INTRODUCTION

Concerns about abnormal audit fees have tremendously increased in recent years, as is evinced in a handful of the research attention showcased by prior research studies. Specifically, studies have examined how audit fees can statistically be linked to the variables such as the audit quality and the audit opinion (Xie, Cai & Ye, 2010; Eshleman & Guo, 2014; Krauss, Pronobis & Zülch, 2014; Fitriany & Anggraita, 2016). Observably, a bulk of such prior research studies are found in both developed and emerging economies. Notwithstanding that fact,
our research study found that, as a follow up to the recommendation of R. Doogar, P. Sivadasan and I. Solomon (2015), the study carried out by O. J. Ilaboya, M. O. Izevbekhai and G. Ohiokha (2017) focused on examining the determinants of abnormal audit fees and an emphasis was placed on the variables such as the client size, the Big4, profitability, joint audit and leverage as the possible determinants of abnormal audit fees. Notably, apart from the study's focus on only companies in the manufacturing sector, the construct of O. J. Ilaboya et al (2017) only consists of the variables attributable to the audit effort school of thoughts (just like other prior studies), whereas the position of the International Financial Reporting Standards (IFRS) was not considered at all. From the audit effort perspective, it is no doubt practically arguable that the adoption of the IFRS may possibly have certain effects on the abnormal audit fee since the financial statements prepared according to the IFRS require more detailed disclosures than the previously adopted local GAAPs, thereby expanding the scope of the audit work (implying a greater audit effort). Therefore, it is obvious that prior studies (Ilaboya et al, 2017) do not appear to have considered this dimension as a part of the determinants of abnormal audit fees. Thus, the gap in the literature necessitates a further research enquiry, for which reason this study was performed.

The main thrust of this research inquiry is to reappraise the determinants of abnormal audit fees by considering the audit effort perspectives and the IFRS-based financial data.

Given the above research focus, the study's goals include the investigation of how the measures of audit efforts are related to abnormal audit fees by discussing the influence that the adoption of the IFRS would exert on that relationship. The research study is empirical by nature and quantitative techniques such as summary statistics, correlation analysis and other appropriate inferential statistics are used in it. Accountancy regulatory bodies, business entities, audit practitioners, and other relevant stakeholders at both the national and global levels will benefit from the findings obtained in this study given the fact that the explanations of the link between the measures of the audit effort and abnormal audit fees are presented in light of the adoption of the IFRS.

Bearing in mind the foregoing, this study aims to specifically examine:

- the relationship between abnormal audit fees and IFRS-based financial reporting,
- the effect joint audit may have on abnormal audit fees,
- the influence of the client size on abnormal audit fees, and
- whether the client complexity does exert a significant influence on abnormal audit fees or not.

Taking into consideration the foregoing specific objectives, the hypotheses follow accordingly:

H1: There is no significant relationship between abnormal audit fees and IFRS-based financial reporting.
H2: Joint audit has no significant effect on abnormal audit fees.
H3: The client size has no significant influence on abnormal audit fees.
H4: The client complexity exerts no significant influence on abnormal audit fees.

The paper is divided into the four sections in addition to the Introduction and Conclusion. The Literature Review is the first to follow, after which there is the section dedicated to an empirical review and the theoretical basis of the research study. The third section is focused on the methodology applied in this study, whereas the fourth section is focused on the findings/results of the study.

LITERATURE REVIEW

The concept of abnormal audit fees

In performing their contractual obligations, auditors have the pristine rights of gaining access to the clients' accounting information. Such rights allow
auditors to gain more knowledge of their clients’ activities, which enables auditors to obtain a piece of information that may not be available in the public domain. The nature of information before the auditor coupled with the available work to be done in the entire audit process is believed to have some forms of the multiplier effect on chargeable professional fees by auditors. Where the professional fees earned by auditors exceed the normal level of the fees required for specific audit engagements, it becomes obvious that certain abnormal fees may have been incurred by auditors’ clients. Therefore, the concept of abnormal audit fees refers to the amount by which the audit fees received by external auditors exceed the normal range and/or level of the expected fees chargeable for a given engagement assignment. When pricing professional fees, auditors will (to some extent) take into account the magnitude of the evidence obtained while performing an engagement alongside the anticipated tasks or the audit work they are going to do/have done. Accordingly, auditors sometimes charge fees based on available private information about audited firms. In most cases, such information is usually not within the framework of the public domain, so stakeholders may be unaware of the very fact that there actually are such pieces of information.

While an agreement may be reached upon the fact that Nigeria’s prior research concerning the possible motivations for abnormally high audit fees counts but few studies, it is obvious that the research evidence of abnormal audit fees from Asia, Europe and the largest number of developed economies is abundant, although with mixed conclusions (DeFond, Raghunandan & Subramanyam, 2002; Krishnan, Sami & Zhang, 2005; Doogar et al, 2015).

It is noteworthy that a bulk of prior related studies are mainly focused on what determines audit fees, the audit quality and the accounting quality, with very few concerns about the subject matters such as “abnormal audit fees” (Soyemi & Olowookere, 2013; Monye-Emina & Jeroh, 2014; Urhoghide & Izedonmi, 2015; Sagin & Shil, 2019). Notwithstanding, apart from O. J. Baboya et al (2017), who (based on the recommendations of R. Doogar et al, 2015) investigated the determinants of abnormal audit fees in Nigeria, there are but few studies on abnormal audit fees mostly focused on their impact on the other related variables such as the auditor’s independence, disclosure and the audit quality (Oladipupo & Monye-Emina, 2016; Dabor & Uyagu, 2017). Specifically, the studies such as those conducted by M. L. DeFond et al (2002), J. Krishnan, H. Sami, and Y. Zhang (2005), R. Hoitash, A. Markelevich and C. Barragato (2007), and P. Hribar, T. Kravet and R. Wilson (2014) either focused on the measures of the accounting quality or the examination of the relationship between an abnormally high audit fee and the audit quality, among other things. Notably, these sets of studies are mostly concerned about how variations on identified variables can be explained by the amount of abnormal audit fees.

Furthermore, while there are abundant studies on the reversal of abnormal accruals and the market valuation of earnings surprises (DeFond et al, 2002), it is pertinent to note the fact that, regarding the abnormal audit fee issue, J. Krishnan et al (2005) assessed whether the provision of non-audit services is likely to exert a significant impact on the investor’s perceptions of the auditor’s independence. The study also tested the linearity of the relationship between abnormal audit/engagement fees and the audit quality, finding that relationship to be significantly negative. Conversely, M. L. DeFond et al (2002) found no relationship between abnormal audit fees and the going-concern opinion, as it related to the sampled companies. Notwithstanding that, and contrary to the previously identified empirical positions, the outcome of the study carried out by J. Krishnan et al (2016) suggests that abnormal audit fees increase over the time and ignite a reduction in the audit quality. This finding is not in consonance with that of R. Hoitash et al (2007), who previously found a positive relationship between abnormal audit fees and the audit quality. While it is possible to agree upon the fact that earlier empirical documentation presents a schema of contradictory arguments, it is evident that, in spite of the fact that the biggest number of those studies came from developed economies, no attention has yet properly been paid to how the audit effort (the adoption of the IFRS, joint audit, the client size and the client complexity) are likely to affect the levels of
abnormal audit fees charged by audit practitioners. This partly accounts for what this present study is setting out to address.

Succinctly, the pricing of audit fees stems from the three key factors (Dickins, Higgs & Skantz, 2008). Accordingly, the first key factor concerns the estimation of the auditor's effort; the second part pertains to the available personnel and the ranks/status required to efficiently conduct audit; the third factor dwells on the perceived risk and the associated expected rewards of the audit firm (the audit effort). This perceived risk includes the company’s industry (whether their stock is publicly traded and a possibility of failing), whereas the reward includes the client’s reputation or the likelihood that being associated with that particular client might attract new clients (economic bonding). The second component reflects the abnormal audit fees that are particular to the auditor-client relationship (economic bonding). Prior studies (Dickins et al., 2008) have measured the abnormal audit fee as a residual from the regression of the total audit fee on a number of variables. These variables are expected to control normal audit fees charged by the auditor for some level of the effort and risk in carrying out his/her audit. This is because rendered audit services are either underpaid or overpaid and the sign of a residual actually matters. A negative residual implies underpayment, whereas a positive residual implies overpayment. Therefore, the abnormal audit fee studied in this paper is measured using a residual from the regressing audit fee on itself.

INTERNATIONAL FINANCIAL REPORTING STANDARDS AND ABNORMAL AUDIT FEES

It is obvious in today’s economic environment that globalization and changing trends in financial markets have triggered cross-border trading and convergence in accounting practice irrespective of nationalities or countries of residence (Jeroh, 2020; Spasic, Abouagla & Sekerez, 2021). This situation, however, has contributed to several calls for the adoption of a common accounting language aimed at fostering uniform across-the-globe financial reporting standards. One possible way to achieve the latter was the introduction of the global sets of standards - the International Accounting Standards (IAS) and, subsequently, the International Financial Reporting Standards (IFRS). Notably, the IFRS were developed after the careful consideration of diverse viewpoints from across the globe (Obradovic, 2014). This approach was welcomed by the majority of countries (both developed and developing ones) throughout the world, including Nigeria. Specifically, the listed Nigerian companies were mandated starting from January 2012 in line with the set roadmap to the adoption of the IFRS to comply with the IFRS provisions pertaining to the preparation of financial statements. As of today, all the Nigerian listed companies have keyied into the adoption of the global standards (IFRS) by preparing their respective company financial statements in compliance with the IFRS.

As articulated by the IFRS Foundation (Melville, 2019), it is noteworthy that the major the IASB’s main goal in the IFRS development is to introduce transparency, accountability and efficiency in the financial market operations. Nevertheless, following the IFRS introduction, researchers have carried out several studies on IFRS and its impact on different variables like disclosure quality, comparability, and audit fees, among other things (Barth, Landsman, Lang & Williams, 2006; Barth & Schipper, 2008; Taylor, Tower & Nelson, 2010; Yip & Young, 2012; Choi, Peasnell & Toniato, 2013; Ajekwe, Onobi & Ibiamke, 2017; Soedaryono, 2017). According to the largest number of the prior studies, the measurement of the adoption of the IFRS was performed by means of the dummy variables of one (1) and zero (0), as appropriate. Therefore, in line with B. Soedaryono (2017) and other prior studies, this study measures the adoption of the IFRS using the dichotomous measure of 1 for any year in which companies implement the IFRS, and zero (0) for the non-IFRS years. It is, however, expected that the effort required to perform an audit assignment during and the IFRS era may not be the same as those previously required prior to the IFRS era. Bearing this fact in mind, the effect the adoption of the IFRS may have on abnormal audit fees in Nigeria is examined.
Joint audits and abnormal audit fees

The need to consciously improve the quality of audit has been an issue of global concern to accountants, practitioners and regulators. This is partly due to the aftermath of recent corporate and audit failures in high-profile companies around the world, the majority of which were found culpable. Resulting from the known cases of corporate financial scandals, many investors notably suffered severe losses, thereby being led to an abysmal loss of confidence in capital markets, their regulations and operations. Notably, the Enron Arthur Anderson scandals led to distrust in the quality of audit reports. Another concern is the Green Paper Report issued by the European Commission (EC) in 2010, entitled the “Audit Policy”. In line with a part of the issues raised by the EC document of 2010, the President of the Institute of Chartered Accountants of Nigeria (ICAN) called for mandatory joint audit early in 2010. This call was made so as to address the audit quality issue in both developed and developing nations, hoping to contribute to the trending debates on how quality could be improved in the external auditing field in addition to whether joint audit should be encouraged or not (Ajaegbu, 2014).

As noted by N. Razinger-Sakel, S. Audosset-Coulier, J. Kettumen and C. Lessage (2013), joint audit refers to any audit engagement requiring the audit of clients’ financial statements by two or more external auditors. This shows that any given joint audit task requires the engagement of more than one independent auditor to a respective opinion of the clients’ financial statements. Such an engagement will hopefully not only improve the quality of the work done, but it will additionally raise concerns about the required efforts that will be made by such concerned auditors, knowing fully well that the services rendered by the other auditors in the joint assignment may simultaneously serve as checks to the quality of the services currently being rendered. Therefore, the expected relationship between the abnormal audit fee and joint audit also forms a part of the gap this study intends to fill. To achieve this, and in line with prior studies (Andre, Broye, Pong & Schatt, 2015; Ilaboya et al, 2017), joint audit is measured by the dummy variables of “1” (for companies using joint auditors), and “0” (otherwise).

The client size and abnormal audit fees

The issue of whether larger companies have an influence on audit fees or not has been debated over the years due to the fact that this issue calls for a concern. According to D. C. Hay, W. R. Knechel and N. Wong (2006), the meta-analysis they had conducted found that the client size was the most frequent variable determining the amount of the chargeable audit fee (either high or low). As recorded in the 87 studies reviewed by D. C. Hay et al (2006), as many as 85 reported the presence of a positive association between the client size and audit fees. Arguably (in terms of the size) larger companies are likely to be more involved in huger activities, thus requiring more attention and audit efforts as compared to that of smaller firms. In their respective studies, B. Al-Shammari, P. Brown and A. Tarca (2008) and Y. Xu, A. L. Jiang, N. Fargher and E. Carson (2011) found that the relationship between (abnormally) higher audit fees and the client size were inconclusive, thus creating a gap in the literature. In their study, M. Causholli, M. De Martinis, D. Hay and W. R. Knechel (2011) found that the client size was the most significant determinant of audit fees being either abnormally higher or abnormally lower. Therefore, the thrust of our investigation stems from our belief that the client size may possibly drive the required audit effort and engagement, and that it may consequently have a significant effect on abnormal chargeable audit fees.

The client complexity and abnormal audit fees

Consistent with earlier studies E. Carson, N. Fargher, D. T. Simon and M. H. Taylor, (2004) and R. W. Knechel and S. E. Salterio (2017), it is believed that one probable determinant of audit fees is the nature and complexity of the firm being audited. Presumably, clients with a more complex structure may require more tasks and ultimately a greater audit effort. Explicitly, firms with more subsidiaries may have expanded activities,
thus resulting in more complex decisions at both the managerial and divisional levels. D. A. Simunic (1980) avers that, for companies with a high complexity level, decisions are usually made at the administrative/managerial level of parent companies. Therefore, such decisions require a certain monitoring level in order to guarantee the goal congruence sought to attain by every company.

Note that, where companies have several and complex subsidiaries, an increased number of activities and expansion in transactions may undoubtedly expose auditors to higher levels of risk. Such exposures may therefore induce demand for higher audit fees (abnormally high audit fees) by statutory auditors, hoping to compensate for all forms of (a) loss exposure(s) that might arise in the course of the audit. This argument is premised on the fact that companies with complex structures require more time for auditors to assemble, harmonize and implement the audit process. The extended time for the audit process may lead to enhancement in the quality of the entire audit process, thereby attracting higher audit fees (Gerrard, Houghton & Woodliff, 1994). Take for instance the complexities that may arise from the existence of numerous estimations needed for several journal entries arising from the multiplicity of transactions of highly diversified firms with many affiliates (Knechel & Salterio, 2017). Under this circumstance, auditors are expected to perform more tasks that will require an all-inclusive audit necessitating higher audit fees from such complex clients. In support of the notion that auditors need more time and manpower to conduct the statutory audit of complex firms, empirical documentations (Simunic, 1980; Firth, 1985; Low, Tan & Koh, 1990; Chan, Ezammel & Gwilliam, 1993; Butterworth & Houghton, 1995; Carson et al, 2004; Knechel & Salterio, 2017) revealed a significant and positive relationship between the level of the client complexity and the audit fee (either a normal audit fee or an abnormal audit fee).

**An empirical review**

In this section, a further review of the related empirical studies is presented. Accordingly, our review of the mentioned shows that, by relying on the documentation from an analysis of the 532 observations out of the data of the sampled French audit market, M. Haak, M. Muraz and R. Zieseniß (2018) sought to know if, in any joint audit, the audit work allocated to a given audit team affects the audit quality and the fees charged by the auditors. The findings show that there is an inverse relationship between the audit work allocated to concerned auditors in a given joint audit and the quality of the work done (the audit quality), thereby enhancing the amount of the audit fees to be charged. This means that the greater the cooperation between two auditors, the higher (abnormally high) audit fees.

In the Korean context, H. J. Nam (2018) examined whether mandatory transition to the IFRS reporting would affect the audit effort and the subsequent audit fee to be charged by auditors. In the study, the five-year data about the 421 Korean companies listed on the Korean Stock Exchange were analyzed. The data used covered the period of the financial years 2007 to 2011 of the sampled companies. The results obtained from the relevant econometric and statistical analyses provided the evidence that the audit hours (a proxy for the audit effort) were statistically more associated with the intensity of the audit work in comparison with the audit fees, which implied the fact that the effort required from an auditor to perform in an engagement was highly dependent on the nature of the audit to be conducted. This has a consequential effect on the amount of the fees that will be earned by the auditor in the long run, as auditors may request that they should be paid higher audit fees where an audit engagement requires that they should spend more of their time (the audit hours) and make a bigger effort.

B. Soedaryono (2017) assessed the underlying concept of abnormal audit fees and examined its relationship with the audit quality by comparing the outcome during the pre- and post-IFRS regime in Indonesia. The data were collected from the financial reports of the listed Indonesian companies of the automobile and transport sectors. The data were secondary by nature and covered a period of five years (from 2011 to 2015). The data about the audit quality were generated
from the residuals of discretionary accruals. The results obtained in that study showed that, during the pre-IFRS regime, abnormal audit fees had had an insignificant relationship with the audit quality, whereas on the other hand, a positive and significant relationship was found to have been recorded between both variables during the post-IFRS era. With this result, the study concludes that the auditors’ clients were exposed to greater discretion in the choice of discretionary accruals after the adoption of the IFRS, thereby encouraging auditors to charge the audit fees deemed to be abnormal and exceptionally high vis-à-vis the audit work done, which is in line with the tenets of the theory of economic bonding.

M. Salehi, S. Farhangdoust and A. Vahidnia (2017) critically analyzed abnormal audit fees as a concept and x-rayed its link with future restatements. The data obtained from the 936 listed companies in Tehran over a period of six years (from 2009 to 2014) were examined. The study specifically emphasized the critical examination of whether the companies with restated financial statements had higher amounts of audit fees in comparison with the companies without such restated financial statements. A negative/inverse relationship between abnormal audit fees and future restatements was recorded. Conclusively, the researchers maintained that abnormal audit fees were usually found to be low in the periods of the announcement of said restatements.

In Nigeria, O. J. Ilaboya et al (2017) investigated the factors that possibly determined abnormal audit fees, although with an emphasis on the listed manufacturing firms as at December 2014. A total of 56 quoted companies were sampled and the secondary data were compiled for the purpose of the analysis. The results unveiled clearly suggested that, while some variables were significant in explaining the levels of abnormally high audit fees with a positive association, the others recorded a negative, but significant relationship with abnormal audit fees. Additionally, some factors were also found to have a positive, but insignificant relationship with abnormal audit fees. Further empirical documentation from the study was that the companies that patronized the services of the Big 4 audit firms seemed to be paying abnormally high audit fees in comparison with their counterparts, who regularly engaged the services of non-Big 4 firms.

S. C. Okaro, G. O. Okafor and G. N. Ofoegbu (2018) investigated the different perspectives of and calls for mandatory joint audits in Nigeria. The primary data compiled from the responses to the 200 questionnaires previously given to the selected stakeholders (accountants, auditors and academics) were analyzed. The participants were required to give justification for or against and to indicate whether joint audits should be made mandatory in the country or not. The findings suggested that there was a unified agreement among the various stakeholders who believed that the cost of mandatory joint audit would outweigh the benefits of the same. As noted by the majority of the participants, joint audits would make room for abnormally high audit fees payable by the audit clients. With this result in mind, it is our expectation that the joint audit will record a positive effect on exceptionally high professional fees (abnormal audit fees).

A theoretical review - productive theory

Productive theory (PT) originates from the economics field and was popularized by I. Gough (1972). Its major emphasis is placed on the output from the input, i.e. on using available resources in order to create a service that will be beneficial for the survival of the client’s business. In his theory, Gough believes that chargeable fees are the determinant factors of the work effort. Thus, chargeable fees are expectedly higher for the jobs or schedules that demand more efforts from professionals/the labor force. Consistently with the position of productivity theory, M. Alhadab (2018) argues that where auditors aspire to improve the quality of audit and discourage earnings manipulation, abnormal audit fees are mostly charged since such engagements may require additional audit tasks. According to the tenets of productivity theory, abnormal audit fees would presumably demonstrate a significant and positive link with the audit effort.

It is noteworthy that prior empirical studies have provided the evidence that the audit fees deemed to
be abnormally high will spur auditors to make better efforts in a given assignment *vis-a-vis* the nature of the client’s line of activities. In spite of this observation, it is evident that the aftermath of the introduction of the IFRS saw an expansion of the statutory audit scope, thus requiring an increased audit effort in engagements involving IFRS-compliant companies. Hence, A. A. Widyawati and A. Viska (2013) conclude that the implementation of the IFRS requirements has increased the efforts made by the auditors who are now expected to explore a variety of audit evidence relating to several disclosure requirements by the global standards. While we may agree with this position, we also believe that joint audit has a way to reduce the audit effort (i.e. audit hours) since the responsibility of the audit process is jointly shared. Given the fact that this study intends to assess how the factors such as joint audit, audit efforts, the client size and complexity affect audit fees, hence we have found productivity theory (PT) useful, and therefore this study hinges on PT.

**METHODOLOGY**

The study design is longitudinal and panel-based, as it is conventional and implies studying repeated observations of similar variables over a time period (specifically, a ten-year period). Our population covers a sample of 21 listed banks in Nigeria. However, by excluding the only one listed noninterest bank in the country (Jaiz Bank), the study’s data were therefore sourced from the respective audited financial statements of the 20 listed commercial banks for the given period (from 2010 to 2019).

The idea behind the audit effort schools of thought formed the basis of the study framework and is based on productive theory. The analytic framework is therefore depicted in Figure 1, which presents a schematic description of the expected linkage between the abnormal audit fee (the dependent variable) and the independent variables comprising of the audit effort schools of thought variables. D. A. Simunic (1980) classified both the abnormal and normal audit fees as the functions of audit hours (efforts). However, while audit fees are observable and quantifiable, audit efforts are not easily observable which leads to the audit effort schools of thought clearly explained in productivity theory. M. Alhadab (2018) linked productivity theory to auditing, indicating that abnormal audit fees were mostly associated with the additional audit tasks or procedures that would enhance the audit quality so that it became too difficult for managers to manipulate reported earnings. Thus, following the assumption of productivity theory that the abnormal audit fee is a proxy for the audit effort, a total of the four explanatory variables in Model 1 (I) that form a part of the framework as the composites of audit efforts

![Audit Efforts Perspective](image)

**Figure 1** The model framework

*Source: Authors*
are drafted in the study. The review of the variables, measurements and the relevant literature sources is given in the Table 1.

Following the above-mentioned theoretical projections, a functional relationship between the four variables identified from the audit effort school of thought and abnormal audit fees are presented below as follows:

Abnormal audit fees = f (IFRS adoption, joint audit, client size, client complexity)  

This can be specified in the econometric form as follows:

\[ \text{ABFEE}_{it} = \gamma_0 + \gamma_1 \text{IFRS}_{it} + \gamma_2 \text{JAD}_{it} + \gamma_3 \text{SIZ}_{it} + \gamma_4 \text{CPX}_{it} + \epsilon \]  (2)

where:

- \( \gamma_0 \) = the constants or intercepts
- \( \gamma_1 \) to \( \gamma_4 \) = the unknown coefficients or parameters to be estimated

\( it \) = “i” represents the number of the companies (1,…20) and “t” is the period to be covered (1,…10yrs)

\( \text{ABFEE} \) = abnormal audit fees

\( \text{IFRS} \) = the IFRS adoption

\( \text{JAD} \) = joint audit

\( \text{SIZ} \) = the client size

\( \text{CPX} \) = the client complexity

\( \epsilon \) = the stochastic error term

The data were analyzed using descriptive statistics, correlation and panel regression analyses. In order to confirm how the specified model fits and ascertain whether the basic assumptions underlying the regression analysis use (for a study of this nature) are good, certain diagnostic tests had been done. On this note, the collated data were specifically subjected to the Variance Inflation Factor (VIF) test for multicollinearity, the heteroskedasticity test, the serial correlation test and the Ramsey RESET test for the model (mis)specification. The results obtained from those tests are, however, presented by means of the tables accompanied by a relevant analysis. The analysis was, however, carried out using the Eviews (10) software.

### Table 1 The variables, measurements, notation and a priori expectations

<table>
<thead>
<tr>
<th>Variables</th>
<th>Notation</th>
<th>Measurements</th>
<th>Source(s)</th>
<th>a priori expectations</th>
</tr>
</thead>
<tbody>
<tr>
<td>The dependent variable:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Abnormal audit fees</td>
<td>ABFEE</td>
<td>A residual from regressing the audit fee to itself</td>
<td>Gros and Worret, (2014)</td>
<td>-nil-</td>
</tr>
<tr>
<td>The independent variables:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IFRS adoption</td>
<td>IFRS</td>
<td>The dichotomous variable of ‘1’ for the years the companies have been implementing the IFRS, and zero ‘0’ for the non-IFRS years.</td>
<td>Soedaryono (2017)</td>
<td>+</td>
</tr>
<tr>
<td>Joint audit</td>
<td>JAD</td>
<td>The dummy variable of ‘1’ for the firms using joint auditors, ‘0’ otherwise.</td>
<td>Ilaboya et al (2017)</td>
<td>+</td>
</tr>
<tr>
<td>Client size</td>
<td>SIZ</td>
<td>The natural log of the total assets</td>
<td>Choi, Kim &amp; Zang, (2010)</td>
<td>+</td>
</tr>
<tr>
<td>Client complexity</td>
<td>CPX</td>
<td>The number of subsidiaries of the company being audited</td>
<td>Choi et al (2010)</td>
<td>+</td>
</tr>
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Source: Authors
RESULTS

The summary statistics

The outcome of the summary statistics is presented in Table 2, including the results of the mean, the median, the standard deviation, skewness, the kurtosis, Jarque-Bera alongside the minimum and maximum values, among other things.

The descriptive statistics accounted for in Table 2 shows the characteristics of the variables used in the study. As is shown, the ABFEE (abnormal audit fees) variable has the minimum and maximum values of -4.21 and 0.522, respectively, which implies that the sampled firms were engaged in the payment of both abnormally high (positive abnormal) and abnormally low (negative abnormal) audit fees within the 10-year period covered by the study. Also, the mean value of ABFEE (the audit fee residual) has a negative value -0.15, which signifies the fact that the actual audit fees paid by all the sampled firms were on average jointly lower than the predicted industry average in value. The IFRS variable shows the mean value 0.695, which signifies the fact that about 70% of the 10-year period observed in this study can be classified as the IFRS era, namely the two-year pre-IFRS period (2010-2011) and the eight-year post-IFRS (2012-2019) period. Furthermore, the JAD (joint audits) variable shows the mean value 0.170, which means that only about 17% of the sampled firms engaged the joint auditors’ services during the ten-year period observed in the study, whereas the remaining 83% of all the companies engaged single audit firms during the same period. This suggests that the culture of joint auditing is still not rife in the Nigerian financial sector.

Speaking about the size of the firms (SIZ) represented by the actual value of the total assets, the mean value shows that the average total assets of the sampled firms are ₦1,296,921,477,000, with the minimum and maximum values ₦159,041,1 and ₦8,223,984,226, respectively. Finally, speaking about on the complexity of the firms (CPX) as represented by the number of the sampled firms’ subsidiaries, the mean value 9.695 shows that the average number of the operating subsidiaries of the sampled firms is 10. The highest number of the operating subsidiaries of the sampled firms is 53, whereas the minimum value zero (0.000) shows that some of the banks do not have any subsidiary at all. When the Jarque-Bera statistics test of the goodness-of-fit is concerned, the outcome suggests that all the variables show a significant departure from normality owing to their low (respective) probability

<table>
<thead>
<tr>
<th></th>
<th>ABFEE</th>
<th>IFRS</th>
<th>JAD</th>
<th>SIZ</th>
<th>CPX</th>
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<td>Maximum</td>
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<tr>
<td>Std. Dev.</td>
<td>0.988</td>
<td>0.462</td>
<td>0.377</td>
<td>1700807484</td>
<td>11.42825</td>
</tr>
<tr>
<td>Skewness</td>
<td>-2.41</td>
<td>-0.847</td>
<td>1.757</td>
<td>1.634845</td>
<td>2.101941</td>
</tr>
<tr>
<td>Kurtosis</td>
<td>8.767</td>
<td>1.718</td>
<td>4.087</td>
<td>5.074167</td>
<td>6.693215</td>
</tr>
<tr>
<td>Jarque-Bera</td>
<td>471.4</td>
<td>37.624</td>
<td>112.76</td>
<td>124.3173</td>
<td>260.9372</td>
</tr>
<tr>
<td>Probability</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000000</td>
<td>0.000000</td>
</tr>
<tr>
<td>Sum</td>
<td>-30.10</td>
<td>139.00</td>
<td>34.000</td>
<td>2.58E+11</td>
<td>1939.000</td>
</tr>
<tr>
<td>Sum Sq. Dev.</td>
<td>194.2</td>
<td>42.395</td>
<td>28.220</td>
<td>5.73E+20</td>
<td>25990.39</td>
</tr>
<tr>
<td>Observations</td>
<td>200</td>
<td>200</td>
<td>200</td>
<td>199</td>
<td>200</td>
</tr>
</tbody>
</table>

Source: Authors
values, which are all less than 0.05 (< 0.05). Although the violation of the normality assumption poses no major problem in the panel data with large sample observations of ≥ 200 in line with the Central Limit Theorem, as cited in A. Ghasemi and S. Zahediasl (2012), the normality status could be attributed to the following two reasons: firstly, the majority of the variables were used in their original values solely for the purpose of the descriptive statistics in order to ensure unambiguous interpretations; secondly, the dichotomous or categorical variables (the IFRS adoption and the joint audit variables) were included, the categorical data usually not being generated from a normal distribution.

**Correlation analysis**

Correlation was performed on the data for all the variables, as shown in Table 3. This analysis was essentially intended to establish the pattern and direction of the relationships among the variables and to find out if there were signs of multicollinearity among the dataset for the explanatory variables.

In Table 3, the Pearson correlation matrix for all the variables used in the study is presented. The adoption of the IFRS, the firm size (SIZ) and the firm complexity (CPX) are all negatively correlated with the variable of our interest (i.e. the ABFEE variable). They are all statistically significant at different levels as indicated by the asterisk (*) signs. This implies that all things are equal, the variables of the IFRS, SIZ and the CPX move in the opposite direction from that of ABFEE, implying the one ascending and the other descending, thus signifying the inverse relationships. Evidently, where companies grow bigger, with a more complex structure, negative abnormal fees tend to reduce. On the other hand, the JAD variable is positively correlated with ABFEE owing to the 0.136 positive correlation coefficients. However, it is only the JAD (joint audits) variable that was statistically (although weakly) significant at the 10% levels (p-value = 0.054), which suggests that joint audit moves in the same direction as the abnormal audit fees do. Thus, higher joint audits are strongly associated with high positive abnormal audit fees. Speaking about the strength and direction of the associations among the explanatory variables, JAD is negatively associated with the IFRS and strongly positively correlated with the CPX (r = 0.497854, p-value = 0.0000), which means that the adoption of and compliance with the IFRS requirements may not necessarily require that firms should engage joint auditors’ services although highly complex firms are associated with joint auditors. Similarly, the SIZ and JAD variables strongly positively correlated (r = 0.248155, p-value = 0.0004),

<table>
<thead>
<tr>
<th>Correlation</th>
<th>Probability</th>
<th>ABFEE</th>
<th>IFRS</th>
<th>JAD</th>
<th>SIZ</th>
<th>CPX</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABFEE</td>
<td>1.000000</td>
<td>------</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IFRS</td>
<td>-0.205824</td>
<td>1.000000</td>
<td>0.0035**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>JAD</td>
<td>0.136492</td>
<td>-0.076036</td>
<td>1.000000</td>
<td>0.054*</td>
<td>0.2846</td>
<td></td>
</tr>
<tr>
<td>SIZ</td>
<td>-0.579527</td>
<td>0.110133</td>
<td>0.248155</td>
<td>0.000000</td>
<td>1.000000</td>
<td></td>
</tr>
<tr>
<td>CPX</td>
<td>-0.167582</td>
<td>0.110884</td>
<td>0.497854</td>
<td>0.462109</td>
<td>1.000000</td>
<td></td>
</tr>
</tbody>
</table>

Note: Covariance Analysis: Ordinary; Included Observations: 200

**,** *Correlation is significant at the 1%, 5% and 10% levels, respectively

Source: Authors
which means that larger firms are more associated with joint audits.

**Regression diagnostic tests**

The tests done in this section include the variance inflation factor (VIF) test for multicollinearity and the heteroskedasticity test (the so-called Hettest). To clearly show whether the model is rightly or correctly specified or not, the result of the serial correlation test and the Ramsey RESET Test for the model (mis) specification is also presented and analyzed.

Judging from the VIF results, the applicable decision rule is that if each of the explanatory variables has low VIF values below 10, it will be suggestive of the fact that such a variable does not correlate with other independent variables. However, if a variable exhibits a VIF up to or greater than 10, then it correlates with (an)other independent variable(s) and as such should be dropped. As can be seen in Table 4, the values for the centered VIF for all the variables are below the benchmark value 10. In line with E. Jeroh (2020a), the above results suggest the absence of multicollinearity issues among the variables. Thus, there is no issue of unstable parameter estimates in the regression line.

Table 5 shows the results of the heteroscedasticity test which checks for the presence/absence of the nonconstant variance. This test was done using the Breusch-Pagan-Godfrey test. The decision rule is that the variables do not show the signs of heteroscedasticity if the corresponding probability value of the F-statistics is greater than the 5% level. If that is the case (i.e. if the p-value is greater than 5%), a conclusion can be drawn that there is homoscedasticity, which is desirable. Noticeably, the p-value 0.1482 (14.82%) shows the absence of heteroscedasticity, which means that the residuals of the model are homoscedastic, which is desirable for regression analysis.

In the second row of the table, the outcome of the Breusch-Godfrey Lagrange Multiplier (LM) test for higher-order serial correlation is outlined. This test specifically checks for the presence or otherwise of serial correlation. The outcome revealed that the hypotheses of zero autocorrelation in the residuals could be rejected, which is because the probability values (Prob. F, Prob. Chi-Square) are less than 5%. However, the presence of serial correlation does not affect the non-biasness or consistency of the panel data estimators. Thus, it does not pose a major problem for the performed analysis since this study adopted the panel data approach.

In the third row of the table, the outcome of the Ramsey RESET test for the model specification is reported so as to test the accuracy of the regression model. The result reported an F-statistic of 0.595128 and a probability value of 0.7431 (74.3%). The high probability value is suggestive of the fact that there is no significant evidence of misspecification. Thus, the result cannot sustain the wrongly specified model.

### Table 4 The results of the VIF Tests

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient Variance</th>
<th>Uncentered VIF</th>
<th>Centered VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>0.541368</td>
<td>202.8896</td>
<td>NA</td>
</tr>
<tr>
<td>IFRS</td>
<td>0.013284</td>
<td>3.459970</td>
<td>1.055291</td>
</tr>
<tr>
<td>JAD</td>
<td>0.031261</td>
<td>1.991668</td>
<td>1.653085</td>
</tr>
<tr>
<td>SIZ</td>
<td>0.001730</td>
<td>246.8285</td>
<td>3.885331</td>
</tr>
<tr>
<td>CPX</td>
<td>3.52E-05</td>
<td>2.951268</td>
<td>1.712577</td>
</tr>
</tbody>
</table>

**Source:** Authors

Note: Variance Inflation Factors; Sample: 1,200; Included observations: 200
The other regression diagnostics test(s) results

<table>
<thead>
<tr>
<th>Test Summary</th>
<th>F-statistics</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heteroskedasticity Test: Breusch-Pagan-Godfrey</td>
<td>2.106875</td>
<td>0.1482</td>
</tr>
<tr>
<td>Breusch-Godfrey Serial Correlation LM Test:</td>
<td>34.50643</td>
<td>0.0000</td>
</tr>
<tr>
<td>Ramsey RESET Test</td>
<td>0.595128</td>
<td>0.7431</td>
</tr>
</tbody>
</table>

Source: Authors

The outcome shown in Table 6 reveals that the probability value of the Hausman Test (p-value = 0.0085) is less than 5%, which is a confirmation of the appropriateness of the fixed effect model in capturing the relationships among the panels. Therefore, the fixed effect regression result is accepted for drawing conclusions.

<table>
<thead>
<tr>
<th>Test Summary</th>
<th>Chi-Sq. Statistic</th>
<th>Chi-Sq. d.f.</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross-section random</td>
<td>20.531294</td>
<td>8</td>
<td>0.0085</td>
</tr>
</tbody>
</table>

Note: Correlated Random Effects - Hausman Test; Equation: Untitled; Test cross-section random effects

Source: Authors

The regression output

According to Table 7, the statistical significance of the models cannot be rejected at the 5% levels owing to the F-statistics values 37.09337 (p-value = 0.000). This is the indication that there is a linear relationship between the dependent variable (ABFEE) and the explanatory variables taken all together at the 1% significance level. As far as the proportion of the variations in the dependent variable accounted for by the explanatory variables taken all together is concerned, the result shows a total of 43.21%.

However, the adjusted R-squared controlling the effect of the inclusion of the successive explanatory variables at the freedom degrees stood at 42.05%, which implies that the remaining proportions of 57.95% were not captured by the individual models and that they were taken care of by the error term. This de facto means that the IFRS, JAD, SIZ and CPX variables explained reasonable variations in abnormal audit fees (ABFEE), which on its part aptly suggests that changes in abnormal audit fees are reasonably explained by the measures of the audit efforts. Concerning the behaviors of the audit effort proxies with respect to ABFEE as shown in the model, the outcome shows that it is only the JAD variable that has a positive coefficient sign, whereas the IFRS, CPX and SIZ variables have negative coefficient sign. The variables that significantly contributed to the variance in ABFEE, however, are the IFRS (at a 5% level), JAD and SIZ (at a 1% level, respectively), whereas CPX (complexity) was not significant owing to its high p-value of 0.9494, which implies that increases in joint audits by one unit will lead to a unit significant increase of about 0.756 in ABFEE. On the other hand, increases in SIZ and the IFRS will have significant decreasing effects on ABFEE, all things being equal.

CONCLUSION

The paper focuses on the determinants of the abnormal audit fees based on the audit effort perspective. The study was carried out in response to the growing concerns that little is known of the drivers and determinants of abnormal audit fees in Nigeria and the audit effort approach was applied. There were also the questions of whether the factors determining normal audit fees are the same as those determining abnormal audit fees since both originate from the auditor’s service. There were also the beliefs that abnormal audit fees were primarily motivated by extra or unexplained audit efforts and the costs associated with them.

Thus, guided by the tenets of productivity theory as popularized by I. Gough (1972), the link between abnormal audit fees and audit efforts was the subject
matter of our examination, which was carried out considering the size and complexity of the auditor's clients, joint audit and the implication of the adoption of the IFRS on audit efforts. The data used in the paper were secondary by nature and the analysis was conducted using relevant econometric tools.

The key findings arising from this study are indicative of the fact that, when taken together, ABFEE has a linear relationship with the predictor/input variables, with the IFRS, CPX and SIZ variables recording a negative correlation with ABFEE. Impliedly, where companies grow bigger with more complex structures, there are tendencies of such companies recording a reduction in negative abnormal audit fees. Alternatively, JAD recorded a positive correlation with ABFEE, which means that the records of high positive abnormal audit fees are mostly associated with the companies engaging joint auditors’ services. Additionally, the variables that significantly contributed to the variance in ABFEE were the IFRS (at a 5% level), JAD and SIZ (at a 1% level, respectively), whereas CPX (client complexity) was not significant owing to its high p-value of 0.9494, which implies that increases in joint audits by one unit will lead to a unit significant increase of about 0.756 in ABFEE. On the other hand, increases in SIZ and the IFRS will have significant decreasing effects on ABFEE, all things being equal. The further implications of the results arising from this study suggest that larger companies with more complex structures are more associated with joint audits. Regarding the regression output for the hypotheses test, the following conclusions are made:

- there is a significant relationship between abnormal audit fees and the IFRS-based financial reporting;
- joint audit has a significant effect on abnormal audit fees;
- the client size exerts a significant influence on abnormal audit fees, and
- the client complexity exerts no significant influence on abnormal audit fees.

With these results in mind, the study however recommends the following:

- accounting professional bodies should review, harmonize and enforce the minimum audit fee-benchmarks for the various categories of the audit firms engaged in the provision of specified professional audit services;

### Table 7 Panel Regression Results of the Models

<table>
<thead>
<tr>
<th>Audit Effort</th>
<th>Dependent Variable: ABFEE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sample (2010 - 2019); Periods included: 10</td>
</tr>
<tr>
<td></td>
<td>Total observations: 200 (20 cross-sections)</td>
</tr>
<tr>
<td>Variable</td>
<td>Coefficient</td>
</tr>
<tr>
<td>C</td>
<td>4.847234</td>
</tr>
<tr>
<td>IFRS</td>
<td>-0.241357</td>
</tr>
<tr>
<td>JAD</td>
<td>0.755574</td>
</tr>
<tr>
<td>SIZ</td>
<td>-0.256204</td>
</tr>
<tr>
<td>CPX</td>
<td>-0.000377</td>
</tr>
</tbody>
</table>

| R-squared   | 0.432105   |
| Adjusted R-squared | 0.420456   |
| F-statistic | 37.09337   |
| Prob(F-statistic) | 0.000000   |

***, **, *. Significant at the 1%, 5% and 10% levels, respectively.

*Source: Authors*
• firms should embrace joint audit as a way to discourage abnormal audit fees through a deliberate reduction in required audit hours and audit efforts, which will ultimately give relevance to smaller auditing firms in Nigeria.

This study’s scope, however, is delimited to only the four indicators of the audit effort and the data used were solely derived from the commercial banks’ financial statements. Therefore, the resulting suggestion implies that future investigations should expand this scope by looking at the additional factors of influence, such as the audit of fair values and the other estimates that may increase the likelihood of companies paying abnormal audit fees. Furthermore, since our study is solely focused on the data obtained from commercial banks, additional research in the other factors that generate the atypical audit fees paid by corporations in various industries might be conducted by future researchers.

REFERENCES


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DETERMINANTE ABNORMALNO VISOKIH REVIZORSKIH NAKNADA U FINANSIJSKIM IZVEŠTAJIMA ZASNOVANIM NA MEĐUNARODNIM STANDARDIMA FINANSIJSKOG IZVEŠTAVANJA

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U ovoj studiji se ispituje revizorski rad, kao moguća determinanta abnormalno visokih revizorskih naknada koje se navode u finansijskim izveštajima zasnovanim na Međunarodnim standardima finansijskog izveštavanja (MSFI). Iz tog razloga, sekundarni podaci su prikupljeni iz revidiranih godišnjih izveštaja i relevantnih finansijskih izveštaja nigerijskih banaka, koje se kotiraju na zvaničnoj berzi za ispitivani period (2010-2019). Analiza je sprovedena primenom relevantnih tehnika koje uključuju deskriptivnu statistiku, korelacionu matricu i panel regresiju. Saznanja do kojih se došlo pokazuju da između Međunarodnih standarda finansijskog izveštavanja, složenosti i veličine klijenta, s jedne strane, i abnormalno visokih revizorskih naknada postoji negativna korelacija, dok je zajednička revizija zabeležila pozitivnu korelaciju sa abnormalno visokim revizorskim naknadama. Zajednička revizija pokazuje jaču vezu sa abnormalno visokim revizorskim naknadama, dok veličina klijenta pokazuje značajnu vezu, ali negativnu vezu sa normalnim visokim revizorskim naknadama. Slično tome, primećujemo da, sa vrednošću verovatnoće 0,9494, veza između abnormalno visokih revizorskih naknada i složenosti klijenta nije značajna. S obzirom na navedene ishode istraživanja, zaključuje se da su abnormalne revizorske naknade primarno motivisane dodatnim ili neobjašnjениm revizorskim radom i njemu pripadajućim troškovima. Stoga se preporučuje da bi, proporcionalno pruženi usluge, stručna računovodstvena tела trebalo da pregledaju, usaglaše i taktički uspostave gornju granicu naknada za pružene profesionalne usluge, kroz sprovođenje regulisanih standarda koji se odnose na revizorske naknade koje padaju na teret klijenata.

Ključne reči: abnormalne revizorske naknade, MSFI, zajednička revizija, veličina klijenta, revizorski rad

JEL Classification: C23, G21, M4, M42