

Contribution of Internal Audits on the Effectiveness of Procurement Assignments in Tanzania's Local Government Authorities (LGAs)

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Abstract

The paper assesses internal audit effects on procurement in Local Government Authorities (LGAs). The data is from a structured questionnaire to 241 respondents from LGAs, Public Procurement Regulatory Authorities (PPRA), Internal Audit General office and the National Audit office. The study uses exploratory factor and multiple regression methods to analyse the data using STATA programme and finds that internal audit competencies, procedure and independence affect positively the contribution of internal audit to procurement by LGAs. Thus, the study recommends that internal auditors be exposed to different audit environments and implement strictly the Public Procurement Act (PPA). Employers should employ auditors with various skills. Auditors should know the procedure in PPA and the procurement cycle, which the entities have to follow. Lastly, authorities should enforce the auditors' independence through providing sufficient resources for the internal audit functions, ensure the audit units access all information and discourage political interference in auditors' work.

Keywords: effectiveness, internal audit effectiveness, effective procurement, internal audit competency, internal audit independence, internal audit procedures, and procurement.

1. Introduction

This paper assesses the contribution of internal audit on the effectiveness procurement assignments in Tanzania's Local Government Authorities (LGAs). Public procurement contributes to economic, environmental, technological and social goals (World Bank, 2017). Procurement is increasingly recognized as a vital service in developing countries and it accounts for a big proportion of budgetary expenditure (Makabira & Waiganjo, 2014). For instance, in Mainland Tanzania, public procurement accounts for about 60% of the budget; in Kenya, it is 60% of the total expenditure; in Angola, it is 58% of the budget; and it is 70% of the budget in Uganda (Makabira and Waiganjo, 2014). An Internal audit facilitates the auditing of the procurement cycle. It functions as a control and governance organ that provides assurance to the management that the procurement is carried out in accordance with the best practice.

Globally, auditing has been considered as a crucial element in assessing and reporting the effectiveness of the entity in attaining its objectives. The internal

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audit activity supports the whole organization, given its legal role of assessing and reporting operational activities within the organization. This legal role of an internal audit comes from the contract that is from the agency theory in collaboration with stewardship theory (Adams, 1994). The contract needs effective performance of an internal audit (i.e., agent), on behalf of the owner (i.e., government). To perform effectively its functions, an Internal audit must be independent, competent, and use proper procedure when performing its tasks (Tahajuddin and Kertali, 2018). In addition, an internal audit should be autonomous and supported by the top management. Thus, it can be regarded as a tool for improving governance and accountability in the organization. To this effect, the question for empirical investigation rests with its contribution in discharging procurement assignments in public entities (Ali, 2016; Prawitt *et al.*, 2009).

Panda and Leepsa (2017), explain that internal audit functions exist to monitor the activities of the management and to attest to management's performance for the stakeholders' benefits. Furthermore, the management as a stakeholder can use audit's recommendations to strength its internal controls and to improve its performance. The oversight institutions such as public procurement regulatory authority, controller and auditor general and internal auditor general offices may use internal audit reports for their actions and decisions. Internal audit functions are there to assist management to show that they are managing the entities' procurement effectively (Etse & Asenso-Boakye, 2014). Due to the sensitivity of procurement, internal audit ought to execute its functions effectively as to detect a significant error, a fraud and non-compliance.

Procurement is identified as a vital in service delivery in the public sector (Basheka and Bisangabasaija, 2010). In Tanzania, LGAs as part of public sector have a responsibility of using resources efficiently to maintain peace, order, good governance and to promote social welfare and economic development of the people (Wakasangula *et al.*, 2015). Internal audit function should provide information that brings value for money in procurement. Audit can facilitate the whole organization to work as a team towards achieving an acceptable procurement requirement (Peterson *et al.*, 2003). Effective procurement assignment involves compliance with procurement laws, minimization of costs, accountability of procurement funds and quality of procured goods, works and services (Njeru, 2015).

In the recent years, public entities have faced challenges in using procurement funds (Matto, 2017). Some of these challenges include the following: weak internal controls, lack of staff capacity and lack of integrity. For instance, in the period 2008-2018, about TZS 60 billion were mismanaged in procurement assignments (CAG Reports, 2008-2018). In addition, over the years reports by the Controller and Auditor General (CAG) and the Public Procurement Regulatory Authority (PPRA) have shown consistently these malpractices. The trend of the mismanagement of procurement in the public sector has stirred a debate on whether internal audit performs its work appropriately or not (Matto, 2017; Shamki and Amur, 2017).

One of the roles of the internal audit (IA) is to ensure compliance to procurement assignment in public entities. Regulatory framework demands greater involvement of internal audit in monitoring procurement activities within the public entities, among which are the local government authorities (LGAs). To accomplish the tasks, internal audits should be competent, autonomous and supported by the management. Additionally, the audit method itself and the whole process (i.e., procedure) should be appropriate to the activity (Badara and Saidin, 2013).

The discussed challenges with regard to procurement need to be investigated empirically to show evidence of the contribution of internal audits, through assessment of competence, independence and procedure, on effective procurement assignments. This study examines this contribution by analysing some selected LGAs in Mainland Tanzania since public procurement accounts for about 60% of the budget in Mainland Tanzania. To date, no study in Tanzania that has attempted to investigate the contribution of internal audit competencies, independence and procedure to effective procurement in LGAs in Tanzania, to the best of the researcher's knowledge.

Empirical results from exploratory factor analysis (EFA) and multiple linear regression show that internal audit competencies, appropriate procedure and independence are significant and positively contribute to procurement assignments in LGAs. Thus, the study recommends that for successful procurement assignments. The internal audit functions require that auditors should be competent and independent in implementing their tasks. Moreover, the correct procedure in procurement has to be followed to ensure effective procurements in LGAs.

2. Literature Review

2.1 Theoretical Literature Review

2.1.1 Agency Theory

Agency theory roots can be traced to the 1960s when economists started exploring risk sharing (Eisenhardt, 1989). Agency theory seeks to provide explanations with regard to how to organize the chaos of conflicting objectives into an equilibrium to maximize the value of the entity (Jensen and Meckling, 1976). The theory brings a contract of two parties, namely, the one that delegates a task to be performed and the other who undertakes the task. Internal audit is an agent who assures the principal on the use of resources and the principal is the government, which represents the taxpayers. The internal audit function is established to monitor activities of the management and to attest its performance, among which are procurement assignments. The monitoring cost is an example of an agency cost and it must be cost effective (Colbert and Jahera, 1988). Each party in the contract possesses different goals, resulting into outcomes that may be in conflict, with different attitude toward risk. The different goals and attitude toward risk are aligned through the Agency theory. For example, the internal audit function to be aligned to the principal's interests, it must be motivated by competence and independence when performing its audit assignments. Thus, internal audit competence and independence are issues and mechanisms that facilitate effective

performance of the agent (i.e., Internal Audit) by giving feedback to the principal through audit reports, to ensure that resources are used efficiently (Badara, 2017; Pinto, 2015). The audit reports help the principal (i.e., the government) to make informed decisions. Critics of the agency theory argue that despite being centred on control and conflict, it is only concerned with the principal's affairs and ignores the agent's interest, the welfare of the community and other issues, such as organizational complexities and cultural, social and political issues.

2.1.2 Stewardship Theory

Stewardship theory is concerned with employment relationship between two parties, the owner and the manager (Davis *et al*, 1997; Madison, 2014). In the theory, the owner is referred to as the principal and the manager is referred to as the steward. In this study, internal audit function (i.e., internal auditor) is regarded as a manager and the taxpayers, represented by the government, as the principal. The theory is relatively new (Larson, 2013) and presumes that the manager is a steward of the business with behaviours and objectives adhering to that of the owner. Stewardship theory advocates that the entity's aim is to contribute to humanity by serving stakeholders in needs such as customers, employees and community at large (Karns, 2011). The theory centred on the principle that the business exists to serve, not necessarily for profit. Nevertheless, the entity to be able to serve, it must be able to sustain itself economically. Thus, the theory promotes efficient and effective use of resources (i.e., to ensure value for money through working with stakeholders). Internal audit function (i.e., internal auditor) being one of the stakeholders need to be competent, use the appropriate audit procedure and be seen as independent to safeguard the interest of the principal. The stewardship theory is used to consider appropriate procedure in the internal audit, which the agency theory does not take into account. The theory calls for cooperation and collaboration among stakeholders. With this cooperation, the theory considers even the stakeholders who have no direct contribution to the principal's interests and provide non-economic value to the entity.

Therefore, the study draws from two theoretical perspectives: the agency theory (for internal auditor independence and competencies) and stewardship theory (for internal audit appropriate procedure). These theories are appropriate and useful for studying the contribution of internal audit on effective procurement assignments in LGAs. They help to explain and predict the existence of internal audit, and the contribution of internal audit to the effective procurement assignments.

2.2 Conceptual Framework

The agency and stewardship theories are used to show the relationship between the independent variables and the dependent variable. In this study, independent variables are internal audit competencies, internal audit procedures in procurement and internal audit independence; and the dependent variable is effectiveness in procurement assignments. Attributes of the dependent and independent variables are explained in detail in the appendix (See Table A2). The constructs and relationships between the variables are shown in the Figure 1.

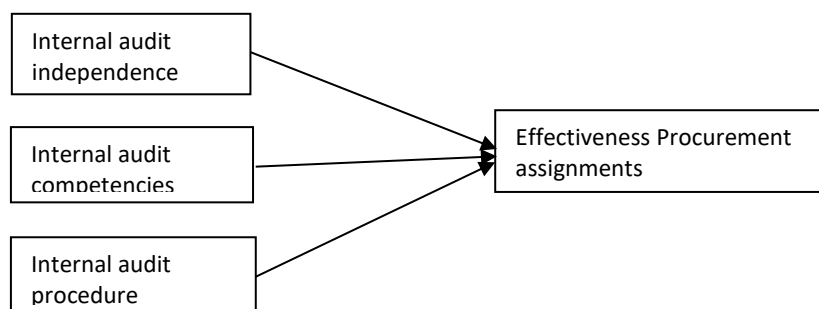


Figure 1: Conceptual Framework for the Study

Source: Author’s construction from reviewed literature

The study is guided by three constructs, shown in Figure 1: independence of internal audit function, internal audit competencies and internal audit procedures.

2.2.1 Internal Audit Independence

Both the Public Finance Act, No.6 of 2001 and the professional practices framework adopted by the government of Tanzania demand internal audit to be independent in its operations. An activity tends to assist the management by assessing and giving feedback independently regarding procurement. As referred to in the authoritative international standards on public sector auditing (INTOSAI), the strength of an internal audit activity is evaluated by examining the level of independence it has from the management and from operating responsibilities. The internal audit has to be independent regardless of whether it is established by legislation or it is accountable to top management; and whether it reports to both top management and those charged with governance. Internal audit has to be removed from political pressure to conduct its audits; and to have access information from those charged with governance. Independence in this sense means being freed from external influence so that internal audit activities can be undertaken smoothly without any fear or favour (Belay, 2007). Thus, the following hypothesis was proposed:

H1: There is a positive influence of internal audit independence on effective procurement assignment in the LGAs.

2.2.2 Internal Audit Competencies

The main objective of auditing public procurement is to ensure that procurement activities attain the value for money within the provision of the procurement policy (URT, 2001, 2011). To achieve competency in the procurement audit, training for specific issues should be provided to internal auditors. Internal auditors who are competent will have all skills necessary to analyse information and produce a good audit report (Shamsuddin *et al*, 2014). Internal audit standards (IIA’s) require that to be proficient, an internal auditor must have the correct skill set, knowledge and other competencies in the area of the assignment. Understanding the procurement policy and having the necessary skills when performing the audit function is one of the requirements to be competent (IIA, 2018). IA function should have

multidisciplinary skilled staff, with knowledge of procurement law, information technology and others areas (Bailey, 2010; Njeru, 2015). Members of the audit function must possess skills to be competent to perform the required procurement assignments. The following is the corresponding hypothesis used in this study:

H2: There is a positive influence of internal audit competencies on effective procurement assignment in LGAs

2.2.2 Internal Audit Procedures

The internal audit function, which needs to seek compliance on procurement law in the organization, must be conversant with the procurement cycle. The procurement cycle is the cyclical process of key steps when procuring goods, services or works. This is an interactive tool that has been developed to guide members through the procurement process with links to relevant knowledge to support every step in the process of procurement. According to URT (2011), the procurement cycle comprises of procurement planning, requirement definition, tendering source, evaluation and selection, contract award and contract management. The internal audit should abide by the procurement processes and procedures as stipulated in procurement policies so as not to risk getting undesired audit results. Internal audit must monitor and report procurement assignments to ensure that inconsistencies or irregularities in the procurement process are identified immediately and resolved to support a fair and open procurement process (Etse and Asenso-Boakye, 2014). The corresponding hypothesis is stated as:

H3: There is a positive influence of internal audit procedures on effective procurement assignments in LGAs.

2.4 Empirical Literature Review

Several studies have been undertaken on internal audit functions. for example, Badara & Saidin, 2013; Bashuna, 2013; Mokogi et al., 2014; Pinto, 2015. Pinto (2015) examined the impact of procurement practices in the municipality auditing market in Portugal and showed that municipalities raise reasonable doubts about procurement procedure and other issues that need to comply with Public Procurement Act and audit quality. The study dealt with audit issues, but issues; however, issues related with the contribution of internal audit function in procurement processes, specifically its independence, competencies and audit procedures were not clearly stated. Makabira and Waiganjo (2014) examined the role of procurement practices on the performance of corporate organizations in Kenya, and found that the planning decision is undertaken for every purchase.

Mokogi *et al.*, (2014) examined the effect of procurement practices on the performance of commercial state-owned enterprises in Kenya, using descriptive analysis and found that the buyers-supplier relationship, supplier selection procedures, organizational capacity and procurement process management enhance the performance of the organization. Vaidya *et al.*, (2006) investigated the critical factors that influence E-procurement implementation success in the public sector in Australia. The study identified end-user uptake and training, supplier

adoption, compliance with best practice for business, systems integration, security and authentication strategy and technological standards as the variables. The study identified organization and management factors as the most important categories for the success of e-procurement initiatives.

Bashuna (2013), analysed the factors affecting effective management of the procurement function in Kenya using descriptive analysis. The study found that project financing accountability, ICT adoption, internal processes and internal control system affect the procurement function. Similarly, Mugo and Ngugi (2012) conducted a study to explore factors that affect the procurement process of suppliers in Kenya's public sector. The study adopted the descriptive research design to analyse the purchasing process in the health-care industry. The findings showed that accountability, ICT adoption and ethics affected the procurement process of the health care supplies in the public sector. In addition, Badara and Saidin (2013) conducted a literature review on the internal audit effectiveness in Nigeria. The study found that the audit function is influenced by internal audit quality, the organizational link and management support. The study also found that auditing effectiveness is affected by professionalism, internal audit independence, audit experience and ethical orientation.

However, there is limited empirical evidence on the contribution of internal audits on procurement assignments in public entities. For instance, Cohen and Sayag (2010) study on Israel found that determinants of effective procurements were management support and internal audit independence. Baharud-din *et al*, (2014) examined factors that contribute to the effectiveness of internal audit in the public sector in Malaysia accounted that to auditor's competencies, independence of auditors and management support to internal audit. Furthermore, Alzeban and Sawan (2013) carried out a study in Saudi Arabia on the role of internal audit function in the public sector. They found that institutional factors are likely to play a part in the failure of internal audit to develop in the Saudi Arabia's public sector.

The reviewed literature shows that several factors affect the effectiveness of procurement, with the effects varying across different sectors. Internal audit competencies, independence and procedures on procurement have not been given attention on the effectiveness of procurement. There is little evidence on these specific aspects on the contribution of internal audit on procurement assignments in public entities in general. To the best of the author's knowledge, no study has been undertaken with regard to the contribution of internal audit on procurement assignments in Tanzania's local government authorities.

3. Methodology

3.1 Data

The researcher's general objective is to understand how internal audit function independence, internal audit competencies, internal audit procedures contribute the effectiveness of procurement assignment in public entities. The study uses a deductive approach and survey design, which enable a researcher to obtain cross sectional data

about the practice through a questionnaire (Lancaster, 2008). This study used a random sampling technique in selecting LGAs for the study. Thereafter, respondents from each LGAs who are involved in procurement processes were purposively selected. They include mayor/chairpersons, director of the District/ Town/ Municipal/City Council, heads of internal audit units, heads of human resources departments, engineers, treasurers, head of procurement management units and head of planning units. In addition, respondents from oversight institutions such as offices of the Controller and Auditor General, Public Procurement Regulatory Authority office and Internal Auditor General office were purposively included. The selected respondents were 241, as shown on Table 1. All respondents were considered as a unit of analysis, given their experience in the procurement activities. They were asked questions organized in a 5-point Likert scale.

Table 1: Distribution of Selected Respondents

Respondents	Frequency	%
Chairperson	26	10.79
Directors	25	10.37
Human Resource Officer	27	11.20
Head of Internal Audit	24	9.96
Engineers	23	9.54
Treasurers	23	9.54
Head of Procurement Unit	25	10.37
Head of Planning Unit	24	9.96
Head of Legal Unit	25	10.37
Controller Auditor General office	6	2.49
Public Procurement Regulatory Authority Office	6	2.49
Internal Auditor General Office	7	2.90
Total	241	100.00

Source: Research Data, 2019

3.2 Empirical Model

The study used the software-STATA version 14 to analyse the data and run a multiple regression. The model specification for the multiple regression analysis is as given as:

$$EPA = \beta_0 + \beta_1 \text{Internal auditing competency}_1 + \beta_2 \text{Internal audit procedures}_2 + \beta_3 \text{Independence of Internal audits}_3 + \epsilon \quad (1)$$

Where; EPA is effectiveness of procurement assignment and ϵ is the error term.

The study conducted Explanatory Factor analysis (EFA) prior to running the multiple regression. EFA was used to examine variables that contribute most information (Elliot & Woodward, 2016). EFA and varimax rotation was used to determine important variables in explaining effective procurement. The number of factors retained was based on eigen value greater than 1.0 and factor loading above 0.45 (see Table A1). Furthermore, composite scores were created for dependent and independent variables, based on the mean of items which had their primary loading on each factor. Moreover, validity and reliability tests were conducted. To ensure

that the instrument is valid, the study based on survey of literature, expert review and pilot study. Furthermore, reliability of the study was conducted by using Cronbach’s alpha. The Cronbach’s alpha was moderate ranging from 0.651 to 0.748. The Cronbach’s alpha for all the three constructs were as follows: competence factors (0.748), procedure factors (0.703) and independence factors (0.651).

4. Empirical Results

4.1 Profile of Respondents

The results show that half of the respondents (52%) had advanced diploma/first degree, 43% had master’s degree and about 5% had diploma level of education, as shown in Table 2. The level of education plays a significant role in making informed decision in the procurement processes. In addition, the study considered the level of professionalism since it also plays a significant role in making informed decision in procurement. Diploma in accountancy constituted about 2% only, advanced diploma/first degree in procurement/accountancy comprises 63%, certified public accountants 18%, certified procurement professional (9%) and degree in law 8%. In addition, experience of the respondents in management was reported. About 17% of the respondents had been in management for less than 3 years, whilst about 28% had been in management for 4–6 years, 21% for 7–10 years, 26% for 11–20 years, about 5% for 21–30 years, and about 3% for over 30 years. Thus, more than half of the respondents had been in management for more than 7 years.

Table 2: Profile of the Respondents

Highest level of education	No. of respondents	Percentage
Diploma	11	4.56
Advanced Diploma/First Degree	126	52.28
Master's degree	104	43.15
Total	241	100.00
Level of professionalism		
Diploma in Accountancy	5	2.07
Advanced Diploma/First Degree in Procurement/Accountancy	152	63.07
Professional CPA	44	18.26
Professional CPSP	21	8.71
Degree in law	19	7.88
Total	241	100.00
Experience in management		
1-3 years	42	17.43
4-6 years	67	27.80
7-10 years	51	21.16
11-20 years	63	26.14
21-30 years	11	4.56
Over 30 years	7	2.90
Total	241	100.00

Source: Research Data, 2019

4.2 Internal Audits functions and Effective Procurement Assignments

The study examined the extent to which the internal audit independence, procedures and competence influence effective procurement assignments. As already pointed out, the analyses were conducted using exploratory factor analysis and multiple linear regression, the details of which are as given below.

4.2.1 Exploratory Factor Analysis (EFA)

Prior to conducting exploratory factor analysis, the adequacy of the data was examined using Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy and Bartlett's Test of Sphericity, as summarized in Table 3. KMO is the measure of the extent to which correlation between pairs of variables can be explained by another variable. The rule of thumb is that factor analysis cannot be done if the KMO is less than 0.5 (Elliot and Woodward, 2016; Malhotra and Dash, 2009). The computed value of KMO statistic is 0.897, which is meritorious according to Kaiser (1974). Moreover, the Bartlett's test of sphericity shows that the approximate chi-square statistic is 0 3967 with 496 degrees of freedom, which is significant at the 0.01. This significant value enables to reject the null hypothesis that the correlation coefficient matrix is an identity matrix. Therefore, these results confirm that factor analysis is appropriate, since there are sufficient items and there is correlation for each factor.

Table 3: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.897
	Approx. Chi-Square	3966.638
Bartlett's Test of Sphericity	Df	496
	Sig.	0.000

Source: Research data, (2019)

EFA was conducted for the independent variable items, namely, independence factors, procedures and competences) on the dependent variable (i.e., effective procurement assignment) (See Appendix 1). During EFA, items that had loading less than 0.45 and an Eigen value less than 1 were dropped. Cronbach's values were moderate indicating reliability of data. The items were used to construct factor scores, which were estimated against effective procurement assignment using multiple regression analysis.

4.2.2 Correlation Analysis

Correlation was conducted to show the relationship amongst independence, competence and procedure factors using the Pearson correlation coefficient. As shown in Table 4, the findings show that procedures in procurement and competencies had a positive and significant Pearson correlation at 5%. Moreover, internal audit independence and competence were also positive and significantly correlated at 5%. Furthermore, internal audit independence and knowledge of procurement procedures were correlated. This implies that all independent variables have positive correlation. Hence, the multicollinearity test was conducted using Variance Inflation Factor (VIF). According to Field (2013), multicollinearity

exist if VIF is greater than 10. The results of the multicollinearity test indicate that VIF was less than 10 (Table 5), which implies that findings from the study can be used to make inferences.

Table 4: Correlation Analysis

		Competence	Procedure	Independent
Competence	Pearson Correlation	1.0000		
	Sig. (2-tailed)			
	N	241		
Procedure	Pearson Correlation	0.4695*	1.0000	
	Sig. (2-tailed)	0.0000		
	N	241	241	
Independent	Pearson Correlation	0.3914*	0.6718*	1.0000
	Sig. (2-tailed)	0.0000	0.0000	
	N	241	241	241

Note: *** p<0.01, ** p<0.05, * p<0.1

Source: Research Data, 2019

4.2.3 Multiple Regression Analysis and Discussion

The results from the multiple regression analysis, computed using STATA are summarized in Table 5. The estimates show that the model fits well. The computed effectiveness in procurement assignments R square was 0.5298, which indicates that about 53% of change in effective procurement assignment is explained by internal audit independence, competence and procedures. Moreover, the F-test confirm that the model is significant (p<0.000).

Table 5: Multiple Regression Analysis

Variable	Coef.	Std. Err.	T	P>t	[95% Conf. Interval]	VIF
Competencies	0.0971	0.0385	2.52	0.012**	0.0212 0.1729	1.30
Procedures	0.3360	0.0480	6.99	0.000***	0.2413 0.4306	2.01
Independence	0.2758	0.0499	5.53	0.000***	0.1776 0.3740	1.85
Constant	1.45E-08	0.0714	0.01	1.000	-0.1406 0.1406	
Number of obs						241
F (3, 237)						89.02
Prob >F						0.0000
R-squared						0.5298
Adj R-squared						0.5239
Root MSE						1.1083

Note: *** p<0.01, ** p<0.05, * p<0.1

Source: Research data, (2019)

Empirical estimates in Table 5 also show that all the three variables (i.e., competencies, independence and appropriate procedures of internal audit) have a positive and significant impact on effective procurement assignment (p<0.05), as hypothesized.

The study hypothesized that “*there is a positive influence of internal audit competencies on effective procurement assignment in LGAs*”. The result in Table 5 show that internal audit competencies positively affect effective procurement ($p=0.0212$). This implies that if the internal audit unit is independent in its operations, then it has a positive and significant influence on effective procurement in LGAs. This indicates that the internal audit should have competencies related to experience to ensure effectiveness in procurement assignments. Experienced auditors in the audit function will enhance competencies in LGAs and assist the management to achieve the goals of the internal audit unit. Findings of the study are consistent with the findings of other studies in the literature (Alzeban and Sawan, 2013; Baharud-din *et al.*, 2014; Njeru, 2015; Plant *et al.*, 2013; Shamsuddin *et al.*, 2015). These studies provide evidence that the competencies in audit functions contribute to achieving the LGAs goals in terms of how to improve the controls in procurement assignments.

Moreover, the study hypothesized that “*there is a positive influence of internal audit procedures on effective procurement assignment in the LGAs*”. The result in Table 5 shows that internal audit procedure for procurement assignments significantly and positively affect effective procurement. ($p=0.0000$). According to Loiacono and Muhumuza, a clear understanding of the procurement cycle by auditors will uncover all procurement processes, bring the transparency and eliminate the room for corruption in the procurement processes (Loiacono & Muhumuza, 2018). Etse & Asenso-Boakye (2014) highlighted the importance of monitoring the whole procurement process in order to minimize the risk of undesired results. Furthermore, (Pinto, 2015) emphasized the importance of following the procurement methodology to avoid risks of wastage of public resources. The internal audit procedures on procurement assignments in LGAs enhance the contribution of internal audit in achieving the goals of the government of ensuring that the society welfare is improved and resources are used wisely.

The last hypothesis was that, “*there is a positive influence of internal audit independence on effective procurement assignments in LGAs*”. The result, presented in Table 5, show that internal audit independence positively influences effective procurement among LGAs ($p=0.000$). This implies that the higher the political interference, the higher would be the ineffectiveness of the auditors in carrying procurement assignment and if not interfered, it results in effective procurement among LGAs in Tanzania. Stewart and Subramaniam (2010) found similar results when they examined whether auditors’ opinions are affected by political and economic influences from the governments. The result is also consistent with Arena and Azzone (2009) and Cohen and Sayag (2010) who emphasized the importance of top management support on the independence of internal audit. Mihret and Yismaw (2007) concurred that the management support, in terms of availing the required audit resources, including funds, influences internal audit effectiveness. Moreover, the best practices and standards by IAA emphasize that auditors must be independent in mind and appearance. Independence enhances reliability and has strong influence on effective performance in procurement assignments.

5. Conclusions

Effective procurement helps to ensure that there is no misuse of public funds. Internal audit function plays a significant role in ensuring there is effective procurement. However, to have effective procurement, internal audit function needs to be independent and competent as well as to follow appropriate procedures. The results show that internal audit independence, competence and procedures positively and significantly affect effective procurement assignments.

The independence of internal auditors should facilitate auditors to determine whether the existing system of internal control in procurement process is in harmony with the structure of LGAs, enable auditors to review each control in procurement processes and analyses them in terms of costs and benefits. The auditors should be independent to assess the systems established to ensure compliance with those policies, plans, procedures, laws, and regulations that have a significant impact on operations and reports and should determine whether LGAs comply. Therefore, LGAs and the government through the ministry of finance and planning, and the public service department under the President Office need to support the internal audit offices by providing enough resources, ensuring that auditors are not interfered with in the audit processes politically or otherwise and have access to relevant documents. Independence stands for auditors being able to report on material facts, uninfluenced in any way or form.

Theoretically, the study findings indicate that the Agency theory which focuses on the control and conflict against the agent, but does not consider organization complexities, culture and political and therefore a need to introduce the Stewardship theory. Stewardship theory emphasises on cooperation and collaboration among stakeholders to bring in the appropriate procedures. By combining the theories, the study confirmed that internal audit independence, internal audit competencies and internal audit procedures in procurement positively influences effective procurement assignments in local government authorities. Therefore, the study theoretically suggested that an appropriate mixture of different skills with the right number of audit staff is vital in ensuring the effectiveness of procurement assignments in Tanzania's local government authorities.

Several recommendations follow from the findings of the study. Policy makers and the government should ensure that internal audit is competent in procurement assignments. The LGAs should strive to ensure that internal auditors are trained on public procurement, the Act and other related laws. Moreover, internal audit should have staff with relevant professionalism for activities in LGAs. Furthermore, each internal auditor in LGAs must know procurement procedures. The auditors must be conversant with the procurement processes, from the first point of initiation to the end of receiving goods, works and services. Training on procurement cycle (i.e., procurement procedures) should be a focal point, since it is the basis procurement.

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Appendices

Table A1: Exploratory Factor Analysis

Variable	Procedure	Competence	Independence
Internal Auditors possess qualifications necessary to carry out procurement audit		0.736	
Internal Auditors have necessary experience to audit procurement assignments		0.701	
Internal Auditors have training on procurement Act		0.73	
The number of Internal Audit Staff in the organization is adequate		0.577	
At least every year Internal Auditors attend training on procurement Audit		0.662	
Staff attend on the job training at least twice a year		0.697	
Internal Auditors trained on information technology		0.615	
Internal Audit Unit reviews user department initiation of the procurement requirements	0.567		
Internal Audit Unit reviews composition of Tender Board in the organization	0.559		
Internal Audit reviews the involvement of the Tender Board on the contracts awarded	0.637		
Internal Audit Unit evaluates decisions for the procurement method applied in the acquisition of the specific tender	0.804		
Internal Audit evaluates the work of the evaluation committee for submitted tenders	0.715		
Internal Audit Unit reviews how the Evaluation criteria for submitted tenders were developed	0.790		
Internal Audit Unit reviews communication of tender awards to suppliers/services providers who are about to win the said tenders	0.760		
Internal Audit Unit reviews the conduct of negotiations with bidders before awarding the tender	0.698		
Internal Audit Unit reviews the formation of contract management team	0.623		
Internal Audit Unit is accountable to Chief Executive Officer Director			0.697
Internal Audit Unit report the audit results to Director			0.784
Internal Auditors is sufficiently removed from political pressure in carrying on audit assignment			0.453
The council has Internal Audit Charter			0.545
The Internal Audit charter has clearly defined responsibilities of internal audit			0.589
The Internal Audit Charter has clearly defined authorities of Internal Audit Unit			0.611
The Internal Audit unit sub-vote is sufficiently funded			0.582

Note: Factor with loadings < 0.45 are suppressed

Source: Research data, (2019)

Table A2: Attributes of Dependent and Independent Variables

Internal Audit competencies on procurement assignments

Internal Auditors possess qualifications necessary to carry out procurement audit.
 Internal Auditors have necessary experience to audit procurement assignments.
 Internal Auditors have training on procurement Act
 The number of Internal Audit Staff in the organization is adequate.
 At least every year Internal Auditors attend training on procurement Audit.
 Internal Audit Unit issue audit findings to management at least once in three months.
 The management responds positively to Internal Auditors' recommendations.
 Staff attend on the job training at least twice a year
 Internal Auditors trained on information technology
 At least one Internal Auditor is a law graduate

Internal Audit procedures on procurement assignments

Internal Auditors are knowledgeable on Procurement cycle
 Internal Audit Unit reviews the procurement plan as required by professional body and PPRA.
 Internal Audit Unit reviews user department initiation of the procurement requirements.
 Internal Audit Unit reviews composition of Tender Board in the organization.
 Internal Audit reviews the involvement of the Tender Board on the contracts awarded.
 Internal Audit Unit evaluates decisions for the procurement method applied in the acquisition of the specific tender.
 Internal Audit evaluates the work of the evaluation committee for submitted tenders.
 Internal Audit Unit reviews how the Evaluation criteria for submitted tenders were developed.
 Internal Audit Unit reviews communication of tender awards to suppliers/services providers who are about to win the said tenders.
 Internal Audit Unit reviews the conduct of negotiations with bidders before awarding tender.
 Internal Audit Unit reviews the formation of contract management team.

Independence of Internal Audit on procurement assignments

Internal Audit Unit is accountable to Chief Executive Officer Director.
 Internal Audit Unit report the audit results to Director
 Internal Audit Unit report audit results to council
 Internal Auditors is sufficiently removed from political pressure in carrying on audit assignment
 Internal Audit Unit has free access to documents
 Internal Audit Unit has free access to those charged with Governance.
 The council has Internal Audit Charter
 The Internal Audit charter has clearly defined responsibilities of internal audit.
 The Internal Audit Charter has clearly defined authorities of Internal Audit Unit
 The Internal Audit unit has its own sub-vote
 The Internal Audit unit sub-vote is sufficiently funded

Effective Procurement Assignments

LGA comply with procurement legislations
 LGA minimize procurement costs
 LGA procure the required goods, works and services
 LGA timely acquire goods, work and services