



**The effectiveness of independence and assessment of internal audit Control Systems in Organizations and Institutions**

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**Abstract:** Independence and assessment of internal audit Control Systems in every institution in the world, determines ways of evaluating staff of the institutions and organizations to find out the independence/objectivity of internal auditors in public university-organisation (PUO) and to ascertain whether top management in the institution support the activities of the internal auditors. However, this study explored the Capacity of Workers Influence of Management's Acquiescence to Internal Controls at the level of Organizations and Institutions. The research design employed was characterized and analyzed the purpose of the study. Purposive sampling techniques were used to select the respondents. The sample size for the study was two hundred (200) participants and following eight (8) units under the finance department. The procurement unit, treasury unit, pensions and endowment unit, budget unit, bills and claims unit, pay roll management unit, stores and inventory management unit and financial reporting and assurance unit were used respectively. Descriptive research design was employed for this study. The Pearson Correlation and regression analysis was used to find out whether there is a relationship between the variables to be measured (effectiveness of internal audit and the determinants) and also to find out if the relationship is significant or not. The data analysis was done with the aid of the descriptive statistics approach emphasizing mainly on the percentage (%) technique. The Statistical Package for the Social Science (SPSS) software was used in the data processing as well. A simple

regression and correlation analysis through the use of Spearman's rank correlation was also used to determine the relationship between effectiveness of internal audit and its determinants. This resulted the following findings; to establish the proficiency of internal auditors at PUO, the study revealed that, the internal audit function within the PUO is of quality and it shows the significance of internal audit function quality in the study organization. Again, to evaluate the quality of work of the internal auditors in PUO, the study found that, the internal audit staff at PUO have the necessary knowledge and skills in carrying out their job. On independence of internal audit function, the study further revealed that, internal audit reports to the highest level within the organization and also internal auditors within the PUO for the purposes of this study, had unrestricted access to all departments and employees in the organization and that their independence is strictly adhere to. Finally, the results revealed that "competence of internal audit team" influence positively "internal audit effectiveness.

**Key Words:** Internal control; Organizations and Institutions; investigation; effectiveness; PUO; SPSS; internal audit Control Systems.

## 1. Introduction

In the broader context of governance and control, increasing importance has been attached to the internal auditing function [1], and questions as to its effectiveness in discharging its responsibilities are being asked with greater frequency. Indeed, in Ghana the various corporate scandals, coupled with the recent worldwide financial crisis have fuelled debate on whether internal auditing is being performed appropriately, not only in terms of ensuring compliance with the range of controls to which organisations and institutions are subject, but also in respect of its role in risk management, much as more recently assumed by its function. In consequence, the regulatory framework has demanded greater disclosure of governance information, and Internal Audit Function (IAF) has risen to this challenge, adopting an enhanced focus on corporate governance processes generally. Without doubt, IAF is inextricably linked with governance, given its role within the organization and institutions.

Technological, political, regulatory, and economic changes that have occurred during the last decade, have significantly affected basic functions and operations of companies [2]. In this respect, the rise of business risks, the economic instability and the important increase in financial fraud scandals have necessitated the use of internal audit for companies [3, 4, and 5]. Internal auditing helps an organisation accomplish its objectives by bringing a systematic,

disciplined approach to evaluate and improve the effectiveness of risk management, control and governance processes. It assists management in the effective discharge of their responsibilities by furnishing them with analysis, appraisal, recommendations, and pertinent comments concerning the activities reviewed. To achieve these value adding outcomes, internal audit functions need to be effective. However, considerable amount of literature suggests that the low effectiveness of internal audit [6] is due to contextual dynamics within which internal audit is practised. Internal audit is effective when the internal audit function is independent and objective, proficient, produces quality work, and is supported by top management within the sector. Thus, for businesses to get the best from internal audit in terms of acting as internal controls, risk management and promoting good corporate governance, internal audit [functions] must be effective within the given environment within which they operate. With the current challenges being experienced in the economy where every pesewa is important, promoting effective internal audit could be a cardinal strategy for solving the myriad of problems facing institutions especial public organisations that depend on the public purse. In recent years, the Government of Ghana (GoG) has made significant progress in strengthening fiscal discipline and improving the efficiency of its public financial management (PFM) system. The Government has strengthened the legislative base, increased the transparency of budget information, improved control over expenditures, and strengthened budget oversight. At the heart of these initiatives was the passage of Internal Audit Agency Act, 2003 (Act 658) [7] which established the Internal Audit Agency in 2004. The creation of the Internal Audit Agency (IAA) was motivated by the need for Government to establish a structure that could support the eventual transfer of budgetary authority and expenditure control to the metropolitan municipal, and district assemblies (MMDAs). The current study attempts to examine the effectiveness of internal audit in an organisation and institutions of Ghana. A study carried out by the World Bank in 2006, [8] on the Public Financial Management in Ghana revealed that insufficient understanding of the role of internal audit in ensuring appropriate control in an environment where the Accounting Officer is formally held accountable for his/her expenditure, combined with weak capacities amongst Internal Audit Unit staff in the MMDAs, undermine the effectiveness of the internal audit function in carrying out it roles [8]. Again, the current business environment has been characterized by increased competition, technological changes and business frauds and corruption. Internal auditing or auditors play crucial roles in internal control, risk management, and corporate governance in organizations. More clearly, internal auditing activities are directed at ensuring effective control systems for combating fraud,

effectively managing risks in business, and ensuring good corporate governance practices of businesses. However, internal audit ineffectiveness in businesses renders internal auditor's incapable of carrying out these key roles. Internal audit activities are often due to ineffective internal auditors lacking independence and objectivity; low proficiency of internal auditors, low quality of work of internal auditors and lack of adequate support from top management for internal audit activities. Internal auditors have the right and ability to access all information in every part of the organization and their function lies at every activity of the corporate governance system. All the stakeholders will therefore benefit from having a strong Internal Audit Function (IAF), which will provide value to the other cornerstones of corporate governance [9]. Because internal auditors can remind line managers of their responsibilities, they can act as consultant in monitoring risks, identify weakness as in internal control system, and facilitate the implementation of risk management. IA also contributes to the appropriateness of procedures and operations of the audited body [10, 11]. The importance of the internal auditing objectives and functions, especially, with regards to controlling and managing the internal audit function, its emphasis the need for a solid framework to assess and measure its performance in order to keep it working effectively. [12] found that the measurement of internal auditing performance is an important process not only from the perspective of internal auditors but also from that of its various stakeholders, and that, through properly utilized performance measures it is able to communicate the value of the audit function to management[13, 14] stated that the chief audit executive must develop and maintain a quality assurance and improvement program that covers all aspects of internal audit activity, and that this program should also assess the efficiency and effectiveness of internal audit activity. It used to be that internal auditing in the public sector served as a simple administrative procedure comprised mainly of checking accuracy of transactions, pre-payment verification and control, counting assets and reporting on past events to various types of management. But in recent times, a combination of forces has led to a quiet revolution in the profession. This research focused on the effectiveness of internal auditors; measuring internal auditor's ability to identify non-compliance activities and the added contributions by IA to the public sector offices which are an important concept to show the influential outputs of the internal auditors.

In the heat of the controversies for inept public sector performances, Ghana as a developing economy and its Public Universities-Organizations (PUO) as an eye of impact knowledge to personnel to fit in organizations and institutions, both publicly and privately, to contribute effectively to development in Ghana and the entire world. However, in such institution-

organizations in particular, one has to gear her resources up for effective developmental utilization and the need for the services of Internal Auditors in the Public Sector to become more imperative. A constant complaint in government organizations such as (PUO) by the general public is that, the unit which is established to check the financial dealings of public institutions (internal audit unit) is too weak in its functions either as a result of inadequate staffing, weak internal control, poor administration, lack of required personnel, inadequate documentation, and application of appropriate internal audit techniques in the local government bodies, among others, to prevent fraud [15, 16]. This research thus examined what factors that contribute to the effectiveness of IA in order to perform their duties effectively and how indirectly, they can assist the public sector in managing the public resources efficiently. Factors such as competency of the auditors, independence and objectivity of internal auditors and management support may be the causes that affect the effectiveness of IA function which this research seeks to examine. However, to ascertain whether top management in the institution supports the activities of the internal auditors, and its influence, examination of the quality of work and assessment of the independence of internal audit was done by the researchers.

## **2. Methodology**

Research methodology defines the systematic and scientific procedure used to arrive at the results and findings for a study against which claims for knowledge are evaluated. [17] Against this background, it was found that the descriptive research survey design was appropriate and used for the study because it enables researchers to administer a set of questions to a large number of respondents concerning the current status of the issue under study. Furthermore, this study had “learning by participation” as its main objective. It implies that, the researchers and individuals identify a problem; finding the courses and recommendation, advice for an intervention mechanism to solve that problem. The purpose of this study that necessitated the choice of research to enhance management’s compliance to internal control assessment procedures at the institutional and organizational levels. When the procedures involved in the use of research method were thoroughly examined, it fitted the topic for this study, hence its adoption. In order to solicit information from staff of the organization, the basic instruments used were interview and questionnaire. On the collection of data, a semi-structured interview schedule was arranged with the staff members, during which a lot of information were gathered review issues that were pertaining within the establishment. The sample size of this study was

two hundred (200) selected from the staff and management members of the following eight (8) units and the finance committee. These were finance committee, procurement unit, treasury unit, pensions and endowment unit, budget unit, bills and claims unit, pay roll management unit, stores and inventory management unit and financial reporting and assurance unit. A questionnaire was used to further solicit the causes of gaps within the assessment system. The research questions were the basis on which all the data gathered for the study were characterized and analyzed. The data analysis was done with the aid of the descriptive statistics approach emphasizing mainly on the percentage (%) technique. Other data from the interviews were analyzed with the view of Ornamental management’s compliance to review procedures. Also views and theories were then carefully analysed and compared with each other to draw inferences and conclusions on the data collected. The Statistical Package for the Social Science (SPSS) software was used in the data processing as well. However, a simple regression and correlation analysis through the use of Spearman’s rank correlation was also used to determine the relationship between effectiveness of internal audit and its determinants.

**2. Results and discussion**

The analysis as shown in table 4.1 indicates that 55% of respondents are males’ while 45% of respondents who took part in this study represents females.

**Table 4.1. Gender of respondents**

	Frequency	Percentage
Male	80	55
Female	65	45

Source: Field survey 2020

**Age of respondents.**

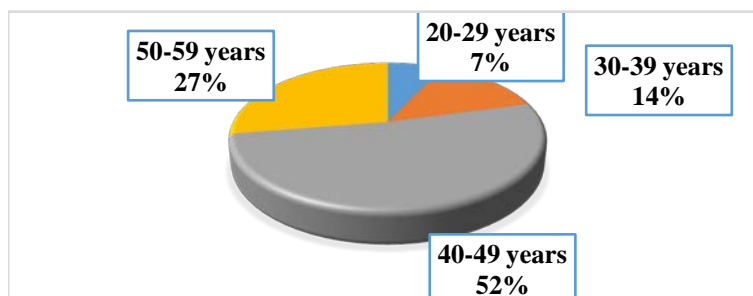


Figure 4.1. Age of respondents are free from interference.

**Table 4.6. Analyzing the independence of internal audit.**

	<b>Mean</b>	<b>Standard deviation</b>
Internal audit report to the highest level within the business	4.93	0.12
Internal auditors have unrestricted access to all departments and employees in the organization	4.89	0.27
Internal audit participates in the development of the company processes	4.63	0.41
<b>Overall (Average)</b>	<b>4.82</b>	<b>0.27</b>

Source: Field survey 2020. Hint: Mean: 0.00 – 1.50 = strongly disagree, 1.51 – 2.50 = Disagree, 2.51 – 3.50 = neither agree nor disagree, 3.51 – 4.50 = Agree and 4.51 – 6.00 = strongly agree.

#### **4.6. Management support regarding internal audit function.**

For any organization to survive and maintain best and acceptable corporate governance practices, management must be in support of the internal audit function. That said, this study found out that, the PUO’s management provides adequate support for the internal audit function. Thus, an average mean of 4.55, SD = 0.51. The statement “senior management supports internal audits personnel’s” and “Internal audit department is large enough to efficiently carry out its duties” recorded a mean of M = 4.84 (SD = 0.36) and M = 4.55 (SD = 0.56). Respondents also agree that senior management is aware of internal audit need within the organization. [18] Observe management support to be the second highest contributor to internal audit effectiveness, and that with such support, sufficient resources are usually allocated for the function, and its recommendations implemented; whereas without it, a lack of commitment to independence on the part of internal auditors is likely. This confirms the findings from this study. This explains why Strouse (n. d.) argues that what sets effective internal auditing systems apart from the ineffective, poorly executed auditing systems is basically the commitment of senior management.

**Table 4.7. Analyzing management support for internal audits.**

	<b>Mean</b>	<b>Standard deviation</b>
Senior management supports internal audit personnel	4.84	0.36
Internal audit department is large enough to efficiently carry out its duties	4.55	0.56
Senior management is aware of internal audits needs.	4.25	0.62
<b>Overall (Average)</b>	<b>4.55</b>	<b>0.51</b>

Source: Field survey 2020. Hint: Mean: 0.00 – 1.50 = strongly disagree, 1.51 – 2.50 = Disagree, 2.51 – 3.50 = neither agree nor disagree, 3.51 – 4.50 = Agree and 4.51 – 6.00 = strongly agree.

## 2.7. Regression Analysis.

**Table 4.8. Correlation matrix**

	IAE	QIA	CIAT	IAA	MS
IAE	1				
QIA	0.823	1			
CIAT	0.806	0.769	1		
IAA	0.715	0.647	0.811	1	
MS	0.745	0.735	0.717	0.621	1

Source: Authors computation, 2020. Correlation is significant at 0.01 level.

**Table 4.9 Regression Model Summary**

<b>R</b>	<b>R square</b>	<b>Adjusted R square</b>	<b>Std. error of the estimate</b>
0.523	0.843	0.817	0.484

Source: Authors computation, 2020.

**Table 5.0. Random effect estimate**

<b>Variables</b>	<b>Coefficients &amp; values</b>
<b>QIA</b>	b1, 0.123
<b>CIAT</b>	b2, 0.208



<b>IAA</b>	b3, 0.179
<b>MS</b>	b4, 0.243

Source: Authors computation, 2020.

A Pearson correlation matrix is provided for dependent and independent variables in Table 4.8. From the table, it is observed that there is a significant and positive correlation ( $r = 0.823$ ) between “Internal audit effectiveness” and “Internal audit quality” at  $p < 0.01$ , a significant and positive correlation ( $r = 0.806$ ) between “Internal audit effectiveness” and “Competence of internal audit team” at  $p < 0.01$ , a significant and positive correlation ( $r = 0.715$ ) between “Internal audit effectiveness” and “Independence of internal audit” at  $p < 0.01$  and a significant and positive correlation ( $r = 0.745$ ) between “Internal audit effectiveness” and “management support”. Then, Table 9 reports the results of the regression analysis. From the table, it is argued that the overall model is significant ( $F = 159.231$ , sig.  $F = 0.000$ ,  $p < 0.05$ ). As far as the first hypothesis is concerned, the results indicate that there is a positive and significant association between “internal audit effectiveness” and “internal audit quality” ( $b_1 = 0.128$ ). Thus, H1 is accepted while H0 is rejected. But even more intensive, there is a positive and significant relationship between “internal audit effectiveness” and “independence of internal audit” ( $b_3 = 0.179$ ), suggesting support for H3. The fourth hypothesis relates to management support. In this case, the regression analysis highlighted a positive and significant association between “management support” and “internal audit effectiveness” ( $b_4 = 0.243$ ). Thus, H4 is strongly supported.

Finally, the results reveal that “competence of internal audit team” influence positively “internal audit effectiveness” ( $b_2 = 0.208$ ), suggesting support for H2, but not at the same level as for the other hypotheses. As illustrated in table 4.9, the  $R^2$  for model is 0.843 indicating that factors affecting the effectiveness of internal audit function, independent variables in the model (QIA, CIAT, IAA and MS) explained that 84.3% of the variance in the effectiveness of internal audit for the purpose of this study are indeed measured by the independent variables. This research confirms [19] who in his study argues that there is positive association between management supports and internal audit effectiveness. [10 & 7] also argued that independence of internal audit affects internal audit effectiveness. Again, [20] identified factors impacting internal audit effectiveness in the Ethiopian public sector. The study found that internal audit effectiveness is strongly influenced by internal audit quality and management support, whereas organizational setting and auditees attribute do not have a strong impact on audit effectiveness.

#### 4. Conclusion

To find out the independence/objectivity of internal auditors in PUO and to ascertain whether top management in the institution support the activities of the internal auditors, questionnaire was prepared and administered as the main instrument to a study sample size of 200 taken from a population of 1,964. Descriptive research design was employed for this study. The Pearson Correlation and regression analysis was used to find out whether there is a relationship between the variables to be measured (effectiveness of internal audit and the determinants) and also to find out if the relationship is significant or not.

The following are the major findings of the study: To establish the proficiency of internal auditors at PUO, the study revealed that, that internal audit function within the PUO is of quality and it shows the significance of internal audit function quality in the study organization. Again, to evaluate the quality of work of the internal auditors in PUO, the study found that, the internal audit staff at PUO have the necessary knowledge and skills in carrying out their job. On independence of internal audit function, the study further revealed that, internal audit reports to the highest level within the organization and also internal auditors within the PUO for the purposes of this study have unrestricted access to all departments and employees in the organization and that their independence is strictly adhere to.

Furthermore, on Management support regarding internal audit function, the study shows that, the PUO's management provides adequate support for the internal audit function. On the regression analysis, the results show the following relationship: That, there is a positive and significant association between "internal audit effectiveness" and "internal audit quality". That, there is a significant and positive correlation between "Internal audit effectiveness" and "Competence of internal audit team. That, there is a significant and positive correlation between "Internal audit effectiveness" and "Independence of internal audit. That, the study found a positive and significant association between "management support" and "internal audit effectiveness. Finally, the results reveal that "competence of internal audit team" influence positively "internal audit effectiveness.

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