

Factors Affecting Internal Audit Effectiveness: Evidence from Microfinance Institutions Operating in Hawassa, Sidama Region, Ethiopia

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Abstract: The main purpose of this study was to examine factors affecting internal audit effectiveness: Evidence from Microfinance institutions operating in Hawassa city, Sidama Ethiopia. Effective internal audit function could be a major asset for improving public confidence in financial reporting and corporate governance. Also it add value and improve an organization's operations. Ensuring the effectiveness of internal audit on MFIs is also important to improve internal control system and better performance. Thus, to examine effectiveness of IA in MFIs operating in Hawassa city, the study used mixed research design with quantitative approach. Management support, independence of internal audit, having approved internal audit charter, adequate and competent internal audit staff, and quality of internal audit are used as explanatory variables while, internal audit effectiveness considered as explained variable. Population was all MFIs currently operating in Hawassa city. The targeted populations were 54 respondents and all of them selected as Sample size based on judgmental sampling method because the researcher believes that, these respondents can provide in depth information about the study variables and respective indicating. The primary data used to collect information from targeted respondents and close ended questionnaires were distributed to selected respondents. Both descriptive and inferential statistics were used to analyze the data. Correlation and regression analysis were used to identify the relationship between dependent and independent variables. The SPSS data analysis tool has used and the findings were described and statistically presented using table, mean, frequency, standard deviation, percentage and graph. The result of Pearson correlation shows that all those factors included in this research has positively related with internal audit effectiveness. Besides the management support, adequate and competent internal audit staff and quality of internal audit has positively and significantly correlated with internal audit effectiveness. The result of regression identified that, Management support, Independence of internal audit, having approved internal audit charter, adequate and competent internal audit staff, and quality of internal audit were contributed to internal audit effectiveness in MFIs is positively and significantly and it making 23.9%. Thus, MFIs should understand which factors highly affect the effectiveness of their internal audit in order to enhance their audit function effectiveness. It is recommended that if similar research can be done in the future so as to find other factors which have impact on internal audit effectiveness and also to include other banks and insurances which were not included in this study.

Keywords: Internal Audit, Internal Audit Effectiveness, Microfinance Institution, Sidama Region

1. Introduction

Internal auditing is defined as an independent, objective assurance and consulting activity designed to add value and improve an organization's operations. It helps an organization accomplish its objectives by bringing a systematic disciplined approach to evaluate and improve the

effectiveness of risk management, control, and governance processes, Institute of Internal Auditors [15]. Internal audit are the mechanism through which information about the effectiveness of the quality system is gathered by auditors selected from within the company, but who are independent of the area function or procedures being audited, [13]. Internal audit effectiveness as the degree including quality) to

which established objectives are achieved, [14].

Micro-Finance Institutions (MFIs) can be defined as any activity that includes the provision of financial services such as credit, savings, and insurance to low income individuals which fall just above the nationally defined poverty line, and poor individuals which fall below that poverty line, with the goal of creating social value.

Having an effective internal audit function in MFIs that management takes appropriate and timely corrective action in response to internal control weaknesses identified by internal auditors. An internal audit function provides vital assurance to an organization in doing so, the function helps reduce the risk of loss and miss use of resource as well as combating corruption in the institutions and maximize the firms' value. Also effective internal audit function could be a major asset for improving public confidence in financial reporting and corporate governance and it add value and improve an organization's operations. One of the bases to increase internal audit effectiveness is studying factors which affect internal audit effectiveness. Ensuring the effectiveness of internal audit on MFIs is also important as any other organizations since having effective internal audit functions would lead to an improved internal control system and better performance of an organization.

1.1. Statements of the Problem

Ineffective internal audit can result in the possibility of the emergence of fraud, low or non-compliance with internal policy & procedures; difficulties in controlling the financial operations of an enterprise and can also lead to ineffective financial decision for successful operation, [24]. There are varieties of studies are conducted on the topic of audit effectiveness. For instance, [21] identified that internal audit effectiveness is affected by managements support, the existence of adequate and competent internal audit staff, and the availability of approved internal audit charter in Ethiopian selected public sector office.

Also the study examine the determinants of internal audit effectiveness in Ethiopian private banks and found that managers support, managements perception of the IA value, organizational independence, adequate and competent IA staff and availability of the approved internal audit charter were contribution for internal audit effectiveness, [18]. Besides, the researcher examining factors affecting the internal audit effectiveness in Ethiopian Road Authority such factors as audit quality, competence of internal audit team, the managements support, independence of internal audit and approved internal audit charter, found out that all these factors were statistically significant and positively related with internal audit effectiveness [12].

In addition the study was identified factors affecting the internal audit effectiveness as country and organizational-level from institutions theory perspective and suggest that IA effectiveness measured by 'IA proficiency, IA independence and objectivity, scope of IA work, quality of IA planning and execution, and quality of IA reporting and follow up, is significantly associated with a set of organization-level

context factors. These factors are organizational category, organizational size, and organizational policies authorizing IA, organizational risk exposure, Audi tee cooperation, and internal-external audit linkages. IA proficiency, scope of IA work and IA planning and execution appear to be higher in organizations where organizational policy authorizing IA is clearly defined and organizational risk exposure and internal-external audit linkages are stronger, [9].

Similar study conducted in Ghana state owned enterprise supported by institutional and resource based theory. The researcher indicated that internal audit effectiveness is influenced by four broad factors: external factor, internal factor and linking the external and internal factors, [19]. In addition to this the researcher founds that, from external environment IAE is influenced by government law and regulatory institutions. Also more over the study found that organizational characteristic, department characteristics, employee characteristics and managerial practice. Within this internal factor like: - inadequate IAF, staff size, and resource availability, poor Audi tee relationship, poor management support and high political circumvention of Internal controls affecting internal audit effectiveness [19]. In addition, the study conducted in Ghana Micro Financial Institutions and found that a negative relationship between technical competence and internal audit effectiveness, no significant relationship between independence and internal audit effectiveness and recommends as to upgrading of technical competence in audit staff through training programs to boost the effectiveness of the internal audit function, [17]. Further, the study investigated the specific factors associated with internal audit effectiveness in Greek business environment and founds that the quality of internal audit, competence of internal audit team, independence of internal audit and management support are main factors affecting the internal audit effectiveness [11].

However, the studies conducted on internal audit effectiveness and related research topics in Sidama region general in Ethiopia no or very limited researches have been conducted the current study area. Therefore, this study was attempted to fulfill this gap of the study by testing whether or not management support, availability of internal audit chart, independency of internal audit, adequate and competent internal audit staff and internal audit quality are affects internal audit effectiveness on MFIs operating in Hawassa City, Sidama Region.

1.2. General Objectives of the Study

The general objective of the study is to examine the factors affecting internal audit effectiveness in Microfinance Institutions Operating in Hawassa City. The specific objectives are as follow.

- i. To examine the effect of management support on internal audit effectiveness in targeted MFIs in Hawassa City.
- ii. To examine the effect of having internal audit charter for internal audit effectiveness in targeted MFIs in Hawassa City.
- iii. To examine the effect of Independence of internal audit for internal audit effectiveness in targeted MFIs in Hawassa City.

- iv. To examine the effect of adequate and competent internal audit staffs for internal audit effectiveness in targeted MFIs in Hawassa City.
- v. To examine the effect of internal audit quality on the internal audit effectiveness in targeted MFIs in Hawassa City.

1.3. Research Hypotheses

H1: Management Support for IA has significant Positive effect on the Internal Audit Effectiveness in the targeted MFIs.

H2: Having approved internal audit charter has significant positive effect on the internal audit effectiveness in the targeted MFIs.

H3: Independence of internal audit has significant positive effect on the internal audit effectiveness in targeted MFIs.

H4: Having adequate and competent internal audit staffs have significant positive effect on the internal audit effectiveness in the targeted MFIs.

H5: Internal audit quality has significant positive effect on the internal audit effectiveness in the targeted MFIs.

2. Review of Related Literature

2.1. Effectiveness of Internal Audit

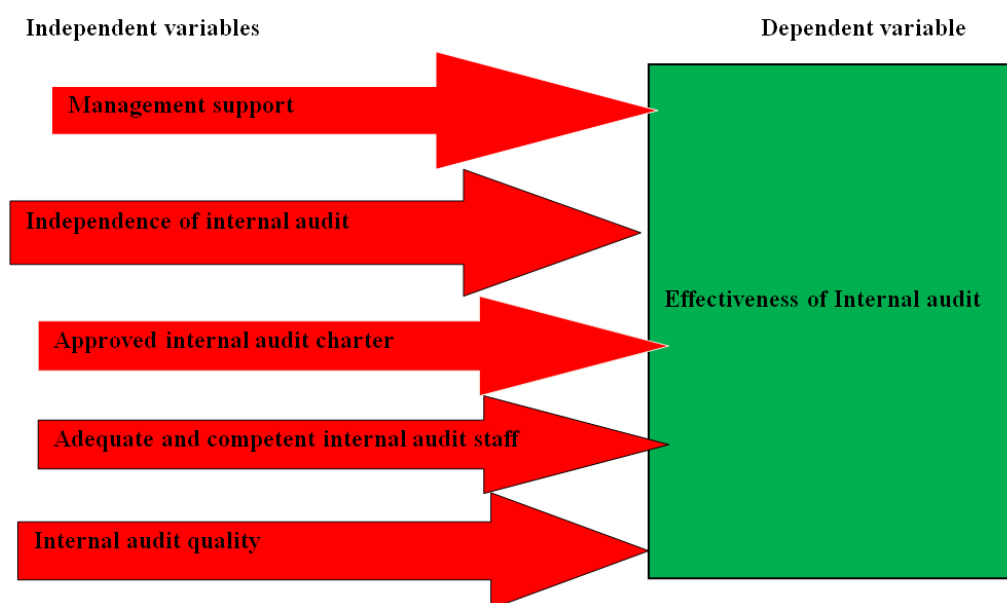
The Internal Audit effectiveness is defined as the degree including quality to which established objectives are achieved, [14]. Also effectiveness is define as the achievement of internal audit goals and objectives using the factor measures provided for determining such factors [10]. Besides, Effectiveness is defined as the capacity to obtain results that are consistent with targets, [5].

2.2. Factor Affecting the Internal Audit Effectiveness

Study conducted to identify the factors affecting internal

audit effectiveness as country and organizational level from an institutions theory perspective and suggests that Internal Audit effectiveness as measured by IA proficiency, IA independence and objectivity, scope of IA work, quality of IA planning and execution, and quality of IA reporting and follow up, is significantly associated with a set of organization-level context factors [9]. Internal audit quality is measured as the extent to which the IAF makes follow-ups on actions to correct problems which identified in the audit report and also the capability of the IAF to properly plan and execute timely audits activities on its own are contribute as to ensure IA effectiveness [20].

In addition the study examining factors affecting internal audit effectiveness in Ethiopian road authority such as audit quality, competence of internal audit team, the managements support, independence of internal audit and approved internal audit charter and he found that all these factors were statistical significance and positively related with internal audit effectiveness [12]. Also another prior study was tested factors that influence the internal audit effectiveness, including internal auditor competencies, internal auditor independence, Audi tee support to internal audit activity, and the internal and external auditor relationship and found that the internal audit effectiveness can be attained through increase internal audit competence, Independence and strong relationship between internal and external auditor, Audi tee support has no effect on internal audit effectiveness [3]. Further, the research Examines factors influencing internal audit effectiveness in Vietnam context and identified that the effectiveness of internal audit is influenced by the independence of internal audit, the competence of internal audit, the management support for internal audit, and the quality of internal audit also researcher finds those factors are positive and significant relationships between internal audit effectiveness [23].



Source: Researcher Own Design, (2021).

Figure 1. Conceptual Framework for the study.

3. Research Methodology

3.1. Population, Sampling Techniques and Sampling Size

Population is consisting of Villages, Institutions, Plants, and Records, [1]. Populations for this study were all Microfinance Institutions Found in Hawassa City, Sidama region, Ethiopia.

3.2. Sampling Techniques and Sample Size

Currently five there were (5) Microfinance Institutions Operating in Hawassa City and those were entire population taken as sample size for this study based on census sampling methods. The 20 internal auditors and 34 managers, were selected as sample based on judgmental sampling method which is non probability sampling techniques, because those selected respondents are considered as proximity with research topic.

3.3. Source of Data and Methods of Data Collection

To examine the factors that affecting the internal audit effectiveness in Microfinance Institution Operating in Hawassa city, Sidama region primary data sources was used. The closed ended questionnaires were distributed to the selected respondents to collect data. Questionnaires are prepared by using the five point likert scale which range from One to five 1=Strong disagree to 5=strongly agree.

3.4. Validity and Reliability Test

To ensure the validity of data collection instrument the questionnaires were composed carefully, Constructed questions to avoid ambiguity and to answer all the research questions and the designed questionnaires were distributed to selected staff from MFIs then an adjustment was done based on comments given by the pilot test participant through this process study ensured the contents validity of the instrument. To measure reliability and consistency of the data collection instrument or likert scale questionnaires the study was used Crombach's alpha (α) which is the most widely used measure of internal consistency coefficient, [8].

3.5. Method of Data Analysis

The data analysis part of this study was supported by using descriptive statistics analysis techniques to identify the current demographic status of the respondents. Whereas, to test research hypothesis and to identify the effects of independent variables on the dependent variables the study was used correlation and multiple linear Regression output supported by

tool of statistical package for the social science version 20.

3.6. Model Specification and Definition of Variables

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + e_i$$

Y = Internal Audit Effectiveness.

X1= Managers Support.

X2= Approved Internal Audit Charter.

X3= Independence of Internal Audit.

X4= Adequate and Competent Internal Audit Staff.

X5= Internal Audit Quality.

β_0 = is a Constant, It Represents the internal audit effectiveness Whenever independent Variables is zero. While β_1 to β_5 are Coefficient of regression or parameters.

U_i = error term or Disturbance term.

4. Results and Discussion

4.1. Response Rate

To collect information regards on research topic fifty four (54) questionnaires were distributed to selected respondents of these 51 were filled and returned back to this makes the response rate 94%.

Table 1. Reliability Statistics.

Crombach's Alpha	Crombach's Alpha Based on Standardized Items	N of Items
.927	.927	30

Source: SPSS output Result, (2021).

As showed in table 1 the results of spss out was found to be 0.927 implies that likert scales supported tool were highly reliable to do further analysis.

4.2. Descriptive Analysis of Variables

To identify the respondents opinion regards of effectiveness of internal auditin MFIs operating in Hawassa the five point likert scale questionnaires which ranges strongly agree (5) to strongly dis agree (1) were distributed to internal auditors and department's directors. As it shows in table as it indicted in table 2 above the average mean score value of items was 4.24, 4.24, 4.57, 4.10 and 4.53 respectively and also overall average mean score for internal audit effectiveness in MFIs is founds 4.33 with the standard deviation 0.279 which fall on agree degree level. Therefore, it can be concluded that internal audit in MFIs operating in Hawassa city, was effective. But, advised to do more on internal audit effectiveness to be strongly effective.

Table 2. Respondent's Opinion on the Effectiveness of Internal Audit.

Internal Audit Effectiveness	N	Mean	Std. Deviation
Internal auditors are able to achieve the institutional targeted goal in my institution.	51	4.24	.428
Internal audit ensures the performance of organizational activities in line with organizational policies procedure and regulation in my institution.	51	4.24	.428
Internal audit ensures the proper use of organizational resources in my institution	51	4.57	.500
Internal auditors detect risk which is associated with financial statement in my institution	51	4.10	.361

Internal Audit Effectiveness	N	Mean	Std. Deviation
Recommendation provided by the internal audit is relevant for managerial decision makings in my institution	51	4.53	.504
Total item mean		4.33	.279

Source: Survey data (2021).

Table 3. Respondent's Opinion on Management Support.

Management support	N	Mean	Std. Deviation
Internal audit gets support and assistance from management in my institution.	51	4.41	.497
an internal auditors has full access to record & information they need to conduct audit task in my institution	51	4.65	.483
Internal audit gets sufficient budget to carry out its task in my institution.	51	4.18	.478
Internal auditors encouraged to introduce with new technology, policy & procedure when it is necessary.	51	3.59	1.023
management's provide enough support & encouragement for training & developing the internal audit staff to improve their skill	51	4.24	.513
Total item mean		4.21	.456

Source: Survey, (2021).

As shown in table 3 above the response of respondent's regards of management support to internal audit in MFIs operating in Hawassa the mean of likert scale average value of items was, 4.41, 4.65, 4.18, 3.59, and 4.24 respectively. The overall average mean value of management support for internal audit in MFIs is 4.21 with the standard deviation

0.456 this fall on agrees degree level of agreement. Therefore, it can be concluded that management are support internal audit function in MFIs but response of respondents regards about management support to internal audit activity is agree. But it should be improve support to introduce internal auditors with new technology, policy & procedure.

Table 4. Respondent's Opinion on Approved Internal Audit Charter.

Approved Internal Audit Charter	N	Mean	Std. Deviation
The internal audit charter is available in my institution.	51	4.57	.855
The internal audit charter defines the scope of internal audit activities in my institution.	51	4.49	.857
Purpose & authority of internal audit is clearly defined in audit charter.	51	4.45	.879
Purpose & authority of internal audit charter is in line with standard for the professional practice set by the institute of internal auditors.	51	4.24	.862
The internal audit charter specifies authorized access to records personnel & physical properties relevant to the performance of engagements.	51	4.39	.874
Total item mean		4.43	.828

Source: Survey data, (2021).

As showed in table 4 above the result of analysis founds that each item mean average value of availability of internal audit charter in MFIs operating in Hawassa was 4.57, 4.49, 4.45, 4.24 and 4.39 respectively. And also overall average

mean value founds 4.43 with standard deviation of 0.828. This implies that respondents response on was agreed about the internal audit charter in respective Microfinance institution operating in Hawassa city.

Table 5. Respondent's Opinion on Independence of Internal Audit.

Independence Of Internal Audit	N	Mean	Std. Deviation
Internal auditors freely decide the scope, time & extent of auditing procedure based on audit standard & the institution policies.	51	4.16	.505
Internal auditors perform their audit work being independently & unbiased manner in my institution.	51	4.33	.516
Internal auditors perform the auditing activities without any interference from anybody & without any influence from the institution.	51	4.33	.516
Internal audit staff has free access to information & data about the institution & unrestricted access to its site (places) in my institution.	51	4.47	.542
Internal auditors are encouraged to implement audit recommendation to promote value added activities & to strength internal audit function in my institution.	51	4.25	.483
Total item mean		4.31	.397

Source: Survey data, (2021).

As shown in the table 5 above the each item means score value of response of respondents regards independence of internal audit in MFIs operating in Hawassa city was 4.16, 4.33, 4.33, 4.47, and 4.25 respectively. And also the overall average mean value founds 4.31 with standard deviation of 0.397, which is lies on agree degree level. Therefore, it can

be concluded that opinion of respondents regards about the independence of internal audit function in Microfinance institutions is agree. But it recommended to managers of those MFIs operating in Hawassa city that internal auditors were to be strongly independent from any influence from organization.

Table 6. Respondent's Opinion on Adequate and Competent Internal Audit Staff.

Adequate and Competent Internal Audit Staff	N	Mean	Std. Deviation
My institution has sufficient skilled internal auditors.	51	3.96	.662
It is possible to audit & review each activity on time, & cover the planned scope of auditing task.	51	3.51	1.027
Auditing procedure & evidence collection are completed on time.	51	3.55	1.026
The internal audit staff number and their skill matches with the scope of operation of the institution.	51	3.02	1.086
The work of internal audit is performed with modern technology that uses computerized data tools & specific internal audit software.	51	2.86	.980
Total item mean		3.38	.785

Survey data, (2021).

As shown in table 6 above each item got mean score value, 3.96, 3.51, 3.55, 3.02 and 2.86 respectively and over all mean average value of respondents response regards about adequacy and competency of internal audit staff fall on 3.38 with standard deviation of 0.785 this is under agree degree level. So it can be concluded that adequacy and competency

of internal audit staff in Microfinance institution is moderate. Beside of this the study recommended that MFIs were should give more attention to improve internal audit staff number and to provide necessary trains on modern technology that uses computerized data tools to internal auditors.

Table 7. Respondent's Opinion on Quality of Internal Audit.

Quality of Internal Audit	N	Mean	Std. Deviation
Annual audit plan is prepared by internal auditors in my institution.	51	4.71	.460
Established internal audit's objectives are accomplished in my institution.	51	4.35	.483
Internal audit's work is efficiently performed in my institution.	51	4.16	.367
Auditing is conducted on very significant area of the institution.	51	4.49	.543
Internal audit's report is accurate & relevant to decision making for manager in my institution.	51	4.55	.541
Total item mean		4.45	.322

Source: Survey data, (2021).

As it presented in table 7 above the five point likert scale items mean score was 4.71, 4.35, 4.16, 4.49 and 4.55 respectively. Hence the overall mean score value of internal audit quality is 4.45 with standard deviation of 0.322 which fall on agree degree. From this point of view we infer that the overall responses of respondents' regards about quality of internal audit in MFIs operating in Hawassa city is agreed by targeted respondents. As it is seen above in table 7 quality of

internal Audit in MFIs in terms of preparing annual audit plan, accomplishment of audit objective, performing audit work efficiently, conducting audit in very significance area and conducting audit on very significant area, and preparing accurate and relevant audit report for managerial decision making were found to be agree, but the those MFIs are expected to work more to brings quality of internal audit to be strongly agree.

Table 8. Pearson Correlations matrix.

Variables	IAE	MS	IOIA	AIAC	ACIAS	QIA
IAE	1	.320*	.190	.178	.337*	.448**
	Sig. (2-tailed)	.022	.181	.212	.016	.001
	N	51	51	51	51	51
MS	Pearson Correlation	.320*	1	.708**	.365**	.688**
	Sig. (2-tailed)	.022	.000	.008	.000	.000
	N	51	51	51	51	51
IOIA	Pearson Correlation	.190	.708**	1	.346*	.603**
	Sig. (2-tailed)	.181	.000	.013	.000	.000
	N	51	51	51	51	51
AIAC	Pearson Correlation	.178	.365**	.346*	1	.465**
	Sig. (2-tailed)	.212	.008	.013	.001	.003
	N	51	51	51	51	51
ACIAS	Pearson Correlation	.337*	.688**	.603**	.465**	1
	Sig. (2-tailed)	.016	.000	.000	.001	.000
	N	51	51	51	51	51
QIA	Pearson Correlation	.448**	.688**	.603**	.465**	.618**
	Sig. (2-tailed)	.001	.000	.000	.003	.000
	N	51	51	51	51	51

*. Correlation is significant at the 0.05 level (2-tailed). **. Correlation is significant at the 0.01 level (2-tailed). N=51.

As shown table 8 above the Pearson correlation coefficient indicates that there is a positive relation between dependent

variable (IAE) and all independent variables which applied in this research study were (MS, AIAC, IOIA, ACIAS, and QIA). Also there were significantly and positively correlations between internal audit effectiveness (IAE) and, MS ($r = 0.320^*$), ACIAS ($r = 0.337^*$), QIA ($r = 0.448^{**}$) with less than 0.05 /0.01 level of significant. But, IOIA ($r = 0.190$), AIAC ($r = 0.178$), were found to be statically in significant. By ignoring statistically significance the correlation shows that all independent variables positively affect the internal audit effectiveness in Microfinance institutions. Therefore, Microfinance institutions should give attention to those variables to utilize the most from internal audit effectiveness. In addition to this study was identified that management support, adequate and competent internal audit staff and quality of internal audit were positively and significantly related with internal audit effectiveness. There for, it can be conclude that these variables are major factor that affects internal audit effectiveness in Microfinance institutions operating in Hawassa city, Sidama region and those MFIs were should have give more emphasis on those variables to make their internal audit function to be more effective.

4.3. Classical Linear Regression Model Assumptions (CLRM)

4.3.1. Assessment of Mean Value of the Errors Is Zero

The first assumption is required that the mean value of the error is zero. If constant term is included in the regression equation this assumption will never be violated. Besides of this a regression with no intercept parameter could lead to potentially sever biases in the slope coefficient estimates, [6]. Therefore in this study researcher includes a constant term and intercept in regression equation. As a result this assumption was not violated.

4.3.2. Assessment of Normality

The objective of this test is to identify whether the data used in this study are normal distributed or not. In order to test the normality of data, Shapiro-Walk tests is used and conducted on SPSS 20. According to Field (2009), when the test is non-significant (p is less than 0.05) it shows that the distribution of the sample is not significantly different from a normal distribution or If the Sigvalue of the Shapiro-Wilk Test is greater than 0.05 the data is normal. If it is below 0.05 the data significantly differ from a normal distribution.

Table 9. Tests of Normality^a.

Variables	Kolmogorov-Smirnov ^b			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	Df	Sig.
IAE	.305	8	.027	.860	8	.120
MS	.254	10	.067	.833	10	.360
IOIA	.180	6	.200*	.920	6	.505
AIAC	.203	14	.124	.936	14	.369
ACIAS	.193	8	.200*	.920	8	.428
QIA	.260	4	.	.827	4	.161

Source; SPSS output result, (2021)

*.This is a lower bound of the true significance.

B. Lilliefors Significance Correction.

As an analysis output result showed above in the table 9 all variables were found to be normal and study concluded that there were no problem in normality assumption for this research data and researcher was accepted normality at $p > 0.05$.

4.3.3. Assessment of Multicollinearity

Multi co linearity exists when there is a high degree of correlation between independent variables and the existence of correlation coefficient (r) value greater than 0.80 [16], tolerance value less than 0.10 and Variance Inflation factor (VIF) greater than 10 in the correlation matrix are the causes for the multi co linearity existence (Field, 2009).

Table 10. Co linearity Statistics.

Variables	Co linearity Statistics	
	Tolerance	VIF
MS	.389	2.569
IOIA	.439	2.276
AIAC	.760	1.316
ACIAS	.418	2.395
QIA	.530	1.885

Source; SPSS output result, (2021).

As shown in the Co linearity table 10 above the tolerance levels for all variables are greater than 0.10 and the Variance Inflation factor (VIF) value are less than 10 (see table 10). Besides of this a correlation matrix of all variables have the paired values among the predictors are less than 0.80 (see table 8 above). As a result there were no multi co linearity problem that biases the analysis of the findings; rather it leads to the acceptance of r value, tolerance and VIF values.

4.3.4. Assessment of Autocorrelation

Data were assessed to ensure that the autocorrelation is not a threat for the use of OLS for analysis. This assumption can be tested with the Durbin-Watson test which test for serial correlation between errors and the value closer to 2 are acceptable. As result presented in model summary table 11 below the Durbin-Watson statistics value is 1.954 this is close to 2 researchers suggests that there is no severe autocorrelation among error terms.

4.4. Regression Analysis Result and Hypothesis Testing

A liner regression analysis was conducted on the

dependent (internal audit effectiveness) and independent variables (Management Support, presence of Approved Internal Audit Charter, Independence of internal audit, adequate and competent internal audit staff and Quality of

internal Audit). Hypothesis test were conducted to accept or reject proposed hypothesis based on regression output, correlation coefficient and by considering beta coefficient and P – value for the significant of the relation.

Table 11. Model Summary^a.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.489 ^a	.239	.155	.25655	.239	2.831	5	45	.026	1.954

a. Predictors: (Constant), QIA= Quality of Internal Audit, AIAC =Approved Internal Audit Charter, MS= Management Support, IOIA= Independency of Internal Audit, ACIAS =Adequacy and Competence of Internal Audit Staff. b. Dependent Variable: IAE= Internal Audit Effectiveness.

From the study internal audit effectiveness was explained by 23.9% of five independent variables as represented by R^2 . But other factors accounted for 76.1% other factors that contribute to internal audit effectiveness which is not added in this model and these factors are accountable for the remaining percentage of unexplained part. R-squared is a goodness-of-fit measure for linear regression models and it is the most common goodness of fit statistic. Besides R^2 defined as square of the correlation coefficient that is the square of correlation between the observed value and a predicted value. It is used to find out how well the independent variables are able to predict dependent

variable as well as the corresponding fitted values from the model and its value must lie between -1 and $+1$ by definition. Since R^2 defined in this way is the square of a correlation coefficient it must lie between 0 and 1 [6]. As shown above table 11 the values of R^2 is found to be 0.239 which is acceptable in a study like this. The value of R^2 that range between 0.10–0.20 is acceptable in social science research [4]. Therefore it can be concluded that the model is best fitted. This implies that there were significant and positive relationship between the predictors and the outcomes of the regression variable ($R=0.489$).

Table 12. ANOVAs.

Model		Sum of Squares	Df.	Mean Square	F	Sig.=p
1	Regression	.932	5	.186	2.831	.026 ^b
	Residual	2.962	45	.066		
	Total	3.893	50			

a. Dependent Variable: IAE= Effectiveness of Internal Audit.

b. Predictors: (Constant), QIA=Quality of Internal Audit, AIAC=Approved Internal Audit Charter, MS=Managements Support, IOIA=Independence of Internal Audit, ACIAS =Adequate and Competent Internal Audit Staff.

From ANOVA table 12 above analysis result shows that, overall model established is statistically significant since F critical value is 2.831 ($p=0.026$) that means p value also less than 0.05. Thus model can be used in predicting how management support, independence of internal audit, approved internal audit charter, adequate and competent

internal audit staffs and quality of internal audit influence effectiveness of internal audit in microfinance institutions operating in Hawassa city, Sidama region. There for it can be concluded that best fit of the model to predict the dependent variable (effectiveness of internal audit in Microfinance institution) see table 12 above.

Table 13. Regression Coefficients^a.

Variables	Un-standardized Coefficients		Standardized Coefficients		t	Sig.	95%Confidence Interval for B	
	B	Std. Error	Beta				Lower Bound	Upper Bound
Bo (Constant)	2.835	.591			4.796	.000	1.645	4.026
B1 (MS)	.122	.127	.200		.959	.0343	.134	.378
B2 (IOIA)	.181	.138	.258		1.315	.0195	.459	.096
B3 (AIAC)	.010	.050	.029		.197	.0450	.111	.091
B4 (ACIAS)	.035	.072	.098		.486	.0062	.109	.179
B5 (QIA)	.380	.155	.439		2.459	.0180	.069	.692

a. Dependent Variable: IAE= Internal Audit Effectiveness.

Where MS=Management Support, IOIA=Independence of Internal Audit, AIAC=Approved Internal Audit Charter, ACIAS=Adequate and Competent Internal Audit Staff, QIA=Quality of Internal Audit.

As indicated in table 13 above the coefficients of beta value for all independent variables has got positive sign. This implies that all explanatory variables which were used in this study have direct effects on internal audit effectiveness in Microfinance institutions operating in Hawassa City, southern Ethiopia. Therefore it can be concluded that any

increase in explanatory variables used in this study leads to increase internal audit effectiveness in MFIs operating in the current study area.

Hypotheses Test

Hypothesis 1

H_0 : Management support has no significant Positive effect

on the internal audit effectiveness in the targeted MFIs operating in Hawassa City.

H1: Management Support for IA has significant Positive effect on the Internal Audit Effectiveness in the targeted MFIs operating in Hawassa City.

From analysis output result Study can be identified that management support for internal audit has positive and significant effect on internal audit effectiveness in Microfinance institutions operating in Hawassa city. As indicated in the correlation table 8 above the correlation Coefficient analysis result shows that there is positive and significance relation between management support and internal audit effectiveness in Microfinance institutions operating in Hawassa city, ($r=0.320^*$). Addition to this regression analysis output result in the table 13 above shows that there is positive beta coefficient ($\beta=0.200$, $t=0.959$) and p value is <0.05 . Therefore researcher concluded that management support for internal audit function has positive and significant effect on the internal audit effectiveness in Microfinance institutions operating in Hawassa city. This implies that management support for internal audit increase unit internal audit effectiveness (IAE) will increase by 20%. This result is in line with study conducted by [11, 18, 12, 21] in their research work they founds that management support for internal audit has positive and significant impact on internal audit effectiveness. Therefore, we can conclude that, management support for internal audit function has positive and significant effect on internal audit effectiveness in Microfinance institutions operating in Hawassa city, Sidama region. Hence, this study rejects the null hypothesis (H_0) and accepts the alternative hypothesis (H_1).

Hypothesis 2

H0: Having approved internal audit charter has no significant positive effect on the internal audit effectiveness in the target MFIs operating in Hawassa City.

H1: Having approved internal audit charter has significant positive effect on the internal audit effectiveness on the target MFIs operating in Hawassa City.

The second hypothesis that proposed in this study was presence of Approved Internal audit charter. It is one of independent variable that affects internal audit effectiveness in microfinance institutions operating in Hawassa city, Sidama region. To measure the effect of this variable on internal audit effectiveness (IAE) the study utilized correlation and regression analysis result. As indicated in Correlation result table 8 above that there is positive relation between approved internal audit charter and internal audit effectiveness ($r=0.178$). Besides a regression results shows in table 13 above that positive beta coefficients ($\beta=0.029$, $t=0.197$ and $p<0.05$). This implies that existence of approved internal audit charter is positively affect internal audit effectiveness in MFIs operating in Hawassa city. Meanings an increase in the availability of internal audit charter in those Microfinance institutions leads to increase effectiveness of internal audit by 2.9%. Therefore, Researcher rejects null hypothesis and accept alternative hypothesis. This result is similar with previous research work

done by [18, 12, 21] the researchers found that existence of approved internal audit charter has positively affect the internal audit effectiveness but it inconsistency with findings of [2] the researcher argue that presence or absence approved internal audit charter has not affect internal audit effectiveness.

Hypothesis 3

H0: Independence of internal audit has no significant Positive effect on the internal audit effectiveness in target MFIs operating in Hawassa City.

H1: Independence of internal audit has significant Positive effect on the internal audit effectiveness in target MFIs operating in Hawassa City.

The third hypothesis of this study which is considered as factor that affect the internal audit effectiveness in Microfinance institutions operating in Hawassa city is independence of internal audit. To identify relation of this independent variable (IOIA) with the dependent variable that is internal audit effectiveness (IAE) study conducted correlation analysis. The correlation analysis output result shows in the table 8 above that there is a positive correlation between internal audit effectiveness and independence of internal audit ($r=0.190$). In addition to this the regression analysis output result shows in table 13 above that there is positive beta coefficient ($B=0.258$, $t=1.315$, $p<0.05$). This means that independence of internal audit increase unit effectiveness of internal audit increases by 25.8%. Based on these findings researcher reject null hypothesis (H_0) and accept alternative hypothesis (H_1). This finds consistence with previous research work carried by, [2, 3, 12, 22, 23] researchers were founds that independence of internal audit have positive impact on internal audit effectiveness. But this result was inconsistency with previous auditing research conducted by [7, 5] they argued that there were no correlation between professional proficiency and adequacy of internal audit with the IA effectiveness.

Hypothesis 4

H0: Having adequate and competent internal audit staffs has no significant positive effect on the internal audit effectiveness in the targeted MFIs operating in Hawassa City.

H1: Having adequate and competent internal audit staffs have significant positive effect on the internal audit effectiveness in the target MFIs operating in Hawassa City.

Besides this variable is supposed as other factors that affect the internal audit effectiveness in Microfinance institution operating in Hawassa city, Southern Ethiopia and its fourth research hypothesis for this study. Then to investigate relationship between those variable correlation result was utilized and shows positive and significance correlation ($r=0.337^*$, see table 8). This means that having adequate and competent internal audit staffs leads to have positive and significant effect on the internal audit effectiveness in the target MFIs in Hawassa City. Besides table 13 above indicates that regression result of beta coefficient is found to be positive sign ($B=0.098$, $t=0.486$, $p<0.05$). Therefore this study concludes that having adequate and competent internal audit staff has positive and significant

effect on internal audit effectiveness of Microfinance institutions operating in Hawassa city. Meaning unit increases in having adequate and competent internal audit staff effectiveness of internal audit will increase by 9.8%. Hence researcher rejects null hypothesis and accept alternative hypothesis. This result is in line with previous research work done by [21, 2, 3, 23] they found that existence of adequate and competent internal audit staff has positively affects the internal audit effectiveness.

Hypothesis 5

H0: Internal audit quality has no significant positive effect on the internal audit effectiveness in the target MFIs operating in Hawassa City.

H1: Internal audit quality has significant positive effect on the internal audit effectiveness in the target MFIs operating in Hawassa City.

The last variable considered as other determinants of internal audit effectiveness is quality of internal audit it is the last hypothesis for this research study. According to correlation analysis result findings shows that there were positive and significantly relation between internal audit quality and internal audit effectiveness ($r=0.448^{**}$, $p<0.05$, see table 8). Addition this regression analysis output result indicated in the table 13 above that there is positive beta coefficient ($\beta=0.439$ $t=2.459$).

Meaning unit increase in internal audit quality leads to increase 43.9% of internal audit effectiveness on Microfinance institutions operating in Hawassa city. This results consistence with previous research work conducted by, [11, 12, 23] they found that quality of internal audit has positive impact on internal audit effectiveness. Therefore, this study reject null hypothesis and accepts alternative hypothesis. Furthermore it can be concludes that quality of internal audit is major factor that affect the internal audit effectiveness on MFIs operating in Hawassa city. Therefore those MFIs shall give more attention for internal audit quality.

5. Conclusion

The main aim of this Study was to investigate factors that affect the Internal Audit effectiveness in the microfinance institutions operating in Hawassa city, Southern Ethiopia. Based on analysis output result and testing of the proposed hypothesis study drawn the following research conclusions.

The study found that all these independent variables were positively related with the internal audit effectiveness in the Microfinance institution operating in Hawassa city. This indicates that when these independent factors increase a unit effectiveness of internal audit will be increases and vice versa. Moreover, this study found that management support for internal audit function, available of adequate and competent internal audit staff and quality of internal audit identified as the major factors for the effectiveness of the internal audit function in the targeted MFIs operating in Hawassa city. Furthermore, the independence of internal audit, availability of approved internal audit charter also has

positive impact to internal audit effectiveness following the above three factors. In addition to this the regression coefficients remarked that, internal audit effectiveness increases when there is a managements support for internal audit function, when there is independence of internal audit function, when there is available of internal audit charter in institutions, have adequate and competent internal audit staffs and have quality of internal audit also increases its effectiveness.

According to the result obtained from these factors contributed about 23.9% (its adjusted $R^2=0.155$) in determining the internal audit effectiveness in Microfinance institutions operating in Hawassa city, Sidamaregion. This result indicates that the reaming of 76.1% are other factors not included in this study. Therefore, further researcher required to include more reaming factors to reach a better conclusion about factors that determine internal audit effectiveness in Microfinance institutions.

6. Recommendations

The main objective of this study is to examine the factors that affecting the internal audit effectiveness on Microfinance institutions operating in Hawassa city, Sidama region, Ethiopia. Thus, based on the findings the following recommendation is forwarded to concerned body:

Management support provide to internal audit effectiveness on Microfinance institutions should continue and strengthen their support and assistance to internal audit function, to give enough support and trainings in developing their staff and giving value to internal audit findings and for the implementation of the same to increase their institutional performance. Also the study found that the response of respondents regarding about availability of adequate and competent internal audit staff has got under mean score value of scale point that means below the agree degree level. Therefore, MFIs should consider that to assign competent and adequate staff in their Microfinance institutions, since it is crucial for the effective implementation of the internal audit function.

In addition, the result revealed that the available of approved internal audit charter is essential for the effectiveness of internal audit of MFIs, it should be available in each of the internal audit function in Microfinance institutions and it should also clearly define scope of internal audit activities and purpose and authority of the internal audit. Among all the variables management support (MS) and quality of internal audit (QIA) has got the highest mean score value of scale point in targeted MFIs. Therefore, it is recommended that it should continue more to increase internal audit effectiveness which in turn the performance of MFIs, and those institutions should give more attention for these factors. Microfinance institutions should improve internal audit effectiveness by hiring additional internal auditor and by providing training on internal audit related software to bring internal audit function to be more effective and to control fraud.

Furthermore, as regression results indicated that all independent variables used in this study were found positive beta coefficient this implies that increase in a unit of Management support, availability of Approved internal audit charter, independency of internal audit, quality of internal audit and adequate and competent internal audit staff has positively increase effectiveness of internal audit function. Besides manages support, adequate and competent internal audit staff and quality of internal audit has significant effect on internal audit effectiveness so that MFIs' and board of directors should give more attention on such variables.

7. Direction to Future Research

This study conducted on MFIs operating in Hawassa City, further study should have to consider on MFIs operating in Ethiopia and another geographical area. In addition these studies limited on MFIs future researcher better to including another financial institution like banks and insurance company.

References

- [1] AAUGP, (2009): Introduction to Research Methods.
- [2] Abraham, Y. (2015): Determinants of Internal Audit Effectiveness; Empirical Study at Construction and Business Bank. Saint Mary University.
- [3] Adhista Cahya Mustika (2015): Factors Affecting the Internal Audit Effectiveness, Journal Akuntansi & Auditing Volume 12/No. 2 than 2015: 110-122.
- [4] Ajai S. (2009), Statistical Methods For Practice And Research Guide To Data Analysis Using SPSS.
- [5] Arena. And Azzone, G. (2009): Identifying Organizational Drivers Of Internal Audit Effectiveness, International Journal Of Auditing, Vol. 13, 43–60.
- [6] C. Brooks, Cambridge, (2008). Introductory Econometrics for Finance 2nd Ed.
- [7] Cohen A. & Sayag, G. (2010). The Effectiveness of Internal Auditing: An Empirical Examination of Its Determinants in Israeli Organizations. Australian Accounting Review, 20 (3), 296-307.
- [8] Crombach's, L. J. (1951). Coefficient Alpha and Internal Structure of Tests (Vol. 16) Psychometric.
- [9] Dessalegn, Getie M. (2010): Antecedents and Organizational Performance Implication of Internal Audit Effectiveness: Evidence From Ethiopia: A Dissertation of PhD in Accounting at the University Of Southern Queensland, Australia.
- [10] Dittenhofer, M. (2001). Internal Audit Effectiveness: An Expansion of Present Methods, Managerial Auditing Journal, 16 (8), 443-50.
- [11] Drogalas George, Karagiorgos Th. And Arampatzis Konstantinos, (2015): Factors Associated With Internal Audit Effectiveness: Evidence From Greece:(Journal of Accounting and Taxation Vol. 7 (7), Pp. 113-122, July, 2015, ISSN 2141-6664.).
- [12] Fetu Ahmed Berehe, (2016). Determinants Of Internal Audit Effectiveness In Roads Construction Sector: Case Study In Ethiopian Roads Authority, Master's Thesis Of Accounting And Finance From, St. Mary's University, Addis Ababa, Ethiopia.
- [13] IIA (2001). Standards For the Professional Practice of Internal Auditing (SPPIA): Audit Tools/Newiistandards.Htm.
- [14] IIA (2010), Measuring Internal audit Effectiveness and Efficiency IPPF- Practice Guide. Institute of internal auditor.
- [15] IIA (2016) International Standards For The Professional Practice Of Internal Auditing (Standards): Available At [Www.Globaliia.Org](http://www.globaliia.org).
- [16] Kothari, R. C. (2004), Research Methodology: Methods and Techniques, 2nd Ed. New Delhi: New Age International (P) Ltd., Publishers.
- [17] Kwadwo Obeng, (2016): Effectiveness Of Internal Audit In Micro Financial Institutions: Evidence from Selected Financial Institution in Ghana; (Research Journal of Finance and Accounting, ISSN 2222-1697 ISSN 2222-2847 Vol. 7, No. 12, 2016 (Available At [Www.iiste.Org](http://www.iiste.org)).
- [18] Meseret Amare, (2016) Determinants of Internal Audit Effectiveness In The Case Of Ethiopian Private Commercial Banks. Master's Of Business Administration in Accounting and Finance from St. Mary's University, Addis Ababa, Ethiopia.
- [19] Raymond Agbesi, (2016): An Analysis Of Internal Audit Effectiveness In State Owned Enterprises in Ghana. Thesis of MPHIL Degree of Accounting from University of Ghana/Available At [Http://Ugspace.Ug.Edu.Gh](http://ugspace.ug.edu.gh).
- [20] Sayag, G. (2014). The Effectiveness Of Internal Auditing In Israeli Local Authorities: An Empirical Examination Of It Determinants. Australian Accounting Review, 20 (3), 241–255.
- [21] Shewamen Hailemariam, (2014) Determinants of Internal Audit Effectiveness in the Public Sector, Case Study in Selected Ethiopian Public Sector Offices. Master's Thesis of Accounting and Finance, From Jimma University Ethiopia.
- [22] Suraj Iliham Ali, (2017) Effect of Internal Audit on Financial Performance of Microfinance Institutions in Kenya, Master's Thesis of MBA from University of Nairobi.
- [23] Tran Thi LAN Huong, (2018): Factors Affecting The Effectiveness Of Internal Audit In The Companies: Case Study In Vietnam. Proceedings of the International Conference on Business Management (Icm18hong Kong Aug Conference) Hong Kong, SAR - Prc. August 12, 2018. Paper Id: Hm830.
- [24] Kida, M. I (2011): Effectiveness Of Internal Audit As Instrument Of Improving Public Sector Management, Journal Of Emerging Trends In Economics And Management Sciences (JETEMS), 2 (4), 304-309.