

Factors Determining Internal Audit Quality: Empirical Evidence from Ethiopian Commercial Banks

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Abstract

Internal audit is an important part of the corporate governance structure within an organization. The central objective of this study is to investigate factors determining internal audit quality in Ethiopian commercial Banks. The study has adopted quantitative research approach by employing survey research as a strategy of inquiry. Survey for the quantitative strategy has been used through distributing self-administered questionnaires to 160 internal auditors' cross-sectional of 15 commercial banks. The Multiple Regression (OLS) has been employed to regress the data obtained via a structured questionnaire of a 5-point Likert scale. The implication of this paper go to inform the members of corporate governance (or board of directors, audit committee, internal auditors and external auditors) to use the findings in to account in their interactions to better equip internal audit function for their role in corporate governance effectiveness. The results of the study indicate that internal auditors in Ethiopian commercial banks believe the performance, competence and use of information technology by internal auditors as significant factors affecting internal audit quality. As a descriptive and regression result shows "performance" is the highest determinant factor of internal audit quality, followed by "competence" and "Information technology" respectively. The study recommends that Ethiopian commercial banks must work to ensure the availability of the key factors to achieve the quality of internal audit function.

Keywords: Competence; Ethiopia; Information Technology; Internal audit quality; Objectivity; performance

1. Introduction

The recent corporate failures have increased the significance of internal auditing. Concerning this issue, Schneider (2003) argued that the bankruptcies, financial irregularities and fraudulent activities that occurred in Enron, WorldCom and other firms have increased the need for corporate monitoring and concluded that external audit failures related to these events increase the role of internal auditing in corporate monitoring. Organization's management is accountable for establishing and maintaining effective internal control systems which help the management of the organization that effectively diminish the risks to organization's attainment of objectives. Management is charged with this responsibility on behalf of the organization's stockholders and is held liable for this responsibility by an oversight body (e.g. board of directors, audit committee, elected representatives).

Internal audit is an important part of the corporate governance structure within an organization. Corporate governance includes those oversight activities undertaken by the board of directors and audit committee to ensure the integrity of the financial reporting process (Public Oversight Board, 1993). Three monitoring mechanisms have been identified in the corporate governance literature. They are external auditing, internal auditing, and directorships (Anderson et al., 1993, Blue Ribbon Committee, 1999) as well as the audit committee Institute of Internal Auditors (IIA, 2003a, as cited in Matarneh, 2011). An existence of well organized corporate governance (board of directors, audit committee, external auditing, and internal auditing) is one of the strongest means to monitor and promote good governance systems in an organization (Belay, 2007). As recognized by economists and finance specialists, the role of banks is essential for the development of an economy. In addition, commercial banks always play an essential role in the economic development of every country. The governance and performance of commercial banks is determinant for sustainable economic development. Therefore, this study aims to provide evidence on the question of whether the internal auditor's competence, objectivity, performance and access to information technology determine the internal audit quality.

An effective internal audit function is a significant player in two basic governance activities; monitoring of risks and providing assurance regarding controls. Furthermore, internal audit function plays a key role in compliance work and may also spend considerable time on consulting or operational-oriented work, with the objective of enhancing the organizations effectiveness and efficiency; and all these elements map directly in to organizational governance (Hermanson and Rittenberg, 2003). The existence of well-publicized articles on corporate failure around the world suggests weak corporate governance as being a major source of the failures. This suggests that auditors both internal and external, audit committee and board of directors may not properly discharge their professional and statutory responsibilities. Interestingly, a study by Smith (2010) acknowledges the critical role of internal auditors to improve the organizational governance in the U.S. In a more recent study by Sarens and Mohammad (2011) that aimed to investigate factors associated with the convergence of internal auditing toward best practices indicated that internal audit function in emerging countries converge more rapidly

to best practices than internal audit function in developed countries. Consistent with the findings by Sarens and Mohammad (2011), Bursa Malaysia recognizes the importance of internal auditing and the roles of internal auditors in the governance process within an organization (Bursa Malaysia, 2009).

Internal auditing (IA) serves as an important link in the business and financial reporting processes of corporations and not-for-profit providers. Internal auditors play a key role in monitoring a company's risk profile and identifying areas to improve risk management (Goodwin and Kent, 2006). Thus, internal audit quality strongly needed so as to keep abreast of developments and technical progress witnessed by the world. As the literature reviews show, there is lack of adequate literatures on factors determining the internal audit quality. Therefore, carefully examining factors determining internal audit quality could fill the gap to the literature in general and in Ethiopian context particularly on commercial banks of internal audit quality. Furthermore, this study to the best of the researcher's knowledge, it is unexplored area that attempts to identify factors determining the internal audit quality in Ethiopian commercial banks. This fact reveals a great need to conduct this study.

The principal objective of this study is to investigate factors determining internal audit quality which means to examine the relationship, if any, between the competence, objectivity, performance and access to information technology of internal auditors and the quality of internal audit in Ethiopian commercial Banks. This study contributes to internal audit quality literature by providing empirical evidence that increase the body of knowledge in understanding the factors that influence the quality of internal audit function. Furthermore the study used to the financial institutions particularly banks to understand factors determining the internal audit quality in corporate governance effectiveness. Individuals, internal auditors, could compare their own contributions to the quality of their internal audit function using this study. The other members of corporate governance (or board of directors, audit committee and external auditors) could use these findings in to account in their interactions to better equip internal audit functions for their role in corporate governance effectiveness.

2. Literature review

The internal audit function has become well-recognized as a one of the key governance mechanisms and that role has evolved over time. Despite its earlier role as company's 'watch-dog' for the organization, the nature of internal audit processes today has extended and typically encompasses consulting role, including risk management, control assurance and compliance work. This is reflected by the new definition of internal auditing by the Institute of Internal Auditors (IIA, 2011) that defined it as an independent, objective assurance and consulting activity designed to add value and improve an organization's operations. It helps an organization accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control, and governance processes.

Even though the definition of internal audit may change via time, there are some difficulties encountering to understand the internal audit function and its importance in the system. Internal audit has turned from being a tool of internal control to be broader and more comprehensive than this traditional concept, and now is not only a tool to regular auditing for the effectiveness of internal control, verification of manipulation, or assist the external auditor, but its role extended to include the definition of the risks faces the company, and advising senior management in this regard. To reach and obtain all the reward of internal audit function, the other parties in the system (Management, Accountants, Audit Committee and so on) should have sufficient considerate of the audit function (Staciokas and Rupsys, 2005).

Internal Audit Quality

A key factor in the consideration of the use of internal audit in the external audit process is the quality of internal audit. The internationally recognized auditing professional standards (SAS No.65, AICPA, 1991; ISA No.610) require external auditors to first consider the quality of internal audit namely in terms of the objectivity, competence and work performed by the IA function before relying on the work of the internal auditor.

The professional standards for each of the internal and external audit have identified the necessary factors to ensure the quality of the internal audit function, and it identifies the list of auditing Standards (No. 65, AICPA, 1991) the factors of quality internal audit function to include: (1) competence which is measured by educational level, and Professional certificates, (2) objectivity which is measured by the parties that addressed the internal audit report to them, and the parties who responsible for the appointment of internal auditors,(3) quality of performance of tasks ,which measured by the accuracy and adequacy of audit programs, and the scope of audit (AICPA,1991). Similarly the standards of the Institute of Internal Auditors identified the factors of quality of audit functions by: Proficiency, independence, objectivity, (IIA, 2003b).

The technology revolution in accounting and auditing began in the 1954 with the first operational business computer. IT changed the way accounting data was stored, retrieved, and handled. These new systems led to radically different audit trails, if one at all. The revolution became a dynamic evolution as the computer industry sustained continuous, rapid, technical innovations. Information technology affects, and continues to affect, auditing (Salehi and Alipour, 2010).

Discussions by the Public Company Accounting Oversight Board (PCAOB) Standing Advisory Group (SAG) regarding auditor's knowledge of information systems (IS) has emphasized the importance of information technology (IT) in general, and IT auditing specifically, to the external financial audits of public companies. In addition to the United States' Sarbanes-Oxley Act (SOX), a plethora of other laws, regulations, and standards have all necessitated additional IT assurance related to information security and privacy. These include, but are not limited to, the Health Insurance Portability and Accountability Act (HIPAA), Canada's Personal Information Protection and Electronic Documents Act (PIPEDA), the Payment Card Industry Data Security Standard (PCI DSS) and the European Union's Data Privacy Directive. In addition to these regulatory compliance requirements, auditors of public companies in the U.S. are bound by auditing standards that require adequate IT expertise to assess controls (Curtis et al., 2009).

previous empirical evidence indicate that extent to which external auditors rely on the internal audit work will be greater when the internal audit department possessed the characteristics associated with competency (Messier and Schneider, 1988). These studies focus on specific criteria use to assess the competency of the internal audit function including the size or existence of the IA function (Goodwin and Kent, 2006); IA training programs and professional certification (Brown, 1983); IA experience (Messier and Schneider, 1988) and IA existence or size (Goodwin and Kent, 2006; Prawitt et al., 2010).

Objectivity is a very important attribute that internal auditors should work for. It is considered as the key element of the effectiveness of the internal audit function. Internal Auditing Standards and studies stressed the importance of both, the organizational independence of the internal audit function and the individual objectivity of internal auditors (IIA, 2003; Goodwin and Yeo, 2001). A number of previous studies have investigated the reporting level of the internal audit department, for example, Clark et al., (1981) found that, the independence of the internal audit department and the level of authority (the level to which internal audit personnel report) were the two most important criteria influencing the objectivity of their work. There is also study by Eisa (2008) that determines the factors affecting the quality of the internal audit function to improve the quality of corporate governance. It has disclosed that the Increase of eligibility of internal auditors by increasing objectivity of the internal auditors through increasing the degree of independence leads to increase the quality of the internal audit.

A major part of external auditors trust to the results of internal audit activity, and this confidence is going to grow quite fast in the next future (Ward & Robinson, 1980). Schneider (1984) realized a descriptive model study through the examined one major factors of internal auditing which is work performed that have big influences over the confidence of external audit in the internal auditing. The results obtained by Schneider showed that, from external auditors' point of view, the most important factor is the quality of the work performed by internal audit, next important factors being competence and objectivity. There is another relevant study realized by Haron, et al (2004), Mihret, and Admassu (2011). The findings of the study indicated that work performed is the one most important criterion that external auditors consider in their reliance on internal auditors.

Salehi and Husini (2011) have found on their study, using IT causes incredible changes in internal auditing. According to these findings, IT is generally used in performing different phases of internal auditing, especially performing content tests and in the process of performing analytical investigations and main operations. Upon these findings, auditors can increase their benefit and their duties with a higher quality by using IT. It helps auditing by improving the quality of different aspects of internal auditing. Software packages, extensive electronically sheets and other programs like planning software provide possibility of improving internal auditing operations. Research results also show that using IT causes auditors to spend less time on probing and performing content tests and accuracy of mathematical calculations of office accounts rapidly.

3. Research Methodology and Hypotheses

The researchers has adopted quantitative research approach to examine factors determining internal audit quality in Ethiopian commercial banks. A quantitative approach is one in which the investigator primarily uses postpositive claims for developing knowledge, i.e., cause and effect relationship between known variables of interest (Creswell, 2003). In line with this, quantitative research tests the theoretically established relationship between variables.

To undertake this study, the specific method which has been employed is survey questionnaire as the main data gathering instrument from primary data. The raw data which has been used in this study has been collected through personal management as by the researcher himself in order to get the point of view of the respondents on the relationship between the competences, objectivity, performance and information technology of internal auditors and the quality of internal audit in Ethiopian commercial banks.

All internal auditors of Commercial banks which have been operated and the additional banks which make an initial public offering to begin their operation have been taken as a population. Currently, there are eighteen commercial banks of Ethiopia, and the internal auditors of fifteen commercial banks have been taken where as three commercial banks such as Addis International bank, Dashen bank and Enat bank excluded and

the researcher believe that, for meaningful analysis, there is no need to sample from the fifteen commercial banks of internal auditors as they are already few in number to collect information. Therefore, only internal auditors' of fifteen commercial banks' information was incorporated in this study.

Survey has been conducted via self-administered questionnaire from the internal auditors of commercial banks; due to questionnaire is a common place instrument for observing data beyond the physical reach of the observer (Leedy, 1989).

Questionnaires were distributed to 160 internal auditors of 15 commercial banks out of 18 commercial banks for the reason that two banks (such as Addis International bank, Dashen bank) had not accepted the researcher's letter due to confidentiality of information and one Enat bank is excluded due to its new entrant to the service. Out of 160 distributed questionnaires 154 questionnaires have been collected. Questions have been presented in the form of affirmative statements, relating to the concepts on factors determining the internal audit quality, in such a way as to enable measurement of the respondents' opinions. The questionnaires have been developed from the previous studies.

The survey questionnaire contains two parts; first part includes demographic characteristics while the second part has been designed to test the four main variables of the study, each set questions formed a field statements, which covers the questions of the study. The main parts of the questionnaire participants have been asked, according to their insights and perceptions, to state the extent to which they agreed or disagreed with the statements provided in the four scales of the study (objectivity, competence, performance and Information technology). Five point- Likert scale has been used as a measure to reflect the views of respondents regarding the statements contained in the questionnaire, which will be allocated weight (5) for the situation strongly agree, and (4) for agree, and (3) for the situation is neutral and (2) for disagree, and (1) for Strongly Disagree.

This study identifies the factors that influence internal audit quality. Thus, the multiple regression equation (OLS regression model) has been used to analyze the data obtained via a structured questionnaire using SPSS (statistical package for social scientists).

The regression model: To examine factors determining the internal audit quality, the following multiple regression model has been developed:

$$IAQ = \beta_0 + \beta_1COM + \beta_2OBJ + \beta_3PER + \beta_4IT + U_i$$

Where:

β_i = The regression coefficient, $i = 0, 1, \dots, 4$.

IAQ = Internal audit quality.

COM= Competence of internal auditors.

OBJ = Objectivity of internal auditors

PER = performance of internal auditor.

IT = Access to Information Technology by internal auditors

U_i = Error term, $i = 1, 2, 3 \dots$

Variables in the model and their measurement

Dependent variable: The dependent variable used by the study is the *internal audit quality* and it has been identified by six statements. The dependent variable (Internal audit quality) has been measured based on the previous study (Matarneh, 2011).

Independent variables: The independent variables used by the study are *competence, objectivity, performance, and Information Technology* of internal auditors; each one of independent variable has been measured based on the previous study (Matarneh, 2011; Eisa, 2008; Suwaidan, and Qasim, 2010). IT has also been measured based on the prior studies.

Formulation of Hypotheses

Competence (com)

previous empirical evidence indicate that extent to which external auditors rely on the internal audit work will be greater when the internal audit department possessed the characteristics associated with competency (Messier and Schneider, 1988). The findings of the study of Haron, et al (2004) indicated that technical competence is the most important criterion that external auditors consider in their reliance on internal auditors. The result obtained by Schneider (1988) also showed that, from external auditors' point of view, the important factor is the quality of the competence by internal auditors. Based on these evidences, the researcher hypothesizes that:

- ✓ **H1:** There is a positive relationship between competence of internal auditors and the quality of the internal audit.

Objectivity (OBJ)

Objectivity is the key element of the effectiveness of the internal audit function. Objectivity significantly influences the control environment (monitoring) aspect of the internal control system (Fadzil, et al., 2005). An increasing objectivity of the internal auditors through increasing the degree of independence leads to increase the quality of the internal audit (Eisa 2008). Benchmarking these empirical evidences, the researcher hypothesizes that:

- ✓ **H2:** There is a positive relationship between objectivity of internal auditors and the quality of the internal audit.

Performance (PER)

The findings of the study by Haron, et al (2004), also indicated that work performed is the one most important criterion that external auditors consider in their reliance on internal auditors. Results of the study of Mihret and Admassu (2011) and Schneider (1988) indicate internal audit work performance is the most important factor that determines the extent of external auditors' reliance on internal audit work. Based on these empirical evidences, the researcher hypothesizes that:

- ✓ **H3:** There is a positive relationship between performance of internal auditors and the quality of internal audit.

Information Technology (IT)

Salehi and Husini (2011) have found on their study, IT causes remarkable changes in internal auditing and IT increases the quality of internal audit. IT helps auditing by improving the quality of different aspects of internal auditing. Research results also show that using IT causes auditors to spend less time on performing content tests and accuracy of mathematical calculations of office accounts rapidly. Benchmarking these empirical facts, the researcher hypothesizes that:

- ✓ **H4:** There is a positive relationship between internal auditors' use of information technology and the internal audit quality.

4. Results and Discussions

Descriptive and Econometric Results

The demographical characteristics are described for the respondents and analyzed their opinions and responses on the survey questionnaire. Table 1 (see appendix) shows that 20 respondents or 13 percent hold a Diploma, 113 respondents or 73.4 percent hold a bachelor degree, 19 respondents or 12.3 percent have a master degree, and 2 respondents or 1.3 percent hold other (CPA). As far the area of study, the majority of the respondents (90 respondents) or 58 percent specialized in accounting, and 35 respondents or 23 percent specialized in finance whereas 20 respondents or 13 percent are business administration and the remaining 9 respondents or 6 percent take the others field of specialization (Management, Project management, Economics, Information system (BSC), and Information Technology (IT)). It can also be seen from the table that 60 respondents or 39 percent have an experience as internal auditor for less than five years and also 68, 18, 4, 4 respondents or 44.2, 11.7, 2.6, 2.6 percent have an experience or served as internal auditor for the years of 5-10, 10-15, 15-20, and more than 20 respectively. It can also further observed that 42, 67, 34, 7, 4 respondents or 27, 43, 22, 5, 3 percent of internal auditors have experience in the bank for the years of Less than 5, 5-10, 10-15, 15-20, and more than 20 years respectively. In general, the table information indicates that internal auditor are qualified enough to answer the questionnaire and can be trusted in their abilities and information.

To achieve the objectives of the study, the questionnaire were designed and distributed to 160 internal auditors of 15 commercial banks. The results of the questionnaire indicate that internal auditors in Ethiopian commercial banks consider the competence, objectivity, performance and the use of IT by internal auditors as significant factors affecting the internal audit quality. As it

is observed on the following Table 2 (see appendix) it is found that "performance" have the highest mean score (4.4405), followed by "competence" (4.4177), "Information Technology" (4.3680), and "objectivity" (4.3649) respectively.

Table 3 (see appendix) reports the regression results that attained by regressing the dependent variable (internal audit quality) on independent Variables (competence, objectivity, performance and IT). The OLS regression results for the entire explanatory variables indicate that all variables have positive correlation and statistically significant except (objectivity) with the explained variable (internal audit quality). The regression output displayed in table 3 and as it is attached in appendix D the model is significant at ($F = 31.583$, $R\text{ Square} = 0.459$, $P < 0.01$). The R-squared value measures how well the regression model explains the actual variations in the dependent variable (Brooks, 2008). The adjusted R^2 value in the above table indicates that more than 44% of the total variability of internal audit quality is explained by the model, so it can be concluded that the independent variables provide good explanatory power. The regression F-statistic (31.583) and the p-value of zero imply that the independent variables in the model are able to explain variations in the dependent variable.

Discussions on main variables

This study has intended to test four (4) hypotheses to test factors determining the internal audit quality (competence, objectivity, performance, and information technology). This section reports the discussion of testing the research hypotheses using multiple regression analysis (OLS), and empirically examine whether there is a relationship between the explanatory variables and the internal audit quality.

Competence: As the regression result shows in table 3, there is a positive relationship between the competence

of internal auditors and the internal audit quality at a statistical significance level equal to 0.001 (1%), where the magnitude of the effect of this variable on the internal audit quality is 0.181 and the value of (t) 3.334 is higher than the value (2), indicating competence is the determinant factor for internal audit quality. Therefore we accept the hypothesis of the study that there is a positive relationship between competence of internal auditors and the quality of the internal audit. The result reveals that competence plays a material positive influence on internal audit quality. This means that internal auditors' of commercial banks which have competence criteria will enhance their internal audit quality. The result of this study is consistent with earlier studies. previous empirical evidence indicate that extent to which external auditors rely on the internal audit work will be greater when the internal audit department possessed the characteristics associated with competency (Messier and Schneider, 1988). The findings of the study of Haron, et al (2004) indicate that technical competence is the most important criterion that external auditors consider in their reliance on internal auditors. The result obtained by Schneider (1988) also showed that, from external auditors' point of view, the important factor is the quality of the competence by internal auditors. Thus, the result of this study confirms the prior studies and the hypothesis of the study that there is a positive relationship between competence of internal auditors and the internal audit quality.

Objectivity: In accordance with regression output, unexpectedly, it has been found that there is a weak positive correlation which is not statistically significant between objectivity of internal auditors and the internal audit quality ($P=0.882$), where the magnitude of the effect of this variable on the internal audit quality is 0.007 and the value of (t) 0.149 is lower than the value (2). Therefore we reject the hypothesis of the study that there is a positive relationship between objectivity of internal auditors and the internal audit quality. The result reveals that objectivity has not a material positive influence on internal audit quality. This means that internal auditors of commercial banks which have objectivity criteria will not that much influence their internal audit quality. The result of this study is consistent with earlier studies of Haron, Chambers, Ramsi and Ismail (2004) that the objectivity of internal audit is not considered as being significant, from external auditor's point of view, a possible justification being the fact that internal auditors are seen as the employees of the organization. In Ethiopia, most of the time employees and internal auditors have a close relationship that influences their independence. Hence, objectivity is not an important element that could affect the decisions of external auditors regarding their reliance on internal auditors.

Performance: As hypothesized by the investigator of this study based on the previous empirical evidences, there is a positive relationship between the performance of internal auditors and the internal audit quality at a statistical significance level equal to 0.000, where the magnitude of the effect of this variable on the internal audit quality is 0.323 and the value of (t) 5.807 is higher than the value (2), indicating a best determinant factor for internal audit quality. Therefore we accept the hypothesis of the study that there is a positive relationship between performance of internal auditors and the quality of the internal audit. The result reveals that performance plays a material positive influence on internal audit quality. This means that internal auditors' of commercial banks which have performance criteria will enhance their internal audit quality. The result of this study is consistent with previous studies. The results obtained by Schneider shows that, from external auditors' point of view, the most important factor is the quality of the work performed by internal audit, next important factors being competence and objectivity. Results of the study of Mihret, and Admassu (2011) indicate internal audit work performance is the most important factor that determines the extent of external auditors' reliance on internal audit work. There is also the finding of the study by Haron, Chambers, Ramsi and Ismail (2004) that work performed is the one most important criterion that external auditors consider in their reliance on internal auditors.

Information Technology: As it is displayed on the table 3 there is a positive relationship between the use of IT by internal auditors and the internal audit quality at a statistical significance level equal to 0.041, where the magnitude of the effect of this variable on the internal audit quality is 0.152 and the value of (t) 2.063 is higher than the value (2), indicating a determinant variable in the study. As a result we accept the hypothesis of the study that there is a positive relationship between the use of IT by internal auditors and the quality of the internal audit. The result shows that IT has a positive influential power on internal audit quality. This means that internal auditors' of commercial banks which use IT will improve their internal audit quality. The result of this study confirms the results of previous studies. Salehi and Husini (2011) have found on their study, IT causes significant changes in internal auditing and IT increases the quality of internal audit. IT helps auditing by improving the quality of different aspects of internal auditing. Research results also show that using IT causes auditors to spend less time on performing content tests and accuracy of mathematical calculations of office accounts. The previous finding of Abu-Musa (2008) shows internal auditor need to enhance their knowledge and skills of computerized information systems (CIS) for the purpose of planning, directing, supervising and reviewing the work performed.

Conclusion and Implication to Research and Practice

This paper aimed to investigate factors determining the internal audit quality in Ethiopian commercial banks through quantitative research method. Therefore, the study concludes that performance of internal auditors' is the most important determinant factor that affects the internal audit quality in Ethiopian commercial banks. Competence of internal auditors' is one major determinant factor that affects the internal audit quality in Ethiopian commercial banks.

The study also concludes that the use of information technology by internal auditors' is another determinant factor that influences the internal audit quality in Ethiopian commercial banks. Surprisingly, objectivity of internal auditors' is not a factor that determines the internal audit quality in Ethiopian commercial banks.

This research is a great importance to the corporate governance structure within an organization, specifically Ethiopian commercial banks. This paper go to inform the members of corporate governance (or board of directors, audit committee, internal auditors and external auditors) to use the findings in to account in their interactions to better equip internal audit function for their role in corporate governance effectiveness. Therefore, Ethiopian commercial banks can make use of this study to determine internal audit quality

This research study has a number of strengths. Nevertheless, in the course of this study the few constraints encountered which calls for further studies. This study concentrated only on the banking sector; hence, future studies could investigate internal audit qualities of other industries. The survey study carried out in this study was concentrated on few variables, thus, future studies could incorporate including other important variables in the study.

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Appendices

Table 1: Demographic distribution of the respondents

<i>Variables</i>	<i>Variable Categories</i>	<i>Frequency</i>	<i>Percent (%)</i>
<i>Qualifications</i>	Diploma	20	13
	Bachelor's Degree	113	73.4
	Master's Degree	19	12.3
	Others***	2	1.3
	Total	154	100
<i>Specialization</i>	Accounting	90	58
	Finance	35	23
	Business Administration	20	13
	Others***	9	6
	Total	154	100
<i>Experience as internal Auditor</i>	Less than 5 years	60	39
	From 5-10 years	68	44.2
	From 10-15 years	18	11.7
	From 15-20 years	4	2.6
	More than 20 years	4	2.6
	Total	154	100
<i>Experience in the Bank</i>	Less than 5 years	42	27
	From 5-10 years	67	43
	From 10-15 years	34	22
	From 15-20 years	7	5
	More than 20 years	4	3
	Total	154	100

Source: Author's own computation based on survey data (2013)

Note: *** Others for Qualification include: CPA

*** Others for Specialization include: Management, Project management, Economics, Information system (BSC), and Information Technology (IT).

→ Professional certification of internal auditors' reply on the questionnaire includes: ACCA, CIA (Certified Internal Auditor), Fraud detection Audit.

Table 2 summary of descriptive Statistics

<i>Variables</i>	<i>N</i>	<i>Minimum</i>	<i>Maximum</i>	<i>Mean</i>	<i>Std. Deviation</i>
<i>Internal Audit Quality</i>	154	2.33	5.00	4.5476	.38571
<i>Competence</i>	154	2.17	5.00	4.4177	.50281
<i>Objectivity</i>	154	2.00	5.00	4.3649	.55171
<i>Performance</i>	154	2.17	5.00	4.4405	.52452
<i>Information Technology</i>	154	3.50	5.00	4.3680	.36439
<i>Valid N (listwise)</i>	154				

Source: Author's own computation based on survey data (2013)
 N = Number of observations

<i>Variables</i>	<i>Regression Estimation Result</i>		<i>Unstandardized Coefficients</i>		<i>Standardized Coefficients</i>		<i>Co-linearity Statistics</i>	
	<i>β</i>	<i>Std. Error</i>	<i>Beta</i>	<i>t-value</i>	<i>Sig.</i>	<i>Tolerance</i>	<i>VIF</i>	
<i>(Constant)</i>	1.621	.321		5.046	.000*			
<i>Competence</i>	.181	.054	.235	3.334	.001*	.729	1.372	
<i>Objectivity</i>	.007	.044	.009	.149	.882	.897	1.115	
<i>Performance</i>	.323	.056	.440	5.807	.000*	.633	1.580	
<i>Information Technology</i>	.152	.074	.143	2.063	.041**	.752	1.330	

Note: R Square = 0.459 F = 31.583 ANOVA Sig. = 0.000

Adjusted R Square = 0.444 Durbin-Watson = 1.635 Cronbach's Alpha (α) = 0.732

*1 % significant level

**5 % significant level

Dependent Variable: Internal Audit Quality (IAQ)

Source: Author's own computation based on survey data (2013)

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