

Factors Affecting the Adoption of Performance Audit in Public Universities in Uganda

Joseph E. Wanyama¹

Msc. Finance and Accounting -Scholar

¹Jomo Kenyatta University of Agriculture and Technology (JKUAT) Nairobi, Kenya

Tabitha Nasieku²

Senior Lecturer

²Jomo Kenyatta University of Agriculture and Technology (JKUAT) Nairobi, Kenya

Abstract:- Performance audit (PA) promotes good governance and minimizes misappropriation of public funds. Based on the need to ensure that government entities, operations, programs and activities are conducted in accordance with the principles of economy, efficiency and effectiveness, the study examined the factors affecting the adoption of performance audit in Public Universities in Uganda. Specifically, the focus of the study was: To examine the effect of financial resource adequacy on adoption of performance audit; To assess the effect of auditor professional competence on adoption of performance audit and; To establish the effect of management support on adoption of performance audit in public universities in Uganda. The study population included all the 10 public universities in Uganda. A triangulation of both qualitative and quantitative techniques was used in the study. The study established that there was a statistically significant positive effect of financial resource adequacy, auditor professional competence and management support on adoption of performance audit. The study recommended that adoption of performance audit be given utmost priority in utilizing the scarce resource in all universities; Internal Audit staff competence should be enhanced by training in effective IT and project management skills to build capacity of staff to effectively conduct performance audits; Management of Public Universities should focus on ensuring adoption of performance audit by providing competent audit staff, adequate financial resources and structuring the Internal audit function to include performance audit unit. These will facilitate the Internal audit function to stretch their activities beyond the traditional compliance and financial statement audits to include the critical Performance audits.

Keywords:- Financial Resource Adequacy, Auditor Professional Competence, Management Support and Adoption of Performance Audit.

I. INTRODUCTION

Performance audit promotes good governance and minimizes misappropriation of public funds by ensuring that government entities, operations, programs and activities are conducted in accordance with the principles of economy, efficiency and effectiveness. The limited accountability at all levels of government in developing countries continues to raise concerns on whether the execution of government programs generates beneficial outcomes to the citizenry

(Guthrie and Parker, 1999). There are several reports of corruption and misuse of public resources in government ministries, agencies and institutions which call for effective internal audit functions (IAF) to conduct compliance, financial and performance audits (PA) in the public sector, to attest to the accuracy and reliability of the information contained in financial reports produced by the managers (Ihendihiu, 2009).

Johnsen et al (2001) noted that PA was practiced in Australia, Canada, Finland, France, the Netherlands, and New Zealand, Norway, Sweden, UK and US by the late 1990s. In Asia only 50% of the countries conduct PA (ASOSAI 2012). Al Twaijry et al (2003) in their research on the performance of IA noted that PA was not well developed in Saudi Arabia. According to PWC (2014), Africa was a complex continent with diverse economies and industries affecting IAFs and corporate failures were increasing such as Sainsbury in Egypt, Carrefour in Algeria, Uchumi Super markets in Tanzania, International Credit bank, Crane Bank and National Bank of Commerce in Uganda among others (Auditor General's Report, 2014). Nkundabanyanga (2016) attributed increased corporate failures to weak IAF which did not evaluate performance of entities beyond mere financial performance and compliance to assessment of VFM of government initiatives and programs.

PA was just in the initial stages in Uganda and had not picked up in many government departments and agencies (OAG 2018). Government departments continue to perform the traditional compliance and financial statement audits leaving the PA functions to the OAG, which seems to be overwhelmed by the huge national audit demands (OAG 2012). The OAG (2012) further noted that universities in Uganda were at the core of national development because they produce not only knowledge needed to drive economic growth but also the technical and managerial human resource required in pursuit of global economic goals. According to the National Development Plan 2010/2011 to 2014/2015, Government of Uganda targeted to increase tertiary gross enrolment rate from 4.97% to 15%. As a result, Government injected a lot of resources into public universities to support infrastructural development, research and Innovation (Kirya 2018). This has seen the number of public universities growing since the 1990s. By 1986 the country had only one public University namely; Makerere University. The number has grown over the last three decades to included Mbarara University, Kyambogo

University, Gulu University, Busitema University, Muni University, Soroti University, Lira University, Kabale University and Uganda Management Institute. However, the construction of new infrastructural projects provided numerous opportunities for corruption (Murisa 2010). Research grants were squandered through fake activities for events that did not take place (Kirya 2019).

A survey of IAF of the ten public universities revealed that they all have IA charters which clearly prescribe the scope of the IAF to include evaluation of the effectiveness, efficiency and economy of all university operations. However, the key objectives to be achieved in the university annual audit work plans for the period from 2015 to 2020 mainly focused on evaluating the existence and adequacy of internal controls in the universities; and whether the planned objectives were achieved. Rwabutara (2013), Barzelay (1997), Dye and Stapenhurst (1998) cite several key factors affecting the adoption of PA such as internal audit independence, legal mandate, unrestricted access to information, adequate funding, competent leadership, competent staff, strong management support, adequate size of the audit team and availability professional audit guidelines and standards for audit work. However, Raudla et al (2014), Lockie and Put (2011) observed that there was lack of empirical studies on factors affecting the adoption of PA in developing nations. Some of the studies analyzed by a few researchers (Pollitt et al (1997), Funnel and Cooper (1998), focused on challenges affecting SAI, ignoring the role of IAF in government departments which are also mandated to conduct PA and provide objective information for decision making for those charged with governance and oversight responsibilities in government departments and agencies. The research therefore sought to examine the effect of financial resource adequacy, auditor professional competence and management support on adoption of PA in public institutions in Uganda with a focus on Public Universities.

➤ *Statement of the Problem*

Performance audit as a tool for combating corruption and promoting economic, effective and efficient governance has not been adopted by government Ministries, agencies and institutions in developing countries (USAID 2016). The need for performance audit arises due to increasing concerns of limited accountability in governments departments in developing countries (Pollit and Suma 2007). In Uganda, higher education institutions are critical for economic, political and social transformation and therefore receive a lot of financial, material and human resources for attainment of their goals, however, these have not been translated into quality educational outcomes (Basheka 2008). The Report of the Visitation Committee of Public Universities (2007) indicated that universities had failed to account for funds appropriated to them and there was continuous demand by stakeholder for greater transparency and accountability in management of public expenditure in institutions of higher learning.

The Government of Uganda Public Financial Management Act 2015 and the Local Government Act 1997 mandate government departments, agencies, institutions and local governments to have IAF to conduct performance audits of government program and operations of votes among other functions. Despite the successes registered by the function, improvements do not seem to translate into economy, efficiency and effectiveness in service delivery (USAID 2016). IAFs continue to conduct the traditional compliance and financial audits ignoring the PA function and yet there were several reports of corruption and fraudulent misappropriation of resources meant for infrastructural development and research grants (Ihendinihu 2009). The IGG report (2009) revealed that IAF in public entities in Uganda was doing well in terms of auditing annual expenditure in a timely manner, however PA of activity inputs and actual outcomes to assess the VFM in the investments was limited, increasing opportunities for corruption particularly in public infrastructural projects. Out of 10 public Universities in Uganda, only 2 (20%) had embraced PA and were providing VFM reports in their annual audit reports arising from their activities. Adoption of PA was slow despite its effectiveness in probing transparency and accountability in public expenditures compared to the traditional financial and compliance audits (kururia, 2018). If the situation is left unchecked public institutions are likely to continue losing significant amounts of money to corruption resulting into shoddy infrastructural works and intense misappropriation of research grants.

This research therefore sought to conduct systematic examination of the key factors affecting the adoption of PA by the IAF in Public Universities in Uganda.

➤ *Objectives of the Study*

• *Overall Objective*

The aim of this study was to examine the factors affecting adoption of performance audit in public universities in Uganda.

• *Specific Objectives*

- ✓ To examine the effect of financial resource adequacy on the adoption of performance audit in the public universities
- ✓ To assess the effect of auditor professional competence on the adoption of performance audit in public universities.
- ✓ To establish the effect of management support on the adoption of PA in public universities

II. THEORETICAL REVIEW

➤ *Agency Theory*

This research was based on the agency theory which suggests that principles lacked reasons to trust their agents as a result of information asymmetries and self-interest, and would seek to resolve these concerns by putting in place mechanisms to align the interests of agents with principles

in order to reduce the scope for asymmetries and opportunistic behaviours. The separation of management from ownership in public institutions is the basis of agency theory. The principles delegate the running of the entity to the agents who are the directors and managers. Conflict arises as the separation of ownership from management makes it difficult for the owners to monitor management activities and results in the need to employ certain source of information systems and control measures to minimize agency costs (Krishnan and Visvanathan, 2013).

The assumption in agency theory is that, due to human nature, each individual has own desires and seeks to maximize personal benefits, sometimes at the expense of organizational goals (Chua and Chrisman, 2006). As a result of information asymmetry, managers usually have more information on effective management and operation of the company compared to their principles and may therefore abuse the power given, and act opportunistically by designing and implementing systems and controls that maximize their personal benefits at the expense of the shareholders (Shapiro 2005). According to Dye and Staplehurst (1998), IAFs in public institutions are designed by managers to concentrate on financial and compliance audits ignoring performance audits which are very critical in establishing economy, efficiency and effectiveness of the operations in government ministries, departments, agencies and local government. The theory therefore explains that management ought to support the IAF to conduct performance audits by putting in place supportive frameworks and controls, to ensure that institutional resources are allocated and utilized with strong emphasis for VFM.

➤ *Stakeholders Theory*

Freeman (1984) defines stakeholders as "any group or individual who can affect or is affected by the achievement of the organization's objectives. This theory centers on the issues concerning the stakeholders in an institution. According to Freeman (1984), stakeholders refer to groups of constituents who have legitimate claim on the corporation or a person who contributes directly or indirectly to the firm (Zulkifli, 2009). It requires that corporate entities always seek to provide a balance between the interests of different stakeholders in order to ensure that each of them receives some degree of satisfaction (Abrams, 1951).

There are many stakeholders interested in seeing that public universities in Uganda are operated in accordance with the principles of economy, efficiency and effectiveness to ensure VFM services and produce quality outcomes. Performance of education institutions is appraised on the basis of their ability to add value to all their stakeholders. The stakeholders' theory was therefore utilized in this study to explain the need for adoption of PA to ensure that university missions, goals and objectives are achieved optimally to maximize benefits and promote the welfare of different stakeholders.

Adoption of PA is therefore critical to ensure economic, efficient and effective utilization of public resources in order to maximize education outcomes to all the stakeholders beneficiaries.

➤ *Theory of Audit Explosion (TEA)*

In the Theory of Audit Explosion, Power (2005) advocated for a critical approach to auditing and accounting practices, advancing the importance of the sociological context in understanding auditing. Peci et al (2012) argued that a relationship should be made between the explosion of audit and other control activities; with the New Public Management (NPM) reforms on public management processes. This involves the growth of formal monitoring institutions due to increased demands for managerial accountability supported by pressure from accountants and other advisers, and the NPM reforms that created demand for audit services in the public sector (Chezue, 2013). The theory sought to drop control based on compliance and financial statement audits and adopt controls guided by the principles of VFM to support NPM reforms driven by the political demand for greater accountability, efficiency, effectiveness and better quality of public sector services and customer focus (Peci et al, 2012). The theory was adopted in the study because it demonstrates the importance of the principles of economy, efficiency and effectiveness which form the basis of PA in public sector entities to ensure transparency and accountability in their operations.

➤ *Empirical Review*

Okwoli (2004) noted that PA had not gained the required level of recognition in the developing countries, though it lies within the mandate of IAF to ensure accountability and transparency in the public sector operations. Abuazza et al (2015) conducted a study into the scope of IAF in Libyan Public Sector. The study established that IA was mainly focused on financial accounting matters, ignoring key functions such as PA, risk management and other governance issues. The study therefore recommended further empirical investigations into the relationship between the key factors hindering the full execution of the IA role. Berhanu (2019) in his study on factors affecting PA practice in Oromia SAI established that legal mandate, independence of IAF, professional competence and proper maintenance of audit evidence had a significant effect on PA practice. He recommended that further research was needed on other dimensions of PA effectiveness to get a holistic view of the challenges affecting adoption of PA such as adequate funding, management support, audit team size and leadership competence among others.

Cohen and Sayag (2010) in their exploratory studies stated that management support was the main determinant of the effectiveness all IAFs. The study further revealed that even other determinants of IA effectiveness such as professional competency, sufficient funding, size of IA, independence of IA are derived from the support of top management. The study called for empirical examination to verify this conceptual revelation by testing the assertions. Ihendinihu (2009) in his study of VFM audit as a control measure for government expenditure on projects and

programs in Nigeria established that insufficient funding was one of the major factors inhibiting effective application of PA in the public sector. Mohammed et al. (2014) did a study on the role of internal audit in strengthening Corporate Governance. The study found that lack of adequate funds mainly hindered the effectiveness of internal audit.

Dereje (2012) in the study of factors affecting PA effectiveness in Ethiopia established that PA was not well developed in the federal government of Ethiopia due to various factors and problems such as lack of sufficient competent auditor staff and cooperation of auditees, less legislature attention, lack of support materials and resources such as books, and infrastructure facilities faced them. Mihret et al (2010), Cohen and Sayag (2010), Alzeban and Gwilliam (2014), Seif and Hussein (2012) conducted research on the impact of management support on the effectiveness of IAF in public organizations. The results of the research established that management support was the most important factor influencing the effectiveness of internal audits. White and Hollingsworth (1999), and Waring et al (2006) mention several key requirements for an effective PA function. These included organizational independence, a legal mandate, unrestricted access to information, adequate funding, professional competence, management support, and professional audit standards. However, the literature reviewed gives a theoretical foundation on studies conducted with SAI in developed countries and a few countries in Africa, with mixed findings on factors affecting adoption of PA. No empirical studies have been conducted on factors affecting the adoption of PA by the IAF in Government.

➤ *Research Gaps*

The challenge of PA is that it is an emerging issue that has received little attention by researchers. To date, a limited number of studies on the challenges affecting adoption of PA in the public sector are available. Much of the research has been conducted focusing generally on factors affecting IA effectiveness and yet most IAFs focus their work mainly on compliance and financial audits ignoring the element of PA. Some of the researchers who analyzed the factors affecting adoption of PA included Dye and Stapenhurst (1998); Waring and Morgan (2007), Ferdousi (2012); White and Hollingsworth (1999), Pollit et al (1999), among others. However, their research was so general focusing on the challenges faced by the SAI in different countries in the world. Their findings cannot be used to explain the challenges affecting adoption of PA by the IAF of different government departments and agencies in different countries. According to Chapman (2004), the factors that affect adoption of PA vary from country to country. There

is very limited scholarly research that has been published on factors affecting the adoption of PA by the IAF in public institutions in Uganda. A few of the scholars who have conducted research on PA such as Rwabutara (2013), Muryambonera and Mayanja (2015) and Oketch (2017) examined the challenges of PA in the office of the OAG, the SAI of the land, ignoring the role of IAFs in Government Departments and yet these units are also mandated to conduct PA and report to governing councils for effective decision making.

Bovens et al (2008) and Morin (2008) opined that there was need for more empirical research about PA as there were no generally accepted theories that explain the subject with the underlying factors. There was therefore a need for a study that focuses specifically on factors affecting adoption of PA by the IAF in public institutions in Uganda, in order to guide policy makers on effective decision making. From the literature reviewed, there were many factors that affect the adoption of PA but for convenience of analysis and due to constraints, the research examined three factors namely: Financial resource adequacy; competence of staff, management support and how they affect the adoption of PA.

III. METHODOLOGY

The study adopted a descriptive research design for collection of data on people's views and experiences on the factors that affect the adoption of PA in public Universities. A triangulation of both qualitative and quantitative techniques was used to collect and analyze data. A census was used to select the 10 public universities in Uganda. The respondents were the university bursar and the director of internal audit from each of the universities, selected considering their vast knowledge, attitudes, experiences and perceptions of the subject matter. Self-administered questionnaires were used to gather information from the respondents.

➤ *Data was Analyzed using Multiple Linear Regression Model Stated as:*

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$$

Where:

Y is: Adoption of performance audit;
 X_1 is: Financial resource adequacy;
 X_2 is: Auditor competence;
 X_3 is: Management support

IV. RESEARCH FINDINGS AND DISCUSSION

➤ Descriptive Analysis

Table 1 Financial Resource Adequacy

Descriptive Statistics for			
Financial adequacy	N	Mean	Std. Deviation
The internal audit department has an adequate budget to effectively perform its duties and responsibilities including performance audits/value for money audits	N	2.32	.946
The internal auditors at the university are provided with adequate compensation for conducting performance audits	19	2.95	1.026
Adequate funds are provided for hiring technical personnel such as Engineers, IT personnel to support the Performance Audits	19	2.30	.956
Adequate funds are provided for training audit staff on performance audit work	19	3.08	1.120
The Internal audit unit has the required resource (vehicles, office equipment and supplies such as computers, photocopiers, filing cabinets for conducting performance audit	19	2.89	1.150
The internal Audit requires a lot of financial resources for adoption of performance audit	19	4.12	1.170
Valid N	19		

Results of Table 1 show that respondents disagreed that the internal audit department had adequate financial resources to effectively conduct performance audits in public universities in Uganda with aggregate mean score of 2.95. The respondents disagreed that the IAF had adequate budget to conduct PA, that internal auditors were provided with adequate compensation for conducting PA and adequate funds were provided for hiring technical personnel with a mean of 2.32, 2.89 and 2.30 respectively. This was consistent with the findings of Salemi (2021) that insufficient funding creates a considerable barrier to fulfilling the roles and responsibilities of the IAF. Majority of respondents agreed that Internal Audit unit requires a lot of financial resource for adoption of PA with a mean of 4.12. According to Manzoor (2012) adequate funds are

required for compensation and use of bonuses to motivate the audit team to effectively fulfil their mandate. The standard deviation in all cases was small ranging between 0.946 to 1.170. This implies that the respondents had uniform perceptions of the concepts under investigation. The lack of adequate funding for compensation of audit staff, hiring technical staff such as engineers hampers the adoption of PA. The findings were also in agreement with Omona (2012) who established that there had been a general decline in funding of higher education in Uganda over the last two decades and this affects funding of critical activities such as audit. According to Brierley et al (2001) shortage of funding affects the IAFs' capacity to execute the challenging PA and concentrate on the routine financial and regulatory audits.

Table 2 Auditor Professional Competence

Descriptive Statistics			
Auditor Competence	N	Mean	Std. Deviation
There is understanding of performance measurement principles of inputs against output targets	19	3.89	.459
University Internal auditors are proficient in the use of IT and technical based audit techniques	19	3.37	1.165
University Internal Auditors are proficient in project management	19	3.37	1.012
Internal auditors have knowledge of data collection and various audit analysis tools and techniques	19	3.74	.806
There are highly experienced performance auditors in the directorate of internal audit at the university	19	3.63	1.212
The university audit team consists of members with educational qualifications required to conduct performance audits	19	3.95	.848
University internal auditors are encouraged to upgrade their skills and knowledge on performance audit via several short and long term trainings	19	4.16	.688
University internal auditors have the professional skill needed to produce an effective performance audit	19	3.68	1.003
Team leaders and supervisors have enough practical experience to conduct performance audits	19	3.63	.955
Valid N (listwise)	19		

As indicated in Table 2 respondents agreed that internal auditors were given opportunity to upgrade their knowledge and skills required to conduct PA through short and long-term training with the highest rating at 4.16, followed by possession of requisite education qualifications required to conduct PA at 3.95, followed by clear understanding of performance measurement principles of inputs against output targets. The findings concur with Ferdous (2012) that PA was not limited to specific or routine procedures and therefore needed strong professional skills to exercise their intelligence carefully when forming audit conclusions. Respondents also moderately agreed that they had professional skills needed to produce an effective PA; they had data collection and various audit analysis techniques, and that supervisor had sufficient practical experience for conducting PA.

However, respondents disagreed that they possessed IT skills and project management skills needed for conducting PA in each case with a mean of 3.37. According to Pollit and Suma (2002), IT skills and ability to make use of latest technology were key requirements for effective PA. The standard deviation in all cases was small ranging between 0.459 to 1.165. This implies that the respondents had uniform perceptions of the concepts under investigation.

The results indicate that internal auditors in public universities in Uganda had education qualifications required for conducting PA and were facilitated to train and gain more knowledge on PA however, the audit staff did not cover IT and Project management skills critical for conducting PA. The findings were in tandem with Dittenhofer (2001) who established that IT and project management skills were key requirements for conducting PA.

Table 3 Management Support

Descriptive Statistics			
Management Support	N	Mean	Std. Deviation
University Management gives internal audit function the latitude to design and implement performance audits in the annual work plans	19	3.79	.855
University Management designs and provides policies and guidelines for conducting performance audits	19	3.63	.895
Management has put in place an effective internal control system to minimize risk and ensure value for money in all its operations	19	3.26	1.195
Management provides enough resources to Internal audit function for adoption of performance audit	19	2.05	.780
University management reviews the work of the internal audit to include performance audits	19	3.42	.961
University management encourages internal audit function to include performance audits in annual work plans	19	3.74	.872
Valid N (listwise)	19		

The results presented in Table 3 indicated that respondents agreed to the statements that the university management; gives IAF the latitude to design and implement performance audit work plans with a mean of 3.79; Encourages IAF to include PA in annual audit work plans with a mean of 3.74; designs and provides policies and guidelines for performance audits with a mean of 3.63.

Other results indicated that the respondents disagreed that management makes periodic reviews of the work of IA to include PA and that management had put in place strong internal control systems to minimize risk with a mean of 3.42 and 3.26 respectively. The findings can be explained by the agency theory which explains that management as the agent of the principal may not act in the best interest of the principal but act in self-interest.

According to Roussy and Brivot (2016), top management has a duty to maintain reliable and effective internal controls to minimize resource wastage. However, due to asymmetric information, managers may act opportunistically by designing and implementing systems and controls that maximize their personal benefits at the expense of the benefits that accrue to the shareholders (Shapiro 2005). The findings were also contrary to the

assertions of the stakeholder’s theory that managers are responsible for maximizing stakeholders value by putting in place necessary controls that ensure organizations are run economically efficiently and effectively. Respondents also disagreed that management provides enough resources to IAF for adoption of PA with a mean of 2.05. The results support the findings by Sarens and Beelde (2006) that the efficiency of IAF depends on the availability of resources and lack of management support greatly affects the adoption of IA.

The results indicate that university management designed PA policies and guidelines, gives the latitude to IAF to design PA work plans but does not provide adequate financial resources required to conduct PA. Adoption of PA has been hampered by failure of management to support the audit functions by providing adequate financial resources needed to conduct PA. According to Ihendinihu (2009) where resources for audit are inadequate, internal audit concentrates on the traditional financial and compliance audits ignoring the challenging tasks inherent in PA.

➤ *Performance Audit*

Mean scores and standard deviation were used to summarize the results as presented in Table 4

Table 4 Adoption of Performance Audit

Descriptive Statistics			
Adoption of Performance Audit	N	Mean	Std. Deviation
University operations have not been conducted with regard to economy, efficiency and effectiveness	19	3.42	.961
The internal Auditors have sufficient knowledge about the audit discipline called performance audit	19	3.79	.918
Performance audit is a complex process which tends to extend over a long period for its successful adoption	19	4.00	.000
Performance audit calls for careful audit planning, design, sequencing and implementation	19	4.05	.229
Adoption of performance audit requires a well-established unit under the internal audit directorate	19	3.95	.524
Limited resources have hampered the adoption of performance audit	19	4.05	.229
Valid N (list wise)	19		

From the table, the results revealed that respondents agreed that limited resources had hampered the adoption of PA and PA requires careful audit planning, design, and implementation with a mean rating 4.05. Respondents also agreed that PA was a complex process which extends over a long period with a mean rating of 4.00 followed by adoption of PA requires a well-established unit under the IAF with a mean of 3.95 and followed by internal auditors having sufficient knowledge about audit discipline called PA audit with a mean of 3.79. The findings were in agreement with Gheorgiu (2012) that PA was a complex operation which needed well trained and competent professionals. However, respondents did not agree on the statement that university operations were conducted with regard to economy, efficiency and effectiveness with a

mean of 3.42. According to the theory of audit explosion, organizations ought to embrace NPM reforms which seek to drop control based on regularity and legality of transactions, for control guided by the principles of economy, efficiency and effectiveness of public sector services with customer focus (Peci et al, 2012).

➤ *Inferential Statistics*

The study sought to establish the combined effect of the factors namely financial resource adequacy, auditor professional competency and management support on adoption of PA in public universities in Uganda. Pearson Product Moment Correlation Coefficient test was used to determine the relationship and the results are presented in Table 4.

Table 5 Product Moment Correlation between the Independent and Dependent Variables

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.946 ^a	.895	.874	.20034a

- Depend variable: Adoption of performance audit
- Predictors: (Constant) Financial Resource adequacy, Auditor Competence, Management support

resource adequacy, auditor professional competence and management support while 10.5% was attributed to other factors not examined in this study.

From table 5, the value of R was 0.946 and the value of R square was 0.895. From the findings, 89.5% of the factors affecting the adoption of PA were attributed to the three independent variables namely financial

Table 6 shows the analysis of variances between three independent variables: Financial resource adequacy, auditor professional competence and management support, and the dependent variable of adoption of PA.

Table 6 Analysis of variance

ANOVA ^a						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	5.109	3	1.703	42.575	.000 ^b
	Residual	.602	15	.040		
	Total	5.712	18			
a. Dependent Variable: Adoption of performance audit						
b. Predictors: (Constant), Financial resource adequacy, auditor professional competence, management Support						

ANOVA statistics of the processed data at 5% level of significance shows that the value of calculated F is 42.575 and P=0.000, which was statistically significant at 5% level of significance. This shows that the overall model was significant.

Table 7 Regression Coefficient

Model		Coefficients ^a			T	Sig.
		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta		
1	(Constant)	.390	.332		1.175	.258
	Management Support	.152	.172	.175	.883	.000
	Financial Adequacy	.015	.223	.014	.067	.002
	Auditor Competence	.761	.114	.809	6.675	.000

- Dependent variable: adoption of performance audit
- Independent variable: Financial adequacy, auditor competence, management support\

As shown on table 7, the multiple linear regression model when performance audit Adoption was regressed against Finance Resource Adequacy Auditor professional competence and Management support was:

$$Y = 0.390 + 0.015X_1 + 0.761X_2 + 0.152X_3$$

Where: Y is: Adoption of performance audit;

X₁ is: Financial resource adequacy

X₂ is: Auditor competence;

X₃ is: Management support

The results showed that management support had regression coefficient B = 0.152 which indicated that a change in management support by 1 unit was associated with an increase in adoption of PA by a factor of 0.152. Financial resource adequacy had B = 0.015 which indicated that a change in financial resource adequacy by one unit was associated with an increase in adoption of PA by a factor of 0.015. Auditor professional competence had regression coefficient B = 0.761 which indicated that a unit change in auditor professional competence was associated with an increase adoption of PA by a factor of 0.761.

V. SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

➤ Summary of the Findings

The results revealed that PA was a complex process which required long period to accomplish and therefore requires careful audit planning, design and implementation. A lot of resources are required to conduct a successful PA. Adoption of PA in public universities has been hampered by resource limitations. Results also revealed that PA requires a well-established unit under the IAF with other specialized non audit personnel to support the PA function, for its effective adoption. The finding revealed that there was a strong positive correlation between financial resource adequacy and adoption of PA in public universities in Uganda. Analysis of variance results showed that financial resource adequacy had a statistically significant positive effect on adoption of PA in public universities in Uganda. The lack of adequate funding for compensation of audit staff, hiring technical non audit staff such as engineers hampers the adoption of PA.

The findings from the study also revealed that there was a strong positive correlation between auditor professional competence and adoption of PA in public universities in Uganda. The results indicated that internal auditors in public universities in Uganda had education qualifications required for conducting PA and were facilitated to train and gain more knowledge on PA, however, there were weaknesses in the training programs. Internal auditors did not have sufficient IT and Project management skills which are critical in effective conduct of PA. Respondents revealed that strong IT skills were needed for tracking procurement and payment systems in the IFMS to ensure VFM of project activities. Results also revealed that project management skills were relevant in identifying the project activities and ensuring that the costs that relate to them were allocated with due regard to economy, efficiency and effectiveness. Lack of critical skills for PA had hampered the adoption of PA.

The study also revealed that management support had a strong positive correlation on adoption of PA in public universities in Uganda. The results revealed that university management designed PA policies and guidelines, gives the latitude to IAF to design PA work plans but does not provide adequate resources required to conduct PA. Adoption of PA has been hampered by failure of management to support the audit functions by providing adequate resources needed to conduct PA.

➤ Conclusions

Based on the study findings, the researcher concluded that all the three study independent variables namely financial resource adequacy, auditor professional competence, and management support had a significant positive effect on adoption of PA in public universities in Uganda. The study concludes that PA is a complex process which extends over a long period. It therefore requires careful audit planning, design and implementation which takes a lot of resources, competent staff and these require a lot of management support for adoption.

The findings were in agreement with the agency theory which argues that principles lack reasons to trust their agents. This view was also supported by Dye and Staplehurst (1998) that managers in public institutions allocate resources to concentrate on financial and compliance audits sidelining PA which are very critical in ensuring economy, efficiency and effectiveness, in order to pave way for fraudulent expenditures.

➤ *Recommendation*

In view of the findings of the study and conclusions, the following recommendations were made; Adoption of PA should be emphasized in all public universities in Uganda. The concepts of economy, efficiency and effectiveness are very critical in the utilization of public resources and should be given due consideration to minimize wastage of scarce resource in all university operations. Internal Audit staff professional competence should be enhanced by training in IT and project management skills required for effective conduct of PA. Management of public universities should support adoption of PA by structuring the IAF to include PA unit, and provide adequate financial resources to facilitate the IAF to stretch their activities beyond the compliance and financial statement audits to include the critical PA. This will help to promote transparency and accountability and ensure value for money in all University operations.

➤ *Areas for Further Research*

The study was limited to public universities in Uganda. More research could be conducted in private universities, other tertiary institutions and local governments. The study also focused on three independent variables namely financial resource adequacy, auditor professional competence and management support. These gave a coefficient of determination of 0.895 implying that the three independent variables affect adoption of PA in public universities in Uganda by 89.5% leaving the 10.5% unexplained. The study can therefore be stretched further to include other determinants that were not considered in this study.

REFERENCES

- [1]. Ali, O. M. and Omri, B, (2016): Factors Affecting the Internal Audit Effectiveness in Tunisian Altamonte Springs, FL: The Institute of Internal Auditors Research Foundation
- [2]. Al-Twaijry, A, A. etal (2003). The development of internal audit in Saudi Arabia: An institutional theory perspective. *Critical Perspectives on Accounting*:507-31and Oromia National Regional State. Master's Thesis, Addis Ababa University
- [3]. ASOSAI (2012). Evaluation and Improvement of Internal Audit Systems and the Athens Journal of Business & Economics, 1(4), 311-324. Audit in Nigeria
- [4]. Barzelay, M. (1997) Central Audit Institutions and Performance Auditing: A Comparative Analysis of Organizational Strategies in the OECD. *An International Journal of Policy, Administration and Institutions, Governance*, Vol 10, No 3, p. 235– 260
- [5]. Black, K. 2010; "Business statistics: contemporary decision making" 6th edition, John Wiley & Sons.
- [6]. Bosire, E and Karanja, P. (2013): Factors affecting implementation of Value For Money Auditing at City Council Nairobi. *International Journal of Social Sciences and Entrepreneurship* 1(2), 320-339.
- [7]. Bovens. M (2005). From financial accounting to Public accountability. Utrecht school of governance. Utrecht University.
- [8]. Brierley, J.A etal, 2001, 'The problems of establishing internal audit in the Sudanese public sector', *International Journal of Auditing*, vol. 5, no. 1, pp. 73-87.
- [9]. Chapman, C (2004); Bringing Enterprise Risk Management (ERM) into focus. The Internal Auditor Published by the IIA
- [10]. Chua, J. H., Steier L. P., & Chrisman, J. J. (2006). How Family Firms Solve Intra- Family Agency Problems Using Interlocking Directorates: An Extension. *Entrepreneurship Theory and Practice*, Vol. 30, No. 6, pp. 777-783
- [11]. Dereje, T. (2012). Role of performance audit in fighting corruption: Evidence from FDRE
- [12]. Dittenhofer, M. (2001) "Performance Auditing in Governments". *Managerial Audit Journal*, 16 (8), pp. 438-442.
- [13]. Dye, K.M. and Staplehurst, R. (1998)). Pillars of Integrity: The Importance of Supreme Audit Institutions in Curbing Corruption. /The World Bank 1818 H Street, N.W. Washington, D.C. 20433, U.S.
- [14]. Ferdousi, N. (2012). Challenges of performance audit in the implementation phase: Bangladesh perspective
- [15]. IGG (2009): The Third Annual Report on tracking Corruption Trends in Uganda
- [16]. Ihendinlhu, J. U. (2009): use of value-for-money audit as a control measure for governl\ent expenditure on projects and programmes in Nigeria
- [17]. IIA (2006): The Role of Auditing in Public Sector Governance
- [18]. IMF (1994): Role of Internal audit in government financial management. *An International*
- [19]. Kirya, M. (2019). Corruption in universities: Paths to integrity in the higher education
- [20]. Kururia, E. (2018). Effect of Value For Money Auditing on Public Sector Accountability in kenya. A Masters dissertation.
- [21]. Manzoor,Q.A(2012), 'Impactofemployeesmotivationo norganizacionaleffectiveness', *Business Management and Strategy*, vol. 3, no. 1, pp. 1-12
- [22]. Mihret, D, G, and Yismaw, A, W. (2007). Internal audit effectiveness: An Ethiopian public sector case study. *Managerial Auditing Journal* 22: 470-484
- [23]. Morin, D. (2008). "Influence of Value for Money Audit on Public Administrations:
- [24]. Nkundabanyanga, S.K. (2016)," Board governance, intellectual capital and firm performance
- [25]. Okpara, F. O. (2002). Potentials and Problems of Value for Money Auditing in the Nigerian
- [26]. Okwoli, A.A. (2004) Value for Money Auditing in the Nigeria Public Sector: Its Problems and
- [27]. Power, M. (2005) 'The Theory of the Audit Explosion' in E. Ferlie, L.E. Lynn and J.R. and C. Pollitt (eds.) *Oxford Handbook of Public Management*. Oxford: Oxford University Press.
- [28]. Raudla, R. etal (2015). "The Impact of Performance Audit on Public Sector Organizations: The Case of Estonia", *Public Organization Review*, pp.1-17.
- [29]. Republic of Uganda (1997). The Local Government Act (1997

- [30]. Republic of Uganda (2015). The Public Financial Management Act. Review of Business Research Papers, Vol. 5, No. 1, pp. 277-293
- [31]. RGoB (2019): Performance Audit Manual for Internal Auditors
- [32]. Rwabutara, P. (2013). Examining the challenges of performance auditing in the office of the Auditor General. Unpublished Masters dissertation. Makerere University, Kampala, Uganda.
- [33]. Roussy, M., & Brivot, M. (2016). Internal audit quality: A polysemous notion? *Accounting, Auditing & Accountability Journal*, 29(5), 714–738. doi:<https://doi.org/10.1108/AAAJ-10-2014-843> [Crossref], [Google Scholar
- [34]. Sarens, G., and Beelde, I. (2006). The relationship between internal audit and senior management: A qualitative analysis of expectations and perceptions. *International Journal of Auditing*, 10(3), 219-241.
- [35]. Shapiro, S. P. (2005). Agency Theory. *Annual Review of Sociology*, Vol. 31, pp. 263-84
- [36]. Sifile O, Innocent NM (2014): Internal audit perceptions and their impact on performance of the internal audit function. *IOSR Journal of Business and Management (IOSR- JBM)* 16: 81-85.
- [37]. White, F. & Hollingsworth, K. (1999) *Audit, Accountability and Government*. Oxford: Clarendon Press
- [38]. Zulkifli, H. (2009). *Corporate Governance: Western and Islamic Perspectives*. International