



EXTERNAL AUDITORS' ATTRIBUTES AND CORPORATE INCOME SMOOTHING PRACTICES AMONG LISTED NON-FINANCIAL FIRMS IN SUB-SAHARAN AFRICA

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Abstract

This study evaluated the relationship between external auditors' attributes and corporate income smoothing practices among listed non-financial firms in Sub-Saharan African countries. The study employed the *ex-post facto* and descriptive research designs. The sources of the data were secondary sources generated from audited financial reports and accounts of selected non-financial firms listed on the Ghana, Kenya, South Africa, Tanzania, Zimbabwe Stock Exchanges and the Nigerian Exchange Group between 2013 and 2022. Using the homogenous purposive sampling technique, two hundred and ninety-nine (299) listed non-financial firms were selected from Stock Exchanges of Ghana; Kenya; Nigerian Exchange Group; South Africa; Tanzania and Zimbabwe. The independent variables employed for the study were External Auditors' Firm Type, External Auditors' Audit Report Lag, External Auditors' Fees, External Auditors' Tenure and Joint Audit. The dependent variable was proxied by Eckel 1981 corporate income smoothing Model while Firm Size and Return on Total Assets were employed as control variables. The panel data were analyzed with the aid of Pooled OLS techniques using version 14 of Stata statistical software to conduct the descriptive statistics, correlation, and regression analyses. The study found that: **Audit Firm Type (XATYPE, coef. 1.572 {0.028})** has a statistically significant and positive effect on corporate income smoothing practices among listed non-financial firms in Sub-Saharan Africa. **External Audit Report Lag (XARLAG, coef. -0.0009{0.815})** did not show any statistically significant effect on corporate income smoothing practices of listed non-financial firms in Sub-Saharan Africa. **External Audit Fee (XAFEE, coef. -0.523 {0.000})** indicated a statistically significant but negative effect on corporate income smoothing practices among listed non-financial firms in Sub-Saharan African. **External Audit Tenure (XATEN, coef. -4.117 {0.048})** has a statistically significant and negative

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effect on corporate income smoothing practices among listed non-financial firms in Sub-Saharan Africa. **Joint Audit Practices (JAUDIT, coef. -3.113 {0.197})** has no statistically significant effect on corporate income smoothing practices among listed non-financial firms in Sub-Saharan Africa. Based on the above findings, the study concluded that external audit methodologies and procedures may not be designed to effectively detect corporate income smoothing in the six economies under study, especially if external audit firms are not keeping up evolving accounting practices and financial engineering techniques prevalent in the region under study. Hence the theory of audit quality in mitigating earnings smoothing may not always be valid especially in the six selected Sub-Saharan African economies. Hence, this study recommended that: Regulators of the audit market should reduce the over concentration of Big Four audit firms in Sub-Saharan African economies by enacting policies that will encourage second tier audit firms in the African Stock Exchanges to step up the quality of their audit services to compete favorably with their Big Four counterparts. Also, external audit tenure system can be an effective strategy for improving external audit quality and curbing corporate income smoothing practices among the selected six economies under study in line with the Economic Consequences Theory which sternly cautions managers of listed non-financial firms in Sub-Saharan African economies against the negative consequences of corporate income smoothing practices such as loss of investor trust and confidence, higher borrowing costs, regulatory scrutiny and damage to firm's reputation.

Keywords:

External auditors' attributes, Corporate income smoothing, Eckel 1981 model.

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1.0 Introduction

The Financial Accounting Standard Board (FASB) Statement of Financial Accounting Concepts No.1 has the main objective of financial statements as: To provide information that is useful to users in making rational investment, credit, and similar decisions. However, the expediency of financial information is affected by the quality of its reporting, which should be relevant and reliable (Aboud, Haruna, & Diab, 2023; Andrian, & Kuntadi, 2023; Berglund, Eshleman & Guo, 2018; Diliana, Zulfikar & Bawono, 2023; Gaynor, Kelton, Mercer & Yohn 2016; Hung, Van & Archer, 2023). Financial information, which can often be found in financial reports released by the business to consumers of financial information, is one of the most critical pieces of information needed in making investment decisions, particularly in the private sector (Egbe, Nmesirionye & Eshiet, 2021). The result of this high-quality financial information is that it is valuable in scrutinizing the past and forecasting the future economic and business transactions.

A manager as a preparer of financial report should be able to communicate the information and protect its relevance and reliability. However, when manager's incentive is based on their companies'

financial performance, it may be in their self-interest to give the appearance of better performance through income smoothing practices (Dewi, Mukhtaruddin & Prayudha 2018). In many companies, particularly in the Subs-Sahara African region (Okyere, Fiador and Kumankoma, 2021) managers are compensated both directly (in terms of salary and bonus) and indirectly (in terms of prestige, future promotions, and job security) depending on a firm's income performance relative to some pre-established yardstick. This combination of management's discretion over reported income and the effect these incomes have on their compensation leads to a possible agency problem.

The extant literature has documented two conflicting facts about the prevalence of corporate income smoothing practices. The first considers smoothness to be an important component (informative) of accounting profits while the second group believes that smoothing is an unlucky material (deceptive) in accounting profits that allow managers to serve their interests by hiding important facts (Shubita, 2015). On the one hand, proponents view corporate income smoothing practices as acceptable acts because of its objective of maximizing the benefits of the stockholders (Faraji, Fathi, Kia, Motie & Alavi, 2021; Kamarudin, Ismail & Yasin 2018) asserted that smoothness might function as a useful tool for management to maximize the benefits to investors, including lowering total corporation tax, preventing breaches of debt covenants, and lowering agency costs (Berglund, Eshleman & Guo, 2018; Kamarudin *et al.*, 2018).

This opinion was supported by Boudiche, (2013), who pointed out that artificial corporate income smoothing practices have subtler costs, to include cost related to loss of credibility or consumption of the manager's time in such activities. On the other hand, critics of the deceitful approach argued that corporate income smoothing practices are less informational and hence dishonest. Consequently, managers are more likely to smooth corporate income not by providing information but simply using it as a misleading device to influence accounting information to suit their interests (Alwan, Ahmad & Nanggala, 2021). Consistent with the views of Eckel (1981) and Ozili (2017), intentionally/real corporate income smoothing practices involve decisions that affect cashflow and squander firm value with apparent costs. Therefore, in this study, the opinions of Soselisa and Mukhlisin, 2008; Tarmidi, Murwaningsari and Ahnan, 2021 were empirically tested by making an indebt examination into the content of external audit attribute(s) which limits managers preference of utilizing corporate income smoothing methods of earnings management among listed firms in selected Sub-Saharan Africa economies.

1.1 Statement of the problem

Corporate income smoothing practices conceals real financial performance of firms and reduces the ability of shareholders to make informed investment and business decisions. Unpalatable earnings constrain informed investment and business decisions, have also been blamed for numerous corporate scandals and audit failures around the world thus bringing to the fore that earnings management has become an issue of great concern in the global market place (Gaynor, Kelton, Mercer & Yohn, 2016). Poor investment decisions as a result of earnings manipulations are a nuisance to market efficiency and economic development of both developed and developing economies such as Nigeria, Ghana, South Africa, Zimbabwe, Tanzania and Kenya.

Various contemporary audit failures and corporate scandals have principally been attributed to poor audit quality and the failure of external audit function to stop earnings manipulations (Tarmidi, Murwaningsari & Ahnan, 2021). For the most part, corporate scandals have been associated with managerial inefficiencies, and the fact that financial statements do not show the true position of the organization hint at the fact that financial statements quality as well as the confidence of stakeholders are functions of the external auditors whose responsibilities are to address managerial inefficiencies through efficient and effective execution of the audit assignments (Bala, Ahmad, Khatoon & Karaye, 2022).

Within the extant literature, earnings management (corporate income smoothing) practices among listed non-financial firms within the Sub-Saharan Africa have been attributed to numerous causes. However, the conceptual causes of corporate income smoothing practices by managers of listed non-financial firms within the Sub-Saharan region are, poor external audit quality and failure of external audit functions to stop earnings management practices, management reward motives and unprincipled conducts by managers, and improving investors' confidence in reported earnings. (Al-taie, Flayyih & Talab, 2017; Egbunike, Igbinovia & Mmadubuobi, 2023; Gandia & Huguet, 2021; Kamau, Bnafa & Kariuki, 2022 and Kustono, 2021).

Inconsistencies in related study findings further suggest that there is need for further investigation in this area of study. Eshleman and Guo (2014); Francis, Michas, and Yu (2013); Sadiq and Othman (2017) Francis, Hasan, and Li (2016) and Oz, and Yelkenci (2018) documented that cross-country studies permit benchmarking practices across different countries. Against this backdrop, this study examined how external auditors' attributes (audit firm type, audit report lag, audit fees, audit tenure, and joint audit) are related with corporate income smoothing practices of listed non-financial firms in selected Sub-Sahara African countries using Eckel (1981) corporate income smoothing model as the dependent variable.

1.3 Objectives of the study

The main objective of this study was to determine the relationship between external auditors' attributes and corporate income smoothing practices among listed non-financial firms in selected Sub-Saharan Africa countries.

1.4 Research questions

Based on the above research objectives, the following research questions were proffered:

1. To what extent do external auditors' attributes relate with corporate income smoothing practices of listed non-financial firms in selected Sub-Saharan African countries?

1.5 Research hypothesis

In order to answer the research questions of the study, the following hypotheses were tested:

H₀₁: External auditors' attributes have no significant relationships with corporate income smoothing practices of listed non-financial firms in selected Sub-Saharan African countries.

2.0 Review of related literature

2.1 Conceptual review

2.1.1 Corporate income smoothing practices

Suyono, Wiratno, Purwati, Suparlinah, Mustaf and Lestari (2023) noted that corporate income smoothing practices occur when managers use judgment in financial reporting to arrange transactions or modify financial reports for the purpose of either misinforming stakeholders about the underlying economic performance of the company or impact contractual results that depend on reported accounting numbers.

In the views of Yaari and Ronen (2020), corporate income smoothing practices are defined as the reducing of fluctuations in reported earnings over time meaning that management is inclined to take actions to increase earnings when earnings are comparatively low and to decrease earnings when earnings are comparatively high. However, corporate income smoothing practices can also arise from the procedure of non-disclosure of positive financial statements. Corporate managers may be motivated to smooth their income (or security), assuming that income constancy and growth rates are preferred than higher average income streams with more significant variability.

Corporate income smoothing practices are forms of earnings management carried out by management for a number of periods to give a steady earnings flow level.

Al-Natsheh & Al-Okdeh, (2020) argued that corporate income smoothing practices are management's attempts to gratify shareholders by diminishing company risk. Analysts consider companies that have a constant earnings flow as less unpredictable firms and considered by investors and creditors as low bankruptcy risk firms because they provide a more assured promise of future returns (Junianto & Wisadha, 2014).

In their study, Riyadh, Sukoharsono, Alfaiza (2019) noted that the main reasons why managers practice corporate income smoothing are to maximize their wealth, reduce the perceived riskiness of the firm, enhance firm value, meet debt covenants, reduce tax and political costs and enhance the reliability of financial forecasts. However, some researchers considered that the practice of corporate income smoothing is morally wrong, fraudulent, and misleading by firm management. Management has information asymmetry to indirectly increase firm value through earnings management (Farichah, 2017). Investors can mistake the condition and prospects of such firm because of their limitations and incapability to observe the financial reporting process.

Corporate income smoothing is a miniscule of earnings management that entails the lessening of the variation in periodic profit over time to the extent allowed by accounting and management principles (Chi-Yih, Boon, & Xiaoming, 2012).

Adeyemi and Fagbemi, (2018) asserted that the recent high-profile corporate scandals in Nigeria, South Africa, Ghana, Kenya and other Sub-Saharan African economies have continued to raise concern about the integrity of financial and auditing reporting systems in the region. These sad, unfortunate and iconic high-profile corporate failures underscored the need for effective corporate governance as a mechanism for mitigating wide spread corporate scandals, resolving agency problems

and restoring investors' confidence in financial reporting (Eshiet, Nmesirionye, Okezie and Ekwe, 2021). Further, Blkasem & Mansor, (2019) posited that the practice of earnings management is predominant in developing countries including Ghana due to weak enforcement of laws which allows for continued low performances of listed non-financial firms.

The debate on the effect and intention of corporate income smoothing practices remains contentious in extant literature. Gassen, Fulbier and Sellhorn (2006) presented two theories of corporate income smoothing practices. On one hand, corporate income smoothing can be viewed as having a signaling role in efficient capital markets. In this sense, corporate income smoothing practices are instruments for the revelation of private information about future earnings. However, if the assumption of the efficient market is dropped, then corporate income smoothing practices can be viewed as an instrument employed by managers to mislead market participants regarding future earnings or risk levels for a company in order to lower the cost of capital and get private benefits for the company. Thus, and based on this argument, the provocation and anticipations of corporate income smoothing practices remain unclear. Other studies have asserted a more specific version of the role of corporate income smoothing practices.

From the foregoing, it is the opinion of this study that the intention of corporate income smoothing practices "accounting discretion", is an instrument employed by unscrupulous managers to misinform market participants regarding risk levels for a firm so as to reduce the cost of capital and get private benefits for the company. Much more, earnings management have also appeared in other convinced designs including but not limited to fraud cases, restatements, and abnormal accruals.

2.1.3. External auditors' attributes

DeFond, Erkens and Zhang (2017) defined auditing as "a service purchased by companies in order to improve the credibility of their financial statements". Eshleman and Guo (2014) asserted that external audit has long been considered a complete governance mechanism with the aim of controlling the relationships between the different stakeholders of a company. In the same vein, Fang, Pittman, Zhang and Zhao (2017) considered external audit as one of the governance mechanisms whose mission is to settle agency problems. Guan, Su, Wu and Yang (2016) and Gul, Wu and Yang (2013) defined external audit as an important governance mechanism that contributes to and helps in safeguarding the reliability and relevance of accounting data.

Similarly, Ross (1973) and Mitnick (1973) posited that external audit serves to bring the interests of managers closer to those of shareholders hence can be used as a means of justification or obligation (bonding). To supervise and control managers (monitoring), shareholders and creditors oversee financial statements through an independent external auditor. As hypothesized by Ormrod and Cleaver (1993), this helps to decrease managers' opportunistic behaviour. As theorized by De Angelo (1981), external audit quality is contingent on the quality of the external auditor (their independence and competence).

Financial reporting quality is a comprehensive model which has series of varied quantifiable characteristics (Eshiet, Nmesirionye, Akpan & Okpo, 2023). External audit attributes however, refer to the characteristics or features of an external audit process or engagement. Depending on the precise prerequisites and anticipations of the stakeholders concerned, these characteristics of financial reporting quality can differ. Fundamental among these attributes, external auditors are believed to be unprejudiced and impartial in their judgments and opinions representing the fact that they should not have any financial or personal interests in the organization being audited. Further, external auditors need to possess the necessary knowledge, skills, and expertise to perform the audit effectively. Hence, this attribute of external auditors advocate that they should have a strong understanding of auditing standards, regulations, and industry practices.

2.1.3.1. External auditors' firm type

Auditors' firm type denotes the large-scale income and organization of the public accounting firm, which is now called Big 4 (including their affiliations), comprising PricewaterhouseCoopers (PwC), Deloitte Touché, Ernst and Young (EY), and Klynveld Peat Marwick Goerdeler (KPMG). In the views of Zandi, Sadiq and Mohamad (2019), the most popular proxy for audit quality has been the use of auditor brand, normally referred to as Big X where X represents the number of top tier audit firms within the period under study. Throughout history, the number of these top tier audit firms has varied, with some audit firms losing their position to others. Before 2002, there was the Big 5, which was made up of Ernst and Young, PWC, KPMG, Deloitte and Arthur Andersen LLP (AA). However, following the Enron Corporation scandal and its eventual demise, and the role Arthur Andersen played in the downfall of former Enron Corporation, the erstwhile number one accounting firm in the world had a mammoth reputational fall, lost its position as the global top tier external auditing firm, and became extinct from the global audit market in 2002.

The quality of an external audit depends on two key supports: the aptitude of an external auditor to discover material errors and misstatements and also having the objectivity to acquire the right attitude towards reporting such errors and misstatements (DeAngelo, 1981). These two supports are further classified into input-based and output-based methods. The type of Big 4 firms is used as a measure for both competence and independence. The large types of Big 4 audit firms afford the audit firms the ability to invest more into what it takes to provide good quality audits. This is an input-based approach to ascertaining competence which discloses that Big 4 audit firms are capable of providing audits of good quality (DeFond & Zhang, 2014).

Becker *et al.* (1998) and Francis, Maydew and Sparks (2019) reported a negative effect of Big 4 auditors on corporate income smoothing. Egolum (2021) argued that there is a negative relationship between the Big 4/5/6 and earnings management. Houqe, Ahmed, Van Zijl (2017) suggested that high audit quality reduces earnings management which is consistent with the findings of Tendeloo and Vanstraelen (2018) who examined the effect of audit quality (proxying audit quality with auditor size) on earnings management and found that audits performed by Big 4 audit firms types resulted in less corporate income smoothing. However, Chen, Krishnan, Li and Zhang (2020) and Davidson and Godwin-Stewart (2015) failed to report such negative effects in their studies.

From the foregoing, it is the opinion of this author that effective, statutory and independent auditing is essential for efficient markets and one of the prerequisites for quality, effective external audit services is auditing firm type. Big 4 auditing firms (firm type), because of size, professional quality and reputation could be more competent and effective than non-Big 4 accounting firms. Big 4 (audit firm type) was chosen as a proxy for audit quality because Big 4 is an input-based measure that covers both quality and competence of the external auditor.

2.1.3.2. External auditors' audit report lag

Audit report lag refers to the time elapsed between the end of a company's fiscal year and the issuance of its audited financial statements, including the auditor's report. This lag can vary significantly from one company to another and can be influenced by various factors. Understanding audit report lag is crucial as it can have implications for financial reporting quality, market transparency, and investor confidence.

From the preceding, the effect of audit report lag on the timeliness of the release of financial statements and the various reactions to accounting information by investors has attracted researchers and practitioners' attention. Justifiably so, the timeliness of the issuance of financial reports can affect uncertainty in making informed economic and investment decisions. A fundamental IFRS qualitative characteristic of financial information is relevance. The relevance of information in financial statements is achieved if the financial information is disclosed to the public on time. This study opined that the timeliness of finishing the external audit processes is extremely significant because it controls the timeliness of the release of the financial statements.

The choice of audit report lag as a proxy for external auditors' attributes for this study was because it is rarely used in this context within the extant literature especially for studies conducted in Sub-Saharan African economies. Furthermore, audit report lag was chosen as a variable for this study because it is considered to be an important factor for firms, investors, regulators and the external auditors. Audit report lag is one of the few externally observable and discernible external audit output variables that allow those external to the company to gauge external audit efficiency. Since the audit report contains the auditors' opinion regarding the credibility of the financial statements, investors, in particular, prefer short audit report lag.

2.1.3.3. External auditors' fees

In this study, unlike prior related studies (Anandarajan, Kleinman and Palmon, 2012; Blay and Geiger, 2012) it is posited that auditors' fees are not a direct proxy for auditors' quality, competence or even independence as have been documented in extant related studies (Al Mutairi, Naser & Enazi, 2017; Naser & Hassan, 2016; Nasution & Ostermark, 2013; Okah, 2012; Owusu & Bekoe, 2019). While auditor fees can be an indicator or a factor that may influence auditors' quality, competence and independence, they do not provide a conclusive measure of these external auditors' attributes on their own (Nasution & Ostermark, 2013 and Okah, 2012). Also, auditor fees can be influenced by various factors such as the size and complexity of the audit engagement, the nature of

the client's business, and the level of effort required to conduct the audit. In this regard, charging higher fees may be justified for more complex audits or for additional services beyond the scope of the audit engagement.

Further, audit fees are the compensation paid to the external auditors. A higher audit cost/fee implies higher audit quality, either because of greater audit effort or greater expertise (Hrazdil, Simunic & Suwanyangyuan, 2020). AL-Khaddash, Nawas and Ramadan (2013) defined audit fees as all charges that the client companies pay to the external auditors against the audit services and non-audit services such as management advisory and consultants. The Securities and Exchange Commission (SEC) of Nigeria defined audit fee as the fees paid for annual audits and reviews of financial statements for the most recent fiscal year. Chersan, Robu and Maruena (2012) also defined audit fee as the sums payable/paid to the auditor for the audit services offered to the client company.

In the auditing profession literature, the reputation of the audit firm is a factor that affects audit fees. Well-established and reputable firms may command higher fees due to their perceived expertise and credibility (DeAngelo, 1981). Some studies suggested that longer tenure may be associated with lower fees due to familiarity and efficiencies, while others find no significant relationship. Therefore, auditor tenure, or the length of the auditor-client relationship, can have mixed effects on audit fees (Chen, Krishnan, Li and Zhang, 2020). The level of market competition among audit firms is also important. Higher competition may lead to more competitive pricing and lower fees, while lower competition may result in higher fees (Asthana, Khurana & Raman, 2019). Within the Sub-Saharan African economies, Afribank Nigeria Plc, Intercontinental Bank Plc. were sad and eloquent examples of audit failures that occurred immediately after they were audited and given clean bills of health by the external auditors. Still, the unfortunate relationship between former Enron Corporation and former Arthur Andersen (the external auditor) which abruptly terminated in 2001 provided another casualty of income smoothing practices in recent memory.

In summary, higher external audit fees paid to the independent external auditor might make the auditor look away from accounting and bookkeeping errors and other possible sharp accounting practices of the client firm and subsequently failed to detect earnings management (corporate income smoothing practices) of the client firm: a negative influence on income smoothing practices. In the long run, these sharp accounting practices will negatively affect the financial performance of the firm, the firm value, and eventually, financial distress of the firm. In severe cases, complete extinction from the global market place is probable. In this study, audit fee was used to measure external auditors' attribute because of its influence on external audit quality, wide acceptability as a proxy for external auditors' attributes, ease of measurement as a proxy of audit quality and above all, its influence on the concept of earnings management (corporate income smoothing practices) especially within the context the Sub-Saharan African economies.

2.1.3.4. External auditors' tenure

The span of time an external audit firm has been appointed by the client company to deliver external audit services is generally referred to as audit firm tenure (Singer & Zhang, 2018). Extant studies

suggested that audit firm tenure can have an effect on audit quality, independence, and financial reporting quality. In the literature of audit tenure, partner tenure refers to the span of time an individual external audit partner has been leading the audit engagement for a client firm. Su, Zha and Zhou (2016), suggested that lengthier partner tenure can enhance audit quality due to partner expertise and knowledge of the client's business.

However, other scholars argue that lengthy partner tenure may reduce independence and increase the likelihood of impaired objectivity (Srinidhi, Leung & Gul, 2019; Velte & Loy, 2018; Virginus, 2020). The next classification represents engagement tenure which denotes the span of time an audit engagement team has been working on a particular client's audit engagement. Similarly, while some studies suggested that longer engagement tenure can lead to improved knowledge of the client's operations and better audit quality, others argue that long engagement tenure may diminish auditor independence and professional skepticism.

Adeyemi, Okpala and Dabor, (2012), suggested external audit tenure is short when the same external auditor has audited the financial statements for a period of three (3) years and long when the same external auditor has been engaged for up to nine (9) years. These authors provide strong evidence suggesting that as the auditors' tenure increases, the advantage of superior proficiency and better insight into the clients' operations and business plans seem to outweigh the possible independence impairment. Further, auditors described the term 'audit firm tenure' as the span of the audit-firm-client relationship in terms of the fiscal year-end covered by the audited financial statements. Based on the assertions of Reid and Carcello (2017), audit tenure requires the same external auditor to have audited the financial statements of a client company for two (2) or three (3) years.

Including Sub-Saharan African economies, developing and transitional economies, generally, do not have oversight Boards for mandatory audit tenure. However, some transitional economies that have oversight Boards and have implemented mandatory audit tenure include: South Korea since 2006, Austria and Canada since 2005, United Kingdom since 2003, Singapore since 2002, Brazil since 1999, France from 1998-2004, Spain since 1989, Italy since 1974, (Cameran, Prencipe & Trombetta, 2014). Academicians and accounting professional have argued that mandatory audit tenure could help to uphold auditor independence (Rahmina, 2014; Qawqzeh, Endut, Rashid, Johari, Hamid & Rasit, 2018; Tepalagul & Lin, 2015). Also, the external auditor will be in a sturdier position to oppose management pressure and be independent with integrity and objective professional judgment when there is a mandatory audit firm tenure (Amake & Okafor, 2012; Banimahd, Poorzamani & Ahmadi, 2017; and Martani, Rahmah, Fitriany & Anggraita, 2021).

It is the opinion of this study that for the independent auditor to maintain auditors' independence and objectivity, external audit firms should periodically relinquish their clients preferably every nine (9) years. Obligatory audit term could help to preserve auditors' independence. Also, with mandatory tenure, the independent auditor will be in a sturdier position to repel management pressure and be independent with integrity and objective professional judgment. Global best practices for the adoption and implementation mandatory audit rotation include oversight Boards. Economies within the Sub-Saharan African region should institute such Boards as well. Audit tenure was employed as a

proxy for audit quality because of lack of consensus among researchers on the association between external auditors' tenure and corporate governance mechanisms (practices) especially within the Sub-Saharan African economies. Also, external auditors' tenure is widely accepted as a measure of audit quality because it is easier to measure.

2.1.3.5. Joint audit

On the concept of joint audit, there is a general agreement among researchers. Previous studies including those of Alanezi, Alfaraih, Alrashaid and Albolushi, (2017); Baldauf & Steckel, (2019); Paugam and Raymond (2015); Ratzinger, Audousset-Coulier and Cedric (2013) and Zerni, Haapamaki, Jarvinen and Niemi (2016) defined joint audit as an audit in which two (2) or more independent auditors, from separate audit firms, are appointed to audit financial statements of an audit client, in such a way that involves: joint development of the audit plan; performing the audit work jointly; making periodic cross reviews and mutual quality controls; issuing and signing a single audit report; and bearing joint liability in case of audit failure.

The concept of joint audit should be distinguished from the concept of dual audit, where two or more independent auditors from distinct audit firms are appointed to audit financial statements of an audit client in a way that involves: developing the audit plan independently; performing the audit work individually; no intermittent cross reviews and joint quality controls; and issuing binary or several audit reports, in which every auditor is not accountable for the audit opinion expressed by the others (Alanezi *et al.*, 2017; Lin, Lin & Yen, 2014; Ratzinger, Audousset-Coulier, Kettunen & Lesage, 2013). Still, joint audit differs from the concept of double audit, where a single auditor is expected to completely execute the audit work twofold (Alanezi *et al.*, 2017; Ratzinger *et al.*, 2013). In a joint audit, two distinctive audit firms mutually form an opinion of a client's financial statements of which they are also mutually legally responsible for the issued audit opinion.

This study concluded from the above that there is a clash of opinions concerning the effect of the adoption of the joint audit method on the quality of the audit. This notwithstanding, this study submits that listed firms should adopt the joint audit approach since the positive effects of joint audit on audit quality far outweigh the negative effects. While those in support of the adoption of the joint audit approach argue that it has a positive impact on the quality of the audit as it leads to increased auditors' independence, providing a machinery for mutual cross-supervision among auditors, increasing contact and consultation between auditors, among others. Critics think otherwise, they argue that the implementation of joint audit method may negatively affect the quality of the audit due to the auditor's dependence or reliance on the other auditor's efforts, inadequate partnership among auditors due to rivalry in the audit market, and the likelihood of making the joint audit a traditional exercise and de facto turning it into a single audit.

The justification for the choice of joint audit as a proxy for external auditors' attributes for the present study was multi-faceted. There is ample evidence within extant accounting literature that joint audit approach has an effect on audit quality. With Arthur Andersen leaving the audit market following the Enron Corporation debacle and eventual collapse in 2002, attention has been drawn, especially in the

academics on how to counter the danger related to concentration in the audit market resulting from the reduction of large audit firms from five to only four (Big 4) in 2002. This resulted in increased audit market concentration which creates an incentive to increase audit fees. Due to lack of rivalry in the audit market, the likelihood of one of the Big 4 audit firms leaving the market for the remaining three audit firms could disorder the entire audit market as a whole. Based on the above, and given the scarcity of studies on the joint audit approach especially in the Sub-Saharan African economies, the choice of joint audit as a proxy for external auditors' attributes for the present study was justified.

2.1.7. External auditors' attributes and corporate income smoothing practices

DeFond and Subramanyam (1998) hypothesized that external audit plays a role in limiting corporate income smoothing, and high-quality audit will easily find and report misstatements or corporate income smoothing. The simple association between external auditor's quality and corporate income smoothing cum earnings management is based on the argument that high-quality auditors are more likely to detect questionable accounting practices than low-quality auditors (Francis, 2018). However, the auditors' propensity to detect and report questionable accounting is not only a matter of training and experience but is also influenced by incentives produced by agency relationships between audit firms and their clients (municipalities) and principals (voters and other stakeholders) (Watts & Zimmerman, 1986). Antle and Nalebuff (1991) theorized that the agency problem arises because the auditors' effort is unobservable, which makes the audit services hard to evaluate and control. Therefore, there is an inherent risk that audit firms will use their information advantage to maximize their own profit.

2.1.8. External auditors' firm type and corporate income smoothing practices

Early studies of Asthana, Khurana and Raman, (2019), Jiang, Wang and Wang, (2018) and Le, (2021) with respect to earnings quality found that big audit firms can constrain earnings management (represented as corporate income smoothing in this study) in the USA, where there are effective mechanisms to control auditors, but they may fail in averting earnings management practices where the institutional setting does not promote high-quality audits (Almarayeh, Aibar-Guzman & Abdulatif, 2020; Alzoubi, 2016). Indeed, several non-US studies found no difference between Big N (also known as Big Four Auditing Firms) and non-Big N firms in restraining earnings management (Bauwhede, Willekens & Gaeremynck, 2019; Kraub & Zulch, 2013).

These findings have been explained based on several arguments. First, in countries where the legal environment does not inspire high-quality audits because the risk of lawsuits is low or there are no effective disciplinary mechanisms to control unprincipled behaviors, Big N auditors and non-Big N auditors may provide comparable audit quality (Alzoubi, 2016; Maijoor & Vanstraelen, 2016). Second, since Big N and non-Big N firms are subjected to the same standards and legislation, both should provide a similar audit quality (Lawrence *et al.*, 2011). Finally, in some cases, small firms may even be more capable than their larger peers of detecting abnormalities due to their greater knowledge of local markets (Özcan, 2019).

2.1.9. External auditors' audit report lag and corporate income smoothing practices

Hassan, (2016) documented that the intricacy of a firm's financial statements can affect the audit process's duration. Firms with complex operations, numerous subsidiaries, or intricate financial instruments may require more time to complete the audit. Further, Hassan, (2016) showed that audit report lag can be influenced by the size and capacity of the audit firm whereby larger audit firms with more resources may be able to complete audits more efficiently, leading to shorter report lags. Suwardi and Saragih (2023) posited that higher audit quality is often associated with detailed and complete auditing processes so that companies that prioritize audit quality may experience longer report lags as auditors conduct more extensive procedures to ensure accuracy.

In the views of Habib, Bhuiyan, Huang and Miah (2018), companies with a history of clear and dependable financial reporting may experience shorter report lags as they have established credibility with auditors and regulators while the regulatory environment in a particular country or region can significantly impact audit report lag (Akingunola, Soyemi, & Okunuga 2018). Rigorous regulatory requirements may necessitate more time for compliance. Strong relationships between clients and auditors can lead to more efficient audits and shorter report lags (Pradipta & Zalukhu 2020). Conversely, conflicts or challenges in the auditor-client relationship may extend the audit timeline. Companies operating in competitive industries may feel pressure to release financial statements quickly to maintain their market position which can lead to shorter report lags. Agency theory suggest that effective corporate governance practices, including the presence of independent audit committees, can influence audit report lag indicating that robust governance structures may facilitate quicker audits.

2.1.10. External auditors' fees and corporate income smoothing practices

Fees paid to auditors can affect audit quality in multiple ways. Large fees paid to auditors may increase the endeavor exerted by auditors, hence, increasing audit quality. From the signaling perspective, high audit fees may be understood by external stakeholders as a signal of higher audit quality and greater auditor independence. This signaling effect can reduce the apparent benefits of corporate income smoothing practices for managers. They may worry that engaging in corporate income smoothing practices could be more easily detected by auditors who charge higher fees. Further, the Resource Dependence view suggest that managers may take into account the cost of audit fees as a resource restraint. Higher audit fees can limit the financial resources available to managers for discretionary activities, including corporate income smoothing practices (Mansor, Ahmad, Ahmad-Zaluki & Osman, 2013; Susanto, & Pradipta 2020). Managers may highlight the allocation of resources towards other strategic initiatives instead of corporate income smoothing practices, particularly if the supposed benefits of corporate income smoothing practices do not outweigh the costs of higher audit fees.

However, the logic behind the supposition of a positive association between audit fees and audit quality has been questioned based on the argument that if the auditor is financially reliant on the client, there is a risk that the auditor may try to please the client rather than protect the stakeholders (Walker & Hay, 2013). Financial dependence concedes auditor independence in the sense that an

external auditor concerned about the possible loss of an important client is less likely to object to income smoothing practices through earnings management (Asthana & Boone, 2012; Eshleman & Guo, 2014; Walker & Hay, 2013). In this regard, Eshleman & Guo, 2014, indicated that higher (abnormal) audit fees could denote illicit acts by the company and inflated future earnings. Large fees paid to auditors, particularly those that are related to non-audit services, make auditors more economically dependent on their clients. Such financial reliance may induce a relationship whereby the auditor becomes unwilling to make suitable inquiries during the audit for fear of losing highly profitable fees. Thus, there are competing hypothetical arguments and mixed empirical evidence regarding the relationship between audit costs/fees and corporate income smoothing practices.

2.1.11. External auditors' tenure and corporate income smoothing practices

The debate on auditor tenure pivots on how tenure affects audit quality. It is generally believed that a high-quality audit translates to high earnings quality. The probability that the auditor will discover the infringement is a function of auditor competence and the possibility that the auditor will report the breach is a function of auditor independence. Because it is not possible to separate the effects of independence and competence on audit quality, researchers have typically examined the effect of tenure on a particular outcome, such as the quality of reported numbers, to suggest the potential costs and benefits of auditor tenure. Advocates of audit firm tenure argue that longer audit tenure improves auditor independence and objectivity because a protracted auditor–client relationship can make an auditor self-righteous and unwilling to confront management.

It has been argued that an auditor is likely to lack sufficient information about a new client and that information asymmetries between the client and the auditor increase the likelihood of audit failure (American Institute of Certified Public Accountants (AICPA), (1992). As auditor tenure increases, however, knowledge about the client's business seemingly helps the auditor in evaluating the risk and planning the audit. Thus, longer auditor tenure is likely to increase the competence of the auditor and thereby increase audit quality. Supporting this notion, Reid and Carcello (2017), documented that audit firms are relatively more likely to make mistakes in the early years of their tenure. Similarly, an AICPA quality control committee concluded that allegations of audit failure occur three times more often during the first two years of audit engagement than in subsequent years (AICPA, 1992).

As suggested by Geiger & Raghunandan, (2020), as the auditor-client relationship lengthens, there is the tendency that the auditor may develop a learned confidence in the client which may result in the auditor not performing religiously, the required testing of financial reports. This learned confidence results in the auditor making assumptions about outcomes and using less rigorous audit procedures or inactive audit programmes. Hypothetically, an escape for a decline in audit quality has been created. Hence, Kuang, Li, Sherwood and Whited (2020) argued that a long auditor–client relationship may result in the development of a personal relationship that may lead to bonds of faithfulness, trust, or sensitive associations between the client company and the auditor.

Prior studies indicated mixed results, with some studies finding a positive relationship between longer audit tenure and higher financial reporting quality (Gul, Fung and Jaggi, 2019; Hammersley, Myers

and Shakespeare, 2015), while others found no significant association (Ashbaugh-Skaife, Collins, Kinney & LaFond, 2017; Krishnan & Krishnan, 2018). Generally, prior studies suggested that longer audit tenure may lead to better audit quality due to increased auditor-client familiarity, knowledge of client-specific risks, and improved understanding of the client's internal control systems (Casterella, Jere, Lewis and Walker, (2014), Copley and Doucet, (2017). However, other studies found that longer tenure may compromise audit independence and objectivity, potentially leading to lower audit quality (Geiger & Raghunandan 2020; Gul, Kim & Qui, 2013). Some studies suggested that longer audit tenure may enhance the auditor's ability to detect and report irregularities due to accrued knowledge and experience with the client (Kaplan & Mauldin, 2018; Krishnan & Krishnan, 2018). However, other research indicated that longer tenure may reduce the likelihood of reporting abnormalities due to factors like contentment and reduced cynicism (Chen, Lin & Lin, 2011; Geiger & Raghunandan, 2020).

2.1.12. Joint audit practice and corporate income smoothing practices

There is a tough discuss raised by advocates and antagonists of the joint audit practice. Advocates of joint audit (Baldauf & Steckel, 2019; Zerni *et al.*, 2016; Lobo, Paugam, Zhang & Casta, 2017) argued that the practice of joint audit could increase audit quality thereby lowering corporate income smoothing practices for the following reasons. First, the type of audit report issued by two auditors seems to be more precise than the type of audit report issued by a single auditor because having four eyes to obtain audit evidence could increase the precision of audit opinion that will be issued based on this evidence. Second, joint audit could improve the auditors' ability to detect material misstatements because it allows each auditor to check the work done by the others to make sure that the other auditors have taken the appropriate audit procedures to obtain the appropriate and sufficient audit evidence. Third, joint audit practice could improve auditor independence by weakening the economic relationship between the auditor and the client because joint auditors share audit fees between them. In addition, it lessens the economic relationship between the auditor and the management because it might be more difficult for management to influence two auditors instead of one. Fourth, joint audit practice could improve auditor competence through preserving knowledge that results from auditors' meetings. Finally, joint audit practice could reduce audit market concentration by reducing the domination of big audit firms and allowing small audit firms to collaborate with big audit firms, resulting in the emergence of new generation of big audit firms.

On the other side of the divide, antagonists of joint audit (Marmousez, 2019; Zerni *et al.*, 2016; Alsadoun & Aljaber, 2014; Deng, Simunic and Ye, 2014) argued that the practice of joint audit could reduce audit quality for the following reasons. First, it could result in free riding problem because the small audit firm has fewer resources than the big audit firm, so it will have an incentive to withhold its limited resources and free ride the big audit firm's effort. Second, joint audit could result in opinion shopping problem because management may offer to purchase the audit opinion of the small audit firm, and the small audit firm may accept this offer because, in this case, the big audit firm will bear the reputation costs alone. Third, joint audit may result in insufficient information exchange, resulting in compromising audit quality because auditors from competitive audit firms may not have an incentive to cooperate while conducting the audit. Fourth. accounting standards contain many

accounting alternatives, which may make cooperation between auditors difficult and lead to conflict between them in the event an auditor chooses a different accounting alternative than the other auditor would prefer. This could lead to a difficulty in reaching a common opinion among the auditors. Fifth, the adoption of joint audit approach may become a ceremonial process. If the same two audit firms participate in the audit of the same clients, an informal agreement may occur between them where each reviews the financial statements of a certain number of clients on their own while the other auditor only signs the report. The audit becomes, in practice, an individual audit, which may adversely affect the accuracy and quality of the audit evidence (Kraub & Zulch, 2013).

2.2 Theoretical framework

2.2.4. Economic consequences theory (ECT) (John Maynard Keynes, 1920)

The ECT, explored how managers' decisions and actions are influenced by the anticipated economic outcomes and consequences of those decisions. It posited that managers consider the potential effects, both positive and negative, that their choices may have on various stakeholders and on the overall economic well-being of the firm (Keynes, 1920). At its core, the Economic Consequences Theory recognized that managers are motivated by the desire to maximize the value of the firm and that their decisions can have significant economic implications (Day, 1920). These consequences may extend beyond the immediate financial implications and impact various stakeholders such as shareholders, employees, customers, suppliers, and the broader society (Keynes, 1920).

The present study was anchored on Economic Consequences Theory (John Maynard Keynes, 1920) because managers assess the potential economic outcomes of their decisions and weigh the costs and benefits associated with each alternative. They consider how different courses of action may affect factors such as profitability, market share, reputation, competitive position, regulatory compliance, and the firm's long-term sustainability. In the context of external audit attributes and income smoothing, the Economic Consequences Theory suggested that managers carefully evaluate the potential economic ramifications of engaging in corporate income smoothing practices. Corporate managers should assess the advantages, such as achieving stability in reported earnings or managing investor expectations, against the disadvantages, such as reduced transparency, impaired decision-making, and potential legal and reputational risks. Managers may anticipate positive economic consequences of corporate income smoothing practices, such as improved access to capital, increased stock price stability, or enhanced performance metrics. Conversely, they may also consider the negative economic consequences of corporate income smoothing practices, such as loss of investor trust, higher borrowing costs, regulatory scrutiny, or damage to the firm's reputation.

2.3. Empirical review of literature

Egbunike, Igbinovia, Okafor and Mmadubuobi (2023) examined the association between residual audit fee and real corporate income smoothing, proxied as real operating cash flow and production expenditure smoothing of non-financial firms in Nigeria. The study used secondary data from annual financial statements of 75 firms in the non-financial sector from 2010 to 2019. Data were analyzed using the dynamic panel GMM estimation procedure. The study results revealed a significant

negative effect of residual audit fee on real operating cash flow smoothing and production expenditure smoothing of non-financial firms.

Alshare, Kadir, Kamarudin and Hassan (2023) examined the effects of auditor tenure on earnings management and if CEO compensation controls this association. The sample used included all firms listed on the Amman Stock Exchange from 2015 to 2019 with the exclusion of the financial sector. The fixed effect model, robustness testing to ensure data integrity and alternative measurements to ensure reliable results were used in the study. The study findings revealed that there is a negative and significant association between auditor tenure and earnings management. Also, the study findings revealed that the combined influence of CEO compensation and auditor tenure had a negative and significant impact on earnings management.

Umoren and Ukpong (2023) examined the association between company attributes and the earnings quality of listed non-financial companies in Nigeria. The non-financial firms were classified into natural, industrial and service sectors. Company characteristics were proxied by company size, auditor type, company leverage, company age, board size and board meetings while earnings quality was measured by income smoothing. Sample size was 95 listed companies from 2012 to 2019 and data were analyzed using descriptive, correlation and regression analysis. The study found that company leverage (negative and significant) and company age (positive and significant) were the most prominent company characteristics that significantly influenced earnings quality for most of the sectors and the combination of all sectors.

Eshiet, Ekwe, Nmesirionye, Okezie and Akpan (2023) investigated the level of effect of external auditors' attributes on corporate income smoothing among listed non-financial firms in Nigeria from 2011 to 2020. The *ex-post facto* design was used and filtering sampling technique was used to select sample size of 75 non-listed firms drawn from 10 Nigerian non-financial sectors including agriculture, conglomerate, consumer goods, construction and real estate, healthcare, information and technology, oil and gas, industrial goods, natural resources and services. Results from the binary logistic regression revealed that audit opinion, and audit delay have significant positive effects on Small Positive Income of listed non-financial firms in Nigeria during the period under study while audit fees have significant negative effect on Small Positive Income. Still, audit firm size has an insignificant effect on Small Positive Income of listed non-financial firms in Nigeria.

Hussin, Salleh, Ahmad and Rahmat (2023) conducted a study on the association between the attributes of audit firms (Big 4, audit fees, busy season, audit firm tenure and audit partner gender) and the impact of these attributes on key audit matters (KAM readability in Malaysia). Auditors' reports and financial data were analyzed from a sample of FTSE 100 Malaysian listed companies for the fiscal years 2017 to 2019, consisting of 258 observations. Panel regression analyses were conducted and KAM readability. The study findings revealed that female audit partners significantly impact KAM readability and that company audited by Big 4 audit firms and higher audit fees tend to report a more readable KAM disclosure in the FTSE 100 in Malaysia.

Eshiet, Nmesirionye, Akpan and Okpo (2023) investigated the effect of corporate governance attributes on financial reporting quality of listed manufacturing firms in Nigeria. *The ex post facto* design was employed. Non-probability filtering sampling technique was employed to select a sample of 42 manufacturing firms. Panel regression was used to analyze the secondary data for the period 2012 to 2021 with the aid of Stata version 14. Vocal variables used included board size, ownership concentration, board gender diversity, board diligence (proxies for independent variable) and timeliness (proxy for dependent variable). The study findings revealed that board size and board ownership concentration have significant positive effects on timeliness of financial reporting in Nigeria during the period under study. Still, board gender diversity and board diligence have no significant effects on timeliness of financial reporting of listed manufacturing firms in Nigeria during the period under study.

Suryani, Winarningsih, Sofia and Dewi (2023) investigated the effect of audit size and tenure of KAP on the detection of financial statement fraud. A sample of 140 manufacturing companies from 2014 to 2015 listed on the Indonesian Stock Exchange was used. SPSS and multiple regression were used to analyze the data. The study findings revealed that the size of audit firm and the tenure of the audit did not significantly affect the indications of fraudulent financial statements as measured by the sales growth, gross margin, asset quality, day's sales receivable, general and administrative expenses, leverage and total accrual indexes but had a significant effect on fraudulent financial indication reports as measured by the depreciation index indicator.

Thi (2023) investigated the relationship between audit quality, the role of institutional environments at the provincial level, and earnings management around listing events by using data from 189 newly-listed companies on the Hochiminh Stock Exchange. Audit quality was proxied by Big 4, auditor tenure, and auditor industry specialization, while earnings management was quantified as current discretionary accruals. The study findings revealed that there was no role for Big 4 auditor, auditor tenure, and auditor industry specialization in curbing earnings management, as indicated by the regression result of the full sample. Still, the regression results of different forms of earnings management showed a contrast and indicated that the auditor tenure can mitigate the activities of income-increasing activities in the positive model. The model auditor tenure and the auditor industry specialization can explain the incentives for managing earnings in the negative model.

Adeusi (2023) investigated the influence of audit firms' attributes on earnings management of listed firms on the Nigerian Exchange Group (NGX) for the period of thirteen years (2010- 2022). *Ex post facto* research design was employed together with mixed effects ML regression, correlation matrix and descriptive statistics were used to analyze the data collected. Sample size consisted of 40 listed non-financial firms with 480 firm year observations. The results of the analyses revealed that earnings management proxied by discretionary accruals was negatively affected by all attributes of audit firms used in the study (audit firms' size, joint audit, audit firms' tenure and audit fees).

Wiedjaja and Eriandani (2021) analyzed the effect of audit tenure and auditor workload on audit report lag (ARL) and provided empirical evidence of whether the selection of industry-specialized

auditors and audit partners with specific workloads can weaken this relationship. Sample size was 945 firm year and moderated regression analysis was used to analyze the panel data for the period 2015-2017. Results of the study revealed that audit tenure moderately, significantly and negatively affects ARL. Also, audit partners with heavy workloads can lead to longer ARL while a long partner-client relationship can weaken the workload and ARL relationship due to the auditors' more familiarity and information.

Almarayeh, Aibar-Guzman and Abdullatif (2020) investigated whether some audit quality attributes are capable of restricting earnings management in a developing country, Jordan, whose cultural, economic, and institutional context is very different from most previously analyzed countries' context. A sample of 251 firm year observations was used for the study. Generalized least squares regression GLS was used to study the association between two audit quality attributes auditor size and audit fees and discretionary accruals as a proxy of earnings management for a sample of industrial firms listed on the Amman stock exchange during the period 2012-2016. Study findings revealed that with the expectations in emerging countries external audit can function differently from that in Anglo-Saxon and West European countries with regard to its role in restricting earnings management and indicate that, given the institutional environment in Jordan, auditor size and audit fees have no significant effect on earnings management.

Kendory, Ahmed and Kadhim (2020) investigated the gaps in the checking methods, and multiple alternatives available in accounting policies and accounting standards that are used in the areas of measurement and disclosure of the preparation of financial statements. A sample of 3 non-financial companies for the period 2013 to 2016 was used for the study. The study concluded that some companies smooth their profit to improve their competitive position in the market. Therefore, the accounting information users needed to know the companies that smooth their income, and Eckel's 1981 model can determine which company is smoothing its income.

Amina (2018) aimed to measure income smoothing practices in a sample of 30 French joint stock companies during the period 2007- 2009. Dummy variables method and Eckel 1981 model to measure income smoothing practices and Binomial test according to SPSS program to confirm or refute the hypotheses. The study results found that there were significant statistical indicators of income smoothing practices in the sample studied of French companies during the period 2007-2009. Rather, the income series on the same sample studied were characterized by stability and non-volatility with any intervention of management through accounting manipulation.

Bisogno and De Luca (2016) analyzed the effect of a joint audit system on the quality of a firm's financial statements, investigated the association between the presence of a double auditor and the occurrence of small positive earnings, which can be considered the consequence of earnings management practices and a signal of poor earnings quality. A sample of Italian industrial non-listed SMEs with 12,344 firm year observations for the financial year 2010, stratified in order to fulfill certain requirements for asset value, turnover and number of employees was used for the study. Logistic regression was employed to test the study hypotheses and the study results confirmed that a joint audit system does positively affect earnings quality and the reliability of firm's financial statements.

Almeida, Neto, Bastianello and Moneque (2012) investigated two aspects of accounting information that may be inherently related: corporate income smoothing practices and conditional conservatism. A sample of 864 non-smoothing and 1,216 smoothing firms with 3,978 firm year observations in Brazil was used in the study. Eckel's model (1981) was used in the study to classify listed companies as smoothing or non-smoothing while Basu's model (1997) was used to quantify the degree of conditional conservatism present in each firm. Samples were created with annual share return data from both March and December. The study results found that non-smoothing firms had a higher degree of conditional conservatism. Also, more opportunity to recognize future economic losses because the market could use the share return data to anticipate future losses contained in the information regarding profits.

2.4 Summary of empirical review and gap in literature

The findings from the studies reviewed showed both positive and negative relationships between various external auditors' attributes and income smoothing practices among listed non-financial firms in the Sub-Saharan African region. However, few of these studies were seen to have shown no significant relationships. Among the studies conducted in African and other developing economies (Nigeria, Ghana, Kenya, Zimbabwe, Tanzania, Iran, India, Sri Lanka and Bangladesh), few, especially in Sub-Saharan economies, showed both positive and negative relationships between the various external auditors' attributes (Alshare, 2023; Bala, 2022; Egbunike *et al.* 2023; Kustono, 2021; Musa *et al.* 2023; Okoro *et al.* 2020; Otekunrin *et al.* 2021; Umoren, Ukpong, 2023). What was also obvious was the fact that several of the studies conducted in the Sub-Saharan African economies employed primary data and did not use the infrequent measures of audit report lag and joint audit as proxies for external auditors' attributes.

The present study was conducted using secondary data obtained from the various Stock Exchanges Groups (Q4 2022) for the selected six economies under study in Sub-Saharan African countries. Still, the present study employed the rare measure of earnings management (income smoothing) (Eckel 1981 model) alongside with the occasionally used external auditors' attributes: joint audit, audit tenure, audit fees, audit report lag and audit firm type to postulate empirical evidence on the relationship between external auditors' attributes and corporate income smoothing practices among listed non-financial firms in Sub-Saharan African economies. More so, and in line with the motivations for this study, it is well established that no previous related study conducted in Nigeria have examined all six Sub-Sahara economies of interest in a single literature. Therefore, to fill the gaps in literature, this study was conducted to allow for a comprehensive analysis of different countries, enabling researchers to identify patterns, similarities, and differences in corporate income smoothing practices across Sub-Saharan African economies.

3.0 Methodology

3.1. Research design

Ex-post facto and descriptive research designs were employed in this study. The choice of *ex-post facto* research design hinged on two major reasons: First, the study relied on past historical accounting data obtained from financial statements of the selected listed companies; therefore, the researcher did

not control or manipulate the information (data) of the variables. Second, the *ex-post facto* research design was adopted for this study since the study intended to determine the cause-effect relationship between the independent and dependent variables with a view to establishing the degree of effect of external auditor attributes on corporate income smoothing practices of selected listed non-financial firms in Sub-Saharan Africa region. The *ex-post facto* design assumes cross-sectional heterogeneity and time heterogeneity among the sampled firms.

3.2. Sources of data

This study employed data secondary sourced from Stock Exchange Fact Books and audited annual reports of the selected companies listed on the respective Stock Exchanges of interest and employed data from non-financial listed firms that were traded on the floors of the Ghana Stock Exchange, Nairobi Securities Exchange, Nigerian Exchange Group, Johannesburg Stock Exchange, Lusaka Stock Exchange and Victoria Falls Stock Exchange. Consequently, these annual reports of the selected sampled firms were used to obtain information on both variables of external audit attribute and corporate income smoothing.

3.3 Period scope

The study covered a ten (10) year period from 2013 to 2022. The period scope of this study (2013 to 2022) was relevant as the Sub-Saharan African economies have been experiencing severe funding squeeze during the past fifteen (15) years (International Monetary Fund (IMF), 2023). This big funding squeeze may have provided opportunities for companies within the Sub-Saharan African region to manipulate reported earnings to present impressive performances in order to attract potential investors and creditors. In addition, the period (2013 to 2022) witnessed unprecedented competition for fresh capital within the Sub-Saharan African economies which can motivate companies to engage in earnings manipulation (Bello & Yero, 2011). Firms included in the sample must have been listed on these Stock Exchanges during the period 2013-2022, and have an unrestricted access to their annual financial reports for the study data. Further, firms listed before and after 2013 and 2022 respectively were excluded from the study sample to enable homogeneity of the study scope.

3.4. Population of the study

In Africa, there are twenty-nine (29) Stock Market Exchanges (SME) representing thirty-eight (38) nations' capital markets (African Securities Exchanges Association (ASEA) (2023). Out of the twenty-nine (29) SMEs in Africa, twenty-four (24) are in Sub-Saharan African countries (ASEA, 2023) because the Exchanges of Cameroon (former DSX) and Libreville (former LBVSE) formed a merger to become Bourse des Valeurs Mobilleres del' Afrique Centrale (BVMAC) in 2008 (Kingsley & Kouam, 2022). In this study, the total population of the study was four hundred and forty-four (444) listed non-financial firms from six (6) selected countries of interest in the Sub-Saharan African region between the period 2013 to 2022. Based on 2023 economic outlook by International Monetary Fund, Nigeria, Kenya and South Africa are among the five fastest growing economies in Sub-Saharan Africa (IMF, 2023). Also, Ghana, Tanzania and Zimbabwe are among the first ten economies in Sub-Saharan Africa with the highest Gross Domestic Products (GDPs) (IMF, 2023). However, these optimistic economic forecasts may not be sustained if the incessant corporate failures caused by earnings management (income smoothing) practices in the region are left un-controlled (IMF, 2023).

Hence, the justification for selecting the study samples from Ghana, Nigeria, Kenya, South Africa, Tanzania and Zimbabwe so as to draw conclusion following the results obtained from the study and then offer recommendations to the various stakeholders based on the study findings.

3.5. Sample size and sampling techniques

The researcher employed the purposive sampling technique due to the availability and accessibility of relevant data of interest from Ghana, Kenya, Nigeria, South Africa, Tanzania and Zimbabwe Stock Exchanges between 2013 and 2022. This study focused on specific characteristics of the population that had the required data for the period under study which best enabled the researcher to answer the research questions. Hence the present study followed the studies of Campbell, Greenwood, Prior, Shearer, Walkem, Young, Bywaters and Walker (2020); Palinkas, Horwitz and Green, 2015; Thomas (2022) to employ purposive sampling method to select two-hundred and ninety-nine (299) listed non-financial firms on the Ghana, Kenya, Nigeria, South Africa, Tanzania and Zimbabwe Stock Exchanges as of fourth quarter 2022 as the study sample.

Table 3.1: List of listed non-financial firms (population) in selected six countries under study as of fourth quarter 2022 and (samples) drawn

S/n	Stock Exchange	Number of Listed Non-financial Firms (Population)	Number Drawn from the Population (Sample size)
1	Ghana Stock Exchange	25	15
2	Kenya Stock Exchange	39	29
3	Nigeria Exchange Group	106	75
4	South Africa	212	141
5	Tanzania	15	7
6	Zimbabwe	47	32
	Totals	444	299

Source: Authors' compilation (2023)

3.6. Data analysis techniques

This study estimated and explored two basic types of panel models (Fixed Effect and Random Effect Panel Models) to investigate the effect of external auditor attribute on income smoothing among listed non-financial firms in Sub-Saharan African region. Panel data set structure refers to a dataset constructed from recurring cross-sections and longitudinal sections over time (Hsiao, 2015). The decision to use panel data structure was that the process improves data collinearity and provides more degrees of freedom when compared to pooled data set structure. (Ganda & Milondzo 2018; Ganda, Ngwakwe & Ambe 2018).

Panel models are attractive since they contain more information than single cross-section and allow for an increase in precision during estimation (Baltagi, 2020). The collated panel data were subjected

to descriptive statistics analysis, correlation analysis, test of normality of data and regression analysis. Descriptive statistics was used to evaluate the characteristics of the data in terms of its Mean, Maximum, Minimum, and Standard Deviation while correlation analysis was employed to evaluate the association between the variables of interest. Test for normality of data was carried out to confirm asymmetric distribution of the data using Shapiro Wiki normality test procedure.

3.6 Variable measurements and model specification

Table 3.2: Variables: Definitions and measurements (Operationalization of variables)

S/ N	Variables/ a priori sign	Definition	Type	Measurement	Source
1	SMOOTH	Corporate Income Smoothing	Dependent	Eckel 1981 Model $EI = \frac{CVA\%Net\ Profit}{CVA\%Sales}$	Almeida, Neto, Bastianello and Moneque (2012) Al-taie, Flayyih and Talab (2017) Amina (2018) Kendory, Ahmed and Kadhim (2020).
2	XATYPE (-)	External Auditors' Firm Type	Independent	Audit firm type in Dummy (1,0) was computed as '1' for firms that use PWC, Deloitte, E &Y and KPMG as external auditors and '0' otherwise	Samak, El-Said, and El-Latif (2014); Suryani, Winarningsi, Avianti, Sofia & Dewi (2023) Alshare, Kadir, Kamarudin & Hassan (2023).
3	XARLAG (+)	External Auditors' Report Lag	Independent	Audit Report lag computed in Days as the difference in the dates between when a company external auditors sign the company annual audited report and the company financial statement year end date.	Wiedjaja and Eriandani (2021); Pradipta and Zalukhu (2020); Bryan and Mason (2020); Zheng (2019); Habib, Bhuiyan, Huang and Miah (2018).
4	XAFEE (-)	External Auditors' Fees	Independent	Total audit fees paid to the audit firm in	Gandia and Huguet (2021); Egbunike,

				each year.	Igbinovia, Okafor & Mmadbuobi (2023); Musah, Okyere & Agyepong 2023).
5	XATEN (+)	External Auditors' Tenure	Independent	Length of auditor-client relationship: '1' if 3 years+ & '0' otherwise	Bamahros and Wan-Hussin (2015) Okolie (2014) Hussin, Salleh, Ahmad & Rahmat (2023).
6	JAUDIT (+)	Joint Audit	Independent	Is a dummy variable with the value 1 if the company was audited by two independent external auditors, and 0 otherwise	Bisogno and De Luca (2016) Velte and Azibi. (2015) Zerni, Haapamaki, Jarvinen and Niemi (2016).
7	FSIZE	Firm Size	Control	Natural Log of Total Asset	Wijaya, Mauren and Cahyadi (2020); Susanto & Pradipta (2020); Putri (2019); Indrawan, Agoes, Pangaribuan and Popoola (2018).
8	PPROFIT	Firm Profitability (Return on Total Asset)	Control	Profit after Tax Divided by Total Asset	Shahfira and Hasanuh (2021); Supriyadi (2021)

Source: Authors' Compilation (2023)

3.7. Theoretical specification of regression model

This study employed the Eckel's corporate income smoothing model (1981) for measuring the dependent variable of corporate income smoothing. Eckel's model (1981) is based on the premise that revenues and costs are linear over time. Therefore, they grow or decline at the same rate; when a linear relationship is not observed, this property may be due to interference from management to smooth reported earnings. To observe the relationship between profits and revenues, the coefficients of the percentage variations of profits and sales revenue are used. When the coefficient of the profit is less than that of the revenue, this demonstrates that the company is interfering in the profits through artificial smoothing. The author's definition is as follows:

$$CV\Delta\%Net\ Profit \leq CV\Delta\%Sales = \text{Smoothing}, \dots\dots\dots (1)$$

Where:

$$CV\Delta\%Net\ Profit = \frac{Net\ Profit_t - Net\ Profit_{t-1}}{Net\ Profit_{t-1}}$$

$$CV\Delta\%Sales = \frac{Revenue_t - Revenue_{t-1}}{Revenue_{t-1}}$$

From these data, income smoothing is estimated using Eckel's index formula (EI):

$$EI = \frac{CV\Delta\%Net\ Profit}{CV\Delta\%Sales} \dots\dots\dots (2)$$

From this data, corporate income smoothing is estimated using Eckel's index formula (Kendory, Ahmed & Kadhim (2020); Schloegl, Schmidt, Boeckle, Weiss and Kotrschal (2012) which shows that if the index obtained is less than 0.9, the company performs corporate income smoothing, and if the index is greater than 1.1, the company does not perform corporate income smoothing.

3.8 Model specification for selected six (6) countries under study

This study modified the econometric model of Almarayeh, Aibar-Guzmán, and Abdullatif (2020)

$$(DACKO_{i,t} = \beta_0 + \beta_1 AUDSIZE_{i,t} + \beta_2 AFEE_{i,t} + \beta_3 LEVERG_{i,t} + \beta_4 SIZE_{i,t} + \beta_5 GROW_{i,t} + \beta_6 ROA_{i,t} + \beta_7 PPROFIT_{i,t} + \varepsilon_{i,t}) \text{ to fit the variables employed in this study as follows:}$$

$$SMOOTH_{i,t} = a_0 + \beta_1 XATYPE_{i,t} + \beta_2 XARLAG_{i,t} + \beta_3 XAFEE_{i,t} + \beta_4 XATEN_{i,t} + \beta_5 JAUDIT_{i,t} + \beta_6 FSIZE_{i,t} + \beta_7 PPROFIT_{i,t} + e_{i,t}$$

Where:

SMOOTH	=	Corporate Income Smoothing
XATYPE	=	External Auditors' Firm Type
XARLAG	=	External Auditors' Report Lag
XAFEE	=	External Auditors' Fee
XATEN	=	External Auditors' Tenure
JAUDIT	=	Joint Audit
FSIZE	=	Firm Size
PPROFIT	=	Profitability
β	=	Expected Coefficient
a	=	Intercept
i	=	Cross Section (Sampled Listed Firms)
t	=	Period t (2013 to 2022)
e	=	Error term

4.0 Data presentation and results/analysis and discussion

4.1 Descriptive statistics

In the descriptive statistics, each variable was examined based on its mean, standard deviation, maximum and minimum values. Table 4.1 displays the descriptive statistics for the study.

Table 4.1: Summary of descriptive statistics analysis results

FULL SAMPLE	Variable	Mean	Std. Dev.	Min	Max
	SMOOTH	.0835319	13.63907	-261.54	240.07
	XATYPE	.721927	.4481289	0	1
	XARLAG	103.1031	70.96321	12	811
	XAFEE	3.752555	.8764249	.6	7.07
	XATEN	.0176313	.1316323	0	1
	JAUDIT	.0233794	.2339512	0	1
	PPROFIT	.0656839	5.371363	-263.78	88.03
	FSIZE	15.56495	2.505203	7.87967	22.96905

Source: Author's compilation (2023)

Table 4.1 shows the descriptive statistics of this study for the combined samples (Ghana, Kenya, Nigeria, South Africa, Tanzania, and Zimbabwe) as well as the descriptive statistics for the individual countries under study. In terms of the dependent variable (corporate income smoothing practices), Table 4.1 shows that corporate income smoothing practices (SMOOTH) has a mean value of 0.083 and a standard deviation value of 13.63 in the combined sample.

Clearly, as indicated in Table 4.1, following the mean values of corporate income smoothing variable obtained from the descriptive statistics, it is observed that managers of all listed non-financial firms in the sample engaged in corporate income smoothing practices at some point in time during the period under review. This finding corresponds to fact that all the mean values from the respective listed non-financial firms in the countries of interest are seen to be less than 0.9 (the Eckel's index bench mark for firms which practice corporate income smoothing practices).

In the case of the independent variables (External Auditor Firm Type), the descriptive statistics results in Table 4.1 shows that External Auditor Firm Type (XATYPE) has a mean value of 0.72 and a standard deviation of 0.44 for the combined sample. Particularly, this outcome indicates that about 72% of the sampled observations hired the services of big four audit firms during the period under analysis suggesting that non-big four audit firms in these countries have been given less priority to provide audit services.

In terms of the independent variable (External Auditor Report Lag), Table 4.1 shows that External Auditor Lag (XARLAG) has a mean value of 103.10 and a standard deviation value of 70.96 in the combined sample. Specifically, this outcome suggests that on average external auditors spend approximately 103 days as against 90 days as stipulated in the regulations for external auditors to sign the financial reports after the firm's year end date. The descriptive statistics Table 4.1 shows that External Auditor Fee (XAFEE) have a mean value of 3.75 and a standard deviation of 0.87 for the full sample.

EXTERNAL AUDITORS' ATTRIBUTES AND CORPORATE INCOME SMOOTHING PRACTICES AMONG LISTED NON-FINANCIAL FIRMS IN SUB-SAHARAN AFRICA

The descriptive statistics Table 4.1 result shows that External Auditor Tenure (XATEN) have a mean value of 0.17 and a standard deviation of 0.13 using the combine samples. This result shows that approximately only 2% of the sampled listed non-financial firms in the six Sub-Saharan African countries retained their external auditors for a period of 3 years and above while the remaining 98% had auditor-client relationship that lasted for less than 3 years. By implication, sampled listed non-financial firms in the six Sub-Saharan African countries do not observe the three- year external audit rotation during the period under study.

The descriptive statistics table results in Table 4.1 shows that Joint Audit (JAUDIT) have a mean value of 0.02 and a standard deviation of 0.23 using the combine samples. The result indicates that less than 3% of the sampled observations practiced joint audit system during the period under investigation. Overall, this study documented that the practice of joint auditing in Sub-Sahara Africa countries is very low.

For the control variable, profitability, the descriptive statistics Table 4.1 result shows that Profitability (PPROFIT) have a mean value of 0.06 and a standard deviation of 5.37 using the combine samples. For the control variable, Firm Size, the descriptive statistics Table 4.1 result shows that Firm Size (FSIZE) has a mean value of 15.56 and a standard deviation of 2.50 using the combine samples.

4.1.1. Correlation analysis

Usually, in statistics, three types of correlations are measured: Pearson correlation, Kendall rank correlation and Spearman rank correlation. Spearman correlation is a type of non-parametric test and is the most appropriate correlation analysis technique when the variables follow a non-normal distribution. The coefficient of Spearman rank correlation is computed based on ranked data. Hence, in this study, the Spearman rank correlation was employed since the data set employed did not follow a normal distribution.

Table 4.2: Correlation analysis results

FULL SAMPLE	PPROFIT	FSIZE	SMOOTH	XATYPE	XADLAY	XAFEE	XATEN	JAUDIT
			1.0000					
				1.0000				
			-0.0419	-0.1539	1.0000			
			-0.0302	0.2119	-0.0558	1.0000		
			-0.0097	-0.0070	0.1203	-0.0019	1.0000	
			-0.0116	-0.0978	-0.0434	0.1377	-0.0171	1.0000
			0.1039	0.1099	-0.1904	-0.0187	-0.1751	0.0101
	1.0000							
		FSIZE	-0.0005	0.1866	-0.1196	0.8646	-0.0332	0.1368
	0.0318	1.0000						-

Source: Author's Compilation (2023)

From Table 4.2, a careful examination of the correlation between the independent variables and dependent variable shows that there exists a positive association between external auditor firm type (XATYPE, 0.0603), firm profitability, (PPROFIT, 0.1039) and corporate income smoothing practices (SMOOTH) in the full sample. While there is a negative association between external audit report lag XARLAG, -0.0419), external audit fee (XAFEE, -0.0302), external audit tenure, (XATEN, -0.0097), joint audit (JAUDIT, -0.0116), firm size (FSIZE, -0.0005) and corporate income smoothing practices

(SMOOTH) during the period under investigation. In summary, from the combined sample, it should be noted that since no Spearman's ρ coefficient is equal or greater than 0.80 during the period of interest, the possibility of collinearity was eliminated (Bergqvist, Tossavainen & Johansson, 2020, Kim, 2019).

4.1.2. Regression analysis and presentation of regression results

Due to the nature of the data set collated for this study (Panel Data), this study tested for the presence of fixed and random effect in the specified model and have included both country and year effects variables and finally employed mixed effect regression estimation technique in the presence of fixed and random effects errors as have been documented in the studies of (Helwig, 2017; Tremblay & Newman, 2015 & Zulfikar, Sitepu & Zulfikar 2019) to test the hypotheses of this study.

4.1.3. Panel regression models

As noted by Ghardallou (2022) the fixed-effects model which is the main technique for analysis of panel data is used when it becomes important to control for omitted variables that differ between cases but are constant over time. On the other hand, the random-effects model is used when there are reasons to believe that some omitted variables may be constant over time but vary between cases, and others may be fixed between cases but vary over time. To justify the choice of model, the Hausman specification test is largely suggested by scholars (Gujarati, 2004).

Specifically, to examine the cause-effect relationship between the dependent and independent variables, this study first employed the pooled least square regression analysis and proceeded to validate the estimates. Table 4.3 presents the regression results obtained from the listed non-financial firms in selected sub-Sahara Africa countries. As observed from Table 4.3, the pool panel least square regression analysis result revealed an R-squared value of 0.1191 which indicate that about 11.91% of the systematic variations in corporate income smoothing among listed non-finance firms in selected sub-Sahara African countries is jointly explained by the independent and control variables in the model. Further, the F-statistic value of 6.93 and its associated p-value of 0.0000 shows that the specified model is statistically significant at 1% level. Specifically, as indicated in Table 4.6, a mean VIF value of 2.25 shows that VIF is within the benchmark value of 10, to indicate the absence of multicollinearity.

A cursory look at both the F-statistic and Wald-statistic values {3.28 (0.0018) and 49.78 (0.0000)} for fixed and random effect regression models respectively in Table 4.3 shows that both models are statistically significant at 1%. The coefficient of determination (R-squared), values of 0.0103 and 0.0087 (fixed and random effect models respectively) indicate that about 1.03% and 0.87% of the systematic changes in corporate income smoothing is jointly explained by the independent and control variables. However, following the test for normality of error for the random effect model the result in Table 4.3 shows a 5% statistically significant idiosyncratic $e_i = 21.08(0.000)$ and $u_i = 305.91(0.000)$ which presents a problem of cross-sectional effect leading to unobserved heterogeneity issues indicating that the assumption of homoscedasticity of the error term has been violated. Therefore, mixed effect regression analysis technique was employed to control for the unobserved heterogeneity and consequently used to test the study hypotheses.

Table 4. 3: Regression analyses results

	Pooled Panel Least Square Model	Fixed Effect Model	Random Effect Model	Mixed Effect Model
XATYPE	1.25394* (0.062)	1.869978 (0.152)	1.522436** (0.034)	1.572792** (0.028)
XARLAG	-.0010077 (0.800)	.0004874 (0.923)	-.0006762 (0.867)	-.0009448 (0.815)
XAFEE	-.2279633 (0.762)	2.0126 (0.207)	-.4063376 (0.613)	-.5228969 (0.000)
XATEN	-4.258425** (0.049)	-1.193648 (0.670)	-4.220305* (0.053)	-4.117784** (0.048)
JAUDIT	-3.257486 (0.174)	-.9779354 (0.760)	-2.987012 (0.217)	-3.113514 (0.197)
PPROFIT	.7889007*** (0.000)	.6159283 (0.000)	.8025409*** (0.000)	.8235725*** (0.000)
FSIZE	.0206634 (0.937)	-.714756 (0.253)	-.0407021 (0.880)	-.0297375 (0.912)
COUNTRIES1			1.90804 (0.394)	2.037604 (0.362)
COUNTRIES2			1.329711 (0.374)	1.489733 (0.320)
COUNTRIES3			1.427353 (0.299)	1.510076 (0.272)
COUNTRIES4			1.221039 (0.313)	1.381475 (0.256)
COUNTRIES5			.9381038 (0.690)	1.212717 (0.606)
2014				-1.495222 (0.241)
2015				-.6648487 (0.600)
2016				-2.286403* (0.072)
2017				-1.868194 (0.141)
2018				-.0265406 (0.983)
2019				-1.006095 (0.423)
2020				-1.458369 (0.251)
2021				-.6644455 (0.602)
2022				-2.113847 (0.135)
_CONS	-.2399897 (0.909)	2.155782 (0.713)	-.0024145 (0.999)	1.257556 (0.596)
F/WALD	6.93*** (0.0000)	3.28*** (0.0018)	49.78*** (0.0000)	57.32*** (0.0000)
R ²	0.1191	0.0103	0.0087	
VIF TEST	2.25			
HAUSMAN			22.75 (0.1019)	
JOINT TEST FOR NORMALITY ON E:	CHI2(2) = 21.08	PROB > CHI2 = 0.0000		
JOINT TEST FOR NORMALITY ON U:	CHI2(2) = 305.91	PROB > CHI2 = 0.0000		
SOURCE: AUTHOR'S COMPILATION (2023)				

4.1.4. Hausman specification test

The Hausman is based on the null hypothesis that the random effect model is preferred to the fixed effect model. However, this study employed the mixed effect regression model to eliminate contemporaneous and idiosyncratic errors which were detected in the random effect regression model. (Bar, Booth, and Wells, 2023) documented that the mixed effect model simultaneously estimates fixed effects coefficients and variance components associated with the random effects.

Table 4.4: Hausman Specification Test

. estimate store re

. hausman fe re

	Coefficients			
	(b)	(B)	(b-B)	sqrt(diag(V_b-V_B))
	fe	re	Difference	S.E.
xatype	1.869978	1.522436	.3475417	1.090074
xarlag	.0004874	-.0006762	.0011635	.0029678
xafee	2.0126	-.4063376	2.418938	1.378248
xaten	-1.193648	-4.220305	3.026658	1.762217
jaudit	-.9779354	-2.987012	2.009077	2.106767
pprofit	.6159283	.8025409	-.1866125	.048962
fsize	-.714756	-.0407021	-.6740539	.5640514

b = consistent under Ho and Ha; obtained from xtreg

B = inconsistent under Ha, efficient under Ho; obtained from xtreg

Test: Ho: difference in coefficients not systematic

$$\begin{aligned}\chi^2(7) &= (b-B)'[(V_b-V_B)^{-1}](b-B) \\ &= 22.75 \\ \text{Prob}>\chi^2 &= 0.1019\end{aligned}$$

Source: Author's compilation (2023)

4.1.5. Normality of data analysis

In this study, the Shapiro Wilk test for data normality was employed. Shapiro Wilk test was originally restricted for sample size of less than 2000. This test was the first test that was able to detect departures from normality due to either skewness or kurtosis, or both. It has become the preferred test because of its good power properties (Mendes & Pala, 2003). Hence, the adoption of the Shapiro Wilk test for data normality is justified following the findings of Mendes and Pala (2003) and Keskin (2006) who concluded that Shapiro-Wilk test is the most powerful normality test. Particularly, when testing for normality, where the probabilities > 0.05, it indicates that the data are normally distributed. Conversely, where the probabilities < 0.05, it indicates that the data are not normally distributed.

Table 4.5: Data normality test results

VARIABLE	STATISTICS	FULL SAMPLE
SMOOTH	z Prob>z	18.543 (0.00000)
XATYPE	z Prob>z	0.446 (0.32797)
XARLAG	z Prob>z	16.348 (0.00000)
XAFEE	z Prob>z	9.397 (0.00000)
XATEN	z Prob>z	10.671 (0.00000)
JAUDIT	z Prob>z	17.111 (0.00000)
PPROFIT	z Prob>z	18.963 (0.00000)
FSIZE	z Prob>z	7.269 (0.00000)

Source: Author's compilation (2023)

From Table 4.5, it is observed that the dependent variable, corporate income smoothing practices (SMOOTH) has a z-statistics value of 18.54 as obtained from the Shapiro-Wilk test with a Probability

Z-statistics of 0.00000 in the full sample. Overall, the results implies that the variable of corporate income smoothing practices (SMOOTH) is not normally distributed since the probabilities of the z-statistics are significant at 1% level across the samples.

For the independent variables, Table 4.5 shows that XATYPE ($Z=0.446$; $\text{Prob}>Z=0.32797$) full sample. Also, as recorded in Table 4.5, XARLAG is not normally distributed across the samples: full sample ($Z=16.348$; $\text{Prob}>Z=0.0000$). As shown in Table 4.5, XAFEE ($Z=9.397$; $\text{Prob}>Z=0.0000$) for the combined sample is also not normally distributed since the probability of the z-statistics is significant at 5% and 1% level during the period under study. Still, as shown in Table 4.5, a cursory examination of the external audit tenure variable XATEN ($Z=10.671$; $\text{Prob}>Z=0.0000$) for the combined sample indicate that the variable is not normally distributed since the probabilities of the z-statistics is significant at 1% level. Further, Table 4.5 shows that the joint audit variable (JAUDIT) across all the samples are not normally distributed since the probabilities of the z-statistics is significant at 1% level: particularly, ($Z=17.111$; $\text{Prob}>Z=0.0000$) relates to the combined sample. From Table 4.5, for the control variable PPROFIT, ($Z=18.963$; $\text{Prob}>Z=0.0000$) for the combine sample show that the variable of firm profitability is not normally distributed during the period under study. Looking at the normality of data result obtained for the variable of firm size (FSIZE) from Table 4.5, the variable is not normally distributed following the probabilities of the z-statistics which is significant at 5% or 1% level. Specifically, the result ($Z=7.269$; $\text{Prob}>Z=0.0000$) relates to the combined sample.

Overall, as shown in Table 4.5, this study noted that the test for normality of data revealed that while some of the variables of interest were normally distributed others were not. Accordingly, when a researcher is faced with non-normally distributed data, the available options include but not limited to switching to the use of non-parametric test technique such as the use of Chi^2 test (Bollinger, Christopher & Chandra, Amitabh 2005) or deploy the powers of data transformations methods (Pedhazur, 1997). Notably, in this study, non-parametric Chi^2 test was unacceptable since the intention of the researcher was to find statistically significant levels (1% or 5%) which such non-parametric test could not provide.

The use of data transformation technique was jettisoned following the position of Poncet, Courvoisier, Combescure & Perneger (2016) who noted that transformations should make theoretical sense: Normalizing a dichotomy such as gender (in this study 'audit tenure') will not make theoretical sense. However, in pursuance of testing the hypotheses of this study, the opinion of Li, (2016) who posited that correlation analysis, least-squares regression, factor analysis, and related linear techniques are relatively robust against non-extreme deviations from normality provided that the errors are not severely asymmetric. Hence, this study proceeded with least squares regression analysis in testing the hypotheses and paid strong attention to the normality of residua which is one critical criterion to be observed for regression estimates to remain unbiased (Poole & O'Farrell, 1971; Shatz, 2023; Schmidt & Finan, 2018). Hence, the focus of the interpretation of the study results was on the probabilities of the t values rather than the t values as recommended by Gujarati (2004).

Table 4.6: Variance Inflation Factor Test

. vif

Variable	VIF	1/VIF
fsize	5.28	0.189346
xafee	5.27	0.189776
xatype	1.05	0.948898
jaudit	1.05	0.956727
xarlag	1.03	0.966915
xaten	1.03	0.971963
pprofit	1.02	0.980597
Mean VIF	2.25	

Source: Author's compilation (2023)

4.2. Hypotheses testing

HYPOTHESIS 1

H₀₁: External auditors' firm type has no significant relationship with corporate income smoothing practices of listed non-financial firms in selected Sub-Saharan African countries.

The results obtained from the mixed effect panel regression model in Table 4.3 revealed that external auditor firm type [XATYPE, coef. = 1.572 (0.028)] has a significant positive relationship with corporate income smoothing practices of listed non-financial firms in selected Sub-Saharan African countries. In line with the *ceteris paribus* axiom (all things being equal) the result indicates that hiring any of the Big Four audit firms for the purpose of providing audit services will significantly increase income smoothing practices of listed non-finance firms in selected Sub-Saharan African countries during the period under consideration. Therefore, this study rejects the null hypothesis that auditors' firm type has no significant relationship with corporate income smoothing practices of listed non-financial firms in selected Sub-Saharan African countries.

HYPOTHESIS 2

H₀₂: External auditors' report lag has no significant relationship with corporate income smoothing practices of listed non-financial firms in selected Sub-Saharan African countries.

Further, the result obtained from the mixed effect panel regression model in table 4.3 revealed that the variable of external auditor report lag [XARLAG, coef. = -0.0009 (0.815)] has an insignificant negative relationship with corporate income smoothing practices of listed non-financial firms in selected Sub-Saharan African countries during the period under study. In line with the *ceteris paribus* axiom (all things being equal) the result indicates that a one-day reporting lag of external audit report will yield a statistically insignificant effect on income smoothing practices of listed non-financial firms of selected Sub-Saharan African countries. Therefore, this study accepts the null hypothesis that external auditors' report lag has no significant relationship with corporate income smoothing practices of listed non-financial firms in selected Sub-Saharan African countries.

HYPOTHESIS 3

H₀₃: External auditors' fee has no significant relationship with corporate income smoothing practices of listed non-financial firms in selected Sub-Saharan African countries.

Further investigation reveals that the outcome obtained from the mixed effect panel regression model in Table 4.3 for the independent variable of external auditor fee [XAFEE, coef. = -0.523 (0.000)] show a significant negative relationship with corporate income smoothing practices of listed non-financial firms in selected Sub-Saharan African countries during the period under study. Following the *ceteris paribus* axiom (all things being equal) this result indicates that an increase in audit fee of external auditor will yield a statistically significant decreasing effect on corporate income smoothing practices of listed non-financial firms in selected Sub-Saharan African countries. Therefore, this study rejects the null hypothesis that external auditors' fee has no significant relationship with corporate income smoothing practices of listed non-financial firms in selected Sub-Saharan African countries.

HYPOTHESIS 4

H₀₄: External auditors' tenure has no significant relationship with corporate income smoothing practices of listed non-financial firms in selected Sub-Saharan African countries.

The results obtained from the mixed effect panel regression model in Table 4.3 revealed that external auditor tenure [XATEN, coef. = -4.117 (0.048)] has a significant negative relationship with corporate income smoothing practices of listed non-financial firms in selected Sub-Saharan African countries during the period under study. In line with the *ceteris paribus* axiom (all things being equal) the result indicates that longer audit tenure provides the external auditor's ability to observe corporate income smoothing techniques that the short-term auditor could not observe which also suggest that corporate income smoothing activities among listed non-financial firms in selected Sub-Saharan African countries during the period under review significantly reduced when longer audit engagements were observed. Therefore, this study rejects the null hypothesis that external auditors' tenure has no significant relationship with corporate income smoothing practices of listed non-financial firms in selected Sub-Saharan African countries.

HYPOTHESIS 5

H₀₅: Joint audit practices have no significant relationship with corporate income smoothing practices of listed non-financial firms in selected Sub-Saharan African countries.

Further, the result obtained from the mixed effect panel regression model in Table 4.3 revealed that the variable of joint audit [JAUDIT, coef. = -3.113 (0.197)] has an insignificant negative relationship with corporate income smoothing practices of listed non-financial firms of selected Sub-Saharan African countries during the period under study. In line with the *ceteris paribus* axiom (all things being equal) the result indicates the practice of joint audit will yield a statistically insignificant effect on corporate income smoothing practices of listed non-financial firms in selected Sub-Saharan African countries during the period under study. Therefore, this study accepts the null hypothesis that joint audit practice has no significant relationship with corporate income smoothing practices of listed non-financial firms in selected Sub-Saharan African countries.

4.2.1 Discussion of findings

Watts and Zimmerman (1986) and DeAngelo (1981) hypothesized that auditor quality depends on the relevance of the auditor's report in examining contractual relationships and reporting breaches. In other words, Bartov, Gul and Tsui (2020) suggested that higher quality auditors prefer to report errors and irregularities and are unwilling to accept questionable accounting practices. Therefore, it was posited that high quality auditors are expected to be more likely to detect the practice of earnings management (DeFond, Erkens, & Zhang, 2017; Iatridis, 2012; Viana & Lourenco & Black, 2022). In this regard, it was opined that Big 4 audit firms may provide higher quality audit services than non-Big 4 (Caneghem, 2014; DeAngelo, 1981; Watts and Zimmerman, 1986). The Big 4 auditors have strong incentives to provide or maintain a high audit quality level due to the fact that they have a greater number of clients; more opportunity to deploy significant resources to auditing (recruitment, training and technology); and more to lose, for example termination of other clients, loss of reputation, when they do not report a discovered breach (Caneghem, 2014; Chung, Firth & Kim 2015).

Little wonder why well over 70% of the entire sample of non-financial firms in the countries of interest did employ the services of a Big Four company during the period under review which again is consistent with the notion of Viana and Lourenco (2021) who noted that a firm would choose the services of a Big 4 auditor than non-Big 4 auditor if they believe that the reputation of Big 4 auditors reflects superior audit quality. Particularly this argument tally with that of DeAngelo (1981) who documented that large audit firms can detect material misstatements in financial statements and are more willing to report what they find relative to non-Big 4 auditors.

Unexpectedly, the findings obtained from this study contradicts the underlying opinions and several similar opinions of (DeFond, Erkens, & Zhang, 2017; Iatridis, 2012; Ndubuisi & Ezechukwu, 2017; Viana & Lourenco, 2022). Particularly, the outcome from this study indicates that Big 4 auditors have positive effect on corporate income smoothing practices of listed non-financial firms of selected Sub-Saharan African countries during the period under study suggesting that Big 4 auditors are less likely to prevent corporate income smoothing practices performed by their client firms in the selected Sub-Saharan African countries under study. The outcome also corroborates the argument that non-Big 4 auditors could have better familiarity with domestic marketplaces and better liaison with their clienteles.

These motives might enable non-Big 4 auditors to better detect the wrongdoings in the firms (Bala *et al.*, 2022; Iatridis, 2012). The outcome from this study buttressed the results of Almarayeh *et al.* (2020); Lee and Lee (2013); Ozili, (2017) and who noted that the presence of Big 4 auditors did not discourage corporate income smoothing as well as similar findings from Yaşar (2013) who warned that the theory of audit quality as a constraint on earnings management is not always valid in jurisdictions where regulatory guidance and standards relating to corporate income smoothing may not be explicit or may leave room for interpretation.

Such circumstances can make it difficult for auditors to take a clear stance against corporate income smoothing practices. The outcome of this study supports the views of Azar and Vahdati (2022) who documented that external audit firms are expected to maintain independence from their clients to ensure objectivity and integrity in their audits. However, in practice, there may be financial or reputational pressures to maintain good relationships with clients, potentially affecting the auditors' willingness to challenge management on corporate income smoothing issues. This result aligns with previous studies that have also documented significant positive relationships between the Big 4

auditors and earnings manipulation to include those of (Bala, Ahmad, Khatoon & Karaye, 2022; Bruynseels & Cardinals, 2014; Sani, Latif & Al-dhamari, 2018; Ozili, 2017)).

On the variable of external auditor tenure, the study finding is consistent with the expertise hypothesis which postulates that extended tenure improves working relationship between the auditor and the firm which makes for better understanding and learning on the job. However, the present study result disagrees with the views that longer audit tenure could be a threat to independence which is hinged on the opinion that longer union between the client and the auditor may raise too much familiarity which could threaten “honest neutrality” as opined by (Martani, Rahmah, Fitriany, Anggraita & Zyang, 2021; Okolie, 2015).

In this study, the result indicate that the long audit tenure increases the experience and knowledge of the auditor about the client and provides better understanding which will undoubtedly affect the accuracy of the audit results. The study’s findings align with the research of El Guindy and Basuony (2018) and Mohamed and Habib (2013) who documented that external auditor who had a long working tenure in auditing a company had more experience and knowledge about its condition and concluded that the longer the audit tenure, the more it can limit corporate income smoothing. The more experienced an auditor is, the more capable and better performance in increasingly complex tasks. An inexperienced auditor had more significant error rate than a more experienced external auditor.

Longer audit tenure provides the external auditors the ability to observe corporate income smoothing techniques that the short-term auditor could not indicating that shorter audit periods generally left larger accruals in firms. However, the findings of this study contradict those obtained in the studies of Lestari and Aeni (2019); Reguera-Alvarado, de Fuentes and Laffarga (2018); Tyokoso, Sabari, Dogarawa and Ibrahim (2019) who concluded that when the audit tenure increases, clients will have more opportunities to manipulate financial statements and adjust them to financial statements’ forecasts. The authors also noted that a good relationship between the client and the auditor provides an opportunity for a decrease in the external auditor’s objectivity.

Still, the regression result shows that an increase in auditors’ fees will lead to a significant decrease in corporate income smoothing during the period under investigation. This outcome may be viewed from the dimension of incentives for high-quality audits which suggest that higher audit fees may provide incentives for auditing firms to conduct more thorough and high-quality audits. Auditors receiving higher fees might be more motivated to scrutinize financial data rigorously, including identifying and deterring corporate income smoothing activities.

Higher audit fees can enhance auditor independence because auditing firms receiving substantial fees may be less susceptible to pressure from clients to overlook or tolerate corporate income smoothing practices. This is in stern contradiction to the economic bonding theory which opines that higher audit fee may necessitate lower audit quality. Further, this result can be linked to the fact that corporate governance practices have been a focus in all the six countries of interest, with codes and guidelines aimed at enhancing governance standards. Companies that pay high audit fees may be more inclined to adhere to such governance codes, which often emphasize transparency and financial reporting quality. This finding imply that higher fees translate into stronger commitment and more competent services and thus reduces the likelihood of management to smooth income (Hallak & Silva, 2012). However, prior studies have hypothesized that it is not enough for the auditor to have expertise, they must also be independent (DeAngelo, 1981; Watts & Zimmerman, 1986) which may

be captured by increased audit fee. This outcome is in line with the study findings of (Chang, Ho, Liu, & Ouyang, 2021).

5.0 Summary of findings, conclusion and recommendations

5.1 Summary of findings

Earnings management vis-à-vis corporate income smoothing practices occur when management takes deliberate steps within the constraints of Generally Accepted Accounting Principles (GAAP) to bring about a desired level of reported earnings. Numerous studies have investigated whether managers smooth reported earnings opportunistically under the flexibility of accounting rules and several different outcomes have emerged. It is in the light of the forgoing that this study investigated the relationship between external audit attributes and corporate income smoothing practices of listed non-financial firms of selected Sub-Sahara African countries with a scope covering a 10 - year period ranging from year 2013 to year 2022 fiscal period. The independent variables of interest employed to test the hypotheses of the study were External Audit Firm Type, External Audit Report Lag, External Audit Tenure, External Audit Fee and Joint Audit. However, two control variables: Firm Size and Firm profitability were also employed in the study. Further, the Eckels 1981 corporate income smoothing model as the proxy for the dependent variable was also employed and various statistics and econometric procedures were conducted which revealed that:

1. External Audit Firm Type has a statistically significant and positive relationship with corporate income smoothing practices of listed non-financial firms in selected Sub-Saharan African economies during the period under consideration.
2. External Audit Delay has no statistically significant relationship with corporate income smoothing practices of listed non-financial firms in selected Sub-Saharan African economies during the period under investigation.
3. External Audit Fee has a statistically significant and negative relationship with corporate income smoothing practices of listed non-financial firms in selected Sub-Saharan African economies during the period under review.
4. External Audit Tenure has a statistically significant and negative relationship with corporate income smoothing practices of listed non-financial firms in selected Sub-Saharan African economies during the period under discussion.
5. Joint Audit Practices has no statistically significant relationship with corporate income smoothing practices in selected Sub-Saharan African economies during the period under study.

5.2 Conclusion

The widespread failures in financial disclosures have created the need and urgency to improve financial information quality. Consequently, the factors which might influence the occurrence of corporate income smoothing practices have been an intense and inconclusive area of research and thus have provided an interesting issue of discourse. These factors have been identified to be both exogenous and endogenous to the firms especially in the six selected Sub-Saharan African economies under study. Based on review of related literature and propelled by the gaps in the literature, five factors (exogenous and endogenous) were identified and framed as hypotheses which were tested in this study.

In general, the study observed that corporate income smoothing practices are prevalent in all the selected six economies of Sub-Sahara Africa which were considered in this study. It seems clear that except for the variables of external audit report lag and joint audit practices, all other variables of interest do significantly and positively or negatively relate with corporate income smoothing practices of all the selected six economies of Sub-Sahara Africa during the period under review.

Interestingly the variable of external audit firm type did not meet apriori expectation suggesting that the services of Big Four audit firms does not truly constrain earnings smoothing practices especially for the six selected economies within Sub-Saharan Africa. This outcome is likely, noting that non-financial firms in Sub-Saharan African region tend to operate audit environments different from that of other developed countries such as the US and the UK where there are greater litigation risks and stricter audit environment relative to Sub-Saharan African countries (Kimea, Mkhize, & Maama, 2023). Further, audit methodologies and procedures may not be designed to effectively detect corporate income smoothing practices, especially if audit firms are not keeping up with evolving accounting practices and financial engineering techniques. Therefore, the theory of audit quality in mitigating earnings smoothing practices may not always be valid in Sub-Saharan Africa especially in the selected six economies under study.

5.3 Recommendations

Particularly, pertaining to audit firm type variable, which did not meet apriori expectations, is an indication that Big Four external auditors in Sub-Sahara African countries look the other way from the practice of corporate income smoothing practices hence go about their own interests and not necessarily those of the principal. This practice is condemnable as it erodes the quality of financial reports which goes a long way to destroy the value of the firm. To this end, and due to the empirical evidence of widespread corporate income smoothing practices in all the six countries of interest, this study recommended that:

Regulators of the audit market should reduce the over concentration of Big Four audit firms in Sub-Saharan Africa economies by enacting policies that will encourage second tier audit firms in the African Stock Exchanges to step up the quality of their audit services to compete favorably with their Big Four counterparts. Regulators of the audit environment must strengthen enforcement mechanisms and develop rules and regulations that constrain corporate income smoothing practices of listed non-financial firms in Sub-Saharan Africa.

More specifically, this study recommended that Companies and Allied Matters Acts (which is one instrument for audit regulation in Nigeria, and all other similar Acts in the chosen study countries) should be regularly reviewed and updated so that stiffer penalty is melted out to erring external audit firms. Further, non-financial listed firms in Sub-Saharan Africa region must ensure that the external auditors' whom they engage are credible and have a track record of delivering reports that show the actual and fair view of economic and business transactions of the firm.

Regulators of the audit environment across Sub-Saharan Africa countries of interest should strengthen enforcement mechanisms and develop rules and regulations that constrain corporate income smoothing practices of listed non-financial firms through incentives such as subscribing to higher fees for external auditors to enable them deliver higher quality audit services. Adopting competitive audit fee structures that align with the complexity and risk profile of their operations should be considered.

Concerning the variable of external audit report lag, and observing that the time elapsed between the end of a company's fiscal year end and the issuance of its audited financial statements, including the auditor's report aimed at ensuring external audit quality has no statistically significant effect on corporate income smoothing practices across all six countries of interest, the study recommended that external audit quality policies pitched towards the direction of audit report lag in checkmating corporate income smoothing activities particularly in Sub-Sahara African economies under study should be less prioritized.

The finding that external audit tenure significantly reduces corporate income smoothing practices among listed non-financial firms in Sub-Saharan Africa is promising. It suggests that audit tenure system can be an effective strategy for improving external audit quality and curbing corporate income smoothing practices among the six Sub-Saharan Africa countries under study in line with the Economic Consequences Theory which sternly cautions managers of listed non-financial firms in Sub-Saharan African economies against the negative consequences of corporate income smoothing practices such as loss of investor trust and confidence, higher borrowing costs, regulatory scrutiny and damage to firm's reputation.

However, to enhance this, the present study recommended that regulatory authorities in each of the countries (Nigeria, Ghana, Kenya, Zimbabwe, South Africa, and Tanzania) should collaborate to develop clear and standardized guidelines for mandatory audit firm tenure. These guidelines should specify the duration of audit firm tenure (maximum of nine years per global standard) and outline the procedures and requirements for transitioning from one audit firm to another. Monitoring compliance with audit tenure policies should be established and penalties enforced for non-compliance. Further, regulatory authorities should conduct regular audits to ensure that firms adhere to the audit tenure requirements.

Pertaining to the variable of joint audit practices, and noting that the practice of joint auditing for the purpose of providing specialized external audit services has no statistically significant effect on corporate income smoothing practices across all six Sub-Saharan Africa countries of interest, the study recommended that external audit quality policy issues geared towards the direction of joint audit practice in checkmating corporate income smoothing practices should be less prioritized.

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