Determinants of Internal Audit Effectiveness: Evidence from Gurage Zone

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Abstract
This study aims at identifying main determinants of internal audit effectiveness in Gurage zone local Administrations. Hence, descriptive and explanatory research design was considered. The survey includes 60 respondents; using simple random sampling Woredas were selected and all units of each selected were included. The researcher collected data from primary sources. The primary data has been collected by distributing five scale likert scale questioner to the sampled respondent. To analyse the collected data the study use descriptive statistics, correlation statistics and econometrics model. A total of five explanatory variables were included in the regression and the results of the model show that quality of internal audit, independency of internal audit and proficiency of internal auditors are positively affect internal audit effectiveness. Based on the finding the study recommends that the Office of Finance and Economic development has to maintain the investigative and reporting independence of internal auditors. Besides, the internal audit offices have to do for the development of internal auditors through continuous education and short term training so as to enhance the level of internal audit effectiveness.

Keywords: Internal Audit; Audit Effectiveness; Ethiopian Public Sector, Proficiency of Auditors

1. Introduction
Local government managements are entrusted with public resources and saddled with the responsibility of managing these resources effectively and efficiently. It is expected that, the local government officials entrusted with the management of public resources at local government level will give account of how these resources are being managed under their care. In order to ensure proper utilization of these resources entrusted to the local government officials, laws are enacted to control the local government revenues and expenditures (Modibbo, 2015).

However, the process of accountability is not complete without auditing, which presently remains one of the most neglected and misunderstood area of the financial management cycle, especially in the public sector (Maru, 2002). For an audit to be meaningful the audit unit must be seen to be truly independent and the report produced by internal auditor will assist in providing information for planning, decision making and performance evaluation.

The establishing of internal audit function is important as an essential internal assurance mechanism in public financial controls and as a tool for monitoring and evaluating financial management activities in government agencies. Besides, it will assist government organizations to achieve accountability and integrity, improve the implementation of government programs and develop confidence among citizens and stakeholders as well as to lead to use public fund efficiently and cater any risk of mismanagement of public fund. Audit services also can help organization for the success of better financial management in public service by playing the effective and efficient roles to promote better governance in managing public money. In local government administrative this audit function has a special importance.

The objective of auditing is to review and evaluate the activities of the organization with a view to express an opinion on the efficiency and effectiveness of management, as well as the adequacy of internal control within an organization. Therefore, internal auditor is charged with the responsibility of safeguarding the assets and liabilities of an organization and other constructive services that will enhance the efficiency and effectiveness of the operations of the organization, through the review of accounting systems, internal control systems, implementation of the corporate policies, and carrying out special investigations assigned by the management (Modibbo, 2015).

However, due to different factors IA become ineffective in conducting an audit function. Thus, this ineffectiveness leads them not to prevent and detect frauds. So this fraud negatively affects an economy as a whole, by causing huge financial losses, weakening social stability, threatening democratic structures, leading to a loss of trust in the economic system, or corrupting and compromising economic and social institutions (Nicolescu, 2007).

Internal audit effectiveness is arguably a result of the interplay among different factors: internal audit quality, management support, organizational setting, attributes of the auditee, and the competence of the audit team and the independence of internal audit (Mihret & Yismaw, 2007; and George, Theofanis & Konstantinos, 2015). An internal audit function's capability to provide useful audit findings and recommendations would help raise management's interest in its recommendations.
Hence, scrutinizing these major factors that affect the effectiveness of internal audit of local governments is the critical task of different parties.

1.1. Need of the Study
Examining the determinant factors that affect internal audit effectiveness is important, because effective internal audit work can lead to the improvement of four important processes in the organization: learning (educating staff how to do their work better), motivation (auditing also leads to improvement of performance), deterrence (knowing that an audit is discourage any things that can lead to abuse), and process improvements (internal audit also ensure that the right things are done in the right way) (Eden & Moriah, 1996; and Aaron & Gabriel 2010).

Ethiopian studies are not addressed internal audit in local government administration, for example, Mihret and Yismaw (2007) study is about public sectors particularly higher educational institutions, and Belay (2007) study is about effective implementation of internal audit function to promote good governance in the public sector, Mihret (2010) studied the factors associated with attributes of internal audit departments.

Hence, as far as the researchers knowledge there is no conducted study about determinants which contribute for effectiveness of internal audit in Ethiopia local governments, particularly in Gurage Zone. Internal audit effectiveness is arguably a result of the interplay among different factors. However, these factors which have an immense effect on internal audit effectiveness are not thoroughly investigated. Therefore, the main intention of this paper is to examine the factors that affect IA effectiveness of the public sector in managing the public resources efficiently.

1.2. Objectives of the Study
The general objective of this study is to examine the factors that affect internal audit effectiveness in Gurage zone local Administrations. More specifically, this study addresses the following objectives.

- To examine the effect of internal audit quality on internal audit effectiveness
- To examine the effect of the independence of internal auditors on internal audit effectiveness
- To examine the effect of professional proficiency of internal auditors on internal audit effectiveness
- To examine the effect of organizational setting on internal audit effectiveness
- To examine the effect of scope of internal audit work on internal audit effectiveness

2. Research Methodology
Both descriptive and explanatory research design have been considered. The study has employed mixed research approach. The study covers all Garage Zone internal audit managers and internal audit staffs that are found in 13 Woredas and two city administrations. Total populations of a study are 106. Eight Woredas have been selected randomly and 60 respondents were included in the study. Primary data through five point likert scale were collected. Close-ended questionnaire was used as a data collection instrument.

2.1. Model Specification
The following multiple regression model is formulated for this research. Most of the independent variables included in the model are extensively used in prior audit researchers (Mihret and Yismaw, 2007; Cohen & Sayag, 2010).

The multiple regression equation is

\[ IAE = \alpha + \beta_1 IAQ + \beta_2 IND + \beta_3 PIA + \beta_4 OS + \beta_5 SIAW + \epsilon \]

Where:
- \( IAE \): Perceived Internal Audit Effectiveness
- \( IAQ \): Internal Audit Quality
- \( IND \): Independence of Internal
- \( PIA \): Professional Proficiency
- \( OS \): Organizational Setting
- \( SIAW \): Scope of Internal Audit Work
- \( \epsilon \): error term of the model
- \( \beta_1, \beta_2, \beta_3, \beta_4, \beta_5 \): parameters or coefficients of explanatory variables to be estimated
- \( \alpha \): Intercept of the regression line
2.2. Conceptual Framework

![Conceptual Framework Diagram]

*Source: Adopted from Mihret and Yismaw, 2007*

Figure 1: Factors influencing internal audit effectiveness

3. Data Analysis and Discussion

3.1. Descriptive Statistics Analysis

<table>
<thead>
<tr>
<th>Demographic Characteristics of respondents</th>
<th>Categories</th>
<th>Frequency(f)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Male</td>
<td>41</td>
<td>68.3</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>19</td>
<td>31.7</td>
</tr>
<tr>
<td>Age</td>
<td>20-29</td>
<td>13</td>
<td>21.67</td>
</tr>
<tr>
<td></td>
<td>30-39</td>
<td>23</td>
<td>38.34</td>
</tr>
<tr>
<td></td>
<td>40-49</td>
<td>21</td>
<td>35</td>
</tr>
<tr>
<td></td>
<td>50-59</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Experience</td>
<td>Below 3</td>
<td>15</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>3-5</td>
<td>32</td>
<td>53.33</td>
</tr>
<tr>
<td></td>
<td>Above 5</td>
<td>13</td>
<td>21.67</td>
</tr>
<tr>
<td>Educational level</td>
<td>Diploma</td>
<td>15</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>BA degree</td>
<td>45</td>
<td>75</td>
</tr>
<tr>
<td>Field of the study</td>
<td>Accounting</td>
<td>35</td>
<td>58.33</td>
</tr>
<tr>
<td></td>
<td>Management</td>
<td>17</td>
<td>28.33</td>
</tr>
<tr>
<td></td>
<td>Others</td>
<td>8</td>
<td>13.34</td>
</tr>
<tr>
<td>Having audit committee</td>
<td>No</td>
<td>23</td>
<td>38.33</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>37</td>
<td>61.67</td>
</tr>
</tbody>
</table>

*Source: SPSS output from survey data, 2017*
Descriptive Measurement of Internal Audit Quality

Table 2: Descriptive Measurement of Internal Audit Quality

<table>
<thead>
<tr>
<th>Items</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>The timing of the audit was appropriate</td>
<td>3.95</td>
<td>1.156</td>
</tr>
<tr>
<td>My staff and I were given the opportunity to provide input, including any concerns and our perspectives, to the planning process</td>
<td>3.67</td>
<td>1.003</td>
</tr>
<tr>
<td>The audit focused on issues that were important</td>
<td>4.15</td>
<td>1.022</td>
</tr>
<tr>
<td>The internal auditors kept me informed throughout the process on a timely basis and there were ‘no surprises’</td>
<td>3.67</td>
<td>0.857</td>
</tr>
<tr>
<td>The internal auditor(s) demonstrated professionalism and an objective approach</td>
<td>3.77</td>
<td>0.810</td>
</tr>
<tr>
<td>The audit report was balanced and constructive</td>
<td>3.85</td>
<td>1.071</td>
</tr>
<tr>
<td>Overall, I was satisfied with the audit</td>
<td>4.03</td>
<td>1.041</td>
</tr>
</tbody>
</table>

**Average** 3.87 0.994

Valid N (60)

Source: SPSS output from survey data, 2017

The average mean score (M=3.87; SD=0.994) is closet to “agree” response of the question. But the standard deviation shows that not all employees were in agreement with that since there was a wider variance of between answers. Among the statements for measurement of internal audit quality “The audit focused on issues that were important” scored the highest mean (M=4.15; SD=1.022) but the standard deviation is high, which shows there is a great variation response on respondents. On the other hand, “The internal auditors kept me informed throughout the process on a timely basis and there were ‘no surprises’” and “My staff and I were given the opportunity to provide input, including any concerns and our perspectives, to the planning process” have smallest mean score (M=3.67) however standard deviation of the first statement is higher than the average. Generally, from the mean response of respondents we can understand that the quality of internal audit is very good.

Descriptive Measurement of Independency of Internal Auditors

Table 3: Descriptive Measurement of Independency of Internal Auditors

<table>
<thead>
<tr>
<th>Statements</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>I can freely access necessary documents, information and data about the organization/sector for my audit work</td>
<td>4.02</td>
<td>1.066</td>
</tr>
<tr>
<td>I feel free to include any audit finding in my audit work and report directly to responsible body</td>
<td>3.95</td>
<td>0.832</td>
</tr>
<tr>
<td>I am free from any intervention in performing my duties</td>
<td>3.57</td>
<td>0.927</td>
</tr>
<tr>
<td>I objectively examine auditing issues only meeting on reliable audit evidence and no management interest is involved for adjustment beyond auditing standards &amp; values</td>
<td>3.63</td>
<td>0.956</td>
</tr>
<tr>
<td>I freely decide the scope, time and extent of auditing procedures based on auditing standards and the office/sector's policy</td>
<td>3.58</td>
<td>1.169</td>
</tr>
<tr>
<td>I perform the auditing activities without any interference from anybody and without any influence from the office/sector</td>
<td>3.73</td>
<td>0.972</td>
</tr>
</tbody>
</table>

**Average** 3.75 0.987

Valid N (60)

Source: SPSS output from survey data, 2017

The factors that affect auditor’s to be effective in their internal audit were in agreement with many of the reasons identified as independency of internal Auditors. Gurage zone internal auditor’s independency for auditing effectiveness has a moderate average mean with nearly closest to “I agree” response. The average mean score of the respondents for this scale (M=3.75; SD=0.987). The average mean of the respondent indicates that respondents have relatively I agree perception about independency of internal auditors but a moderate standard deviation (S.D. =0.987) indicating that all employees were in agreement that there was a moderate variance of between the response of the respondents.

The independency of internal auditors from the units being audited is somehow moderate. However, there is some problems regarding deciding the scope, time and extent of their work, and there is some intervention in performing their duties.
Descriptive Measurement of Proficiency of Internal Auditors

Table 4: Descriptive Measurement of Proficiency of Internal Auditors

<table>
<thead>
<tr>
<th>Statements</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>The internal audit department is large enough to successfully carry out its duties</td>
<td>4.18</td>
<td>.770</td>
</tr>
<tr>
<td>Internal auditors possess sufficient experience to understand the organization’s systems</td>
<td>3.90</td>
<td>.838</td>
</tr>
<tr>
<td>The internal audit staffs possess knowledge and skills in a variety of areas (beyond accounting and finance), as necessary</td>
<td>3.92</td>
<td>.869</td>
</tr>
<tr>
<td>Internal audit office has policies for hiring internal audit staff</td>
<td>3.82</td>
<td>.930</td>
</tr>
<tr>
<td>Internal audit office has policies for training of internal audit staff</td>
<td>3.68</td>
<td>1.172</td>
</tr>
<tr>
<td>Internal auditors undertake continuous professional development activities (such as professional association sponsored programs and correspondence courses)</td>
<td>3.18</td>
<td>1.308</td>
</tr>
<tr>
<td>Adequate short-term training is arranged for internal auditors each year</td>
<td>3.58</td>
<td>1.030</td>
</tr>
<tr>
<td>There is a complete internal audit manual to guide internal audit work</td>
<td>4.12</td>
<td>.739</td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td>3.78</td>
<td>.957</td>
</tr>
</tbody>
</table>

Valid N (60)

Source: SPSS output from survey data, 2017

The average mean score (M=3.78; SD=0.957) is closest to “agree” response for the above listed statements in the table. But the standard deviation shows that not all employees were in agreement with that since there was a wider variance of between the responses of the statements.

From the descriptive result of the above table we can understand that there is lack of opportunity for continuous professional development and short term training arranged for internal auditors. Thus, if internal auditors haven’t such kind of facilities to enhance their profession, it is difficult to perform their activity in a very competent manner.

Descriptive Measurement of Organizational Settings

Table 5: Descriptive Measurement of Organizational Settings

<table>
<thead>
<tr>
<th>Statements</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>The purpose of internal audit is clearly defined</td>
<td>4.20</td>
<td>.732</td>
</tr>
<tr>
<td>Internal audit has policies for hiring internal audit staff</td>
<td>4.17</td>
<td>.740</td>
</tr>
<tr>
<td>Internal audit has policies for training of internal audit staff</td>
<td>3.85</td>
<td>.899</td>
</tr>
<tr>
<td>There is a complete internal audit manual to guide internal audit</td>
<td>4.12</td>
<td>.904</td>
</tr>
<tr>
<td>Internal audit department is large enough to successfully carry out its duties</td>
<td>3.70</td>
<td>.979</td>
</tr>
<tr>
<td>The internal audit staffs possess knowledge and skills in a variety of area (beyond accounting and finance) as necessary</td>
<td>3.77</td>
<td>.927</td>
</tr>
<tr>
<td>Internal audit obtains sufficient budget to successfully carry out its duties</td>
<td>3.52</td>
<td>1.049</td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td>3.90</td>
<td>0.89</td>
</tr>
</tbody>
</table>

Valid N (60)

Source: SPSS output from survey data, 2017

The study required establishing respondent’s opinion on whether organizational settings were playing a great role to internal audit effectiveness. The average mean perception of respondents (M=3.90) is closest to “agree” response. This response is not much deviated from the mean since the standard deviation (SD=0.89) is small. The statement “Internal audit obtains sufficient budget to successfully carry out its duties” has the smallest mean (M=3.52) however the standard deviation (SD=1.049) shows that the variation of response high. From the descriptive result it can be understand that the budget allocated to the audit department to carry out duties is inadequate.
Descriptive Measurement of Scope of Internal Audit Work

Table 6: Descriptive Measurement of Scope of Internal Audit Work

<table>
<thead>
<tr>
<th>Items</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Always checking adequacy of the auditees' record keeping when appropriate</td>
<td>3.92</td>
<td>1.094</td>
</tr>
<tr>
<td>Always verifying accuracy of amounts in financial records</td>
<td>4.05</td>
<td>.852</td>
</tr>
<tr>
<td>Always reviewing information contained in reports of sector offices</td>
<td>4.22</td>
<td>.666</td>
</tr>
<tr>
<td>Always reviewing the systems in each office for safeguarding of asset</td>
<td>4.07</td>
<td>.756</td>
</tr>
<tr>
<td>Always evaluating the internal control system</td>
<td>4.05</td>
<td>.746</td>
</tr>
<tr>
<td>Always performing audit of major fraud cases</td>
<td>4.05</td>
<td>.811</td>
</tr>
<tr>
<td>Always ascertaining compliance with organizational policies and procedures</td>
<td>3.82</td>
<td>.965</td>
</tr>
<tr>
<td>Always checking compliance with contracts when applicable</td>
<td>3.92</td>
<td>.869</td>
</tr>
<tr>
<td>Always checking compliance with government rules and regulations</td>
<td>4.22</td>
<td>.739</td>
</tr>
<tr>
<td>Always ascertaining that operating procedures are consistent with the operational goals</td>
<td>4.27</td>
<td>.686</td>
</tr>
<tr>
<td>Always reviewing operations to ascertain that they were implemented as intended</td>
<td>4.23</td>
<td>.767</td>
</tr>
<tr>
<td>Always assisting the management by identifying risk exposures of the office</td>
<td>4.07</td>
<td>.778</td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td>4.07</td>
<td>.820</td>
</tr>
</tbody>
</table>

Valid N (60)

Source: SPSS output from survey data, 2017

The factors that affect auditor’s to be effective in their internal audit were in agreement with many of the reasons identified as scope of internal audit work. Gurage zone internal auditor’s scope of internal audit work for auditing effectiveness has a high average mean with nearly closest to “I agree” response. The average mean score of the respondents for this scale (M=4.07; SD=0.820). The average mean of the respondent indicates that respondents have relatively I agree perception about scope of internal audit work but a small standard deviation (S.D. =0.820) indicating that all employees were in agreement that there was a small variance of between the response of the respondents.

Except compliance activities, the mean response of scope of internal auditors show that internal auditors are performing their activity in a very good manner.

3.2. Correlation Analysis

The correlational analysis has been done to measure the associations among variables. The purpose of this analysis is not only to establish cause-effect relationship among variables but to determine whether the variables under study have some kind of association or not. Correlations are the measure of the linear relationship between two variables. A correlation coefficient has a value ranging from -1 to 1.

Table 7: Pearson correlation matrix of variables

<table>
<thead>
<tr>
<th></th>
<th>IAE</th>
<th>IAQ</th>
<th>IND</th>
<th>PIA</th>
<th>OS</th>
<th>SIAW</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Correlations</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IAE</td>
<td>1</td>
<td>.491**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IAQ</td>
<td>.000</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IND</td>
<td>.658**</td>
<td>.317*</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PIA</td>
<td>.457**</td>
<td>-.065</td>
<td>.093</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OS</td>
<td>.418</td>
<td>.242</td>
<td>-.198*</td>
<td>.081</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>SIAW</td>
<td>.303*</td>
<td>.304*</td>
<td>-.149</td>
<td>.071</td>
<td>.243*</td>
<td>1</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

Source: SPSS output from survey data, 2017

As it can be shown in the table 4.7 correlation matrix, each variable is perfectly correlated with itself and so r =1 along the diagonal of the table. All variables are positively related with internal audit effectiveness. Internal audit qualities, independency of auditors, proficiency of internal auditors were significantly correlated with internal audit effectiveness (p<0.01) whereas, organizational setting and scope of internal audit work were also significantly correlated at 5% significance level.
On the other hand, internal audit quality was correlated with independency of auditors and scope of internal audit work at p<0.05, while organizational setting and independency of auditors were associated each other at p<0.05 and scope of internal audit work was correlated with organizational setting. Among all variables only independency of internal auditors has a large effect on internal audit effectiveness. On the other hand, all other variables have a moderate effect on the effectiveness of internal audit function.

3.3. Econometrics Analysis
3.3.1. Regression Result Analysis
The regression result explores the necessary indicators of the internal audit effectiveness by using the variables identified in the model. As indicated in the model summery (table 11) the appropriate indicators of the variable used to identify the internal audit effectiveness were explored. That is, the value of R square used to identify how much of the variance in the dependent variable identified by the model. The larger the value of R square, the better the model is.

The overall contribution of internal audit quality, independency of auditors, proficiency of internal auditors, organizational setting and scope of internal audit work to the IAE accounted for 53% ($R^2 = 0.530$) of the variation in the internal audit effectiveness, the rest 47% are other variables not included in this study.

Furthermore, the model summary also shows the significance of the model by the value of F-statistics ($P = .001$) and $F = 4.975$ which implies that there were strong relationship between the predictors and the outcomes of the regression variables and are at best fit the model to predict the effectiveness of internal audits in the public sector. The beta ($\beta$) sign also shows the +ve or –ve effect of the independent variables coefficient over the independent variable. And as shown in table 11 above, beta sign of all the independent variables show the positive effect of the predicting dependent variable. This means any increase in the independent variables lead to enhancement of the effectiveness of internal audit.

Hence, the model used to examine this study is shown as follows:

$$IAE = 1.613 + 0.040IAQ + 0.3011ND + 0.133PIA + 0.056OS + 0.141SIAW + \varepsilon$$

Table 8: Multiple regression result

<table>
<thead>
<tr>
<th>Coefficients</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1 (Constant)</td>
<td>1.613</td>
<td>.599</td>
<td>.065</td>
<td>2.692</td>
</tr>
<tr>
<td>IAQ</td>
<td>.040</td>
<td>.079</td>
<td>.065</td>
<td>2.781</td>
</tr>
<tr>
<td>IND</td>
<td>.301</td>
<td>.093</td>
<td>.400</td>
<td>3.243</td>
</tr>
<tr>
<td>PIA</td>
<td>.133</td>
<td>.108</td>
<td>.163</td>
<td>2.515</td>
</tr>
<tr>
<td>OS</td>
<td>.056</td>
<td>.122</td>
<td>.060</td>
<td>.457</td>
</tr>
<tr>
<td>SIAW</td>
<td>.141</td>
<td>.126</td>
<td>.139</td>
<td>.549</td>
</tr>
</tbody>
</table>

a. Dependent Variable: internal audit effectiveness
No. of observations = 60
$R^2 = 0.530$
Adj. $R^2 = 0.515$
Prob > F = 0.001

Note: *significant @ 1%, ** significant @5%
Source: SPSS output from survey data, 2017

Thus, this implies the IAQ, IND are the most important determinants of IAE in which the public sector office should give more emphasis in their IA function. PIA is also important determinant since it is significant at 5% significance level. Besides this, the remaining independent variables (OS and SIAW) have not significant contribution for the predicted variable (IAE) because they have insignificant value of greater than 5%. All variables have a positive impact on internal audit effectiveness. The variable with the level of significance (sig) value less than 5% could make a significance unique contribution to the predicted value of the dependent variable, beyond this level of sig. the variable are not making a significance contribution for the prediction of the dependent variable (Pallant, 2007; Somekh and Lewinn, 2005).

3.3.2 Discussion of Regression Results
I. Internal Audit Quality
The internal audit quality is measured in staff expertise, scope of the service, effective audit planning, field work and controlling, meeting objectives and effective communication.

Internal audit quality, which is determined by the internal audit department’s capability to provide useful findings and recommendations, is central to audit effectiveness. Internal audit has to prove that it is of value to
The regression result shows that internal audit quality is significant at 1% (p=0.009) and it can be concluded that internal audit quality is a good explanatory variable. This indicated that internal audit quality is statistically significant which affect internal audit effectiveness. The beta value (β1=0.065) indicates that internal audit quality has a direct and positive impact on internal audit effectiveness. Therefore, based on the above result we fail to accept the first null hypothesis (H1) of the study. For the reason that the statistical value of the regression result is significant at 1% and the beta sign is positive. It can be argued that greater quality of IA work understood in terms of compliance with formal standards, as well as a high level of efficiency in the audit’s planning and execution improve the audit’s effectiveness. When internal audit demonstrate professionalism and an objective approach in their work, and report balanced and constructive audit the, the effectiveness of an internal audit can be increased. The result of this study is in lined with George (2015) and Cohen & Sayag (2010).

**II. Independence of Internal Auditors**
Concerning the relationship between internal auditor’s independence and internal audit effectiveness, the result of the study shows that internal auditor’s independence has a positive association with internal audit effectiveness. This positive association (β2=0.400) is statistically significant at 1% significance level (P=0.002). Based on this result the second null hypothesis (H2), “independence of internal auditors has no positive and significant effect on internal audit effectiveness”, is failed to accept, and the alternate hypothesis is accepted.

It can be concluded that independence of internal auditors is the most important factor that affect the effectiveness of internal auditors which enhance the previous studies Alzeban and Gwilliam (2014); and George (2015) who argue that independence is one of the most important factors that affect internal audit effectiveness.

Auditors need investigating and reporting independence to determine the scope and time of work, to express their opinion based on their finding and to report free from anxiety. This means that auditors need to have investigating and reporting independence in order to perform objectivity in course of their work. The investigating independence enables auditors to investigate potential risky areas of the local government administrative without any scope limitation. Whereas reporting independence help auditors express their opinion based on their finding. Therefore, the internal audit function becomes more efficient and effective from time to time when they are independent.

**III. Professional Proficiency of Internal Auditors**
The existence of adequate and competent internal audit staff also supposed to be the determinants of internal audit effectiveness and is the third hypothesis of this research. The regression result highly supports this hypothesis at (P<0.05) level of significant and with the positive signs of beta (β3 = 0.163 and t= 2.515). Based on this result, we fail to accept the third null hypothesis (H3), “professional proficiency of internal auditors has no positive significant effect on internal audit effectiveness”. Therefore, the alternate hypothesis is accepted and it is found that professional proficiency of internal auditors is the one of the important factors which affects internal audit effectiveness. This result was consistence with some previous auditing researches Zaman (2007), Arena and Azzzone (2009); Cohen and Sayag (2010), and George (2015) which argued that there were a relation between professional proficiency and adequacy with the IA effectiveness.

When internal audit office has policies for training of internal audit staff, internal auditors undertake continuous professional development activities (such as professional association sponsored programs and correspondence courses), and adequate short-term training arranged for internal auditors each year the auditors professional proficiency can be enhanced.

The existence of adequate and competent IA staff in the public sector office results positively relationship with IAE and with high contribution for the IAE by performing their activities on time, cover the planed scope of auditing activities by using the computerized data tools and specific IA software. This results with the overall contribution of internal audit effectiveness and its positive relationship with IAE leads to highly support the proposed hypothesis (H3).

**IV. Organizational setting**
Organizational setting refers to the organizational profile, internal organization and budgetary status of the internal audit office; and also the organizational policies and procedures that guide operation of audited company. It provides the context in which internal audit operates. Thus, organizational setting can exert influence on the level of effectiveness that internal audit could achieve. The auditee attributes relate to the capability of the auditee to meet its intended objectives. Auditee attributes with implications on audit effectiveness include the auditees’ proficiency to efficiently and effectively meet organizational sub-goals; their attitude towards internal audit; and the level of cooperation provided to the auditor (Mihret & Yismaw, 2007).

As shown in the above table 11, the beta coefficient depicts that (β4=0.060) organizational setting is positively associated with internal audit effectiveness. However, this result is not statistically significant (p>0.05). Thus, the fourth null hypothesis (H4) “organizational setting has no positive significant effect on internal audit effectiveness” is fail to reject in terms of significance since it is insignificant at 5% significance.
level. However, in terms of sign of relationship the null hypothesis going to be rejected since it have a direct relationship.

V. Scope of Internal Audit Work
The scope of work conducted by internal auditors has a negative impact on internal audit effectiveness. The regression result of the above table show that scope of internal audit work has not a significant impact on internal audit effectiveness ($\beta = -0.139$ and $p = .068$). Based on this result, the last null hypothesis “scope of internal audit work has no positive significant effect on internal audit effectiveness” is accepted in terms of its degree of significance. However, the null hypothesis is rejected and the alternative hypothesis is accepted.

When internal auditors checking adequacy of record keeping, accuracy of amounts in financial records, evaluating the internal control system, performing audit of major fraud cases (risky areas), compliance with government rules and regulations, identifying risk exposures of the office, identifying risk exposures of the office, etc. the level internal audit effectiveness can be enhanced. However, it is not statistically significant

4. Conclusions and Recommendations
The regression result show that the overall contribution of internal audit quality, independency of auditors, proficiency of internal auditors, organizational setting and scope of internal audit work to the IAE accounted for 53% ($R^2 = 0.530$) of the variation in the internal audit effectiveness, the rest 47% are other variables not included in this study. Furthermore, the model summary also shows the significance of the model by the value of F-statistics ($P = .001$) and $F = 4.975$ which implies that there were strong relationship between the predictors and the outcomes of the regression variables and are at best fit the model to predict the effectiveness of internal audits in the public sector. Therefore, we can understand that the contributions of these variables were collectively significant to identify any noncompliance activities in their office and to add values for the internal audit effectiveness in the public sector offices.

The regression result of the study shows that internal audit quality is the determinant factor of internal audit effectiveness. Thus, the qualities of internal audit work increase the extent to which an internal audit office meets its purposes.

Regarding independency of internal auditors, internal audit units are independent because of the internal audit unit existence as a unit under the chairman’s office and the management interference at local government level. The implication of this is that, the auditors are objective in carrying out their audit work. However, the descriptive result shows that there are some problems which affect independency during deciding the scope, time and extent of auditing procedures based on auditing standards and the office’s policy.

It is found that proficiency of internal auditors have an impact on internal audit effectiveness. Therefore, the existence of adequate and competent IA staff in the public sector office results positive relationship with internal audit effectiveness and with high contribution for the internal audit effectiveness by performing their activities on time, cover the planed scope of auditing activities by using the computerized data tools and specific IA software. Therefore, it is concluded the more proficient and competent internal auditor can add value and meet its audit objective than the incompetent auditor.

After watching the research findings and achieved results with regard to the main objective researchers provide the following recommendations.

- The model results show that independence of auditors has a great importance in achieving effective internal audit. However, as we seen from descriptive analysis there are some problems which affect auditor’s independence in the course of their work. Therefore, Woreda Administrates in general and finance and economic development office in particular have to maintain the internal auditor’s independence so as to get effective internal audit work. This is because auditors need investigating and reporting independence to determine the scope and time of work, to express their opinion based on their finding and to report free from anxiety.
- Every Woreda has to establish an audit committee which constitute as per the audit manual. The audit committee has the obligation and responsibility to evaluate the independence of the internal audit function and the individual objectivity of internal auditors. Thus, having an audit committee is a means to maintain independence of the internal audit function and the individual objectivity of internal auditors because this one of the responsibility of audit committee.
- The professional proficiency of auditors significantly affects the effectiveness of internal audit. The internal audit office and the office of finance and economic development have to do for the development of internal auditors’ competency. Because an audit requires professional staffs that collectively have the necessary education, training, experience and professional qualifications to conduct the full range of audits required by its mandate. Therefore, the office should have to enhance the auditors’ professional proficiency through short term training and formal education.
- Training is an important factor to upgrade skills of auditors. New audit techniques need to be learnt to make audit effective. Therefore, different training institutes and professional associations have to new
training materials to train auditors. And also office of economic and finance development have to work for providing training opportunities to internal auditors.

The regression result shows that quality of internal audit is one of the determinants of the internal audit effectiveness. Therefore, internal audit office has to evaluate its performance and continually improve its service.

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