

RESEARCH ARTICLE

## Determinants of Internal Auditor's Effectiveness: Case of Ethiopian Public Sectors

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### Abstract

The main objective of this study is to investigate determinants of internal auditors' effectiveness in Ethiopian public sectors. Public sectors are established with the aim of providing basic public services effectively and efficiently to the whole society. The efficiency and effectiveness of management operations in public sectors, on the other hand, are ensured by the effectiveness of their employees. Internal auditors, the focus of this study and one key employee of public offices, are supposed to work independently and objectively to improve an organization's operations and services quality. Despite of their roles in public sectors, internal auditors have gained less credit from their management that doubts the effectiveness of internal auditors. To investigate determinants of internal auditors' effectiveness in public sectors, primary data was collected from managers and internal auditors by administrating Likert-Scale type questionnaire in 30 public sectors. The Ordinary Least Square (OLS) linear regression model was used to analysis the collected data. The findings of the study revealed that organizational independence of internal auditors was the most dominate determinant of internal auditors' effectiveness with positive significant effect. The presence of internal audit charter in public sectors has also positive effect on internal auditors' effectiveness. Thus, the management of public sectors should work aggressively on the means of assuring organizational independence of internal auditors and the presence of internal audit charter in each sector.

**Keywords:** *Internal auditors' effectiveness, Public sectors, Ethiopia and Organizational independency.*

### Introduction

Public sectors are part of the public body partially or wholly owned by a government and financed by the government budget. They are established with the aim of providing basic government services to the whole society [1] with the main target of not to earn a profit. A public sector provides basic public services such as education, health care, public securities, public transit, and so on, which benefit all society and encourage equal opportunity [2].

The efficiency and effectiveness of management operations in public sectors are ensured by the effectiveness of their employees [1]. Internal auditors, the focus of this study and one key employee of public offices, are supposed to work independently and objectively to improve an organization's operations and services quality by maintaining good internal control system, avoiding corruption, ensuring good corporate

governance, promoting accountability and greater transparency [3-5]. In addition, internal auditors can promote an organization efficiency and effectiveness through providing constructive criticisms and recommendations; reducing information asymmetry in decision-making; and assuring internal assertion in the business and financial reporting processes of the organization [2,6,7,8]. Practically achieving these roles requires the effectiveness of internal auditors. Internal auditors are effective only when they are able to achieve goals of internal audit. The aim of this study was to investigate the main determinants of internal auditors' effectiveness in public sectors. Identifying the determinants can greatly contribute to the improvement of internal auditor's effectiveness in an organization's governance system.

### Statement of the Problem

The internal audit function (here after referred

as IAF) lies at every heart of corporate governance system. Because, it makes line managers conscious of their responsibility; acts as a consultant in monitoring risk; identifies weakness of internal control system; facilitates the implementation of risk management and contributes to the appropriateness of procedures and operations of the organization [7,9,10].

However, despite of IAF roles; a management response to the internal audit findings and recommendations is generally not adequate, and the number of actual audit performed in a given period is usually less than the number of audits stated in the annual audit plan in Ethiopian public sectors [2]. In addition, IAF in Ethiopian public sectors is characterized by gaining less management respect; lack of organizational independence; absence of professional development; delegating internal auditors too many tasks and being ignored (conflict of interest) [1]. The study conducted by Mihret and Yismaw, [2] in Ethiopian public sector (university) also forwarded that internal audit recommendations were not afforded enough management attention and support which may adversely affect the effectiveness of internal audit [7,9]. This lack of internal auditor credibility in public sectors' governance may have greater implication for less effectiveness of internal auditors in public offices. From the management's point of view, internal auditor's recommendations are might not appropriate to implement and to use in decision-making and might not add more values. This decreases the degree of internal audit credibility and makes the line managers to be less active in implementing their recommendations [9].

These greatly doubt the IAF effectiveness in public offices. Thus, this study was designed to investigate determinants of internal auditors' effectiveness in public sectors and was focus on how to improve their effectiveness. To achieve these objectives, the researcher measured internal auditors' effectiveness in terms of two dependent variables- internal auditors' completeness in identifying non-compliance activities, and the contributions added by IAF to selected public offices. In line with this, the effects of management's perception of internal audit's value, management support to IAF,

organizational independence, adequate competent internal audit staff, and existence of approved internal audit charter on internal auditors' effectiveness were analyzed.

## Objectives of the Study

The general purpose of this study was identifying determinants of internal auditor's effectiveness in selected public offices, and specifically investigating the impact of management's perception, management support, organizational independence of internal auditors, adequate competent internal audit staff, and the presence of internal audit charter on internal auditor's effectiveness.

## Research Questions

This research was intended to answer the following research questions.

- Does management perception matter for internal auditors' effectiveness?
- Does the support given by management to internal auditors enhance their effectiveness?
- How organizational independence of internal auditors affects internal auditors' effectiveness?
- Does adequate competent internal audit staff impacts internal auditors' effectiveness?
- Does the presence of Internal Audit Charter in public offices contribute to internal auditors' effectiveness?

## Research Hypothesis

After related literatures were extensively reviewed on management's perception, management support, organizational independence of internal auditors, adequate competent internal audit staff, and presence of internal audit charter, the following directional research hypotheses were developed.

**H<sub>1</sub>:** The better management's perceptions of internal audit values, the higher internal auditors' completeness in identifying non-compliance activities and the more added contributions.

**H<sub>2</sub>:** Internal Auditors' effectiveness in public sectors is positively related to the management support.

*H<sub>3</sub>*: There is a positive relationship between internal auditors' effectiveness in public sectors and organizational independence.

*H<sub>4</sub>*: Internal Auditors' effectiveness in public sectors is positively related to adequate competent internal audit staff.

*H<sub>5</sub>*: There is a positive relationship between internal auditors' effectiveness and the presence of internal charter in the public sectors.

### Significance of the Study

This study was conducted to analyze the effect of management's perception, management support and organizational independence of internal auditors, adequate competent internal audit staff and the existence of internal audit charter on internal auditor's effectiveness in public sectors. The study's outcomes have three important significances. First, the study's conclusions would be used in internal auditors' effectiveness improvement strategy and policy by the public offices management. Second, they enable the public sectors' management to take corrective measures by specifically identifying significant factors of internal auditor's effectiveness. Finally, the study's outcomes would contribute to the literature by developing a conceptual understanding of internal auditors' effectiveness in public sectors.

### Related Literature Review

In recent years, many organizations are encountering rapid economic changes, complex and expanded regulatory requirements, and technological advancements. In addition, the current corporate scandals and the global financial crisis also pushed the public and regulatory bodies to give unique position to IAF in corporate governance for internal assurance services [1]. These changes have been given the IAF a set of expanded opportunities to support and advice management contracts [5,6] in many organizations. However, in the modern organizational management system, the status of IAF effectiveness comes up with many doubts. As argued by Cohen & Sayag [7], Arena and Azzone [9] and Mihret and Yismaw [14] in corporate governance system, internal auditors are facing many challenges that can

diminish their effectiveness and forwarded that future internal audit research should focus on the investigation of internal auditor's effectiveness determinants.

Various scholars have defined the term effectiveness in many ways. Effectiveness is the capacity to obtain the targeted results or it is the achievement of internal auditing goals and objectives [9,10]. In Mihret and Yismaw, [2] internal audit effectiveness is defined as "the extent to which an internal audit office meets its supposed objective or the intended outcome". In line with these definitions, internal auditor's effectiveness was measured in this study based on their completeness in identifying non-compliance activities and their contribution to management in sampled public sector. Because, the primary goals of internal auditors in an organization are assessing the degree of compliance with internal operational policy and adding more value on the organization management performance.

*Management's Perception of IAF's Values* was one of the hypothesized factors that might affect internal auditor's effectiveness in public sectors. *Perception* is the process of attaining awareness or understanding of sensory information or it is intuitive recognition of one experience [11]. In this research, management's perception of IAF's value refers to a management awareness or understanding of internal auditors' roles and their contributions to public management.

To function effectively, internal auditors and the customers of audit services should possess a similar understanding of what makes internal auditing a value-added activity. Failure to reach this understanding could result in the perception that internal audit is simply an obstacle to management operations, and may lead to underutilized audit services and ignored audit recommendations [12] which adversely influences the effectiveness of internal auditors [7,9].

The second hypothesized factor was management support of internal audit functions. Management support has a far-reaching consequence on internal auditors' effectiveness in organizations. In their case study on internal audit effectiveness, Mihret

and Yismaw [2] put that the components of management support- response to audit finding and the commitment to strength internal audit have a significant influence on internal auditors' effectiveness. Given the fact that an internal audit activities are performed in dynamic management process and supportive environment (e.g. analyzing risk), internal auditor expects senior management to take the first steps to support the internal audit process. Because, Sarens and Beelde [13] argue that the overall acceptance and appreciation of internal audit within the company is strongly dependent upon the support they receive from senior management. Internal audit actively seeks management support with resources and commitment to promote audit functions.

In this research, management support was expressed in terms of supporting the auditing processes by fulfilling necessary resources, finance, transport if required, providing training, introducing auditors with new technology and procedures, budgeting funds for certification and other facilities that facilitates the internal auditing works.

The third hypothesized independent factor was organizational independence of internal auditors. Independence has no single meaning and interpretation across peoples; hence, the concept is subject to ambiguity and uncertainty [14]. However, for the purpose of this study independence refers to the concept of being free from any management influence while internal auditors perform audit activities and issue audit report [1, b15]. Independence is fundamental to the reliability of auditors' reports. These reports would not be credible, and investors and creditors would have little confidence in them, if auditors were not independent both in fact and in appearance. The assurance services provided by auditors derive their value and credibility from the fundamental assumptions of independence in mind and independence in appearance [14,16].

Adequate competent internal audit staff was the fourth hypothesized independent factor for internal auditors' effectiveness. Adequacy refers to the presence of enough number of employed internal auditors (staff size) while

competency represents the proficiency (skill) of internal auditors to accomplish their tasks on time. The size of internal audit staff and competency of internal auditors are the two best indicators of internal audit function quality and effectiveness [7, 9, 17, 18, 19, 20, 21] and [2]. The IIA's standard 1210 on proficiency of the auditor required that internal auditors should possess the minimum knowledge (educational status), skills and other competencies needed to perform their responsibilities [5]. Therefore, adequacy and competence of internal audit staff may be the core factors of internal auditors' effectiveness.

Finally, the existence of approved internal audit charter in public sectors was the fifth hypothesized independent factor for internal auditors' effectiveness. Internal audit charter, as defined by IIA, "*a formal written document that defines scope of internal auditor's activity; authorize full access to necessary documents and physical properties; and establish the position of internal auditors in an organization*". The existence of defined audit charter in organizations helps auditors to be more effective in their engagement. As O'Regan [22] concluded, a well-drafted charter is an important ingredient of effective internal audit function. It helps to direct the efforts of audit staff on appropriate audit activities and ensures independency of internal auditors in an organization. Furthermore, (Van Peurseem [4] and van Peurseem [23] added, the presence of a strong charter in a company adds an officially respected layer of authority to the position of internal audit and influences senior management to flow the recommendations of the internal auditor which in turn may affects effectiveness.

## Research Design and Methodology

The public sectors in Ethiopia are undertaking a far-reaching economic plan and policy to ensure sustainable and equitable economic development of the country. In the country, public sectors are the major vehicle for economic development and macroeconomic stability since they are engaged on various economic activities like manufacturing industry, transport and communication services; banking and financial services sector; hotel and tourism industry, education sectors, etc.

To assure the efficiency and effectiveness of public sector's manager, continuous management performance assessment should undertake in each public sector. Internal audit reports and recommendations are the main reflection of management performance. However, the quality and reliability of internal audit reports are depend on the effectiveness of its internal auditors- the main focus of this study.

Target population of the study was public sectors found in the country and those under control of government. Primary data was obtained from managers and internal auditors of purposively sampled 30 public sectors through Likert-scale type questionnaire. From each selected public sector, two managers - the Chief Executive Officer (CEO) and Chief Finance Officer (CFO), and two more experienced internal auditors were taken. Thus, the total sample size was 120 respondents. Data about the internal auditors' effectiveness (the dependent variable) was obtained from their managers while data concerning independent variables was collected from the internal auditors.

To ensure the reliability of data collected, items of the questionnaire were adopted and modified from former scholars [7] and previous literature review. The questionnaires were designed in Likert-type structured questionnaire with 5-scale point where 1 is corresponds to the lowest scale (strongly disagree) and 5-corresponds to the highest scale point (strongly agree). In order to assess the reliability (internal consistency) of the instrument, Cronbach's Alpha ( $\alpha$ ) analysis was performed for all variables. The value of Cronbach's Alpha ( $\alpha$ ) was found between 0.751 - 0.933 for all variables and it is highly reliable and acceptable for data analysis. Ordinary Least Square (OLS) linear regression analysis was employed using SPSS version 16 to investigate dependent and independent variables relationship after OLS assumption requirements met.

### **Dependent and Independent Variables**

The dependent variable for this study was internal auditor's effectiveness. Internal

auditor's effectiveness was measured through two parameters- internal auditors' completeness in identifying non-compliance activities and value added by them to their sector. Compliance audit is a type of audit services mostly performed by internal auditors of the organization [24]. Compliance audit ascertains whether a process or an activity is accomplished in adherence with established policies, plans, procedures, laws and regulations of an organization [1,24,25]. Value creation or adding contribution to their sector is the other goal of internal auditors. Adding value can be described as playing a role in value creation, for instance, avoidance of corporate failures and cost saving [6,7].

To understand the level of managers' perception of internal auditors' effectiveness a 5-point scale Likert-type questionnaires was distributed. All items were measured by a 5-point scale (1 = strongly disagree, 2 = disagree, 3 = neutral (neither agree nor disagree), 4 = agree and 5= strongly agree). Summative score technique was applied to get the numerical value of respondents opinion in each factors. This is because Likert scale is the common summative score [26,27].

On the other hand, about five independent variables were analyzed in this study. The independent variables investigated in this study are (1) management's perception of internal audit's value, (2) management support, (3) organizational independence of internal auditors, (4) adequate and competent internal audit staff, and (5) the presence of internal audit charter. It should be noted that data for the independent variables were collected from the internal auditors of sampled public sectors. Therefore, the independent variables represent the perceptions of the internal auditors regarding these constructs. All the items of independent variables questionnaire were measured on a 5-point Likert-scale (1=strongly disagree to 5 = strongly agree).

### **Model Specification**

The following models were formulated in order to test the research hypotheses. Most of the independent variables included in this model were used in prior audit researches [7,9] except the management perception of internal

audit's value and the adopted internal audit charter. Therefore, the reliability of the model was recognized and was used in this research to analyze and interpret result of the study.

$$COMPE = \alpha_0 + \alpha_1 MGPER + \alpha_2 MGSUP + \alpha_3 ORGIND + \alpha_4 ADQCOM + \alpha_5 INACHA + e_i \dots \dots \dots (1)$$

$$ADDCON = \alpha_0 + \alpha_1 MGPER + \alpha_2 MGSUP + \alpha_3 ORGIND + \alpha_4 ADQCOM + \alpha_5 INACHA + e_i \dots \dots \dots (2)$$

Where:

COMPE = Internal Auditors' Completeness in Identifying Non-compliance Activities

ADDCON = Added Contribution by internal auditor to Sector.

MGPER = Management's Perception of internal audit's Values.

MGSUP = Management Support

ORGIND = Organizational Independence of Internal Auditors.

ADQCOM= Adequate Competent Internal Audit Staff.

INACHA = Existence of Approved Internal Audit Charter.  $e_i$  = the error term

## Research Findings: Analysis and Discussion

The research findings analysis and discussion were undergone based on data obtained from 25 sampled public sectors through administrating questionnaires to the public sector's managers and internal auditors. In total 120 questionnaires were distributed to 30 selected public sectors and 100 questionnaires were collected from 25 public offices giving a response rate of 83.33%. This means 50 managers (CEO and CFO) and 50 internal auditors were responded to the questionnaires.

From managers respondent 43 (86%) were males and 7 (14%) were females while from internal auditors respondent 33 (66%) were

males and 17 (34%) were females. The share of females on both job positions was less than share of males. Female's managerial position is still less than internal auditor's position, though male respondents dominated these positions. Majority of the respondent's age category found between 30 to 39 years and unfortunately, there were no respondents above 59 years indicating most of respondents were in adolescent age. Regarding to respondent's education status, most of managers have bachelor's degree (n = 40, 80%) followed by master's degree (n = 9, 18%), and most of internal auditors have a bachelor's degree (n = 37, 78%) but followed by diploma (n = 9, 18%). Only two (4%) internal auditors have master's degree and one (2%) manager have diploma.

## Regression Result

As explained in preceding sections, OLS linear regression model was adopted to assess the impacts of independent variables on internal auditors' effectiveness. After OLS assumptions for normality, hetro skedasticity and multi co linearity were verified and met, the OLS regression was regressed for both models using SPSS V.16 and the results of regression are presented in Table 1 and Table 2 below.

The first model was significant at  $F = 10.577$ ,  $P < 0.001$  and  $R = 0.739$  (Table-1 below), which implies the presence of strong relationship between the predictors and outcome. The model was at best fit to predict the effectiveness of internal auditing. The composite contributions of management perception, management support, organizational independence of internal auditors, adequate competent internal audit staff and the internal audit charter existence account for 54.5% ( $R^2 = 0.545$ ) of the variation in internal auditor's completeness.

**Table 1: Regression Result for Internal Auditors' Completeness in indentifying non-compliance activities**

Dependent variable: Internal auditors' completeness in indentifying non-compliance activities (COMPE)							
Variables	Unstandardized Coefficient		Standardized Coefficient	t-value	Sign.	Tolerance	VIF
	Beta	Std. error	Beta				
(constant)	4.196	4.398		0.954	0.345		
MGPER	-0.066	0.177	-0.046	-0.371	0.712	0.687	1.456
MGSUP	0.020	0.132	0.016	0.155	0.877	0.914	1.094
ORGIND	0.459	0.162	0.351	2.826	0.007*	0.671	1.491
ADQCOM	-0.103	0.130	-0.083	-0.792	0.432	0.933	1.072
INACHA	1.310	0.260	0.566	5.048	0.000*	0.820	1.219

Source: SPSS Outcomes of survey data

N = 100

\*p < 0.05

**Table 2: Regression Result for the added values by internal audit**

Dependent variable: Added value by internal audit to public sectors (ADDCON)								
Variables	Unstandardized Coefficient		Standardized Coefficient	t-value	Sign.	Tolerance	VIF	R = 0.754 R <sup>2</sup> = 0.568 Adj. R <sup>2</sup> = 0.519 Durbin-Watson (d) = 1.730 F = 11.584 P = 000
	Beta	Std. error	Beta					
(constant)	1.220	2.704		0.451	0.654			
MGPPE	-0.182	0.109	-0.200	-1.676	0.101	0.687	1.456	
MGSUP	0.007	0.081	0.009	0.085	0.933	0.914	1.094	
ORGIND	0.622	0.100	0.754	6.236	0.000*	0.671	1.491	
ADQCOM	0.117	0.080	0.150	1.458	0.152	0.933	1.072	
INACHA	0.162	0.160	0.111	1.016	0.315	0.820	1.219	

Source: SPSS Outcomes of survey data

N = 100

\*p &lt; 0.05

The second model was also significant (F= 11.584, p< 0.001, and R= 0.754) (Table-2) - implies that there was strong relationship between predictors and the added contribution by internal auditing to public sectors since model was explained 56.8% (R<sup>2</sup> = 0.568) of variation in added contributions to public sectors by internal audit.

### Hypothesis Test

The regression outcomes presented in Table 1 and Table 2 provided comprehensive results for examination of the research hypotheses. Therefore, the regression results obtained from both models were utilized to test these hypotheses. The hypotheses sought to test for a significance influence of management perception (MGPPE), management support (MGSUP), organizational independence (ORGIND), adequate competent internal audit staff (ADQCOM) and the existence of internal audit charter (INACHA) on internal auditing effectiveness- which was measured in terms of internal auditors' completeness in identifying non-compliance activities and the added contributions by internal audit to public sectors.

*H<sub>1</sub>: The better the management's perceptions of internal audit values, the higher internal auditors' completeness in identifying non-compliance activities and the more added contributions.*

The regression results do not show any relationship between the management's perception of internal audit's values and internal auditor's effectiveness. Thus, regression results do not support the first hypothesis of this research. This means that the level of management awareness to ward internal auditing values or simply having enough awareness about roles of internal

audit in public sector does not influence the completeness of internal auditors to identify non-compliance activities and to add more values to the public sector.

*H<sub>2</sub>: Internal Audit effectiveness in public office is positively related to the management support.*

The regression results revealed that there was no relationship between the effectiveness of internal audit and the management support. Therefore, the second hypothesis of this research was rejected. The result was inconsistent with the previous auditing research of [2,7] find that the top management support was the critical determinant of internal auditors' effectiveness.

This inconsistency was occurred may be due to difference in understanding and interpreting the concept of management support. According to Cohen & Sayag [7] and Mihret and Yismaw [2] management support was understood as the extent of top level management's responsiveness to audit finding and the commitment to strength internal audit by hiring proficient auditors, developing career channels for internal audit staff, and providing internal audit work independence. However, in this research, the management support was conceptualized as the extent of facilities and resources internal audit has been received in order to perform audit activities. These resources include the extent of providing training in order to improve internal auditors' skill and update with the field; introducing them with new technology, policy or procedures when it is necessary, and the commitment to budget funds for certification to have relevant education in auditing that allows them to audit all of the organization's/sector's systems.

*H<sub>3</sub>: There is a positive relationship between internal auditors' effectiveness in public sectors and organizational independence.*

Organizational independence was the third proposed hypothesis in this research. As per the regression results organizational independence significantly determines internal auditors' effectiveness ( $p < 0.05$ ). The regression analysis shows very strong support for third hypothesis. Organizational independence of internal auditors was the only variable that was strongly and positively related to the two internal auditor's effectiveness dimensions.

As shown in Table-1 and Table-2, the coefficients of organizational independence ( $\beta = 0.459$ ,  $t = 2.826$ ,  $p < 0.05$  and  $\beta = 0.622$ ,  $t = 6.236$ ,  $p < 0.05$ ) were positively related with internal auditors' completeness in identifying non-compliance activities and added contributions by internal audit respectively. This result was consistent with previous auditing researches conducted by Cohen & Sayag [7], Van Peursem [4], Bou-Raad [28] and Gietzmann and Sen [29]. It implies that internal auditors' become more effective, when they are permitted to freely perform auditing activities.

Organizational independence of internal auditors in public sectors ensures internal auditors' completeness in identifying non-compliance activities and ensures the degree of internal auditors' contribution to their sector. To improve internal auditors' effectiveness in public sectors, the management of each public office should give recognition to independence of internal auditors. Internal auditors' organizational independence can be assured by allowing them to freely perform auditing activities without management interference. Internal auditors independency would be assured when they are allowed to freely decide the scope, time and extent of auditing procedures; objectively examine auditing issues; freely access necessary documents; feel free to include any audit findings in audit report, and directly report to responsible body (e.g. to audit committee & board of directors) in their organization.

Internal auditors' organizational independence

has unique characteristic than other internal auditors' effectiveness determinants. It is the only factor has positive significant effect on internal auditors' effectiveness in this study. This concludes without organizational independency of internal auditors, good management perception of internal audit values, existence of excellent management support, having adequate competent internal audit staff, and the presence of internal audit charter do have no any value for internal auditors' effectiveness. Coming up simply with these determinants without assurance of independency adds the efforts of auditors to zero by impairing internal audit objectives. Therefore, every management of public sector should work aggressively on assurance of internal auditor's organizational independence.

*H<sub>4</sub>: Internal Audit effectiveness in public office is positively related to the adequate competent internal audit staff.*

Adequate competent internal audit staff was the fourth hypothesized determinant of internal auditors' effectiveness. However, the regression results show no significant relationships between adequate competent internal audit staff and internal auditors' effectiveness. Therefore, the regression outputs do not support the fourth hypothesis. This implies that adequacy and competency of internal audit staff do not significantly help the internal audit unit to completely indentify non-compliance activities and to add more values to its sector.

The above analysis is consistent with previous auditing researches. For instance, Arena and Azzone [9] argued that there were no relationship between the overall number of internal auditors (adequacy) and the employment of internal auditor with professional certification (competency) and internal audit effectiveness. In addition, Cohen & Sayag, 2010 [7] concluded that there was no correlation between professional proficiency and internal audit effectiveness.

*H<sub>5</sub>: There is a positive relationship between internal auditors' effectiveness and the presence of internal charter in the public offices.*



A well-drafted internal audit charter is another crucial ingredient for a successful internal auditing function. The fifth hypothesis of this study was proposed the existence of internal audit charter in public offices guarantees the effectiveness of internal auditors. Accordingly, the regression analyses highlighted a positive relationship between the existences of internal audit charter in public offices and the internal auditors' completeness in identifying non-compliance activities ( $\beta = 1.310$ ,  $t = 5.048$ ,  $p < 0.05$ ). This implies existence of internal audit charter increases the completeness of internal auditors to identify non-compliance activities. The data analysis, instead, did not show any link between the existence of internal audit charter and the added contributions by internal audit. Hence, the fifth hypothesis of this research was partially accepted.

The result of this hypothesis is consistent with the former audit researches conducted by [22, 23]. According to the authors well drafted internal audit charter helps the IAF to perform its roles independently of management influence and objectively. This ascertains internal auditors' independence which in turn guarantees the effectiveness of internal auditors. So, it can be concluded as, the existence of internal audit charter in public offices directly ensures the organizational independence of internal auditors and indirectly improves the effectiveness of internal auditors.

## Conclusions and Recommendations

Organizational independence of internal auditors is very important for the effectiveness of internal auditors in public sectors regardless of management perception of internal auditors' roles, management support and adequate competent internal audit staff. Internal auditors' completeness in identifying non-compliance activities and the value-added by internal audit to public sectors would increase, when the organizational independence of internal auditors is more guaranteed.

On the other hand, the existence of internal audit charter in public sectors contributes to the effectiveness internal auditors. Specifically, it has very strong significant effect on internal auditors' completeness in indentifying non-compliance activities. Most obviously, internal audit charter is almost crucial to the operation and success of internal audit, since the portion of independence of internal auditors driven from the internal audit charter.

The effectiveness of internal auditors in public sectors will be under question, unless these determinants are appropriately pledged in public sectors. To overcome this threat for internal auditors' effectiveness, the country's Minister of Finance and Economic Development should work more on the ways of ensuring the organizational independence of internal auditors. One possible way of maintaining independence is establishing Audit Committee (AC) in public sectors and notifying internal auditors to whom they directly provide internal audit report, which is independent body of the public sectors' management. The second way is approving and implementing internal audit charter in each public office. The charter should briefly defines the extent of relationship between internal auditors and the management; should smoothly communicate them their accountability and responsibility; should briefly describes the rights and duties of internal auditors and of the employer; should define the scope of audit work, the extent of access to documentations, the benefits and rewards for internal auditors.

Finally, public sectors' management should not undermine the contributions of other determinants to effectiveness of internal auditors, even though they were not statically significant in this study. The management should continue supporting internal audit work by employing adequate and competent internal auditors and should work more to increase the number of certified internal auditors by funding the certification fees and facilitating the way for certifications.

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