



Internal Audit Effectiveness and Its Determinant Factors in Commercial Banks of Ethiopia: The Case of Bale Robe Town

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Abstract: The aim of this study was to investigate the determinants of internal auditing effectiveness in a commercial bank of Ethiopia using a combination of descriptive and explanatory research methods. Specifically, from the audit literature five determinates such as TMS, COMP, IND, ITT and RBIEA were identified to check their effect on internal audit effectiveness. As the main aim of this study was to investigate factors affecting internal audit effectiveness of commercial banks of Ethiopia, Explanatory study would be used to show the causal relationship between variables due to explanatory type of research is used to explain, understand and predict the relationship between variables through statistical tests such as regression. A sample size of 139 was determined from the total population 160 using Yamane's (1967) formula and the questionnaires were distributed to the selected samples by random sampling method and judgmental or purposive Sampling method. The primary and secondary sources of data were used to collect the necessary data. The collected data was analyzed using both descriptive and inferential statistics through EViews software. The study found a significant positive relationship between information technology usage, competency of internal auditors, top management support and cooperation between internal & external auditors with internal audit effectiveness while independency of internal auditor was found to be statistically insignificant. Finally, the study recommended that, internal audit staffs should have sufficient knowledge of key IT audit tools and maintain good or smooth relationship with external auditors, top management should give enough support and training in developing internal audit staffs.

Keywords: Internal Audit Effectiveness, IT Tools, Management Support

1. Introduction

The developing role of the internal auditing is also reflected in its current definition, i.e. internal auditing is an independent objective assurance and consulting activity designed to add value and improve an organizations operations. It helps an organization accomplish its objectives by bringing a systematic disciplined approach to evaluate and improve the effectiveness of risk management, control and Governance process. [43] attested that investment in internal auditing services is associated with the value it adds to strategic objectives, operational objectives, compliance objectives, and financial reporting objectives of an institution [22]. Internal

auditors as internal evaluators of institutional processes assume an autonomous examination of different activities of the institution ranging from governance issues, risk management processes, and internal controls [19, 21].

Accordingly, not all internal auditing functions can help institutions to achieve their objectives, but only those that are effective [32]. In this context, it is important to explain the concept of IA effectiveness and identify critical factors that contribute to creation of “added value” of IA [29]. The most prominent claim that has been observed from the previous studies concerning this IAF is that internal auditing aims to add value to an institution by bringing effectiveness on risk management, governance, and internal

control processes [31, 39].

Hela and Mohammed, [19] have attested that internal auditing creates a unique value by identifying the weaknesses in institutional processes and providing the necessary recommendations to be implemented by senior management to improve the audited processes. However, arguments were noted in the literature regarding the appropriateness of the criteria to correctly measure internal auditing effectiveness. External auditing standards (ASA 315) indicate that effective communication between internal and external auditors can create an atmosphere for external auditors in which they are being mutually informed about key matters that have an impact on their work. On the other hand, [17] have claimed that internal auditing effectiveness is enhanced through coordination with external auditors because it allows internal auditors to access the audit techniques and vocabularies of the external auditors and apply these within the scope of internal auditing.

The international standards for the professional practice of internal auditing (ISPPA) necessitate that an internal auditing unit of an institution should be independent and that internal auditors be objective while performing their internal auditing activities. Standard 1100 recommend that to ensure an appropriate level of independence and objectivity of internal auditors, the head of internal auditing unit should report administratively to senior management and functionally to the audit committee of the board of directors. Internal auditors should have unrestricted access to records, personnel and departments, avoid any conflict of interest, and not perform non-audit activities [38, 31, 24, 16].

Huang, et. al, [40] have suggested that motives, traits, and self-concepts are different from knowledge and skills in that they are essential features of character that are not easy to acquire through training. By contrast, knowledge and skills can be revealed and developed through training intervention. [35] have associated competence with the level of education, working experience in a field of internal auditing, professional qualifications, and training, all of which assist auditors to add value and improve institutional performance. The general experience of internal auditors relates to the years of experience, skills, knowledge, training, and expertise [30] This requirement is consistent with internal auditing standard 1210, which states that “internal auditors must possess high skills, knowledge and competencies to perform their responsibilities” [23]. Furthermore, [25] have associated auditing experience with skills and knowledge that an auditor develops with long practices in the internal auditing field. [33] has observed that a tone of acceptance and appreciation of internal auditing practices can send a crucial message to the entire institution about the importance of internal auditors. The support can enable internal auditing function to complete its activities and responsibilities. [9] have associated management support as a key precursor that influences the implementation of recommendations made by internal auditors. Accordingly, providing an assurance that information security controls are adequate and achieving their intended purpose resides heavily on internal auditors [13].

Finally, based on the reviewed studies we could claim that there was an inconsistency in their findings regarding the measurement of internal audit competence. Besides, the results of prior studies concerning the effect of independence and objectivity of internal auditors on audit effectiveness were inconclusive. Therefore, this study tried to fill the gap in the literature stated above by examining factors affecting internal audit effectiveness in case of commercial bank of Ethiopia in bale robe town.

Objectives of the Study

The specific objectives of the study would be:

- 1) To identify the effect of Competency of internal audit staffs in achieving effectiveness of internal audit in Commercial Bank of Ethiopia found in Bale Robe Town.
- 2) To investigate the contributions of internal and external auditors' relationship on effectiveness of internal audit in Commercial banks found in Bale Robe Town.
- 3) To examine the effect of Independence to the effectiveness of internal audit in Commercial banks found in Bale Robe Town.
- 4) To examine the contributions of management support for effective internal audit on Commercial Bank of Ethiopia found in Bale Robe Town.
- 5) To describe the effect of using Information Technology Tools on internal audit effectiveness in Commercial banks found in Bale Robe Town.

2. Theoretical Concepts

2.1. Internal audit Effectiveness

Various scholars have defined the term internal audit effectiveness in many ways. For instance, The Institute of Internal Audit [18] has defined IA effectiveness as “the degree (including quality) to which established objectives are achieved”. Internal audit is effective if it provides the required service from the function or in other words if it achieves the objectives of the function. In [24] internal audit effectiveness is defined as “the extent to which an internal audit office meets its supposed objective or the extent to which it meets the intended outcome”. [3] defined effectiveness as “the capacity to obtain results that are consistent with targets”. Added value delivered by internal audit become more and more relevant, which makes quite necessary to recognize factors in creating this added value. Therefore, it is of great importance to identify the factors affecting internal audit in order to be effective [1]. Consequently, for this study purpose empirical literatures are reviewed only for five variables as follows.

2.2. Internal Auditors Competence

Prior studies have claimed that the competence of an internal auditor is an important determinant of internal auditing effectiveness [39, 30, 21, 12]. Demeke, et. al, Demeke, et. al [13] have shared that competence of internal auditors positively impacts internal auditing effectiveness, based on their problem-solving skills and their dexterity to use

auditing software effectively. Consequently, the performance of internal auditors is enhanced through computer skills and abilities to solve practical problems in auditing. They also argue that, higher internal audit effectiveness is associated with greater competence of internal audit staff. Therefore, this study extends the prior studies by examining the relationship between competence of internal auditors and IA effectiveness by measuring competence in terms of ability internal auditors to use computerized data tools.

2.3. Top Management Support

The management support is almost crucial to the operation and internal audit; because all other determinants of IA effectiveness derive from the support of top management, given that hiring proficient IA staff, developing career channels for IA staff, and providing organizational independence for IA work are the results of decisions made by top management [7]. This means it is the interest of management to maintain a strong internal audit department. [11] Claim that, the management of an organization is viewed as the customer receiving IA services. As a result, management's commitment to use audit recommendations and its support in strengthening internal audit is vital to IA effectiveness.

2.4. Information Technology Tools

The use of technology-based audit techniques has also become an important part of the internal audit function. Computer assisted auditing techniques (CAATs) are computer-based tools and techniques that permit auditors to increase personal productivity as well as that of the audit function. They can significantly improve audit effectiveness and efficiency during the planning, conduct, reporting, and follow-up phases of the audit [32]. The author [34] have pointed out that computerized assisted auditing tools (CAATs) assist greatly in speeding up the work of internal auditors.

2.5. Empirical Literature

Prior studies have proved that coordination between the two parties boosts efficiency, economy, and effectiveness of processes, including a reduction in external auditing hours, external audit effort, audit delay and external audit fees [1, 10, 23, 33, 39]. Such a coordination allows management to deliver improved services within the organization [7]. The author [15] have claimed that internal auditing effectiveness is enhanced through coordination with external auditors because it allows internal auditors to access the audit techniques and vocabularies of the external auditors and apply these within the scope of internal auditing. They further stated that coordination sets an operative mechanism to reduce the effect of poor tone at the top on the measured fraud risk by internal auditors. The author [9] have concluded that the nonexistence of coordination between auditors can result in a high risk of fraud, and they have suggested that internal auditors should use of this coordination as a means of reducing financial fraud risk and enhancing the reliability of financial statements.

Factors and measurement of internal audit's effectiveness have been used differently by the researchers [28] and until now, there is no consensus regarding the most appropriate framework for internal audit's effectiveness [30]. Thus, effectiveness of internal audit is a dynamic process and a matter of considerable debate. Consequently, this calls for further research on the topic.

There is strong support from literature for the importance of top management support as a successful factor of internal audit effectiveness [10, 17, 30, 33]. However, there is little depth in research that has addressed top management support and its role in an effective audit within the framework of IT integration.

3. Research Methodology

Research designs are plans and the procedures for research that span the decisions from broad assumptions to detailed methods of data collection and analysis (Kothari, 2004). In order to address the research problem and meet the research objectives, in this study both descriptive and explanatory research design were used. As the main aim of this study was to investigate factors affecting internal audit effectiveness of commercial banks of Ethiopia, Explanatory study would be used to show the causal relationship between variables due to explanatory type of research is used to explain, understand and predict the relationship between variables through statistical tests such as regression [8]. If the problem is identifying factors that influence an outcome, the utility of an intervention or understanding the best predictors in outcomes, then a quantitative approach is best. The primary sources of data for this study were collected through distribution questionnaires the respondents. The questionnaire is a fast way of obtaining data as compared to other instruments [20]. Questionnaires gives the researcher comprehensive data on a wide range of factors. Questionnaires allow the collection of large amounts of data within a short period of time and it allows greater uniformity in the way questions are asked, ensuring greater compatibility in the responses. Thus, the document examination helps to corroborate the patterns that evolved from the data collected via questionnaires; so that the validity of the findings could be enhanced.

Generally, in Bale Robe zone there are 49 CBE branches out of which 8 branches are in Bale Robe Town. In the 8 branches there are a total of 185 employees out of which 17 are internal auditing staffs. Therefore, to take a sample all of the internal auditing staffs and branch managers would be taken judgmental or purposive sampling technique and for other employees, in order to satisfy the adequacy and representativeness of the sample, it will be determined by using the sample size determination formula proposed by the research [42]. Accordingly, sample size were calculated using the following formula.

$$n = \frac{N}{1+N(e)^2} \quad (1)$$

Where: n= Actual sample size.

N= Total number of internal auditing staffs in the bank which are 160 other than branch managers and internal auditors.

e = maximum variability or Margin of error at 5%.

Therefore, the sample size determined for this study was computed as follows;

Therefore, $n = \frac{160}{1 + 160(0.05)^2} = 114.285 \sim 114$ hence, the total sample would be $114 + 25 = 139$.

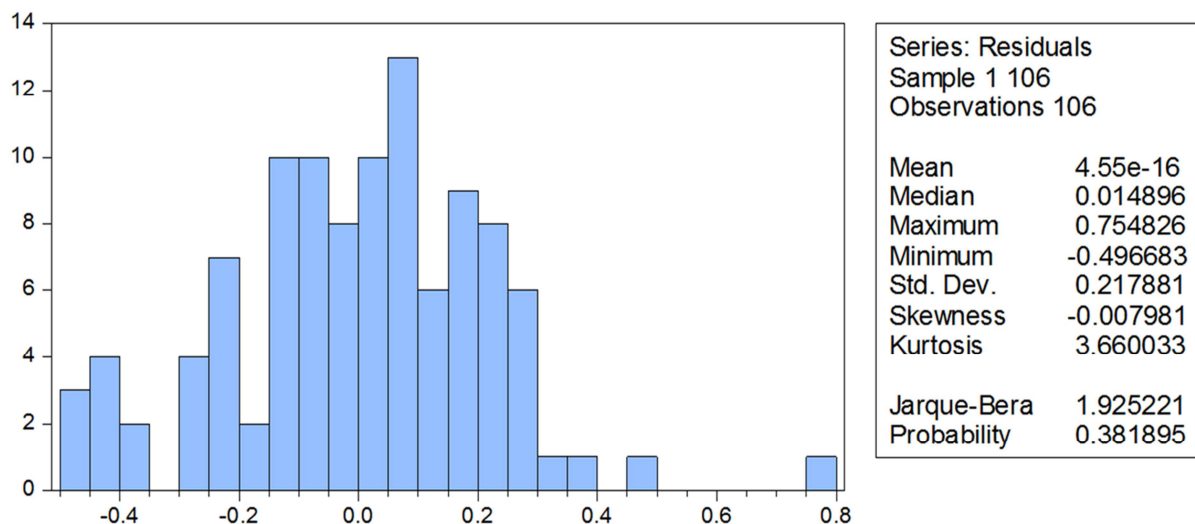
3.1. Model Specification

The following ordinary least squares (OLS) model was formulated for this research in order to test the association between the dependent variable of IAE and five independent variables hypothesized earlier. Most of the independent variables included in the model are extensively used in prior audit researchers [32, 28, 26, 8, 14, 2] except the use of IT tools. So, the model is reliable and appropriate for this research.

$$IAE = \alpha + \beta_1 TMS + \beta_2 COMP + \beta_3 IND + \beta_4 RBIEA +$$

3.2. Data Analysis

3.2.1. Normality Test



Source: Survey data 2022 (EViews10 output summary result)

Figure 1. Normality test.

Based on the test result shown above figure, the residuals were normally distributed because the skewness is near to Zero and its kurtosis is closer to 3. More importantly, its Jarque-Bera probability of 38% is greater than 5% level of risk or its insignificant at 5% significant levels.

3.2.2. Heteroscedasticity Test

A classical linear regression model assumes constant variance of the error term. Thus, the error term is not expected to be heteroscedastic by the nature of the model itself, therefore we need to test for heteroscedasticity problem. Fortunately, there are a number of formal statistical tests for heteroscedasticity, and one of the common and simplest methods is the Breusch-Pagan-Godfrey test. So, in this study

$$\beta_5 ITT + e_i$$

Where:

IAE= the effectiveness of internal auditors' in identifying non-compliance activities, improvement of organization's performance and improves the effectiveness of governance process in the CBE,

TMS =The Managements Support,

ITT = The Use of information technology tools,

IND=The independence of internal Auditors,

COMP= competent internal audit staffs,

RBIEA =The relationship between internal and external auditors.

α = is a constant, represents the effectiveness of IA when all independent variables value is zero.

β_{1-5} = is the coefficient, in which every marginal change in variables on internal audit's effectiveness affects correspondingly.

e_i = the error term.

the researcher used Breusch-Pagan-Godfrey test.

Table 1. Heteroskedasticity Test: Breusch-Pagan-Godfrey.

F-statistic	2.239950	Prob. F (5,100)	0.6561
Obs*R-squared	10.67605	Prob. Chi-Square (5)	0.6582
Scaled explained SS	38.11819	Prob. Chi-Square (5)	0.3249

Source: Survey data 2022 (EViews10 output summary result).

As indicated in the summary result of Breusch-Pagan-Godfrey test of above, the data have no problem of heteroskedasticity. Since the Probability of F-stat. = 0.6561 is greater than 5% level of significance, hence we can't reject the null hypothesis. Therefore, there is no serious heteroskedasticity problem or variances disturbances are

homoscedastic.

3.2.3. Test of Multicollinearity

For this study, Charles spearman's coefficient of correlation (rank correlation) is used. Because of spearman's coefficient of correlation is appropriate when the variables are

categorical/qualitative than Pearson Correlation. Owing to the study variables was measured in five-degree scale, spearman's rank correlation was computed for the independent and dependent variables.

Table 2. Charles spearman's coefficient of correlation.

	IAE	COMP	IND	ITT	RBIEA	TMS
IAE	1.000000					
COMP	0.548358	1.000000				
IND	0.684027	0.621643	1.000000			
ITT	0.598287	0.516886	0.476539	1.000000		
RBIEA	0.419393	0.427648	0.443764	0.556997	1.000000	
TMS	0.576943	0.539761	0.473780	0.537422	0.695167	1.000000

Source: Survey data 2022 (EViews10 output summary result).

As a result, we find that all factors have low correlation power of less than 0.80, meaning that the explanatory variables chosen to explain banks' loan and advance in

commercial banks in Ethiopia do not have a major multicollinearity problem. According to Gujarati, there is no connection above 0.8 in this study.

3.3. Result of Regression

Table 3. Regression Outcome.

Dependent Variable: IAE				
Method: Least Squares				
Date: 04/23/22 Time: 15:08				
Sample: 106				
Included observations: 106				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
COMP	0.152699	0.075041	2.034868	0.0445
IND	0.079415	0.060003	1.323523	0.1887
ITT	0.406881	0.083217	4.889374	0.0000
RBIEA	0.125565	0.048086	2.611228	0.0104
TMS	0.314694	0.085730	3.670774	0.0004
C	0.277461	0.162620	1.706187	0.0911
R-squared	0.879636	Mean dependent var		3.969962
Adjusted R-squared	0.873618	S. D. dependent var		0.805201
S. E. of regression	0.286251	Akaike info criterion		0.391044
Sum squared resid	8.193970	Schwarz criterion		0.541805
Log likelihood	-14.72533	Hannan-Quinn criter.		0.452148
F-statistic	146.1628	Durbin-Watson stat		1.571690
Prob (F-statistic)	0.000000			

Source: Survey data 2022 (EViews10 output summary result).

As shown in the above regression result table, it would be observed that the coefficient of determination of R-squared and Adjusted R-squared were 87.9% and 87.4% respectively. This infers that 87.4% of the variation in effectiveness of internal audit is successfully explained by the factors included in the model such as TMS, COMP, IND, ITT and RBIEA. On the other hand, the remaining 12.6 % of variations in effectiveness of internal audit were caused by other factors that were not included in the model but, influencing internal audit effectiveness in the commercial banks of Ethiopia.

As it is clearly shown in the above table the beta and P value of Independency of internal auditor are $\beta = 0.0794$, and P-value of = 0.1887 (which is greater than 0.05significant level) from this we can infer that as per the study model with 5%significant level, there is no statistically significant relationship between independency of internal auditor and

internal audit effectiveness. But this result needs a caution; in that insignificance of the independency of internal auditors in determining the IA effectiveness didn't mean that it doesn't completely contribute to the effectiveness of IA. This result may be happened due to the employee-employer relationship (because of internal auditors are employees of the organization being auditing) they are under the pressure of management and unable to exercise their independency. This makes the contribution of the IND to the IAE insignificance. This finding is consistent with the finding of [18] they did not obtain any statistically significant evidence for this relationship. However, this result was inconsistency with the work [20, 29, 38]. Independence of internal audit staffs is essential for the effectiveness of internal audit because if internal audit staffs are free to make their work biased and fraud will be minimized and they can do their work

professionally as a result the effectiveness of internal audit will be high.

For the independent variable (RBIEA) which stands for the smooth relationship between internal and external auditors the result of this study shown on table discloses as a beta (β) value of = 0.1255, and P-value of = 0.0104. This indicates there exists a positive and significant relationship between RBIEA and effectiveness of internal audit. So, the result deduces that a high level of cooperation or good smooth relationship between auditors, results in the relatively highest level of internal audit effectiveness as compared to low level of relationship between them at 5% level of significance. The result of this study was consistent with the previous auditing research conducted by Brierley *et al.* (2001) demonstrated that proper participation can enhance productivity and adequacy of audits, and helps administration give higher quality administrations.

With regard to the effect of top management support on the internal audit effectiveness the regression output on table shows a beta (β) value of = 0.31, and P-value of = 0.0004, which is less than 0.05; from this figure we can conclude that the internal audit effectiveness is positively and significantly affected by the support the audit team received from the management. This deduces that top management's commitment and support in terms of providing resources, giving trainings, introducing with new technologies, providing enough facilities and encouraging the internal audit process or work in their office contributes positively for the effectiveness of internal audit. This result was consistent with the previous auditing research works [2, 19, 22] they find that the top management support was the critical determinants of internal audit effectiveness.

Concerning the use of information technology tools (ITT) as decisive factor of IAE, it can be ascertained from the above table, regression result of this study that, a beta (β) coefficient of = 0.406, and P-value of = 0.0000. The result reveals highest Beta coefficient was obtained for information technology tools followed by top management support. Thus, a statistically significant positive coefficient or ITT suggests that the use of information technology tools has a positive impact on IAE. In other word, the use of information technology tools like CAATs in the audit process or knowledge of internal auditors on available technology-based audit techniques results in effectiveness of internal audit function. Therefore, Hypothesis # 5, which states "The use of Information Technology Tools has no effect on internal audit effectiveness in Commercial banks found in Bale Robe Town" is rejected or not supported.

This result is consistent with prior studies [3, 21], they pointed out that computerized assisted auditing tools (CAATs) assist greatly in speeding up the work of internal auditors and enhance the quality of internal audit processes and make complex audit task more easily manageable.

4. Conclusion

The regression results revealed that there was statistically significant relationship between the effectiveness of internal

audit and four independent variables such as; top management support, competency of internal auditors, the use of IT tools and relationship between internal & external auditors. Nonetheless, independency of internal auditor was statistically insignificant. The study has also found out that all statistically significant independent predictors were positively related with the internal audit effectiveness in the commercial banks. This indicates that effectiveness of internal audit increases when these independent factors increase and vice versa.

In the same token, the regression coefficients remarked that, internal audit effectiveness of the CBE increases, when there were more supports from the top management, have adequate and competent internal audit staffs for the proper implementation of internal audit work, have competent auditing staff in the office that can able to use available IT tools combined with a smooth or good relationship with external auditors.

According to the result obtained about 87.4% (its adjusted $R^2=0.874$) of the variation in effectiveness of internal audit in commercial banks was successfully explained by the factors included in the study such as TMS, COMP, IND, ITT and RBIEA. This result indicates that the rest 12.6 % of variations in effectiveness of internal audit were caused by other factors that were not included in the study. Accordingly, this calls for further research to investigate the other factors (12.6%) that affect internal audit effectiveness in the commercial banks of Ethiopia. The results also offer significant insight to both suppliers (auditor) of internal auditing services and customers of these services (CBE) regarding the significant determinants of internal audit effectiveness.

5. Recommendations

Based the analysis and findings of the study, the following recommendations were forwarded to commercial banks of Ethiopia should consider enhancing their internal audit effectiveness:

- 1) First, according to the result of this study the use of IT tools was the primary determinants of internal audit effectiveness. Consequently, the internal audit staffs should have sufficient knowledge of key IT risk, have the capability to use the available IT audit tools and assess the current level of information technology integration in the audit process to determine the levels of efficiency and ensure security is maintained. Besides, in order for the use of information technology to be effective in increasing the effectiveness of the internal audit, internal auditors do need the necessary support from top management. so, that top management should support more for the internal audit role by giving IT audit training to internal audit staffs.
- 2) Second, as per the result of this study competency of internal audit staff significantly affects IAE. Thus, CBE should employ more Skilled and competent internal audit staff and give adequate training and professional certification for the existing internal audit staffs, in order to contribute for effective internal audit.

- 3) Third, Since the study has proved that management support contributes to internal audit effectiveness, Commercial banks of Ethiopia should continue and strengthen their support and assistance to internal audit staff, give enough support and training in developing their staff and giving value to internal audit findings.
- 4) Finally, the study result revealed that having good relationship between internal and external auditors was positively associated with internal audit effectiveness. Hence, internal auditors should maintain good or smooth relationship with external auditors in order to get access to the audit techniques and vocabularies of the external auditors and apply these within the scope of internal auditing for effective internal audit function.

Suggestions for Future Studies

This study, like any other, has limitations, so future research could expand on the findings in a variety of ways. First, the study was limited only to public banks (CBE), while private commercial banks were ignored. Hence, due to the fact that determinants of internal auditing effectiveness vary across diverse organizational settings, favoring public banks alone may be one weakness. It is suggested that future research should include private banks and other sectors. Second, despite the reality that a variety of factors influence internal audit effectiveness, this study only looked at five explanatory variables. Other variables that were not included in this study should be incorporated in future research.

References

- [1] AC (Adhista) Mustika. (2015). *Factors Affecting the Internal Audit Effectiveness*. Diponegoro University.
- [2] Adams J. et al. (2007), "Research Methods for Graduate Business and Social Science Students First edition", New Delhi, Sage Publications Inc. pp. 26-50.
- [3] Ahmet, O. N. A. Y. (2021). Factors affecting the internal audit effectiveness: A research of the Turkish private sector organizations. *Ege Academic Review*, 21 (1), 1-15.
- [4] Al-Akra, M., Abdel-Qader, W., & Billah, M. (2016). Internal auditing in the Middle East and North Africa: A literature review. *Journal of International Accounting, Auditing and Taxation*, 26, 13-27.
- [5] Alizadeh, (2011). Commitment to independence by internal auditors: the effects of role ambiguity and role conflict. *Managerial Auditing Journal*, 15 (3), 66.
- [6] Alkebsi & Aziz (2018). Computer assisted audit tools and techniques in real world: CAATT's applications and approaches in context. *International Journal of Computer Information Systems and Industrial Management Applications*, 153 (6), 771-785.
- [7] Baharud-din, Z., Shokiyah, A., & Ibrahim, M. S. (2014). Factors that contribute to the effectiveness of internal audit in public sector. *International Proceedings of Economics Development and Research*, 70, 126.
- [8] Bou-Raad G. (2000), "internal auditors and a value-added approach: the new business regime": *Managerial Auditing Journal*, 15 (4), pp. 182-186.
- [9] Coetzee, P., & Erasmus, L. J. (2017). What drives and measures public sector internal audit effectiveness? Dependent and independent variables. *International Journal of Auditing*, 21 (3), 237-248.
- [10] Cohen & Sayag, 2010; Mihret and Yismaw, (2007). Determinants of internal audit effectiveness in decentralized local government administrative systems.
- [11] Cohen A. and Sayang G. (2010), "The effectiveness of Internal Auditing: An Empirical Examination of its Determinants in Israeli Organizations", 54 (20).
- [12] Creswell, J. W. (2009). Mapping the field of mixed methods research. *Journal of mixed methods research*, 3 (2), 95-108.
- [13] Demeke, T., Kaur, J., & Kansal, R. (2020). The practices and effectiveness of internal auditing among public higher education institutions, Ethiopia. *American Journal of Industrial and Business Management*, 10 (07), 1291.
- [14] Dittenhofer M. (2001), Internal Auditing Effectiveness: An Expansion of Present Methods *Managerial Auditing Journal*, 16: 443-50.
- [15] Erasmus, L., & Coetzee, P. (2018). Drivers of stakeholders' view of internal audit effectiveness: Management versus audit committee. *Managerial Auditing Journal*.
- [16] Fadzil, F. H., Haron, H., & Jantan, M. (2005). Internal auditing practices and internal control system. *Managerial Auditing Journal*.
- [17] Gunther, J. W., & Moore, R. R. (2002). Auditing the auditors: Oversight or overkill? *Economic and Financial Policy Review*, 1 (5), 1-19.
- [18] Gujarati (2004). *Basic Econometrics* (Fourth ed).
- [19] Hella and Mohamed, (2016). Bank Specific Determinants of Internal Audit Effectiveness: Evidence from Private Banks in Ethiopia. *order*, 13 (5).
- [20] Kothari, C. R. (2004). *Research methodology: Methods and techniques*. New Age International.
- [21] Leedy Paul D. "Practical Research: Planning and Design", Edition, 4, illustrated. Publisher, Macmillan, (1989).
- [22] Lenz, R., & Hahn, U. (2015). A synthesis of empirical internal audit effectiveness literature pointing to new research opportunities. *Managerial Auditing Journal*.
- [23] Mahama (2009), Practice of Internal Auditing in the Banking Institutions in Tamale Muntari University of Cape Coast.
- [24] Mihret and Yismaw. (2007), "Internal Audit Effectiveness: An Ethiopian public sector case study", *Managerial Auditing Journal*, Vol. 22 No. 5, pp. 470-484.
- [25] MoFED. (2004). Internal Audit Standards and Code of Ethics for Internal Auditors and Internal Audit Procedural Manual.
- [26] Mutai K. (2001), How to write standard dissertation: A systematic and simplified approach, New Delhi: Thelly Publications.

- [27] Nagy A., and Cenker W. (2002), "An assessment of a newly defined internal audit functions. *Managerial Auditing Journal*", 17 (3), 130-137.
- [28] NGUYEN, V. H., NGUYEN, T. T. C., NGUYEN, V. T., & DO, D. T. (2021). Internal Factors Affecting Firm Performance: A Case Study in Vietnam. *The Journal of Asian Finance, Economics and Business*, 8 (5), 303-314.
- [29] Pedrosa, I., & Costa, C. J. (2012). Computer assisted audit tools and techniques in real world: CAATT's applications and approaches in context. *International Journal of Computer Information Systems and Industrial Management Applications*, 161-168.
- [30] Pizziniet *al.* (2015). The impact of internal audit function quality and contribution on audit delay. *Auditing: A Journal of Practice & Theory*, 34 (1), 25-58.
- [31] Ramachandran D. J., Subramanian D. R., and Kisoka, I. J. (2012), "Effectiveness of Internal Audit in Tanzanian Commercial Banks", *British Journal of Arts and Social Sciences*, 8 (1), 32-44.
- [32] Salehi, T. (2016). Investigation factors affecting the effectiveness of internal auditors in the company: Case study Iran. *Rev. Eur. Stud.*, 8, 224.
- [33] Saunders, al et, (2009). The research design maze: Understanding paradigms, cases, methods and methodologies. *Journal of applied management accounting research*, 10 (1), 69-80.
- [34] Shamki, D., & Alhajri, T. A. (2017). Factors influence internal audit effectiveness. *International Journal of Business and Management*, 12 (10), 143-154.
- [35] Tewodros T. (2016), A research Study on "Assessment on Challenges of Internal Audit Practice of Dashen Bank S. C".
- [36] Van Peurse, K. A. (2005). Conversations with internal auditors: The power of ambiguity. *Managerial Auditing Journal*.
- [37] Wang, I. Z., & Fargher, N. (2017). The effects of tone at the top and coordination with external auditors on internal auditors' fraud risk assessments. *Accounting & Finance*, 57 (4), 1177-1202.
- [38] Whilst Lenz et al., (2017) Internal audit function quality and financial reporting: results of a survey on German listed companies. *Journal of Management and Governance*, DOI 10.1007/s10997-016-9342-8.
- [39] Wines, G. (2012). Auditor independence: Shared meaning between the demand and supply sides of the audit services market?. *Managerial auditing journal*.
- [40] Wu, T. H., Huang, S. M., Huang, S. Y., & Yen, D. C. (2017). The effect of competencies, team problem-solving ability, and computer audit activity on internal audit performance. *Information Systems Frontiers*, 19 (5), 1133-1148.
- [41] Yee et al., (2008). Perceptions of Singaporean internal audit customers regarding the role and effectiveness of internal audit. *Asian Journal of Business and Accounting*, 1 (2), 147-174.
- [42] Yemane, M. (1967). Elementary Sampling Theory, Printice-Hall Inc. Englewood Cliffs, New Jersey, USA.
- [43] Ziegenfuss, D. E. (2000). Measuring performance. *Internal Auditor*, 57 (1), 36-36.