fails to conform with *a priori* expectation and the submissions of Ahmed & Abdullah (2016) and Musa, et al. (2020), because ordinarily, higher profit attracts higher audit fee. However, it is possible for audit charges to be fixed or based on commission irrespective of profit made. The implication of the result is that a unit change in profit after-tax margin has the tendency to cause a decrease of about (-) 17.2402 units of audit fee. Again, the unbalance panel regression indices require an acceptance of hypothesis four (H_{04}) which states that "the effect of profit after tax margin on audit fees payable is not significant", as the P value of random effect model (0.33) is > 0.05 .

More so, result on ownership concentration (OWNCO) shows a negative but insignificant impact on the audit fee payable. This implies that as ownership concentration increases, the audit fee payable by quoted insurance firms in Nigeria decreases. This is a governance gimmick and is not a surprise, as owners of firms would naturally protect their interest in order to maximize their reward more in terms of increased returns, if they constitute a greater part of the board that determines audit fee. This is consistent with the finding of AlQadasi & Abidin (2018) which says that large-block shareholders do not advocate for extensive audit services. Obviously, whatever can reduce any cost and increase their benefit (reward) is more of interest to them. Specifically, this result implies that a unit change in ownership concentration has the tendency to cause a reduction of about (-2.70633) of audit fee payable by quoted insurance firms in Nigeria, and this requires and acceptance of the fifth null hypothesis (H_{05}) which states that "the effect of ownership

concentration on audit fees payable is not significant”, because the P value of random effect model (0.29) is > 0.05 .

Finally, for audit firm size (big₄ auditors), the result reveals a positive and highly significant impact on audit fee payable. This means that the use of big₄ auditors has a direct and significant relationship with audit fees chargeable. Obviously, big₄ auditors are not comparatively cheap. Hence, it is imperative that the outcome should be so. The outcome also econometrically implies that as long as a firm chooses to employ Big₄ auditors, its audit fee would be increasingly high, and this is in agreement with the empirical conclusions of Owusu & Bekoe (2019) and Silva, et al. (2021). Thus, a unit change in the use of big₄ auditors has a propensity to cause about 6405.09 unit increase in audit fee, and this ultimately implies a rejection of hypothesis four (H₀₆) which states that “the effect of audit firm size on audit fee payable is not significant”, as the P value of random effect model (0.00) is < 0.05 .

CONCLUSION AND RECOMMENDATION

This study statistically tested the association between audit fee payable by Nigerian quoted insurance firms and financial leverage, board independence, number of subsidiaries, profit-after-tax margin, ownership concentration and audit firm size. Drawing from an unbalanced (random effect) panel regression, this study concludes that, there is a positive but insignificant relationship between financial leverage, board independence, number of subsidiaries and audit fees payable. This study further concludes there is an inverse (negative) relationship between audit fee payable and profit-after-tax margin and ownership concentration. Ultimately, the only determinant that is positively and significantly related to audit fee payable hence, this study concludes that audit firm size (Big₄ auditors) is the chief determinant of audit fee payable. It is recommended that a similar study be done in the public sector of Nigerian, using more variables like audit risk and client size.

REFERENCE

- Ahmed, R. A. & Abdullah, H. A. (2016). A framework of audit fees determinants in Kurdistan region. *European Journal of Business and Management*, 8(12), 1-12.
- AlQadasi, A. & Abidin, S. (2018). The effectiveness of internal corporate governance and audit quality: The role of ownership concentration –Malaysian evidence, *The International Journal of Business in Society*, 18(2), 233-253.
- Aronmwan, E. J., Ashafoke, T. O. & Mgbame, C. O. (2013). Audit firm reputation and audit quality, *European Journal of Business and Management*, 5(7), 66-75.
- Barua, A., Hossain, M.S. & Rama, D.V.(2019).
- Chersan, I. C., Robu, I. B., Carp, M. & Mironiuc, M. (2012). A circular casualty analysis on the determinants of the audit fees within the NYSE quoted companies, *The Communication of the IBIMA*, 1.
- Elgammal, W. (2012). Determinants of audit fees: Evidence from Lebanon. *International Business Research*, 5(11) 136-151.
- Fleischer, R. & Goettsche, M. (2012). Size effects and audit pricing: Evidence from Germany. *Journal of International Accounting, Auditing and Taxation*, 21(2), 156-168.

- Gul, F. A., Hsu, A. W. & Liu, S. H. (2017). Parent-subsidiary investment layers and audit fees. *Journal of Accounting, Auditing and Finance*. Retrieved from: <https://doi.org/10.1177/0148558x17696763>.
- Hassan, M. G. & Hassan, S. (2014). Impact of corporate governance on audit fee: Empirical evidence from Pakistan. *World Applied Sciences Journal*, 30(5), 645-651.
- Hay, D. C., Knechel, W. R. & Wong, N. (2006). Audit fees: A meta-analysis of the effect of supply and demand attributes. *Contemporary Accounting Research*, 23(1), 141-191.
- Hamilton, J., Ruddock, C., Stokes, D. J. & Taylor, S. L. (2005). Audit partner rotation, earnings quality and earnings conservatism. Retrieved from: <https://ssrn.com/abstract=740846>.
- Hentati, E. & Jilani, F. (2013). The determinants of non-audit fees in French firms. *Management Science Letters*, 3(6), 1773-1782.
- Hossain, S., Yazawa, K. & Monroe, G.S. (2017). The relationship between audit team composition, audit fees and quality. *Auditing: A Journal of Practice and Theory*, 36(3), 115-135.
- Imeni, M. & Daryaei, A. (2021). Audit fees: A further evidence of the role of financial and operating liability leverage. *Accounting and Auditing Review*, 27(4), 495-522.
- Joshi, P. L. & Al-Bastaki, H. (2000). Determinants of audit fees: Evidence from the companies listed in Bahrain. *International Journal of Auditing*, 4(2), 129-138.
- Khan, A., Hossain, D.M. & Siddiqui, J. (2011). Corporate ownership concentration and audit fees: The case of an emerging economy *Advances in Accounting*, 27(1), 125-131.
- Kikhia, H. Y. (2014). Determinants of audit fees: Evidence from Jordan. *Accounting and Finance Research*, 4(1), 42-57.
- Kimeli, E. K. (2016). Determinants of audit fees pricing: Evidence from Nairobi securities exchange. *International Journal of Research in Business Studies and Management*, 3(1), 23-25.
- Li, C. (2009) Does client importance affect auditor independence at the Office level? Empirical evidence from going-concern opinions. *Contemporary Accounting Research*, 26(1), 201-230.
- Muniandy, B. (2022). Audit fees, board ethnicity and board independence: evidence from South Africa. *Managerial Auditing Journal*. Retrieved on July 23, 2022 from: <https://www.researchgate.net>3588...>
- Musa, W.A., Salman, R.T.A., Amoo, I.O. & Subair, M.L. (2020). Impact of firm's specific factors on audit fee of quoted customer goods firms. *Corporate Governance and Sustainability Review*, 4(1), 47-55.
- Musah, A. (2017). Determinants of audit fees in a developing economy: Evidence from Ghana. *International Journal of Academic Research in Business and Social Sciences*, 7(11), 716-730.

- Nehme, R., Michael, A. & Haslam, J. (2020). Directors' monitoring role, ownership concentration and audit fees. *Australian Accounting, Business and Finance Journal*, 14(5), 3-25.
- Owusu, G.M.Y. & Bekoe, R. (2019). Determinants of audit fees: The perception of external auditors. *Journal of Research in Emerging Markets*, 1(4), 44-54.
- Shakhatreh, M.Z. & Alsmadi, S.A. (2021). Determinants of audit fees and the role of board of directors and ownership structure: Evidence from Jordan. *Journal of Asian Finance, Economics and Business*, 8(5), 627-637
- Siddiqui, J., Zaman, M. & Khan, A. (2013). Do big-four affiliates earn audit fee premiums in emerging markets? *Advances in Accounting*, 29(2), 332-342.
- Silva, A.S.V.C., Inacio, H.C. & Vioira, E.F.S. (2021). Determinants of audit fees for Portugal and Spain. *Centaduria administracion*, 65(4). Retrieved February 22, 2022 from: <https://www.Sciolo.org.mx>>Sciolo.
- UlHaq, A. & Leghari, M.K. (2015). Determinants of audit fee in Pakistan, *Research Journal of Finance and Accounting*, 6(9), 176-189.
- Zhang, T., Xiong, Y. & Zeng, Z.H. (2019). Abnormal audit fees and classified transfer of earnings: Economic rent or audit cost. *Auditing Research*, 2, 82-90.