

DETERMINANTS OF INTERNAL AUDIT EFFECTIVENESS IN LOCAL GOVERNMENT AUTHORITIES (LGAs): EVIDENCE FROM MOROGORO REGION OF TANZANIA

ABSTRACT

This study examines the determinants of internal audit effectiveness in LGAs, addressing the growing importance of robust IAF in public sector governance. We employed the descriptive research design based on a mixed research approach integrating both qualitative and quantitative approaches. Data were collected from 45 purposively selected respondents with extensive auditing experience. A multiple linear regression (MLR) model was used to assess the impact of these factors on internal audit effectiveness (IAE). The empirical results indicate that the four factors collectively explain approximately 65.7% of the variability in internal audit effectiveness, with IT utilization emerging as the most influential factor. The regression analysis revealed that all four factors significantly contribute to the effectiveness of internal audits, as evidenced by an R-squared value of 0.657 and an adjusted R-squared value of 0.616. The ANOVA results further validate the model, showing a statistically significant F-statistic of 3.2976 with a p-value of 0.001, indicating the robustness of the findings. Top management support was found to be critical in fostering a culture of accountability, while the independence of internal audit ensures objectivity and unbiased assessments. IT utilization was identified as a key driver in enhancing the efficiency and reliability of audit processes. Finally, the competence of internal auditors was shown to significantly influence the quality and accuracy of audit outcomes. The study recommends the need for institutionalizing top management support, safeguarding auditor independence, advancing IT utilization, and promoting continuous professional development for auditors. These measures are essential for improving governance and accountability within LGAs, thereby contributing to more effective and reliable internal audit practices.

Keywords: *Internal audit effectiveness; local government authorities; governance; accountability; Morogoro region; Tanzania*

1. Introduction

Governments play a crucial role in ensuring that public funds and resources are utilized effectively and efficiently to deliver essential services to citizens. This responsibility is vital not only for the welfare of the public but also for maintaining public trust and ensure that limited resources are managed in a manner that maximizes their impact. Thus, to achieve this, governments implement robust mechanisms for monitoring and controlling the use of public funds. One of the key mechanisms for achieving this oversight is the Internal Audit Function (IAF). The IAF plays a crucial role in this process by independently assessing how these resources are managed, ensuring accountability and transparency. This function is particularly vital in complex systems where prudent resource management is essential for achieving organizational objectives and maintaining public trust (Bouthach & Taouab, 2023).

Historically, internal auditors were seen as assistants to accountants who primarily focused on verifying financial records. However, the role of internal auditors has evolved significantly, and they are now recognized as autonomous professionals who contribute to the proper use of resources within organizations. Their independence is critical to their effectiveness, yet it remains a challenge, especially when internal auditors are affiliated with external auditing firms. This issue is particularly pronounced in the public sector, where inadequate reporting lines and organizational structures can compromise the independence of internal auditors (Almahuzi, 2020).

In many countries, particularly in the West, the IAF has come under increasing scrutiny, leading to the implementation of stricter regulations aimed at enhancing the efficiency of external audits and, by extension, the internal audit process (Ta & Doan, 2022). The growing number of regulations and the need for more effective internal audits have underscored the importance of the IAF in public sector organizations (Joshi, 2021; Onay, 2021). Studies have highlighted that internal audits are integral to operations, especially in public sector organizations, where they focus on ensuring compliance with regulations and internal controls while providing consulting services (Teru et al., 2023).

The importance of internal audits in improving governance, risk management, and control processes is widely recognized. The Institute of Internal Auditors emphasizes that internal audits offer an independent and objective assessment that adds value to an organization's operations. This value is achieved by aligning organizational assets with strategic goals and identifying inefficiencies and risks within systems, thereby enabling organizations to take corrective actions and promote continuous improvement (Andoh, 2020).

In the context of Tanzania, significant steps have been taken to strengthen the internal audit function in the public sector. The establishment of the General Office for Internal Audits, following the amendment of the Public Finance Act in 2010, marked a critical development in this regard. This office is tasked with coordinating and overseeing the quality of internal audits conducted in government institutions (PFA 2010, Act 658) (Wangilisasi, 2021). Additionally, the adoption of international accounting and reporting standards, such as the International Financial Reporting Standards (IFRS), Public Sector Accounting Standards (IPSAS), and International Auditing Standards (IAS) in 2004, underscores Tanzania's commitment to improving internal audit practices (Mbiha, 2019; Massawe et al., 2020).

Despite these efforts, the effectiveness of internal audit functions in Local Government Authorities (LGAs) in Tanzania remains a concern. The Controller and Auditor General's (CAG) 2020/2021 report highlighted significant weaknesses in the internal audit functions of various LGAs in the Morogoro Region, including Mlimba DC, Ifakara TC, Gairo DC, Ulanga DC, Malinyi DC, and Morogoro Municipality (CAG, 2020). These weaknesses included a shortage of internal audit staff, insufficient budgets, lack of essential equipment, and failure to complete planned audit tasks, all contributing to the ineffectiveness of internal audits in these LGAs.

Further, the CAG's 2021 report revealed that over 150 local governments in Tanzania lacked effective internal audit functions. Research indicates that various factors, such as department size, auditor independence, and management support, influence the effectiveness of internal audits in Tanzania. While information technology (IT) has been identified as a factor affecting internal audit effectiveness (Pathirage et al., 2012; Alkebsi & Aziz, 2017), there is still a need for a comprehensive analysis of its impact, given the rapidly evolving nature of IT.

Therefore, this study aims to analyze both internal and external factors that affect the effectiveness of internal audits in Tanzanian LGAs, with a focus on the Morogoro Region. The findings from this study will offer valuable insights into enhancing the efficiency of internal audits in LGAs, thereby contributing to better governance and resource management in the public sector.

The following sections of this paper are organized as follows: Section 2 describes the theoretical framework that underpins the study. Section 3 describes the methodology used in this study, including a description of the study area, data collection procedures, and the analytical modeling approach. Section 4 presents the results and discussion of the findings. Section 5 provides the conclusions drawn from the study. Finally, Section 6 discusses the policy implications derived from the research findings.

2. Theoretical framework

In this study, we have employed the Agency Theory to examine the determinants of internal audit effectiveness in LGAs, with a focus on the Morogoro Region of Tanzania. This theory serves as a foundational framework for understanding the principal-agent dynamics within the context of internal audits in LGAs. In this framework, the government (principal) delegates authority to internal auditors (agents) to manage and oversee the use of public resources. This delegation is critical in ensuring that resources are used effectively and according to regulatory requirements.

In economic theory, agency theory addresses the relationship between the principal and the agent, emphasizing the efficient organization of information and the management of risk-bearing costs (Eisenhardt, 1989). It seeks to solve problems that arise when the principal and agent have different goals and risk preferences. Through this lens, our study evaluates how well internal auditors perform their roles and responsibilities, and whether they receive the necessary support and autonomy to carry out their duties effectively.

Hence, a central tenet of agency theory is to address the information asymmetry that exists between principals and agents. In the public sector, this asymmetry can result in a gap between what government officials know about resource management and what internal auditors report. The internal audit function is designed to mitigate this information gap by providing independent assessments and reports on the use of public funds. Our study explores how various factors such as the competence of internal auditors and their access to information technology affect their ability to bridge this gap and deliver accurate, timely information.

Furthermore, agency theory emphasizes the need for control mechanisms to align the interests of agents with those of the principals. Internal audits act as a control mechanism by monitoring adherence to policies and evaluating the efficiency of resource management in LGAs. In this study, we investigate how determinants such as top management support, auditor independence, and IT utilization influence the effectiveness of internal audits in enforcing accountability and control. This examination helps us to understand how management support impacts the internal audit function's ability to operate effectively and independently.

We used the agency theory to identify potential agency problems, such as conflicts of interest, moral hazard, and adverse selection. In the context of LGAs, these problems can manifest as ineffective internal audits due to lack of independence, insufficient support, or inadequate

resources. Our study uses agency theory to pinpoint specific factors contributing to these issues and assess their impact on the overall effectiveness of internal audits. Hence, by understanding these dynamics, the study aims to propose solutions that address these agency problems and enhance audit performance. Moreover, the study results are intended to inform policy implications that strengthen internal audit functions, improve governance, and ensure that public resources are managed efficiently and transparently.

3. Material and methods

The study was conducted across nine LGAs in the Morogoro region of Tanzania. Data for the study were drawn from the Prime Minister's Office for Regional Administration and Local Government (PO-RALG), which reports the presence of approximately 185 LGAs in Tanzania. Of these, 157 have been reported as having ineffective internal audit functions. The Morogoro Region was selected based on the Controller and Auditor General (CAG) report, which highlighted that around 85% of LGAs, including those in Morogoro, struggle with ineffective internal audits. Consequently, all nine LGAs in the Morogoro Region were included in this study.

In addition, we have adopted a descriptive research design to explore the current status of internal audit effectiveness in LGAs. This design was based on a mixed research approach (i.e., incorporating both qualitative and quantitative methods) enabling a comprehensive analysis of the factors influencing internal audit effectiveness. The rationale for using a mixed-method approach, as emphasized by Mwonge and Naho (2021, 2022), is that no single method is perfect on its own; therefore, the weaknesses of one approach can be adjusted by the strengths of the other. Thus, this approach was particularly useful in providing insights into the experiences and perceptions of internal auditors within the LGAs.

The primary data were collected from 45 respondents who were purposively selected with extensive knowledge and experience in auditing using a structured questionnaire. A multiple linear regression model was applied to ascertain the relationships between independent variables such as competence of internal auditors, IT utilization, management support, and independence of internal audit and the dependent variable (internal audit effectiveness).

The regression model used in the analysis is represented as:

$$Y = \beta_0 + \beta_i x_i + \epsilon_i \quad (1)$$

Where:

Y stands for Internal Audit Effectiveness (IAE)

β_0 is the constant or intercept

β_i are parameters to be estimated ($i = 1, 2, 3, 4$)

x_i are independent or explanatory variables ($i = 1, 2, 3, 4$)

ϵ_i = the margin error

This model was used to determine the extent to which each independent variable influences internal audit effectiveness in the selected LGAs, providing valuable insights into the factors contributing to effective internal auditing practices.

With four (4) explanatory variables Eqn. (1) can be rearranged as follows:

$$Y = \beta_0 + \beta_1x_1 + \beta_2x_2 + \beta_3x_3 + \beta_4x_4 + \epsilon_i \quad (2)$$

Eqn. (2) is further specified as:

$$IAE = \beta_0 + \beta_1TMS + \beta_2IND + \beta_3ITU + \beta_4COMP + \epsilon_i \quad (3)$$

Where:

x_1 = Management support (TMS)

x_2 = Independence of internal audit (IND)

x_3 = IT utilization (IT)

x_4 = Competence of internal auditors (CIA)

4. Results and discussion

The study examined the influence of four key explanatory variables such as top management support (TMS), independence of internal audit (IND), IT utilization (ITU), and the competence of internal auditors (COMP) on the effectiveness of internal audits (IAE) in LGAs. To analyze these relationships, a multiple linear regression (MLR) model was employed. MLR is a statistical technique that models the linear relationship between several independent variables and a single dependent variable. In this case, the independent variables (TMS, IND, ITU, and COMP) were used to predict the outcome of the dependent variable, internal audit effectiveness (IAE).

The MLR model employed in this study was formulated as follows:

$$IAE = \beta_0 + \beta_1TMS + \beta_2IND + \beta_3ITU + \beta_4COMP + \epsilon_i$$

The regression model was used to determine the extent to which the predictors (i.e., TMS, IND, ITU, and COMP) can explain the dependent variable i.e., IAE. Table 1 presents the study results.

This model aimed to determine the extent to which each of the predictors like TMS, IND, ITU, and COMP contributed to the variability in internal audit effectiveness within the selected LGAs. Table 1 presents the model summary of the regression analysis.

Table 1 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.787 ^a	0.657	0.616	11.61513

Source: Field Study, 2024

The coefficient of determination, commonly referred to as R-squared (R^2), is a key statistical metric used to assess how well the independent variables explain the variability in the dependent variable. Specifically, R^2 indicates the proportion of the variance in the dependent variable (IAE) that can be explained by the independent variables (TMS, IND, ITU, and COMP). In this study, the R^2 value of 0.657 suggests that approximately 65.7% of the variability in internal audit effectiveness can be explained by the four predictors included in the model. Moreover, the Adjusted R-squared, which accounts for the number of predictors in the model and the sample size, was found to be 0.616. This value is slightly lower than the R^2 value, as is typical, indicating that the model has been adjusted for the potential overfitting that can occur when additional predictors are added. Nonetheless, an adjusted R-squared of 0.616 still suggests a substantial explanatory power of the model, affirming that the independent variables collectively have a significant impact on internal audit effectiveness.

Analysis of variance (ANOVA) evaluates the overall significance of the regression model. ANOVA helps determine whether the independent variables collectively provide a significant explanation for the variability in the dependent variable, internal audit effectiveness (IAE). Table 2 presents the study results.

Table 2 ANOVA^a

	Model	Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	1002.849	4	250.712	3.2976	0.001 ^b
	Residual	3041.113	40	76.028		
	Total	4043.962	44			

- a. Dependent Variable: Internal Audit Effectiveness (IAE)
- b. Predictors: (Constant), TMS, IND, ITU, COMP.

The ANOVA results reveal that the regression model significantly explains the variance in internal audit effectiveness (IAE). Specifically, the F-statistic of 3.2976 and its associated p-value of 0.001 indicate that the model is statistically significant at the 0.05 level. This means that the independent variables such as TMS, IND, ITU, and COMP together have a significant impact on the effectiveness of internal audits. In addition, the sum of squares for the regression is 1002.849, which represents the variability in IAE explained by the model. The residual sum of squares, 3041.113, reflects the variability in IAE that is not explained by the model. The mean square for regression is 250.712, which is the sum of squares for regression divided by its degrees of freedom ($df = 4$). This value is used in calculating the F-statistic. Based on the study result F-statistic is 3.2976 which is highly statistically significant at a 1% ($p = 0.001$) level of significance implying that the model was relevant and all the variables i.e., TMS, IND, ITU, and COMP which were included in the model were jointly different from zero (0).

Additionally, the study results indicated that IAE is highly influenced by the TMS, IND, ITU, and COMP. Table 3 presents the estimated study results from linear regression analysis through SPSS 20.

Table 3 Multiple Linear Regression Results

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	0.638	0.125***		3.017	0.000
TMS	0.145	0.042***	0.164	5.126	0.000
IND	0.121	0.021***	0.132	4.272	0.001
ITU	0.214	0.045***	0.200	5.271	0.000
COMP	0.113	0.037***	0.159	4.261	0.001
Number of Observation = 54					
Note: *** Significance at 1%					
F = 3.2976 at P < 0.001					
R square = 0.657, Adjusted R square = 0.616					
Dependent Variable: Internal Audit Effectiveness (IAE)					

Source: Extraction from SPSS version 20

The study results in Table 3 indicate that all four independent variables such as TMS, IND, ITU, and COMP are statistically significant predictors of internal audit effectiveness in the selected LGAs. Among these, IT utilization has the most substantial impact, followed by management support, competence of internal auditors, and independence of internal audit.

Top Management Support (TMS): It is a critical factor influencing internal audit effectiveness. Several studies (Pathirage et al., 2012; Alkebsi & Aziz, 2017) have highlighted the positive impact of TMS on IAE, as it plays a pivotal role in the success of nearly all organizational programs and processes. In this study, TMS was found to be statistically significant at the 1% level, with a p-value of 0.000 ($p < 0.001$) and a coefficient of 0.145. The study result indicates that a one-unit increase in management support is associated with a 0.145 increase in internal

audit effectiveness, holding other factors constant. The study result is in line with the findings of various related studies (Alkebsi & Aziz, 2017; Pathirage et al., 2012) which have shown that TMS strengthens employee efforts in the organization, and drives the organization toward achieving its goals. We have noted that when top management is committed to supporting internal audit activities, it fosters a culture of accountability and transparency within the organization. This support often manifests in the form of adequate budget allocations, the hiring of qualified personnel, and the provision of necessary training and development opportunities. Furthermore, when top management visibly endorses the internal audit function, it sends a strong message across the organization about the importance of internal control and risk management, thereby enhancing the overall effectiveness of the audit process.

Independence of Internal Audit (IND): Independence is a cornerstone of internal auditing, as it ensures that auditors perform their duties objectively without undue influence from management or other parties. The significant impact of auditor independence on audit effectiveness highlights the necessity for internal audit functions to be free from interference, allowing auditors to provide unbiased assessments and recommendations (Alkebsi & Aziz, 2017). Thus, this autonomy enables auditors to identify risks, evaluate controls, and ensure that organizational objectives are met without compromise. In this study, it was found to have a positive and highly significant impact on internal audit effectiveness, with a 1% level of significance ($p = 0.001$) and a coefficient of 0.121. The study results imply that increasing the independence of internal auditors by one unit leads to a 0.121 increase in internal audit effectiveness. The t-value of 4.272 and the p-value of 0.001 confirm that this relationship is statistically significant. Moreover, the significance of the relationship between independence and audit effectiveness aligns with existing literature (Al-Twajjry et al., 2004; Christopher et al., 2009; Alkebsi & Aziz, 2017), which consistently emphasizes that internal auditors must maintain a high degree of independence to perform their roles effectively. Independence allows auditors to approach their tasks with a critical mindset, ensuring that their reports are accurate, reliable, and contribute to the overall governance and accountability framework within the organization.

IT Utilization (ITU): IT Utilization (ITU) plays a crucial role in enhancing the internal audit function, particularly during the planning and reporting stages. The integration of IT systems not only streamlines these processes but also bolsters the reputation and prestige of the audit function within the organization (Yam et al., 2004). In this study, ITU was found to have a positive and highly significant impact on internal audit effectiveness, with a 1% level of significance ($p = 0.000$) and a coefficient of 0.214. This indicates that a one-unit increase in IT utilization results in a 0.214 improvement in internal audit effectiveness, making it the most influential factor among the independent variables. The t-value of 5.271 and the p-value of 0.000 underscore the critical role of IT utilization in enhancing the effectiveness of internal audits. The study results align with the findings of various related studies (Curtis et al., 2009; Yam et al., 2004; Palmer et al., 2004; Satava et al., 2006; Pathirage et al., 2012; Pedrosa & Costa, 2012; Alkebsi & Aziz, 2017) which have shown that ITU significantly boosts the efficiency and effectiveness of accounting and auditing processes. Additionally, Lin et al. (2006) emphasize that the quality of IT and its integration into internal audit work are closely linked to the overall effectiveness of the auditing process. This evidence highlights the importance of leveraging IT systems to enhance the accuracy, efficiency, and credibility of internal audits.

Competence of Internal Auditors (COMP): The competence of internal auditors significantly influences the effectiveness of internal audits. With regard to internal audit proficiency, competence, and ongoing training are crucial and foundational to successful internal auditing (Alkebsi & Aziz, 2017). In this study, competence was found to have a positive and highly significant impact on internal audit effectiveness, with a 1% level of significance ($p = 0.001$) and a coefficient of 0.113. This indicates that a one-unit increase in auditor competence leads to a 0.113 increase in internal audit effectiveness. The t-value of 4.261 and p-value of 0.001 further confirm that auditor competence is a significant contributor to IAE. These findings are consistent with other studies (Al-Twajry et al., 2003; Flesher & Zanzig, 2000; Schneider, 2010; Alkebsi & Aziz, 2017), which have shown that internal auditors must possess essential skills and qualifications to be effective. Additionally, Flesher and Zanzig (2000) highlight the importance of employing auditors with a wide range of skills to competently audit financial activities.

5. Conclusion

We have analyzed the influence of four key factors namely Top Management Support (TMS), Independence of Internal Audit (IND), IT Utilization (ITU), and Competence of Internal Auditors (COMP) on the effectiveness of internal audits (IAE) in Local Government Authorities (LGAs). The empirical results revealed that these variables collectively explained approximately 65.7% of the variability in internal audit effectiveness, as indicated by the R-squared value. The results highlighted that all four factors significantly contribute to the effectiveness of internal audits, with IT utilization emerging as the most influential factor, followed by top management support, the competence of internal auditors, and the independence of internal audits. The ANOVA results further confirmed the overall significance of the regression model, indicating that these variables jointly have a substantial impact on internal audit effectiveness. Therefore, the findings underscore the critical importance of these factors in enhancing internal audit effectiveness within LGAs. Top management support is essential in fostering a culture of accountability, independence of internal audit ensures objectivity, IT utilization streamlines audit processes, and auditor competence guarantees the reliability and accuracy of audit outcomes. These insights provide valuable guidance for LGAs in strengthening their internal audit functions, ultimately contributing to better governance and accountability.

6. Policy implications

The findings of this study carry significant policy implications for LGAs aiming to enhance the effectiveness of their internal audit functions. To strengthen governance and accountability, the following policy measures should be considered:

- i) **Institutionalization of Top Management Support (TMS):** The study underscores the necessity for LGAs to formalize and institutionalize the support of top management for internal audit activities. Policymakers should consider the implementation of regulations that mandate active involvement and commitment from top management in internal audit processes. This includes ensuring adequate budgetary provisions, fostering a culture of transparency, and integrating audit findings into strategic decision-making processes. Such measures will reinforce the legitimacy and impact of internal audit functions, thereby enhancing overall organizational effectiveness.
- ii) **Strengthening the Independence of Internal Audit (IND):** To maintain the objectivity and integrity of internal audits, LGAs must establish and enforce policies that protect the

independence of internal auditors. This can be achieved through the creation of independent reporting lines, clear guidelines preventing undue influence from management, and legal frameworks that safeguard auditors from retaliation. Ensuring independence is crucial for auditors to conduct unbiased evaluations and provide credible recommendations.

- iii) **Advancement of IT Utilization (ITU):** LGAs should prioritize the integration of advanced IT systems into their internal audit processes. Policies that allocate resources for the adoption and continuous updating of IT infrastructure are essential. This investment will enhance the efficiency, accuracy, and reliability of audit processes, thereby increasing the overall effectiveness of internal audits. Additionally, LGAs should provide ongoing IT training for auditors to fully leverage these technological tools.
- iv) **Promotion of Auditor Competence (COMP):** Continuous professional development should be a policy priority for LGAs. This includes offering regular training programs, certifications, and opportunities for skill enhancement for internal auditors. Policies should also encourage the recruitment of auditors with diverse and advanced skill sets to meet the increasingly complex demands of the audit environment. Enhancing auditor competence is fundamental to ensuring that audits are conducted with the highest level of expertise and precision.

Abbreviations

ANOVA	Analysis of variance
CAG	Controller and Auditor General
COMP	Competence of Internal Auditors
IAE	Internal Audit Effectiveness
IAF	Internal Audit Function
IAS	International Auditing Standards
IFRS	International Financial Reporting Standards
IND	Independence of Internal Audit
IPSAS	Public Sector Accounting Standards
ITU	IT utilization
LGAs	Local Government Authorities
PFA	Public Finance Act
PO-RALG	Prime Minister's Office for Regional Administration and Local Government
SPSS	Statistical Package for the Social Sciences
TMS	Top Management Support

REFERENCES

- Alkebsi, M. & Aziz, K.A. (2017). Information Technology Usage, Top Management Support, and Internal Audit Effectiveness. *Asian Journal of Accounting and Governance* 8: 123-132. <https://doi.org/10.17576/AJAG-2017-08SI-11>

- Almahuzi, A.S. (2020). *Factors Impacting the Effectiveness of Internal Audit in the Saudi Arabian Public Sector Thesis*. 1-299. https://vuir.vu.edu.au/42261/1/ALMAHUZI_Ahmed-thesis.pdf
- Al-Twaijry, A.A., Brierley, J.A. & Gwilliam, D.R. (2003). The development of internal audit in Saudi Arabia: an institutional theory perspective. *Critical Perspectives on Accounting* 14(5): 507-531.
- Al-Twaijry, A.A., Brierley, J.A. & Gwilliam, D.R. (2004). An examination of the relationship between internal and external audit in the Saudi Arabian corporate sector. *Managerial Auditing Journal* 19(7): 929-944.
- Andoh, P. (2020). Internal Auditors Placement, Recognition and Independence in Ghana: Evidence from Metropolitan, Municipal and Districts Assemblies in Central Region. *Research Journal of Finance and Accounting*, 1-12. <https://doi.org/10.7176/rjfa/11-8-01>
- Bouthach, I & Taouab. O (2023) « Étude des facteurs affectant l'efficacité de l'audit interne au sein de l'administration publique. *African Scientific Journal* 3(17): 260-316.
- Curtis, M.B., Jenkins, J.G., Bedard, J.C. & Deis, D.R. (2009). Auditors' training and proficiency in information systems: A research synthesis. *Journal of Information Systems* 23(1): 79-96.
- Eisenhardt, K. M. (1989). Agency Theory: An Assessment and Review. *Academy of Management Review*, 14, 57-74. <https://doi.org/10.5465/amr.1989.4279003>
- Flesher, D.L. & Zanzig, J.S. (2000). Management accountants express a desire for change in the functioning of internal auditing. *Managerial Auditing Journal* 15(7): 331-337.
- Joshi, P.L. (2021). Determinants Affecting Internal Audit Effectiveness. *EMAJ: Emerging Markets Journal*, 10(2): 10-17. <https://doi.org/10.5195/emaj.2020.208>
- Lin, J. W., Li, J. F., & Yang, J. S. (2006). The effect of audit committee performance on earnings quality. *Managerial Auditing Journal* 21(9): 921-933.
- Massawe, A. D. F., Abayo, A., & Macha, S. (2020). Factors Determining Internal Audit Function Effectiveness of Listed Companies in Tanzania: an Institutional Theory Perspective. *International Journal of Business Management and Economic Review*, 3(06): 76–96. <https://doi.org/10.35409/ijbmer.2020.3216>
- Mbiha, N. (2019). The Role of Internal Audit on Corporate Governance: A Case Of Simiyu Regional Council, Tanzania.
- Mwonge LA, Naho A. (2021). Determinants of credit demand by smallholder farmers in Morogoro, Tanzania. *African Journal of Agricultural Research*, 17(8):1068-80. <https://doi.org/10.5897/AJAR2020.15382>
- Mwonge LA, Naho A. (2022). Smallholder farmers' perceptions towards agricultural credit in Tanzania. *Asian Journal of Economics, Business and Accounting*, 22(6):58-75. <https://DOI.org/10.9734/AJEBA/2022/v22i630572>
- Onay, A. (2021). Factors Affecting the Internal Audit Effectiveness: A Research of the Turkish Private Sector Organizations Author profile: *Ege Akademik Bakis (Ege Academic Review)*, 1-15. <https://doi.org/10.21121/eab.873867>

- Palmer, K.N., Ziegenfuss, D.E. & Pinsker, R.E. (2004). International knowledge, skills, and abilities of auditors/ accountants: Evidence from recent competency studies. *Managerial Auditing Journal* 19(7): 889-896.
- Pathirage, Y.D., Jayawardena, L. & Rajapaksha, T.N. (2012). Impact of management support for team performance: a Sri Lankan case study in the apparel industry. *Tropical Agricultural Research* 23(3).
- Pedrosa, I. & Costa, C.J. (2012). Financial auditing and surveys: how are financial auditors using information technology?: an approach using expert interviews. Proceedings of the Workshop on Information Systems and Design of Communication (37-43). ACM.
- Satava, D., Caldwell, C. & Richards, L. (2006). Ethics and the auditing culture: Rethinking the foundation of accounting and auditing. *Journal of Business Ethics* 64(3): 271-284.
- Schneider, A. (2010). Assessment of internal auditing by audit committees. *Academy of Accounting and Financial Studies Journal* 14(2): 19.
- Ta, T.T., & Doan, T.N. (2022). Factors Affecting Internal Audit Effectiveness: Empirical Evidence from Vietnam. *International Journal of Financial Studies*, 10(2): <https://doi.org/10.3390/ijfs10020037>
- Teru, Susan & Usman, T. (2023). Determinant of Audit Efficiency in the Public Sector in Nigeria, 2(1): 132–145.
- Wangilisasi, S. (2021). *Factors influencing the effectiveness of internal audit function in Tanzania local government authorities*. <http://repository.udom.ac.tz>
- Yam, R.C., Guan, J.C., Pun, K.F. & Tang, E.P. (2004). An audit of technological innovation capabilities in Chinese firms: some empirical findings in Beijing, China. *Research Policy* 33(8): 1123-1140.