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Effects of Internal Control Weaknesses, Financial Independence and Size on Quality of Financial Statements in the Tanzanian Local Government Authorities

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Abstract

This study examines the relationship between internal control weaknesses (ICWs), independence, and size on the quality of financial statements of local government authorities (LGAs) in Tanzania. The analysis is based on data from a large sample of LGAs' financial statements for four years from FY 2010/11 to FY 2013/14. The study employed logistic regression to examine whether ICWs (fraud prevention plan, risk management, accounting system, and IT controls), financial independence, and size of LGAs determine financial statement errors/restatements in the LGAs. The study shows that large and financially dependent LGAs with accounting system ICWs are more likely to have lower financial statement quality. However, other ICWs (IT controls, fraud prevention, and risk management) results were insignificant. These results may be attributed to the level of compliance and implementation of the parent ministry's directives among LGAs. Therefore, practitioners and policymakers should ensure that LGAs not only adopt directives/policies but also fully comply and implement with their requirements as well as build financial management capacity to increase LGAs' financial independence.

Keywords: Internal Control Weaknesses, Financial Independence, Local Government, Quality of Financial Statement

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Introduction

The main purpose of financial reporting is to produce financial information or financial statements to users that are required to have a certain level of standard, as defined by the International Accounting Standard Board (IASB). IASB (2018) identified two fundamental qualitative characteristics of financial information: relevance and faithful representation (IASB, 2018). For financial information to be relevant, it should help users make better decisions, while faithful representation requires the financial information to be complete, neutral, and free from error (IASB, 2018). Furthermore, financial statement quality can be enhanced by being timely, understandable, verifiable, and comparable (IASB, 2018).

The quality of financial statements is likely to be affected by the presence of internal control weaknesses (ICWs) in an organisation (Cheng *et al.*, 2018). In fact, ICWs contribute to inefficiency in operations and waste or loss of public resources (Ahadiat, 2013; Cheng *et al.*, 2018; Feng *et al.*, 2015) as well as fraudulent financial reporting and financial statement errors (Doyle *et al.*, 2007b). In contrast, strong internal controls assures the quality of financial statements (Ji *et al.*, 2017), and contribute to achieving organizational objectives and ensuring efficient use of scarce resources (Fjeldstad *et al.*, 2004). In addition, it has the potential to enhance the efficient utilisation of the limited resources in the delivery of public services (Ahadiat, 2013; Ong'unya & Abbey, 2019). Therefore, an assessment of ICWs on the quality of financial statements is paramount.

Based on a review of the existing literature, relatively little empirical research has been conducted on the government context on the determinants of the quality of financial statements. While these studies pinpoint issues related to ICWs, size, and financial independence (Julita & Susilatri, 2018), a detailed assessment of their effects on the quality of financial statements is lacking. Therefore, this study seeks to address this gap in the extant literature by examining the effects of ICWs, size, and financial independence on the quality of financial statements in the Tanzanian Local Government Authorities (LGAs).

To explore the relationship between the quality of financial statements and the factors contributing to it, the empirical analysis in this study uses a total of 565 observations from the Financial Years (FY) 2010/11 to 2013/14 and employs logistic regression. Therefore, this study examines whether fraud prevention plans, risk management, accounting system, IT controls, size, and independence are more likely to increase the likelihood of financial statement error/restatements. These findings could contribute to our understanding of the potential effects of the factors that contribute to the quality of financial statements in the context of emerging economies in Sub-Saharan Africa which receive less attention in the overall extant literature. The paper begins by reviewing prior literature on the ICWs, size, independence, and quality of financial statement literature. The methodological approach employed in this study is then explained. The results and discussion are presented before drawing conclusions.

Literature

Quality of Financial Statement

The primary purpose of producing a financial statement is to provide users with useful information for decision making (Agustiningsih *et al.*, 2020). According to the IASB (2018),

to produce useful financial information, the financial statement should have the following qualitative attributes: the information should be relevant and faithfully representation, reliable, timely, comparable, verifiable, and understandable. Otherwise, the users will make wrong decisions as they are based on information that is not of good quality (IASB, 2018).

Several studies have measured the quality of financial statements directly or indirectly. For instance, Beest *et al.* (2009) directly used qualitative characteristics to measure the quality of financial statements. However, the direct method requires full disclosure, and even when met, it does not reflect the quality of financial statements (Laupe *et al.*, 2018). As a result, several other studies prefer to use indirect methods that focus on specific attributes, such as earnings management (Dechow *et al.*, 1995), internal control (Cavélius, 2011) and restatement (Baber *et al.*, 2013; Rich & Zhang, 2016) to measure the quality of financial statements.

This study uses financial restatement/error to assess the quality of financial statements which has also been used in previous studies like (Baber *et al.*, 2013; Huang *et al.*, 2012; Romanus *et al.*, 2008). Financial restatement is acknowledged by previous financial statement errors or misstatements (Abbott *et al.*, 2004). It may involve either restatements that correct unintentional errors or intentional misstatements (Hammersley *et al.*, 2008). Although financial restatement may not have an impact on the quality of financial statements, it is a signal of inappropriate accounting and, therefore, a relevant measure of financial statement quality (Huang *et al.*, 2012).

Internal Control and Quality of Financial Statements in Private Settings

The internal control system is a crucial element in any organisation (IFAC, 2012). COSO (2013) defines internal control as “a process, effected by an entity's board of directors, management, and other personnel, designed to provide reasonable assurance regarding the achievement of objectives relating to operations, reporting, and compliance”. According to COSO, the main objective of internal control is to ensure that an organisation is run effectively and efficiently, financial reporting is timely and reliable, and an organisation is operated in accordance with the relevant rules, laws, and regulations (Ramdany, 2015).

Organisations in different countries across the world, including Tanzania, have adopted the COSO framework as the foundation for their internal controls. The auditing profession embraced the framework as a benchmark against which internal controls were evaluated (COSO, 2013). In 2013, COSO issued an updated integrated internal-control framework with an additional explanation of the five internal control components, namely control environment, risk assessment, control activities, information and communication, and monitoring. These COSO internal control components are interrelated (COSO, 2013). For instance, control activity involves control of the activities of the control environment, risk assessment, information and communication, and monitoring activities (Ramdany, 2015). The internal control environment refers to the attitude, consciousness, and actions of the management and employees regarding internal controls and their significance in the entity. It provides the foundation for all other components of internal control and includes integrity, ethical values, and the competence of personnel (Muskanan, 2014). On the other hand, risk assessment as an internal control component involves the identification and evaluation of relevant internal and external risks that might affect the achievement of the organisation's objectives as well as the establishment of the manner of managing them (COSO, 2013). In

addition, control activities are the policies and procedures established by the management to ensure that necessary actions are taken to address the risks involved in the attainment of an organisation's objectives (COSO, 2013). Furthermore, information and communication involves the accumulation and dissemination of reliable, well-timed, and relevant information from both internal and external sources to those who need it (COSO, 2013). Finally, monitoring, the last component of COSO internal control, involves the process of evaluating the adequacy and quality of internal control over time (COSO, 2013).

Most prior research in this area tends to focus on private organisations located in developed countries, such for example (Donelson *et al.*, 2017; Hammersley *et al.*, 2008; Scholz, 2014; Wang, 2013). Few studies conducted in emerging economies concentrate on areas such as the influence of information technology on internal control (Minani, 2013; Nuryanto & Afiah, 2013), and internal control and quality service delivery (Ong'unya & Abbey, 2019). While these studies highlight issues related to ICWs, a detailed assessment of their effects on the quality of financial statements is missing.

Research on internal controls and quality of financial statements in private and public companies has investigated various issues, including quality of accrual reporting (Ashbaugh-Skaife *et al.*, 2008; Doyle *et al.*, 2007a), fraud and fraudulent reporting (Scholz, 2014) and restatements and financial statement errors (Plumlee & Yohn, 2010). Studies indicate that ICWs negatively affect accrual quality. For instance, Doyle *et al.* (2007a) found that companies with ICWs have less reliable accruals quality, and this relationship is driven by the entity. This is attributed to the fact that internal controls vary across industries and organisations (Hermanson *et al.*, 2012). Chan *et al.* (2008) also found that firms with entity-level ICWs have lower earnings quality than firms with account-level ICWs. Ashbaugh-Skaife *et al.* (2008) reported that firms with ICWs have significantly larger positive and larger negative abnormal accruals than firms with strong ICs. Moreover, Chan *et al.* (2008) hold that disclosure of material weaknesses, especially company-level weaknesses, is positively associated with a decline in earnings quality.

Some studies have shown that ICWs increase the likelihood of financial restatements. For example, Ashbaugh-Skaife *et al.* (2008) suggest that ICWs can lead to unintentional errors rather than intentional misstatements. In contrast, Doyle *et al.* (2007b) predict that ICWs have the potential to allow both intentional and unintentional errors in financial statements. On the other hand, Chan *et al.* (2008) provide empirical evidence that firm-level ICWs lead to intentional manipulation. Consequently, this may force firms with material weaknesses to restate their earnings (Ashbaugh-Skaife *et al.*, 2007).

The extent of financial restatements increases for firms with ICWs. Firm-level material weaknesses are more likely to experience higher restatement severity than account-specific material weaknesses (Wang, 2013). In contrast, strong internal controls over financial reporting reduce the likelihood of intentional or unintentional errors in financial statements (DeFond & Jiambalvo, 1991). More specifically, Grant *et al.* (2008) found that firms with weak IT controls are more likely to report accounting errors. In summary, these studies show that both firm-level and account-specific ICWs affect the quality of financial statements.

Internal Control and Quality of Financial Statement in Government Setting

Despite the unique accountability role played by financial statements in government settings, less attention has been directed toward understanding the relationship between ICWs and quality financial statements. Some studies have focused on the overall relationship between internal control and the quality of financial statements. For instance, Ahadiat (2013) examined the quality of internal controls and financial reporting and management in several government agencies in the US. The study found that deficiencies in financial reporting were associated with weaknesses in internal controls in the majority of government agencies. However, the study did not attempt to correlate the weaknesses in the different internal control components with deficiencies in financial statements. Similarly, Dewi *et al.* (2019); Surbakti (2018); Wahyuni *et al.* (2019) found that internal controls positively influence the quality of financial statements. Similar findings were reported by Kewo and Afiah (2017) using survey data from 66 LGAs and found that internal control systems affect the quality of financial statements.

The association between internal controls and the quality of financial statements has been relatively more researched in private firms than in government settings. In particular, after the introduction of regulatory requirements on part of the management to provide reports on the status of internal controls which need to be examined by external auditors (Grant *et al.*, 2008; Wang, 2013). However, in the published literature, there is scant research that addresses the association between the quality of financial statements and internal control components in government settings (Badara & Saidin, 2012).

In addition, most prior studies used primary data and applied univariate tests as the analysis technique. However, most prior studies have been conducted in developed countries such as the US and Europe, and some in Asian countries. Therefore, the context of developing countries, especially African settings, is missing. In response, the present study used secondary data of four (4) years to examine the effect of ICWs, size, and financial independence on the quality of financial statements of the Tanzanian LGAs. Unlike prior studies, this study employed secondary data from CAG reports and multivariate analysis techniques. In addition, prior studies on internal control found that ICWs are positively associated with financial statement errors (Doyle *et al.*, 2007b).

The argument is that internal controls positively influence the quality of financial statements (Dewi *et al.*, 2019; Surbakti, 2018; Wahyuni *et al.*, 2019). ICWs contribute to inefficiency in operations and waste or loss of public resources (Ahadiat, 2013; Cheng *et al.*, 2018; Feng *et al.*, 2015) as well as fraudulent financial reporting and financial statement errors (Doyle *et al.*, 2007b). In contrast, strong internal controls assures the quality of financial statements (Ji *et al.*, 2017), and contribute to achieving organizational objectives and ensuring efficient use of scarce resources (Fjeldstad *et al.*, 2004). Therefore, the following hypotheses are tested in the context of local governments in Tanzania:

H1: ICWs in LGAs positively influence financial restatement / error.

Size and Quality of Financial Statement

Previous studies suggest that the quality of financial statements is associated with size (Al-Dmour *et al.*, 2018) as larger firms have resources that allow them to invest in internal control

structures as well as engage reputable audit firms, thereby producing higher quality financial reports (Huang *et al.*, 2012).

Similarly, Cohen and Kaimenakis (2011) found that the size of LGAs is associated with the comprehensiveness of financial statement disclosure. In other words, the size of municipalities enhances the quality of financial statements. This finding contradicts Agustini *et al.* (2020) who did not find evidence that financial statement disclosures are associated with LGAs size. Another example is Saputro and Achmad (2015) who found that LGAs size is associated with lower financial statement quality when using capital expenditure as a measure of size, as LGAs acquiring large fixed assets are associated with fraud.

Previous studies have used total assets as a measure of organizational size (Jauhari & Dewata, 2019). However, the use of total assets as a measure of organizational size is more common in a private setting (Agustina & Setyaningrum, 2020; Arifin, 2020). However, various measures of size have been employed in a public setting. For instance, Kiswanto *et al.* (2020) argued that capital expenditure is similar to the amount used to acquire fixed assets and, therefore, a more appropriate measure of size (Kiswanto *et al.*, 2020). While Sebayang (2018) argues that the size of LGAs can be assessed by their physical appearance. Therefore, we can say that previous research employed different measures of size in their studies.

The argument presented in the context of local governments is that larger size is associated with low financial statement quality (Kiswanto *et al.*, 2020). In the context of the local government of Tanzania, recurrent expenditure is a better measure of LGAs than capital expenditure, which reflects the extent of service delivery and activities. In addition, capital development expenditure in Tanzania fluctuates as LGAs are required to meet certain criteria to qualify for capital development grants. Therefore, the argument put forward is that LGAs with large size (measured by recurrent expenditure) are more likely to exhibit financial statement error/restatement. Therefore, the following hypothesis is tested in the context of local governments in Tanzania:

H2: The LGA size positively influence financial restatements/error

Financial Independence and Financial Statement Quality

Financial independence is the capacity of LGAs to self-finance their activities without depending on the central government's resources. It is measured by the amount of revenue generated or collected by the total expenditure/revenues (Murdayanti *et al.*, 2016; Saputro & Achmad, 2015; Sebayang, 2018). Siregar and Pratiwi (2017) described that LGAs' financial capacity depends on the amount of revenue collected/generated from its own sources. Similarly, Fjeldstad and Heggstad (2012) argue that LGAs fail to collect their own revenues partly due to poor administrative capacity to assess and enforce payments (Suarjana *et al.*, 2019). The argument presented is that financial independence measured by higher own-source revenue collection may indicate administrative, staff, and supervision capacity of LGAs which exhibit higher financial statement quality. Based on the above arguments, the following hypothesis is proposed:

H3: Financial independence have negative influence on financial restatement/error

Methodology

Data and Sample Selection

The data for analysis were manually collected and obtained from CAG's report on LGA for a period of four years from 2010/11 to 2013/14. General reports are available on the website of the National Audit Office of Tanzania (NAOT) (<https://www.nao.go.tz>). Therefore, data on financial statement errors were only reported for four (4) years making a total sample of 565 observations, as shown in Table I.

Table I: Sample Selection

A: Financial Year	Observations (Number of LGAs)	
2010-11	134	
2011-12	134	
2012-13	139	
2013-14	163	
	570	
<i>Less: LGAs with missing data</i>	5	
Total number of observations	565	

B: LGA Type/status	Observations (% of LGA)	Observations (number of LGA)
City Council	3.2	18
Municipality Council	12.6	71
District Council	78.9	446
Town Council	5.3	30
Total number of firm-year observations	100.0	565

Source: CAG Reports

In general, CAG heads NAOT which is the country's Supreme Audit Institution (SAI). CAG produces six (6) general annual audit reports on local government, central government, public authorities, development projects, performance, and specialised and information systems audits. The LGAs report includes a chapter on internal control in which several internal control (IC) variables are evaluated by the CAG. The evaluated variables include inadequate accounting system/use of manual accounting systems, lack of risk management framework, inadequate information control environment, and lack of documented fraud prevention plan.

Data Analysis

This study used both univariate and multivariate methods to analyse the relationship between ICWs, size, financial independence, and financial statement errors/restatement. The study employed Logistic regression analysis was used to examine whether ICWs (risk management, accounting system, fraud prevention, IT controls), size (recurrent expenditure), and independence (OSR collection) of LGAs determined the presence of financial statement errors. The logistic regression model specifications are as follows:

$$Error = f(ACCSYSTEM, FRAUD, RISKMG, ITCONTROLS, SIZE, INDEP).$$

Where:

ERROR is the amount related to various irregularities such as errors, omissions, understatements, and overstatements of figures; value 1 when an LGA reports a financial statement error/restatement, and zero otherwise.

ITCONTROLS is an IT control environment variable which takes the value of 1 when there is an inadequate IT control environment, and zero otherwise.

RISKMGT is a risk management assessment variable which takes the value of 1 when LGA lacks risk management assessment, and zero otherwise.

FRAUD is a fraud prevention plan variable which takes the value of 1 when an LGA lacks a documented fraud prevention plan and zero otherwise.

ACCSYSTEM is the utilisation of an accounting package which takes the value of 1 when LGA has not fully utilised the accounting package and zero otherwise.

SIZE measured the size of LGAs using the amount of recurrent expenditure scaled by 1 billion.

INDEP is the financial independence of LGAs, measured by the amount of revenue generated or collected divided by total expenditure (sum of recurrent and capital expenditure).

Results and Discussion

ICW and Quality of Financial Statements

Table II shows descriptive statistics of data on ICWs and presence of financial statement error/restatements. The results show that on average, 72 percent of the sample have inadequate IT controls, 52 percent lack risk management assessment framework, 45 percent lack documented fraud prevention plan and 47 percent have not fully utilized the accounting system between the FY 2010/11 and 2013/14. These results show that about half of the LGAs have ICWs. Furthermore, on average 64 percent of the LGA had a financial statements error. This shows that more than half of the LGAs financial statements had errors and restated their financial statements during the study period. These results are consistent with Baber *et al.* (2013) who found that more than 50 percent of municipalities financial statement were reinstated. Overall, the descriptive statistics show that on average about 50 percent of LGAs have ICWs.

In addition, the correlation coefficient shows that ICWs related to risk management, fraud, and accounting systems are positively correlated with financial statement errors. However, only the accounting system results are significant (see Table III). Furthermore, ITCONTROLS was negatively associated with financial statement errors.

As for the regression analysis results in Table IV, the prevailing ICWs results were mixed. The results on ICWs show that LGAs that do not fully utilise the accounting system (ACCSYSTEM) are more likely to have a financial statement error than those that fully utilise the accounting system (odds ratio = 1.526) significant at less than 5 percent). These results

suggest that ICWs related to accounting system increase the likelihood of financial statement errors, thus producing lower-quality financial statements. These results are consistent with previous studies that suggest that applying information technology improves internal control (Minani, 2013) as financial accounting standards are programmed in the system (Muda *et al.*, 2018) and therefore produce higher quality financial statements (Nuryanto & Afiah, 2013; Wahyuni *et al.*, 2019).

Table II: Descriptive statistics

	N	Min	Max	Mean	Std. Dev.
ITCONTROL	565	0	1	.72	.447
RISKMGMT	565	0	1	.52	.500
FRAUD	565	0	1	.45	.498
ACCSYSTEM	565	0	1	.47	.500
ERROR	565	0	1	.64	.481
SIZE	564	.24	79.77	18.44	10.14
INDEP	564	.82	89.10	8.46	9.44

Similarly, LGAs with ICWs related to risk management and fraud prevention are more likely to have financial statement errors. In other words, ICWs increase financial statement errors. Although the results are not statistically significant, this implies that having a risk management framework and fraud prevention plan in place decreases the likelihood of financial statement errors.

Table III: Spearman Correlation of Financial Statement Error

Variables	ITCONTROL	RISKMGMT	FRAUD	ACC SYSTEM	SIZE	INDEP	ERROR
ITCONTROL	1.000						
RISKMGMT	.213**	1.000					
FRAUD	.260**	.208**	1.000				
ACCSYSTEM	.172**	.061	.036	1.000			
SIZE	-.019	-.081	-.089*	.069	1.000		
INDEP	-.018	-.125**	.004	-.069	-.072	1.000	
ERROR	-.027	.043	.025	.099*	.131**	-.086*	1.000

*Correlation is significant at the 0.05 level; **Correlation is significant at the 0.1 level

Despite the positive results in other ICWs, the results of the IT control weakness results are unexpected. They show that weaknesses in IT controls are less likely to increase financial statement error/restatement. The adverse effect of IT control on financial statement errors does not conform to the findings of Grant *et al.* (2008) who found that firms with weaker IT controls are more likely to have financial statement errors. Although the results are not significant, weak IT controls may be explained by the lack of a strong enforcement mechanism from the authorities; hence, they do not have an impact on the quality of financial

statements. The LGAs may only be doing compliance or partial implementation of the ministry's directives instead of full implementation (Mzenzi & Gaspar, 2015) therefore, they cannot achieve the intended results.

Table IV: Prediction of Probability of Financial Statement Error

Panel A: Analysis of Maximum Likelihood Estimates						
Predictors	B	S.E.	Wald	df	Sig.	Exp(B)
ITCONTROL	-0.331	0.217	2.330	1	0.127	0.718
RISKMG	0.129	0.187	0.474	1	0.491	1.137
FRAUD	0.135	0.189	0.512	1	0.474	1.145
ACCSYSTEM	0.423	0.183	5.349	1	0.021	1.526
SIZE	0.017	0.009	3.728	1	0.053	1.018
INDEP	-0.033	0.011	9.093	1	0.003	0.968
Constant	0.454	0.270	2.844	1	0.092	1.575

Panel B: Overall model evaluation			
	Chi-square	Df	Sig.
Step	21.146	6	0.002
Block	21.146	6	0.002
Model	21.146	6	0.002
<i>Goodness of fit test</i>			
Hosmer and Lemeshow Test	3.647	8	0.888
-2 Log likelihood			715.863
Cox & Snell R Square			0.037
Nagelkerke R Square			0.050

Size of LGAs and Quality of Financial Statements

As for LGA size, Table II shows that the average size of LGAs TZS 18.4 billion and which ranges from TZS 0.24 billion to TZS 79.77 billion. LGA size also showed a positive influence on financial statement error (0.131**); however, the association is not strong, as shown in Table III. Apart from the univariate analysis, logit regression analysis on Table IV shows that larger LGAs are more likely to increase financial statement error/restatement (odds ratio =1.018) at a significance level of less than 10%. These results suggest that larger LGAs increase the likelihood of financial statement error/restatement and, therefore, are more likely to produce lower financial statement quality. Consistent with previous research conducted by (Kiswanto *et al.*, 2020) in the context of LGAs, they found that larger LGAs produce lower quality financial statements.

Independence and Quality of Financial Statement

As for the independence results, on average, only 8 percent of their finances were from their own source revenues. However, other LGAs were up to 89 percent independent, while others were less than 1 percent financially independent during the study period. In addition, the

correlation coefficient results show that financially independent LGAs have less financial statement error (-0.086), and the results are statistically significant; however, weak relationships are shown in Table III. These results are further supported by the logistic regressions in Table IV which show that a decrease in financial independence among LGAs is more likely to result in financial statement error/restatement (odds ratio of 0.968) at a significance level of less than 5 percent. This is in line with our argument that financially independent LGAs that meet their financial needs/expenditures will be more accountable to their finances, thus producing higher quality financial statements.

Conclusion

This study makes the following conclusions. First, strong internal controls on the accounting system contribute to the quality of financial statements. The remaining ICW variables were not statistically significant. These results suggest that only ICWs related to accounting system contribute to financial statement errors, consistent with the findings of prior studies such as (Ashbaugh-Skaife *et al.*, 2008; Doyle *et al.*, 2007b). These results may have been influenced by the level of IC compliance. Therefore, fraud prevention plan, risk management, and IT controls may be explained by the lack of a strong enforcement mechanism from the authorities, and therefore may not have an impact on the quality of financial statements. At the same time, the level of compliance on the accounting system is compulsory/self-regulated because of automation, which results in a higher level of compliance and, therefore, has an effect on the financial statements produced. Those who do not comply are more likely to make errors, as the automation of financial transactions has a direct impact on the quality of financial statements. Second, size increases the likelihood of financial statement errors and, therefore, lowers financial statement quality. Last, financial independence contributes to financial statement error/restatement in LGAs; thus, capacity building in financial management may be beneficial to them and the central government.

Our study had several limitations. First, the sample size of the study was limited to four years from 2010/11 to 2013/14 due to the availability of financial statement error data in the CAG reports. Second, few prior studies have been conducted on individual ICWs, and therefore, limited the theoretical foundation of the current study.

This study has the following practical and theoretical implications for policymakers, researchers, regulators, and practitioners. First, it is recommended that the parent ministry enforces LGAs to fully comply and implement with its directives. Most of the ICW findings in this study did not show significant results. This implies that most of the LGAs moderately comply and partially implement the regulators' requirements because they are not held accountable (Mzenzi & Gaspar, 2015). Second, LGAs' officials are recommended to ensure the effective functioning of ICs. In this regard, LGAs' internal auditors are urged to frequently review and provide appropriate recommendations to manage the effectiveness of ICs. Third, the parent ministry should build the administrative and financial management capacity of LGAs to increase their financial independence in order to escalate financial statement quality. Finally, a detailed assessment of the effectiveness of ICs in LGAs and their potential consequences on financial malpractices is needed. This can be undertaken as a special audit by the CAG.

This study focused only on a period of four years; therefore, further research is needed to explore the effects of ICWs and other factors on the quality of financial statements using a larger dataset and more recent data. Further, studies on the role of internal audits in addressing ICWs are needed. Such studies could potentially provide an appraisal of the internal audit functions of LGAs and their impact on the assessment of ICs. This could potentially minimise the errors in financial statements. Similar studies could be undertaken to explore the extent to which the competences and experiences of accounting personnel contribute to the financial statement error/restatement. Nevertheless, this study contributes to our understanding of the effects of ICWs, size, and independence on the quality of financial statements in Sub-Saharan Africa.

References

- Abbott, L. J., Parker, S., & Peters, G. F. (2004). Audit committee characteristics and restatements. *Auditing: A Journal of Practice & Theory*, 23(1), 69-87.
- Agustina, N., & Setyaningrum, D. (2020). Determinants of quality of local government financial statements in Indonesia. *Review of Integrative Business and Economics Research*, 9(3), 226-236.
- Agustiningsih, S. W., Murni, S., & Putri, G. A. (2020). Audit findings, local government characteristics, and local government financial statement disclosure. *Review of Integrative Business and Economics Research*, 6(3), 91-104
- Ahadiat, N. (2013). A study of quality of internal control in the US federal financial management systems. *Journal of Law and Financial Management*, 12(2), 2-9.
- Al-Dmour, A., Abbod, M., & Al-Balqa, N. (2018). The impact of the quality of financial reporting on non-financial business performance and the role of organizations demographic' attributes (type, size and experience). *Academy of Accounting and Financial Studies Journal*, 22(1), 1 - 16.
- Arifin, J. (2020). Domination of regional wealth as a determining factor of financial statement disclosure. *Jurnal Akuntansi Dan Keuangan*, 22(2), 91-104.
- Ashbaugh-Skaife, H., Collins, D., & Kinney, W. (2007). The discovery and reporting of internal control deficiencies prior to SOX-mandated audits. *Journal of Accounting and Economics*, 44 (1-2), 166-192.
- Ashbaugh-Skaife, H., Collins, D. W., Kinney, W. R., & Lafond, R. (2008). The effect of SOX internal control deficiencies and their remediation on accrual quality. *The Accounting Review*, 83(1), 217-260.
- Baber, W. R., Gore, A. K., Rich, K. T., & Zhang, J. X. (2013). Accounting restatements, governance and municipal debt financing. *Journal of Accounting and Economics*, 56(2), 212-227.
- Badara, M. A. S., & Saidin, S. Z. (2012). Impact of the effective internal control system on the internal audit effectiveness at local government level. *Journal of Social and Development Sciences*, 4(1), 16-23.
- Beest, F. V., Braam, G. J. M., & Boelens, S. (2009). *Quality of financial reporting: Measuring qualitative characteristics*. Nijmegen Centre for Economics. Retrieved from <https://hdl.handle.net/2066/74896>

- Cavélius, F. (2011). Opening the “black box”: How internal reporting systems contribute to the quality of financial disclosure. *Journal of Applied Accounting Research*, 12(3), 187-211.
- Chan, K. C., Farrell, B., & Lee, P. (2008). Earnings management of firms reporting material internal control weaknesses under section 404 of the Sarbanes-Oxley Act. *Auditing: A Journal of Practice & Theory*, 27(2), 161-179.
- Cheng, Q., Goh, B. W., & Kim, J. B. (2018). Internal control and operational efficiency. *Contemporary Accounting Research*, 35(2), 1102-1139.
- Cohen, S., & Kaimenakis, N. (2011). An empirical investigation of Greek municipalities' quality of financial reporting. *Global Business and Economics Review*, 13(3-4), 187–203.
- COSO. (2013). *A framework for enhancing internal control over financial reporting*. Retrieved from: <https://dair.nps.edu/handle/123456789/2964>
- Dechow, P. M., Sloan, R. G., & Sweeney, A. P. (1995). Detecting earnings management. *Accounting Review*, 70(2), 193-225.
- DeFond, M. L., & Jiambalvo, J. (1991). Incidence and circumstances of accounting errors. *Accounting Review*, 66(3), 643-655.
- Dewi, N., Azam, S., & Yusoff, S. (2019). Factors influencing the information quality of local government financial statement and financial accountability. *Management Science Letters*, 9(9), 1373–1384.
- Donelson, D. C., Ege, M. S., & McInnis, J. M. (2017). Internal control weaknesses and financial reporting fraud. *Auditing: A Journal of Practice & Theory*, 36(3), 45-69.
- Doyle, J., Ge, W., & McVay, S. (2007a). Accruals quality and internal control over financial reporting. *The Accounting Review*, 82(5), 1141-1170.
- Doyle, J., Ge, W., & McVay, S. (2007b). Determinants of weaknesses in internal control over financial reporting. *Journal of Accounting and Economics*, 44(1), 193-223.
- Feng, M., Li, C., McVay, S. E., & Skaife, H. (2015). Does ineffective internal control over financial reporting affect a firm's operations? Evidence from firms' inventory management. *The Accounting Review*, 90(2), 529-557.
- Fjeldstad, H., & Heggstad, K. (2012). *Local government revenue mobilisation in Anglophone Africa*. (ICTD working paper 7), Brighton: IDS.
- Fjeldstad, H., Henjewe, F., Mwambe, G., Ngalewa, E., & Nygaard, K. (2004). *Local government finances and financial management in Tanzania: Observations from six councils, 2000-2003*. Retrieved from <https://www.africaportal.org/publications/local-government-finances-and-financial-management-in-tanzania-observations-from-six-councils-2000-2003/>
- Grant, G. H., Miller, K. C., & Alali, F. (2008). The effect of it controls on financial reporting. *Managerial Auditing Journal*, 23(8), 803-823.
- Hammersley, J., Myers, L., & Shakespeare, C. (2008). Market reactions to the disclosure of internal control weaknesses and to the characteristics of those weaknesses under Section 302 of the Sarbanes-Oxley Act of 2002. *Review of Accounting Studies*, 13(1), 141–165.
- Hermanson, D. R., Smith, J. L., & Stephens, N. M. (2012). How effective are organizations' internal controls? Insights into specific internal control elements, *Current Issues in Auditing*, 6(1), 31-60.
- Huang, H.-W., Rose-Green, E., & Lee, C.-C. (2012). CEO age and financial reporting quality. *Accounting Horizons*, 26(4), 725-740.

- IASB. (2018). Conceptual framework for financial reporting. Retrieved from <https://www.ifrs.org/>.
- IFAC. (2012). *Evaluating and improving internal control in organizations*. International Federation of Accountants.
- Jauhari, H., & Dewata, E. (2019). The determinant factors of performance of provincial governments in Indonesia. *Journal Of Accounting and Business Education*, 3(2) (2019): 170-179.
- Ji, X., Lu, W., & Qu, W. (2017). Voluntary disclosure of internal control weakness and earnings quality: Evidence from China. *The International Journal of Accounting*, 52(1), 27-44.
- Julita, S. (2018). Analysis of factor affecting the quality of government financial report Bengkalis regency. *International Journal of Scientific & Technology Research*, 7(2), 157-164.
- Kewo, C. L., & Afiah, N. N. (2017). Does quality of financial statement affected by internal control system and internal audit? *International Journal of Economics and Financial Issues*, 7(2), 568-573.
- Kiswanto, H., Ain, L., & Mahera, Y. (2020). Factors influencing the weaknesses of internal control of local governments in Indonesia. *Humanities and Social Sciences Reviews*, 8(1), 122-129.
- Laupe, S., Saleh, F. M., Ridwan, & Mattulada, A. (2018). Factors influencing the financial disclosure of local governments in Indonesia. *Academy of Accounting and Financial Studies Journal*, 22 (3), 1-9.
- Minani, I. (2013). Impact of computerization on internal control over cash in municipal councils in Tanzania: A case of Iringa municipal council. *Research Journal of Finance and Accounting*, 4 (2), 1-7.
- Muda, I., Haris Harahap, A., Erlina, Ginting, S., Maksum, A., & Abubakar, E. (2018). Factors of quality of financial report of local government in Indonesia. *IOP Conference Series: Earth and Environmental Science*, 126(1), 1-6.
- Murdayanti, Y., Hasanah, N., & Shodriati, A. (2016). Factors affecting the internal control weaknesses of local governments. *Advanced Science Letters*, 22(5-6), 1643-1646.
- Muskanan, M. (2014). The effectiveness of the internal control system implementation in fiscal decentralization application. *Procedia-Social and Behavioral Sciences*, 164, 180-193.
- Mzenzi, S. I., & Gaspar, A. F. (2015). External auditing and accountability in the Tanzanian local government authorities. *Managerial Auditing Journal*, 30(6-7), 681-702.
- Nuryanto, M., & Afiah, N. N. (2013). The impact of apparatus competence, information technology utilization and internal control on financial statement quality (study on local government of Jakarta province - Indonesia). *World Review of Business Research*, 3(4), 157-171.
- Ong'unya, G. O., & Abbey, K. (2019). Internal control and quality service delivery in a public health sector: A case study of a local government in Uganda. *African Journal of Business Management*, 13(16), 557-563.
- Plumlee, M., & Yohn, T. L. (2010). An analysis of the underlying causes attributed to restatements. *Accounting Horizons*, 24(1), 41-64.
- Ramdany, S.E. (2015). Influence the quality of accounting information systems and the effectiveness of internal control on financial reporting quality. *Research Journal of Finance and Accounting*, 6(6), 143-152.

- Rich, K. T., & Zhang, J. X. (2016). Municipal accounting restatements and top financial manager turnover. *Journal of Public Budgeting, Accounting & Financial Management*, 28(2), 222-249.
- Romanus, R. N., Maher, J. J., & Fleming, D. M. (2008). Auditor industry specialization, auditor changes, and accounting restatements. *Accounting Horizons*, 22(4), 389-413.
- Saputro, E. P., & Achmad, N. (2015). Factors influencing individual belief on the adoption of electronic banking. *Mediterranean Journal of Social Sciences*, 6(4), 442-450.
- Scholz, S. (2014). *Financial restatement trends in the United States: 2003–2012*. Retrieved from <https://www.thecaq.org/financial-restatement-trends-united-states-2003-2012/>
- Sebayang, V. J. (2018). Analysis of factors affecting weaknesses of internal control system at district and city governments in North Sumatra province. *Journal of Public Budgeting, Accounting and Finance*, 1(1), 1-11.
- Siregar, B., & Pratiwi, N. (2017). The effect of local government characteristics and financial independence on economic growth and human development index in Indonesia. *Jurnal Manajemen dan Kewirausahaan*, 19(2), 65-71.
- Suarjana, A. A. G. M., Bayu Wicaksana, K. A., & Wahyuni, L. M. (2019). The effect of economic growth and locally generated revenue on financial independence on regions in the province of Bali. *Soshum: Jurnal Sosial dan Humaniora*, 9(3), 221-229.
- Surbakti, E. (2018). Influence the effectiveness of government internal control system elements to the quality of financial statements at the government of Serdang Bedagai regency. *Journal of Public Budgeting, Accounting & Finance*, 1(4), 1-12.
- Wahyuni, N., Muhyarsyah, M., & Sari, E. (2019). *The influence of the government's internal control system and the availability of budgets on the quality of financial statement (case study in local governments in North Sumatra)*. Paper presented at the The 1st Multi-Disciplinary International conference University of Asahan 2019, Sabty Garden Hotel-Kisaran North Sumatra.
- Wang, Y. (2013). Internal control and financial quality: Evidence from post SOX restatement. *Accounting and Taxation*, 5(1), 20-28.