Empirical Evidence of Antecedents of Internal Audit Effectiveness from Nigerian Perspective

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Abstract: The objective of this study is to present the empirical evidence of antecedents of internal audit effectiveness from the Nigerian perspective. Antecedents here constitute; risk management, effective internal control system, audit experience, cooperation between internal and external auditors and performance measurement. Data of the study were collected through research assistant employed, in which 500 questionnaire were sent to internal auditors, audit committee and chairman of local government or their representatives within the sampled local government in Nigeria. The study used stratified random sampling, in which samples were drawn from six geo-political zones in Nigeria; data were analyzed using Statistical Package for Social Science (SPSS) version 21. Descriptive statistic, factor analysis, correlation matrix and finally, multiple regression analysis were carried out. The result findings of the analysis revealed that, all antecedents have a significant positive relationship with internal audit effectiveness. Finally, conclusion was provided and the direction for future research was also provided.

Key words: Antecedents • Internal audit effectiveness • Local government • Nigeria

INTRODUCTION

Due to the important of internal audit in an organizational setting, especially in regard to organizational objective achievement, enable various researchers continues show concerned over it operation. In fact, it’s received much concentration than before [1] and this equally makes researchers concerned over its effectiveness, due to the fact that organization that has effective internal audit function in place are better than those organization that has not such a function especially in regard to fraud detection and prevention [2, 3, 4]. This indicate the important of having effective internal audit in place, because such effective internal audit enable the achievement of organizational objective [5], in line with this, internal audit functions that is well perform, serve as an effective means for monitoring and promoting system of good governance in any organization [6, 1]. At this point, there is the need to seriously consider the issue of such internal audit effectiveness, as even noted that, only few research been conducted on such internal audit effectiveness within the world [7].

Various researches have showed that internal audit in Nigeria are not effective [8, 9, 10]. And therefore, in line with this, [7], [11] and [12] stressed the need for future research to empirically examine the factors that influence internal audit effectiveness and the possible interactions among them. Even the conceptual study conducted by [13] recommends the empirical validation of these antecedents of internal audit effectiveness.

At this junction, [14] and [15] recommends that different constructs and variables can be employ toward examining internal audit effectiveness, this leads to the absorption of these variables as antecedents toward examining the internal audit effectiveness as can equally be applicable in Nigerian context, so that to empirically display their contribution on internal audit effectiveness in Nigeria. These variables are; risk management, effective internal control system, audit experience, performance measurement and cooperation between internal and external auditors. Each one of them is been taken because of the future studies recommendation on them. Therefore, the objective of this study is to display empirical evidence of antecedents of internal audit effectiveness from the Nigerian point of view. Section two of the paper presents the literature review and hypothesis development, section three provides research methodology, section four present results and discussion and finally the conclusion.

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Literature Review and Hypothesis Development

Internal Audit Effectiveness: An operation can be regarded as effective only when the result outcome of the operation is in line with the established objectives of such operations [16, 17], at the same time, the issues concerning internal audit effectiveness are necessary because it creates improvement in the government ministries [18]. [19] defined internal audit effectiveness “as the degree (including quality) to which established objectives are achieved. Meaning that, internal audit effectiveness is the ability of the internal auditor to achieve the established objective within such organization. As such, the objective needs to be precisely stated in a comprehensive manner and the resources for achieving the objective need to be adequately provided by such organizations [20]. Effective internal audit is considered as one of the instrument that improve governance structure because of the essentials role play in assessing the effectiveness of control measures of an organizations [21, 20] that is why internal audit functions that is effective can easily improve the effectiveness of an organizational operations and thereby adding value to such organizations effectively [17].

In fact, an internal audit function that is adequate has the capability of providing better internal audit work [22]. More specifically, it brings accounting into order and consistency to the various operations of the organization [23], that is why [24] noted that, organizations that belongs to government shall equally encourage to have an effective internal audit functions within their operation in order to support the effectiveness of management, even [5] suggested that organizations that have no effective internal audit department should be encouraged to have such departments in their operations. In this vein, it’s important to have effective internal audit in place so that to enable the objective achievement effectively. Various studies have been conducted on internal audit effectiveness [17, 11, 25, 26, 27, 24, 15, 3, 14, 7, 18]. Nevertheless, none of these studies incorporated those antecedents in examining the internal audit effectiveness predominantly from Nigerian evidence. That is why [13] emphasizing on the empirical validation of these antecedents from different perspective. Therefore, this study extends the previous study through providing the empirical evidence of internal audit effectiveness from Nigerian perspective.

Risk Management: The future development of a country can be ascertained in their effort on risk management and maintenance of good governance within their public sector organizations [28]. In fact, effective risk management is one of the essential aspects of good corporate governance [22] that is why in recent years, enterprise risk management has received a wider global concerned [29]. Meaning that, Nigerian government should equally consider the issue of risk management as one of their priority so that to enable their objective achievement. As noted that such effective risk management enables the achievement of organizational objective [30]. Risk management means the process of identification of the risk up to the management of such risk in order to allow the achievement of organizational objective and to improve internal audit effectiveness.

Most of the previous studies that have been carried out on risk management focused on the role of internal audit in risk management for instance [30, 31, 32]. Only limited studies consider the impact of enterprise risk management on the internal audit function for example [29]. They ignore to examine the impact of such risk management on internal audit effectiveness predominantly within Nigerian context. Some few studies measured risk management with other variables [33, 28]. Despite the above studies, [29] recommend that research should examine the relationship between of enterprise risk management and internal audit. Also, [33] observed that there is still need for a lot of research to be done on risk management, even [34] called for the empirical validation for risk management and internal audit effectiveness relationship in different countries using different tool of analysis. Therefore, this study extends the previous by examine the relationship between risk management and internal audit effectiveness.

A number of studies shown that risk management have something to play in internal audit objective achievement [29, 31, 35, 32, 33] for instance; [32] affirmed that risk management facilitates effectiveness and efficiency in terms of objective achievement. This is line with the finding of [29] that enterprise risk management has positive impact on internal audit’s activities in an organization, especially when the organization’s enterprise risk management process is more effectively in place. In the same vein, the relevant of the risk management process outcome can lead to the effectiveness of internal audit planning [31], also a well-structured risk management methodology when utilize appropriately can help management in achieving their objective [35]. Based on above theoretical presumptions, the following hypothesis is developed.
H1: Risk management has significant positive relationship with internal audit effectiveness in Nigeria.

Effective Internal Control System: Effective internal control system has an essential role to play in a firm’s success [36]. As such, all government ministries and agencies should improve the effectiveness of their internal control system, organization commitment and internal audit function because they improve good governance [37], such effectiveness may provide information to management concerning their achievement or not of the objectives [36, 38, 39]. In general, the establishment of internal control systems ensures effective functioning of any entity [40]. Therefore, effective internal control system is one of the important factors to consider when it comes to internal audit effectiveness. Effective internal control system refers to the effective control measures established by an organization with the aim of safeguarding their assets; ensure the reliability of records both financial and non-financial as well as ensuring compliance with relevant policies and procedure that will ensure the achievement of organizational objective.

Some of the recent studies that have been carried out on effective internal control system [39, 41, 37, 38], these studies did not investigate the relationship between effective internal control systems with internal audit effectiveness mostly in Nigeria. In this vein, [36], [42], recommend that more research in the area of effective internal control system is required, even [43] called for the empirical validation for effective internal control system and internal audit effectiveness relationship in different countries using different tool of analysis. Therefore, this research extends the previous research by empirically examining the relationship between effective internal control system and internal audit effectiveness in Nigeria.

Several literature make a presumption that need to be validated empirically, that effective internal control system has impact on the of internal audit activities [41, 38, 8, 44,14, 39] for example; [8] posit that, the credibility of internal auditor depends upon the effectiveness of internal control system of an organization. This is in line with the results study of [14] which reveals that, the success of internal auditing is associated with the five elements of internal control system. Thus, internal control system monitoring could influence audit effectiveness [44]. Therefore, based on above theoretical presumptions, the following hypothesis is formulated that.

H2: Effective internal control systems have significant positive relationship with internal audit effectiveness in Nigeria.

Audit Experience: Audit experience is another essential factor to consider when it comes to internal audit effectiveness, because it enables the auditor to provide good audit outcome and thereby enable good recommendation. In recent times, research in the area of professional experience in accounting and auditing are increasing [45]. That is why studies on impact of auditor experience on earnings quality has become the target study area in the United States [46] even in China, investors comprehend the credibility of earnings especially if it is been audited by experienced auditors [47]. Virtually this should also be an area of research in Nigerian context and other developing Nation.

Management of an organization usually gives more concern on a judgment of experience group than the inexperience judgments group [48], that why auditors that has adequate experience are usually assigned to control and evaluate different tasks within audit firms [49]. Some of the recent studies that have been conducted on audit experience [46, 49, 45, 26, 16, 47, 50] did not examine the effect of audit experience on internal audit effectiveness. Nevertheless, [50] and [26] recommend that future research is needed to conduct research on audit experience, even [51] called for the empirical validation for audit experience and internal audit effectiveness relationship in different countries using different tool of analysis. Therefore, this research extends the previous research by empirically examining the relationship between audit experience and internal audit effectiveness in Nigeria.

Several research has postulate that audit experience can have impact on the of internal audit issues [5, 28, 45, 46, 48, 26, 52, 53, 49, 47] for example; auditors with more experience have a good comprehension of decision process and placed greater reliance on the net income variable [53]. In addition, [5] expressed some of the factors that influence internal audit effectiveness include; experience, training, education and professional qualifications. [52] Found that experience auditors have the ability to give more explanations of audit findings. Therefore, in view of the above theoretical presumptions, the following hypothesis is developed;

H3: Audit experience has a positive significant relationship with internal audit effectiveness in Nigeria.
Cooperation Between Internal and External Auditors:
Recently, studies that focused on the cooperation between internal and external audit are more increasing [54, 55, 56], this was due to the significant influence of such cooperation between the two auditors on better and quality auditing. Effective and efficient cooperation between the two auditors lead to a higher quality of auditing [56], also such cooperation with the external auditors provide an opportunity for the internal auditors to add value to their organization [57]. The degree of reliance of external auditors on internal auditors’ works is an indication of cooperation between them [58]. Virtually, the cooperation may lead to internal audit effectiveness in Nigeria. Cooperation between internal and external auditors refers to coming together between internal and external auditors with the aim of achieving certain goals. [61]. And well-structured performance measurement system could be used toward improving organizations strategic goals effectively [66]. It’s important to consider such relationship in Nigeria. Recent studies that have been carried out on cooperation between internal and external audit [55, 59, 56, 54] did not examine the effect of such cooperation between the two auditors on internal audit effectiveness, whereas future research are calling to examine the impact of such cooperation between internal and external audit in developing countries because most of the previous researches on this topic were based on the developed world [56, 54]. Therefore, this study extends the previous studies by examining such relationship in Nigeria.

Literature has suggested that cooperation between the two auditors has an impact over internal audit activities [56, 59, 60, 55, 61, 54, 58, 57]. For instance; [61] posit that, it’s important every internal audit staff member understand the key role that cooperation plays in the department’s effectiveness, in order to improve the operations of the organization toward objective achievement. At the same time, effective cooperation between internal and external auditors results to a variety of enjoyment for both auditors and the clients [55, 60]. Such cooperation between internal and external audits lead effective audits [58]; therefore, for internal auditors to enhance audit effectiveness and efficiency, they should cooperate with external auditors [57]. In view of the above presumptions, the following hypothesis is formulated that;

**H4**: Cooperation between internal and external auditors has an impact on the internal audit effectiveness in Nigeria.

Performance Measurement: Performance measurements in internal audit are absolutely an important topic for practitioners [62]. Equally, employing a well standard of performance measures in internal auditing is essential to the professions of internal audit [63] that is why in the recent period, performance measurement received reasonable consideration in internal auditing [64]. This shows that consideration has been reasonably given to the issue of performance measure of the internal audit activities, so that to enhance the effectiveness of such internal audit, this should equally be consider in Nigerian context so that to enhance the effectiveness of such auditors.

In Nigeria, performance of public servant at all the level of government are measured so that to ensure efficiency and effectiveness in the government activities [65]. And well-structured performance measurement system could be used toward improving organizations strategic goals effectively [66]. It’s important to consider performance measurement of internal auditors so that to determine their effectiveness [27]. Even though [67] realized that some performance measures are more effective than others. This indicates that performance measurement varies even in term of effectiveness. Nevertheless, effective performance measures need to be taking into consideration so that to improve the effectiveness of internal audit effectiveness. Some of the recent studies that have been carried out on performance measurement [3, 69, 67, 68, 64, 70, 65] did not examine the influence of performance measurement on internal audit effectiveness, in spite that, it would be importance to conduct a research on performance measurement in the public sector [68], in fact, more research should be conducted on the effect of performance measures for internal audit functions [63]. Therefore, in view of the above, this study extends previous studies by examining the relationship between performance measurement and internal audit effectiveness in Nigeria.

Mostly, performance measurement are established in order to achieve; effectiveness, efficiency, timeliness, productivity, quality and safety [67, 69, 68, 20, 19, 64], it’s also confirm that the success of organization depend on their performance measurement [69]. Performance measurement is an important factor for maintaining effective and high quality of internal audit department [62] because were more supported towards efficiency and effectiveness of internal audit function [64]. Equally, performance measurement would lead to increase in
internal audit effectiveness [25]. Therefore, in view of the above presumption, the following hypothesis is formulated that:

**H5:** Performance measurement has positive significant relationship on internal audit effectiveness in Nigeria.

**Contingency Theory:** Contingency theory is been employ as the underpinning theory for the research due to the fact that, the theory is one of those theory that are recently been employed in the research area of management accounting and auditing [70, 69] even though, the use of theory may have different effect and equally it effectiveness depend upon the field that is been proposed [71]. Nevertheless, contingency theory enables a researcher to systematically introduce factors to explain or predict expected phenomena [72]. The theory enable hypothesize a conditional relationship between two or more independent variables with a dependent variable and subject it to an empirical validation [71]. Equally, the theory has been employed by previous researchers in explaining some of the research variables [33, 36], even with regard to audit effectiveness, the theory has equally employed by previous researchers [44], as contingent variables can also differ [33]. Therefore, this study posit that internal audit effectiveness is contingent upon the contingency variables of; risk management, effective internal control system, audit experience, cooperation between internal and external auditors and performance measurement.

**MATERIALS AND METHODS**

The data for this study were obtained through a survey questionnaire administered to the internal auditors, audit committee and chairman or their representative of various local governments in Nigeria. The population of the study is the entire local government in Nigeria. There are 774 local government in Nigeria, based on this population, the sample size is 264 [73], to reduce the sample error in order to take care with non-response problem, the sample size has been increase to 500 [74], it is also recommended that the larger the sample size, the better [75]. The sampling technique was stratified random sampling, in which the population were divided into stratum i.e. geo-political zones and this sampling technique it’s an efficient research sampling technique because it provides more information on a given sample size [76]. The data were administered and collected through research assistant employed so that to facilitate quick retrieval of completed research questionnaire and equally to provide high responds rate. Therefore, out of 500 questionnaires distributed 350 were fully completed and returned which represent 70% responds rate. A response rate of 30% is acceptable for survey [74].

**Measurement of Research Variables**

**Dependent Variable:** Internal audit effectiveness: Internal audit effectiveness is the ability of the internal auditors to achieved established objective of the internal audit function within the local government. This variable is the dependent variable; the variable is measured by 9 items adapted with some modification [77].

**Independent Variables**

**Risk Management:** Means the process of identification of the risk up to the management of such risk in order to allow for the achievement of organizational objective. The variable is measured with 7 items as adapted with some modification [78].

**Effective Internal Control System:** Refers to the effective control measures established by an organization with the aim of safeguarding their assets; ensure the reliability of records both financial and non-financial as well as ensuring compliance with relevant policies and procedure that will ensure the achievement of organizational objective. This variable is measured with 7 items as adapted with some modification [36].

**Audit Experience:** Refers to different kind of knowledge and skills which the auditor obtains as a result in length of tenure on the job practice in the auditing professions which enhances his effectiveness. Therefore, this variable is measured with 5 items as adapted with some modification [79].

**Cooperation Between Internal and External Auditor:**
Refer to the act of coming together between internal and external auditor for the purpose of achievement of certain objectives. This variable is measured with 6 items as adapted with some modification [55].

**Performance Measurement:** Refers to the process of determining the extent level of achievement of established objective by internal auditor. The variable is measured with 5 items as adapted with some modification [63].
Thus, five-point type rating scale, ranging from strongly agree to strongly disagree has been used in measuring the responses of the entire questions. This is because several researchers has make used of this scale due to its easier for respondents to understand, hence, responses from five point scale are probably to be reliable [80, 14, 81]. Face and content validity of the instrument was carried out through meeting with the expert on the field in order to ensure that those items that contain in the instrument actually belong to that particular instrument. The expert contacted consisted of Academic Staff in Nigerian Institutions, Auditor General for Local Government in Nigeria, internal auditors at state and local government in Nigeria, so that to improve the validity of the instrument. To this end, after taking note on the expert observation, a revised version of the instrument was made which result to some questions were re-worded in order to measure the constructs appropriately, so that to enable clear understanding by the potential respondents, which thereafter administered for pilot study. The reliability of the pilot study was all above 0.7 which indicate the reliability of the measurement [74]. The research instrument can be found in the appendix.

**Method of Data Analysis:** The data were analyzed using SPSS version 21, hence, descriptive statistic was carried out, factor analysis was equally carried out so that to reduce the items into more manageable number [75] in which after the factor analysis, the items remain for each variable certified the requirement of factor analysis, such as KMO >0.5, Bartlett’s test of Sphericity <0.05 or smaller, communalities >0.5, factor loading above >0.5 [74], correlation matrix has been carried out and lastly, multiple regression analysis was then conducted in order to determine the relationship between the research variables.

**RESULT AND DISCUSSIONS**

**Descriptive Statistic:** Table 1.0 present the background information of the respondents, the result reveals that 74.6% of the respondents are male while 25.4% of the respondents are female; this implies that the male respondents outweigh the female respondents. Descriptive statistic result indicates that 27.4% of the respondents are within the age of 30 - 35 years old which implies that the majority of respondents are within the productive age of the entire population which their responses can equally be fair. With regard to highest school qualification, the result shows that majority of the respondents are within diploma/ NCE certificates which represent 47.4%. Majority of the respondents have no professional certificate as reveals by descriptive statistic result with 78.9%. Finally, the result equally displayed that majority of the respondents have enough working experience as showed in Table 1.0 which represent 32%.

The correlation analysis of the variables under study was subjected to a two-tailed test of statistical significance at two different level; significant (p< 0.01) and significant (p< 0.05), Table 2 above shows that correlations between all variables under study are statistically significant at (p< 0.01) and (p< 0.05). It can also be seen from the same table 2 that the correlation of the variables ranges from 0.138 to 0.343. Hence, the problem of multicollinearity is not there.

Table 3 above present the empirical evidence on the relationship between antecedents and internal audit effectiveness, the regression analysis reveals the significant of hypothesis 1 that risk management has significant effect on internal audit effectiveness in Nigeria ($\beta = .207$, t = 3.833, p = .000) this is consistent with [29] even with conclusion of [34] and this implies that, for internal audit to achieved established objective within various local government or various organizations, there should be well established risk management in place by such organization. Hence, H1 is supported. Regression analysis reveals significant effect of effective internal control system on internal audit effectiveness ($\beta = .140$, t = 2.735, p = .007) consistently with the finding of [14] even with conclusion of [43]. This implies that internal audit effectiveness can equally be attained when there is effective internal control in place. Thus H2 is supported.

The result analysis of multiple regressions equally reveals a significant relationship between audit experience and internal audit effectiveness hypothesis 3 ($\beta = .161$, t = 3.100, p = .002) this is in line with [28, 48] even with the conclusion of [51] and this implies that, for internal audit within the local government in Nigeria to succeed in audit effectiveness, audit experience is one of the factor to considered. Hence, H3 is supported.

Hypothesis 4 stated that, there is significant positive relationship in cooperation between internal and external auditors and internal audit effectiveness in Nigeria. This hypothesis was supported by multiple regressions analysis which reveals ($\beta = .208$, t = 4.023, p = .000) this is in line with [61] which implies that such cooperation between the two auditors has significant effect over the internal audit effectiveness. Thus H4 is supported.
Table 1: Background information of the respondents

<table>
<thead>
<tr>
<th>Demographic profile</th>
<th>Categories</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender:</td>
<td>Male</td>
<td>261</td>
<td>74.6</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>89</td>
<td>25.4</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>350</td>
<td>100.0</td>
</tr>
<tr>
<td>Age:</td>
<td>Less than 25 years old</td>
<td>8</td>
<td>2.3</td>
</tr>
<tr>
<td></td>
<td>25 years - 30 years old</td>
<td>66</td>
<td>18.9</td>
</tr>
<tr>
<td></td>
<td>30 years - 35 years old</td>
<td>96</td>
<td>27.4</td>
</tr>
<tr>
<td></td>
<td>35 years - 40 years old</td>
<td>81</td>
<td>23.1</td>
</tr>
<tr>
<td></td>
<td>40 years - 45 years old</td>
<td>66</td>
<td>18.9</td>
</tr>
<tr>
<td></td>
<td>Above 45 years old</td>
<td>33</td>
<td>9.4</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>350</td>
<td>100.0</td>
</tr>
<tr>
<td>Highest school qualification</td>
<td>Secondary certificate</td>
<td>14</td>
<td>4.0</td>
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<tr>
<td></td>
<td>Certificate</td>
<td>29</td>
<td>8.3</td>
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<tr>
<td></td>
<td>Diploma/NCE</td>
<td>166</td>
<td>47.4</td>
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<td></td>
<td>Degree/HND</td>
<td>120</td>
<td>34.3</td>
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<tr>
<td></td>
<td>Masters</td>
<td>21</td>
<td>6.0</td>
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<tr>
<td>Total</td>
<td></td>
<td>350</td>
<td>100.0</td>
</tr>
<tr>
<td>Professional qualification</td>
<td>ICAN member</td>
<td>5</td>
<td>1.4</td>
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<td></td>
<td>ANAN member</td>
<td>47</td>
<td>13.4</td>
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<tr>
<td></td>
<td>ICPAN member</td>
<td>21</td>
<td>6.0</td>
</tr>
<tr>
<td></td>
<td>None</td>
<td>276</td>
<td>78.9</td>
</tr>
<tr>
<td></td>
<td>Others specify</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>350</td>
<td>100.0</td>
</tr>
<tr>
<td>Working experience</td>
<td>Less than 1 year</td>
<td>5</td>
<td>1.4</td>
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<tr>
<td></td>
<td>1-5 years</td>
<td>76</td>
<td>21.7</td>
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<td></td>
<td>6-10 years</td>
<td>88</td>
<td>25.1</td>
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<tr>
<td></td>
<td>11-15 years</td>
<td>69</td>
<td>19.7</td>
</tr>
<tr>
<td></td>
<td>15 years - Above</td>
<td>112</td>
<td>32.0</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>350</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 2: Correlation Matrix

<table>
<thead>
<tr>
<th></th>
<th>IAE</th>
<th>EICS</th>
<th>RM</th>
<th>PM</th>
<th>AE</th>
<th>CBIE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal Audit Effectiveness (IAE)</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Effective Internal Control System (EICS)</td>
<td>.138**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Risk Management (RM)</td>
<td>.228**</td>
<td>.281**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Performance Measurement (PM)</td>
<td>.196**</td>
<td>.260**</td>
<td>.289**</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Audit Experience (AE)</td>
<td>.343**</td>
<td>.160**</td>
<td>.292**</td>
<td>.162**</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Cooperation Btw Internal and External auditors (CBIE)</td>
<td>.209**</td>
<td>.299**</td>
<td>.322**</td>
<td>.184**</td>
<td>.201**</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).

Table 3: Multiple Regression Result between Antecedents and Internal Audit Effectiveness

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>2.891</td>
<td>.380</td>
</tr>
<tr>
<td></td>
<td>EICS</td>
<td>.170</td>
<td>.062</td>
</tr>
<tr>
<td></td>
<td>RM</td>
<td>.218</td>
<td>.057</td>
</tr>
<tr>
<td></td>
<td>PM</td>
<td>.185</td>
<td>.073</td>
</tr>
<tr>
<td></td>
<td>AE</td>
<td>.247</td>
<td>.080</td>
</tr>
<tr>
<td></td>
<td>CBIE</td>
<td>.294</td>
<td>.073</td>
</tr>
</tbody>
</table>

Dependent Variable: Internal Audit Effectiveness
Finally, multiple regressions analysis reveals the significant relationship between performance measurement and internal audit effectiveness (β = .137, t = 2.551, p = .011) this is in line with [64] which equally implies that, measuring the performance of internal auditors improve their level of effectiveness. Hence, H5 is supported.

**CONCLUSION**

This study provided the empirical evidence of antecedents of internal audit effectiveness from Nigerian perspective. The result analysis of the study reveals the significant effect of the entire antecedents on the internal audit effectiveness, which implies that, for local government or other public sector to attain the effectiveness of their internal audit, such antecedents need to be given due consideration. Some of the limitation of the study includes; collecting data from local government only, the research was based on cross-sectional and the finding cannot be generalized due to different setting of various local government internal audits in different countries. Despite the above limitation, the study contribute to internal audit effectiveness by providing empirical evidence of those antecedents on internal audit effectiveness, which previous studies has not incorporate such antecedents in examining the internal audit effectiveness. Therefore, more research are require to be conducted on internal audit effectiveness particularly in local government level because literature has showed limited study and reporting of internal audit within the context of local level. There is need for theoretical implication for internal audit effectiveness in the future studies.

**REFERENCES**


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Appendix

Section 1: The following statement described the internal control system in the local government, based on your perception. Please indicate the extent to which you agree or disagree with the statement based on the scale below: 1=Strongly Agree (SA); 2= Agree (A); 3= Neutral (NEU); 4= Disagree (DA); 5= Strongly Disagree (SD)

A1. Local government councils ensure adherence to the council policies. ........................................ 1 2 3 4 5
A2. Local government council provides good control environment that may assist staff in performing their respective duties. ........................................ 1 2 3 4 5
A3. Local government council carrying out risk assessment activities in order to achieve the local objective. ........................................ 1 2 3 4 5
A4. Segregation of duties is adequately provided among local staff. ........................................ 1 2 3 4 5
A5. Local government assets are properly safeguarded and periodically verified. ......................... 1 2 3 4 5
A6. Information on relevant procedures is easy accessible by the local staff. ................................. 1 2 3 4 5
A7. There is proper monitoring of the local government internal control system with the aim of ensuring it effectiveness. ........................................ 1 2 3 4 5

Section 2: The following statement described how local government manages the identified risk. Please indicate the extent to which you agree or disagree with the statement based on the scale below: 1=Strongly Agree (SA); 2= Agree (A); 3= Neutral (NEU); 4= Disagree (DA); 5= Strongly Disagree (SD)

B1. Local government council has an established risk management process in place. ......................... 1 2 3 4 5
B2. Identification of any kind of risk such as fraud, irregularities or illegal act is easy in the local government. ........................................ 1 2 3 4 5
B3. Effect of any kind of risk identified in the local government is considered in order to manage it. .................................................................................. 1 2 3 4 5
B4. Current control identification enables the minimization of the effect of risk so identified in the local government. ........................................ 1 2 3 4 5
B5. Evaluation of current control in place improves its effectiveness on risk management in the local government. ........................................ 1 2 3 4 5
B6. There is proper risk management strategy in place which handles the current control weaknesses in the local government. ........................................ 1 2 3 4 5
B7. There are proper monitoring activities on the effective application of the policies and activities related to risk management ........................................ 1 2 3 4 5

Section 3: The following statements assess the experience of internal auditors in the local government. Please indicate the extent to which you agree or disagree with the statement based on the scale below: 1=Strongly Agree (SA); 2= Agree (A); 3= Neutral (NEU); 4= Disagree (DA); 5= Strongly Disagree (SD)

C1. Internal auditors have the required knowledge on the overall activities of the local government. .................................................................................. 1 2 3 4 5
C2. Internal auditors in the local government have adequate knowledge on current internal audit practices of the profession. ........................................ 1 2 3 4 5
C3. Internal auditors within the local government have professional related training. .................. 1 2 3 4 5
C4. The internal auditors possess sufficient skills (i.e. accounting and auditing) that is relevant to the local government activities. ........................................ 1 2 3 4 5
C5. The internal auditors used their technical expertise in the local government where necessary. .................................................................................. 1 2 3 4 5

Section 4: The following statements assess the cooperation between internal and external auditors in the local government, based on your perception. Please indicate the extent to which you agree or disagree with the statement based on the scale below: 1=Strongly Agree (SA); 2= Agree (A); 3= Neutral (NEU); 4= Disagree (DA); 5= Strongly Disagree (SD)

D1. Reliance on the local government internal audit is part of the external audit plan. ...................... 1 2 3 4 5
D2. External auditor evaluates local government internal audit work before they rely on them. ........ 1 2 3 4 5
D3. Local government internal auditors meet external auditors on a regular basis in order to discuss progress with the aim of resolving problems .................................................................................. 1 2 3 4 5
D4. Internal audit of the local government discuss their audit plan with and external auditors. ........ 1 2 3 4 5
D5. Internal audit of the local government communicate with external auditors on their audit findings. .................................................................................. 1 2 3 4 5
D6. Internal auditors display kind of assurance to external auditor that they comply with relevant professional standard. ........................................ 1 2 3 4 5

Section 5: The following statement described the measurement of internal audit performance in the local government, based on your perception. Please indicate the extent to which you agree or disagree with the statement based on the scale below: 1=Strongly Agree (SA); 2= Agree (A); 3= Neutral (NEU); 4= Disagree (DA); 5= Strongly Disagree (SD)

E1 Local government has an established standard for measuring the performance of internal auditors. .................................................................................. 1 2 3 4 5
E2 Local government measure the performance of internal auditors regularly. .............................. 1 2 3 4 5
E3 The performance of local government internal audit is measured on the basis of established objective. .................................................................................. 1 2 3 4 5
E4 Local government has performance indicators which will enable good performance of internal audit. .................................................................................. 1 2 3 4 5
E5 Good performance of internal auditors in the local government is rewarded by way of good incentives. .................................................................................. 1 2 3 4 5

Section 7: The following statement assesses the effectiveness of internal audit in local government level. Please indicate the extent to which you agree or disagree with the statement based on the scale below: 1=Strongly Agree (SA); 2= Agree (A); 3= Neutral (NEU); 4= Disagree (DA); 5= Strongly Disagree (SD)

F1. The local government have a clear objective for internal audit to achieve ........................................ 1 2 3 4 5
F2. Internal audit prepares a suitable audit plan for the execution of such objective. ...................... 1 2 3 4 5
F3. Resources are provided in order to complete the audit within the right time. .............................. 1 2 3 4 5
F4. The appointment of internal audit is based on competency. ........................................ 1 2 3 4 5
F5. The local government auditing is conducted based on auditing standard and procedures .................................................................................. 1 2 3 4 5
F6. Audit findings are sufficiently importance without reasonable doubt. ........................................ 1 2 3 4 5
F7. The audit finding in line with the established objective. ........................................ 1 2 3 4 5
F8. The audit finding brings improvement in the local government. ........................................ 1 2 3 4 5
F9. Local council shows satisfaction with the auditor achievement of stated objectives. .................. 1 2 3 4 5