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Does Internal Audit Functions Effectiveness influence External Auditors' Reliance on Internal Audit Work?

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Abstract: *This study examines the influence of internal audit function effectiveness on the extent to which external auditors rely on internal audit function work. A sample of 100 senior external auditors of Tanzanian-listed companies was purposively selected to provide the data. A questionnaire was employed to collect the data which were then analysed using a Partial Least Square Structural Equation Modelling. The result shows that internal audit function effectiveness has a significant positive effect on the extent of external auditors' reliance on internal audit function work. This suggests that external auditors adjust their audit efforts in response to the effectiveness of the internal audit function, consistent with the audit risk model. The result contributes a new dimension, the internal audit function effectiveness and reliance, to the audit risk model. The result has practical implications for clients and external auditors looking to obtain a cost-effective audit of financial statements, by recognising the impact of internal audit functions on external audits.*

Keywords: *Audit Risk Model, Internal Audit function effectiveness, External auditors' reliance, External auditors' audit effort, Dar es Salaam Stock listed companies.*

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1. Introduction

Increase in size and complexity of the entities and the reforms that happened in the wake of accounting scandals in the 2000s have elevated the role of the internal audit function (IAF) in corporate governance (Schneider, 2003; Arens et al., 2014). Apart from performing their traditional role of improving the controls, today, IAFs evaluate and improve the governance and risk management processes (Azad, 2017). As a result, regulators in the world have increased the involvement of IAFs in the controls over financial reporting. The Sarbanes-Oxley Act enacted in the United States of America as a response to accounting scandals, for instance, has reinforced the participation of IAF in financial reporting (Desai et al., 2010; Soh & Martinov-Bennie, 2011). Specifically, Section 404 of the Act requires management to evaluate the design and operation, and report on the effectiveness of its internal

control over financial reporting and incorporated it into the annual reports. It also requires external auditors (EAs) to evaluate management's assessment of internal controls and to issue a report thereon. Similarly, inspired by international trends on strengthening corporate governance, African countries' regulators, for instance in Tunisia (Oussii & Taktak, 2018) and Tanzania (CMSA, 2002), have also mandated companies to have effective IAFs in their corporate governance practices. As a consequence, the capabilities of the IAFs have been deemed to increase.

Due to the increase in the capabilities of IAFs, there has been increasing emphasis on the relationship between the IAFs and EAs, in form of EAs' reliance on IAFs (Munro & Stewart, 2011). The literature argues that, internal auditors and EAs have some equal audit procedures (Fowzia, 2010). More importantly, internal auditors have a better understanding of the company's operations, risks and internal controls (Schneider, 2009; Mihret & Admassu, 2011). Thus, consistent with the audit risk model view, chances exist for EAs to rely on IAFs and reduce the repetition of work (Azad, 2017). Hayes et al. (2005) state that the rationale for EAs relying on the client's effective controls is to enhance external audit efficiency, as EAs are likely to perform less substantive tests to obtain sufficient audit evidence. Moreover, EAs' reliance on IAFs adds value through audit fee reduction (Azad, 2017) and can fasten audit reports production (Pizzini et al., 2015; Oussii & Taktak, 2018). Similar to empirical evidence, global audit standard setters have continued to pronounce that EAs can rely on IAFs to achieve audit efficiency and obtain valuable information that is likely to affect the EAs' work (IAASB, 2014a,b; AICPA, 2014; PCAOB, 2016).

Though EAs can rely on the IAFs, the IAFs need to be effective (Mihret & Admassu, 2011; Alsukker, 2014). IAFs can be deemed to be effective if they can achieve their main roles (Pickett, 2011). According to Dellai and Omri (2016), IAFs are effective if they can improve, among others, the internal control, risk management and corporate governance processes. Although management establishes the IAFs, their attributes vary widely and depend on the entity's needs (Azad, 2017). This suggests that the IAFs' effectiveness can also vary. In Tanzania, the Capital Market and Security Authority (CMSA) requires the Tanzanian listed companies to have effective IAFs (CMSA, 2002). Despite this requirement, however, it remains unrevealed whether the IAFs in these companies achieve their objectives and are effective to guarantee reliance.

Studies (Hogan & Wilkins, 2008; Pizzini et al., 2015) contend that EAs became more sensitive to risk after the accounting scandals of the 2000s. As such, gathering sufficient and suitable audit evidence is crucial for the appropriate opinion on the

fairness and truthiness of financial reports. Altintas (2010) highlights that, EAs use the audit risk model to determine the amount of evidence. This amount of audit evidence depends on the detection risk, which also determines the effort that EAs need to devote to their work. Moreover, Arens et al. (2014) highlight that EAs rely on IAF when using the audit risk model to evaluate the client's effectiveness of controls. They reduce the level of control risk when the IAF is effective and thereby reduce substantive tests. Conversely, it can be expected that EAs will increase control risk levels in case of weak IAF and increase substantive tests.

Previous studies that have examined the relationship between audit risk factors and EAs' audit efforts found varied evidence on whether EAs behave according to the audit risk model. These studies have assumed that EAs' reliance on IAF work can be sensed in other variables, so proxying audit effort with various factors, such as audit fee, days, hours, etc. For instance, Pizzini et al. (2015) find that EAs' audit effort, as measured by audit delays in days, is negatively related to the control risk, measured by the IAF quality, similar to the audit risk model. In the same way, but proxying audit efforts with audit fees, Hogan and Wilkins (2008) confirm the audit risk model. However, other studies such as ones by Felix et al. (2001) and Hackenbrack and Knechel (1997), which used audit fees and labour hours, respectively, did not establish the audit risk model.

Theoretical literature (e.g. Hayes et al., 2005; Arens et al., 2014) has long recognised the effect of IAFs on enhancing the internal controls and the impact that the controls have on EAs' work (or effort). Moreover, studies, for instance, Dellai and Omri (2016), have documented that effective IAFs can ensure the controls are operating effectively. Deductively, this suggests that a positive relationship between IAFs' effectiveness and the extent of EAs' reliance on IAF work exists. Nevertheless, there is little evidence that provides a direct link between IAF effectiveness and EAs' audit effort in terms of reliance. This study's objective is therefore to investigate the relationship between IAF effectiveness and the extent of EAs' reliance on IAF work. Saying it differently, the study examines whether EAs change their reliance on IAF in response to IAF effectiveness. The rest of this paper is presented as follows. Next, the theoretical literature supporting this study and empirical literature relating to the study's variables are presented. Then, section three is the methodology, and section four presents the results and discussion. The paper ends with a conclusion, contribution and implication of the study.

2. Literature

Theoretical Literature

Studies have employed the audit risk model to explain the effort that the EAs devote in response to internal control effectiveness assessment (Hogan & Wilkins, 2008; Pizzini et al., 2015). The model states that: Audit Risk = Inherent Risk × Control Risk × Detection Risk. In this model, both inherent risk and control risk form the clients' risks. EAs cannot control them for the ongoing audit as omissions are already in the financial statements, they only document them based on the assessment of the client. Detection risk measures the effort of EAs (or reliance). To maintain acceptable audit risk in the face of high client risk, EAs need to reduce detection risk. Detection risk is reduced by increasing substantive testing samples. As such, more effort is required to ensure omissions are not in the financial statements (Hayes et al., 2005). Arens et al. (2014) highlight that EAs rely on IAF when using the audit risk model to evaluate the effectiveness of controls of the client. EAs reduce the level of control risk when the IAF is effective and thereby reduce substantive tests. Also, EAs increase the Control Risk level when the IAF is weak and increase substantive tests. Hence, the model explains the influence of IAF effectiveness on the extent of EAs' reliance on IAF work.

Empirical Literature and Hypotheses Development

The extent of EAs' Reliance on IAF work

Alsukker (2014) defines reliance as a state of dependence on somebody or something. Thus, EAs' reliance on IAF means depending on or using internal auditors' work (IAASB, 2014a). IAFs can influence the EAs' work in two ways. First, IAF is a part of internal controls; it affects the effectiveness of the controls and hence the control risk and the EAs' work. Second, EAs can rely on work already performed by IAFs by reading the report, or using internal auditors as assistants (Schneider, 2009; Pizzini et al., 2015). For instance, IAFs may have already evaluated the design of controls (Azad, 2017), tested the controls (Schneider, 2009), and performed substantive tests (Ramasawmy & Ramen, 2012), and EAs take these works as theirs.

Although some literature suggests EAs can rely on audit tests already performed by the IAF, other indicates that EAs' audit procedures are risky and the EAs cannot rely on them. Instead, EAs prefer to rely on low-risk procedures (Azad, 2017; Munro & Stewart, 2011), even though these low-risk procedures add little value to the organisation (Bame-Aldred et al., 2013). This suggests that the EAs' reliance on IAF work can be a trade-off between AR and benefits.

Effectiveness of IAF and the Extent of EAs' reliance on IAF work

Drucker (1974) defines effectiveness as doing the right things. Also, Alsukker (2014) defines IAF effectiveness as the degree to which the objectives of IAF are correctly attained. Generally, the goals of the IAFs can be derived from the current definition, which describes it as a unit that performs assurance and consulting activities designed to evaluate and improve the effectiveness of governance, risk management and internal control processes (IAASB, 2014a). In this case, IAFs are expected to be effective if they correctly achieve these roles. As the client's internal controls influence the EAs' work, EAs assess the control environment, which includes the IAF's effectiveness. This assessment determines the audit procedures required to achieve an acceptable audit risk (AICPA, 2014).

Extant studies that have attempted to investigate the audit efforts regarding whether EAs really change the audit tests in response to audit risk have employed various factors. Similarly, the factors that influence the EAs' audit efforts have also varied across studies. Despite the theoretical literature implicitly implying this relation (see Hayes et al., 2005; Hall, 2011; Arens et al., 2014; Johnstone et al., 2014), studies that link the relationship between IAF effectiveness and EAs' reliance have not come across this study.

Pizzini et al. (2015) examined the association between the control risk, as measured by IAF quality and EAs' effort, measured by audit delays. Analysing data from 216 firms that responded to the Institute of Internal Auditor's (IIA) Global Audit Information Network (GIN) survey, their results revealed that IAF quality negatively correlated with audit delays. Thus, the IAF quality influences the control risk and EAs assessed the control risk to adjust the audit procedure. Pizzini et al. concluded that EAs reduce audit effort in response to control risk reduction due to greater IAF quality, consistent with the audit risk model.

In another study, Hogan and Wilkins (2008) asked themselves whether audit fees could increase due to weaknesses in internal controls. Using the audit risk model framework and proxying EAs' audit efforts with audit fees, they investigated the relationship between EAs' audit efforts and internal control deficiencies. Results indicated that EAs perform more substantive tests when their clients have internal control shortages. They concluded that EAs respond to higher control risk by increasing their audit effort to maintain the audit risk acceptable, consistent with the audit risk model.

O'Keefe et al. (1994) examined the production of audit services by modelling and testing EAs' production problems. They specified audit effort among the inputs of

the model and proxied it using labour hours. They assumed that the client characteristics, including internal controls, affect the EAs' labour hours. Empirically and specifically, they examined the influence of internal controls on EAs' audit efforts. Results showed that internal control effectiveness was not associated with the audit effort, suggesting that EAs do not behave according to the audit risk model.

Hackenbrack and Knechel (1997) examined the relationship between auditors' resource allocations during audit engagements and engagement characteristics. They used grade labour hours (for partners, and managers) charged to activities, such as planning and control evaluation, to measure resources. Further, the engagement characteristics examined, among others, included the degree of control reliance. More specifically, they investigated the correlation between resources and internal control reliance. Their results indicated there was no evidence of an association between control reliance and audit effort that was caused by the substitution of internal control evaluation and testing for substantive procedures. This study implies that EAs did not follow the audit risk model.

Similar to Pizzini et al. (2015)'s study, Prawitt et al., (2011) analysed IIA's GIN survey data to establish whether the IAF contribution influences audit fees. They investigated the association between the time spent by internal auditors on activities of financial nature and external audit fees. They argued that IAF work could impact the substantive procedures of EAs if it has performed procedures relevant to the external audit, such as confirming receivables. However, results indicated that no relation exists between the IAF work and external audit fees.

Overall, studies suggest that IAF effectiveness influences the extent the EAs rely on IAFs. Specifically, Pizzini et al. (2015) indicate that IAF effectiveness is positively (negatively) related to internal control effectiveness (control risk). Similarly, Hogan and Wilkins (2008) document that higher control risk increases the EAs' audit effort. However, studies (Hackenbrack & Knechel, 1997; Prawitt et al., 2011) have also revealed no relationship between internal control effectiveness and EAs' audit effort. Based on these pieces of evidence, this study hypothesised that:

H: IAF effectiveness positively influences the extent of EAs' reliance on IAF work.

3. Research Methods

Population, Sample and Data Collection

The population of this study was the external auditors from audit firms that were identified to audit the Tanzanian listed companies. These firms were identified

through annual reports available on the Dar es Salaam Stock Exchange (DSE) website. However, the total population was undefined due to a lack of a sampling frame because audit firms are restricted to provide their information. As such, a purposive selection of sample was appropriate, where the researcher used judgement to choose useful cases to achieve the objectives (Saunders et al., 2009). Purposively, the participants are identified and requested to participate until enough sample is obtained (Johnson & Christensen, 2014). As the current study aimed to investigate issues that can influence the audit process, a goal was to find experts who decide on the audit approach. External auditors with high seniority were considered suitable, similar to Haron et al. (2004) and Alsukker (2014). A pre-survey to establish the possible number of senior external auditors who can participate in the study suggested a sample of 125. A survey strategy was used to collect the actual data based on its ability to collect data more quickly (Singleton & Straits, 2009). In the audit firm, the questionnaire copies were delivered to a contact person. The contact person was asked to identify and give a copy to the right participants: partner, manager and senior auditor. The filled out questionnaire copies were returned to the researcher via email or the contact person. A total of 125 questionnaire copies were distributed, but 105 were returned. The filled out questionnaire copies were checked to ensure the right participants' participation and no missing information. Out of the returned questionnaire copies, 100 were valid. In partial least square-structural equation modelling (PLS-SEM) analysis, a sample size should be greater than 10 times the number of paths in the structural model (Hair et al., 2017; Kock & Hadaya, 2018). The model for this study had one path (Figure 1), which shows the sample size was sufficient for analysis.

Profile of Respondents

Table 1 indicates the respondents' descriptive statistics. The statistics show that the male EAs dominated the sample of the study; males were 68%, and the rest (32%) were female. Results indicate that most of the participants were senior auditors (62%), followed by audit managers, 33%. The rest were in the group of audit partners, at 5%. This result indicates that the respondents had the appropriate seniority requirements and were expected to decide about the audit approach during an engagement. The qualifications of respondents included a bachelor's degree, master's degree and Doctoral degree. In addition to the degree, many respondents possessed professional qualifications (CPA, ACCA). Results showed that the majority of respondents, 84%, had both bachelor's degrees and professional qualifications. However, it was surprising that some respondents (13%) had a bachelor's degree alone without professional qualifications despite the law in Tanzania requiring every EA to have professional qualifications. Further, some

participants had master's degrees and professional qualifications, at 2% and others had both a PhD and professional qualifications, at 1%.

Table 1: Profile of Respondents

Variable	Classification	Frequency	Percentage (%)
Gender	Male	68	68
	Female	32	32
Total		100	100
Job Position	Audit Partners	5	5
	Audit Managers	33	33
	Senior Auditors	62	62
Total		100	100
Qualification	PhD and professional qualification (CPA, ACCA)	1	1
	Master's Degree and professional qualification (CPA, ACCA)	2	2
	Bachelor's Degree and Professional (CPA, ACCA)	84	84
	Bachelor Degree alone	13	13
Total		100	100
Experience	Under 2 years	0	0
	From 2 to 5 years	44	44
	From 6 to 10 years	35	35
	Above 10 years	21	21
Total		100	100

As for the experience, results show that no one had less than 2 years of experience, 44% had 2 to 5 years; 35% had 6 to 10 years; and 21% had more than 10 years of experience. These statistics show that respondents had the appropriate experience and skills to understand the subject matter of the study. With such experience, a high level of validity and consistency in the respondents' replies was expected. Overall, the respondents' characteristics suggest that they were senior EAs in the

audit firms. Further, they were sufficiently qualified and experienced to judge the matters for this study, and they also meet the objective of this study.

Measurement of Variables

The study's variables were captured using a 5-point Likert scale, strongly disagree (1), disagree (2), neutral (3), agree (4), and strongly agree (5), due to its ability to simplify the process of responding (Kothari, 2004). These variables were adapted from earlier studies. The dependent variable, the extent of external auditors' reliance on the internal audit function (REL) was measured using five audit procedures from Azad (2017). These procedures are tests of balances, tests of transactions, design of controls evaluation, tests of controls and substantive tests that involve narrow judgement. Following a debate in the literature on how to measure the internal audit function effectiveness (EFF), the independent variable was measured using three items from Dellai and Omri (2016). These items are connected to improving the governance process, risk management processes and internal control processes.

Screening for Common Method Variance

The consequences of common method bias can be damaging to a study's validity. Podsakoff et al. (2003) suggest that it can be addressed using statistical methods. As such, common method variance was checked. Harman's single-factor test was evaluated to confirm if it was lower than 50% of the total variance (Podsakoff et al., 2012). The result indicated a 26% variance. This means that common method bias had no impact on the study.

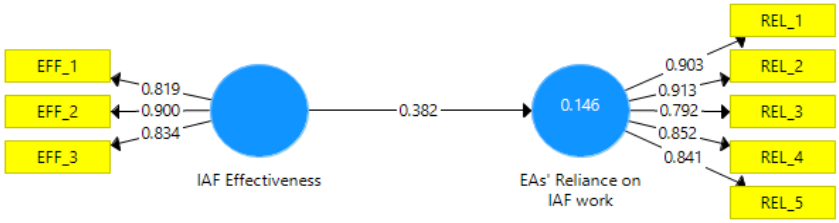
4. Results

A Partial Least Square-Structural Equation Modelling (PLS-SEM), aided by SmartPLS 3.0 software, was used to examine the relationship between variables. The PLS-SEM can simultaneously evaluate the association of variables, both constructs and indicators (Nitzl et al., 2016; Hair et al., 2017). Moreover, evaluating the validity and reliability of the variables was necessary to ensure that all indicators represented the intended constructs. In PLS-SEM, the study can determine the variables' validity and reliability by assessing the measurement (outer) model (Hair et al., 2019). Before the assessment, however, consideration has to be made whether the indicator variables are reflective or formative to a construct (Garson, 2016). Regarding this study, all indicators were considered to be caused by the constructs, therefore, treated as reflective.

Measurement Model

The measurement model was assessed using construct reliability and construct validity. Hair et al. (2017) recommend a minimum indicator loading of 0.708. From Figure 1, it can be seen that the indicators' loading ranged from 0.792 to 0.913. These results suggest that the indicators of the constructs were acceptable to be included in the next step of the data analysis.

Figure 1: Measurement Model



Reliability of variables is assessed using composite reliability (CR). Table 2 indicates the results of CR values; the CR for the EFF was 0.888 and that of REL was 0.935. These results exceeded the recommended CR minimum value of 0.700 (Hair et al., 2019). They indicate good internal consistency among observed variables in measuring each construct; hence the construct reliability was established.

Table 2: Construct Reliability and Validity

Construct	CR	AVE
EFF	0.888	0.725
REL	0.935	0.742

Convergent and discriminant validities are employed to evaluate the construct validity. The convergent validity is assessed using the Average Variance Extracted (AVE). The results in Table 2 show that the AVE values for the constructs range between 0.513 and 0.649. These results are above the recommended AVE values of at least 0.500 (Hair et al., 2017). This suggests that the observed variables closely measured the intended construct, thus, the convergent validity was established. Moreover, the discriminant validity was assessed using the heterotrait-monotrait (HTMT) ratio. The results in Table 3 indicate HTMT ratio of correlations was 0.420, which is less than the cut-off of 1.00 (Hair et al., 2020). These results indicate good discriminant validity meaning that the two constructs differed from each other.

Table 3: Discriminant Validity: Heterotrait-Monotrait Ratio

	EFF
REL	0.420

Descriptive Statistics

Table 4 reveals the descriptive statistics for the perceived effectiveness of IAF and the extent of EAs' reliance on IAF work. The mean value of perceived EAs' reliance on IAF work (2.570) was relatively low, while the IAF effectiveness was average at 3.650. These results show the level of perception of EAs regarding these constructs in the Dar es Salaam Stock Exchange-listed companies. On the other side, standard deviations were below 1.00 for the constructs, indicating consensus among the respondents.

Table 4: Descriptive Statistics

Construct	Mean	Standard deviation
EFF	3.650	0.796
REL	2.570	0.970

Structural Model

The structural model was assessed to determine its capabilities to predict target constructs as an alternative to measuring the goodness of fit (Hair et al., 2017). The model's capability to predict the intended constructs can be examined using the coefficients of determination (R^2), which evaluates the model's accuracy to predict the dependent variables and represents the combined effect of independent variables in a dependent variable. Results in Table 5 indicate that the Effectiveness of IAF (EFF) had the R^2 value of 0.146. This means that 14.6% of the extent of EAs' reliance on IAF work is explained by IAF effectiveness. R^2 above 13% can be interpreted as a medium, according to Cohen (1988). Moreover, the effect size (f^2) of the hypothesised relationships was computed; it confirms the significant effect of an exogenous construct on an endogenous latent construct. For the approximation of the effect strength of the exogenous construct, f^2 values of 0.02, 0.15, and 0.35 are regarded as small, medium and large, respectively (Hair et al., 2020). The results of this study in Table 5 indicated an f^2 value of 0.171, suggesting that EFF had a significant effect on REL. Thus, the capability of the model to predict the endogenous construct was established.

Table 5: Model Capability Assessment

	R Square	R Square Adj.	f square
REL	0.146	0.137	0.171

Hypotheses Test Results

The study had one hypothesis. Figure 2 indicates the path coefficient results along with the p-values in brackets. The statistical test results in Table 6 provide the

values of the parameters, the Path Coefficients (β), the t-values and the p-values that were used to decide the significance of the hypothesis.

Table 6: Hypotheses Testing Results

Hypothesis	Path Coefficients β	t values (1.96)	p values (0.05)
H: EFF → REL	0.382	5.242	0.000

Figure 2: Structural Model

As indicated in Table 6, the statistical test revealed a strong positive path (EFF → REL) coefficient (β) = 0.382, t-value = 5.242 and p-value = 0.000. Consistent with the prediction, the result suggested that the IAF effectiveness had a significant positive influence on EAs' reliance on the IAF work. Putting it differently, the control risk was negatively related to the extent of EAs' reliance on the IAF work. This result means that EAs change their audit efforts, as measured by the actual reliance, in response to changes in control risk, measured by the IAF effectiveness. Putting things into context, as reported by descriptive of variables, EAs perceived an average level of IAF effectiveness in listed companies. It was, therefore, expected that EAs would assess control risk relatively high and therefore reduce reliance, which was the case. This finding is consistent with the audit risk model and provides evidence that EAs in the listed companies are sensitive to audit failures. Previous tests of the audit risk model provide mixed evidence about the negative association between EAs' audit efforts and control risk. Studies (O'Keefe et al., 1994; Hackenbrack & Knechel, 1997), for instance, documented no relation between internal control dependence and EAs' audit effort, as measured by audit labour hours. On the contrary, studies (Hogan & Wilkins, 2008; Prawitt et al., 2011; Pizzini et al., 2015) revealed that EAs put out more effort, as measured by audit fees and audit delays, when the clients have weak internal controls. Schneider (1985)'s study also reported that reliance on IAF work declines as the strength of IAF weakened.

5. Conclusion

This study investigates the influence of IAF effectiveness on EAs' reliance on IAF work in Tanzanian listed companies. Results showed that the extent to which the

EAs rely on IAF is related to IAF effectiveness. Depending on the extent the reliance on IAF can proxy the EAs' audit effort, the result of this study suggests that EAs adjust their effort in response to the effectiveness of IAF, consistent with the audit risk model.

This study contributes to the auditing literature in the following ways. First, while existing studies proxy audit efforts with factors such as audit fees, this study adds a new dimension, the EAs' reliance on IAF work, measured by audit tests. Audit tests such as substantive tests and test control both reduce audit risk. Therefore, they reduce the EAs' work and effort. Second, this study extends past research that investigated the influence of IAF on EAs' work. Lastly, it contributes to the understanding of the behaviour of EAs toward audit risk. The result revealed that EAs are risk-averse; they increase (or reduce) their audit effort in response to low or high effectiveness of IAF.

The results of the study have practical implications for clients and EAs looking to obtain a cost-effective audit of financial statements, by recognising the impact of IAFs on external audits. The result has implications for the regulatory authorities, the CMSA and DSE. These regulators guide good corporate governance, insisting on effective internal control systems and close relationships between EAs and internal auditors during the audit of financial statements in listed companies. They may rethink how to closely monitor the implementation of the guidelines they set to improve the IAF effectiveness and eventually increase trustfulness in terms of reliance.

This study employed a purposive sampling method to select the respondents, the EAs. The study chose listed companies because it needed respondents with IAF. EAs were selected depending on whether they were partners, managers and senior auditors and who had audited listed companies. According to Johnson and Christensen (2014), a purposively chosen sample can limit generalising from a sample to a population.

This study has examined the EAs' perceptions about the impact of IAF effectiveness on EAs' reliance on IAF, focusing only on EAs of Tanzanian listed companies. Future studies could be carried out using a larger sample from other types of organizations.

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