The Effect of Internal Control Systems on The Financial Performance of NSE Listed Banks

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ABSTRACT

The research objective was to investigate the effect of the internal control systems on the financial performance in the Nairobi Stock Exchange (NSE) listed banks in Kenya. The study posits that risk assessment and information and communication have a weak significant effect while the monitoring, control environment and the control activities have the weakest influence on ROA and ROE in the NSE listed banks in Kenya. The study used a descriptive research design and a case study to analyse the impact of the variables on financial performance using Likert collected responses. The correlation results established that monitoring, information and communication, control environment, risk assessment and control activities have positively influenced the performance as they all had positive values. The R squared values of .0664 for ROA and 0.742 for ROE showed a good fit. The F statistic was also significant showing that the independent variables were significantly different and that each could contribute differently to the financial performance of NSE listed banks. The internal controls: risk assessment and the controlled environment have features in them that are essential in establishing any corrupt activities occurring within the banks. To enhance performance and mitigate adverse corporate governance issues management requires that the banks must have strong internal control systems that have been put in place. To facilitate faster delivery of audit activities which includes the processes of detecting and preventing of frauds and/or non-compliance with public expenditure, the Nairobi Stock Exchange listed banks should provide a conducive control environment that enables the use of cutting-edge control activities such as ICT technology to support auditing functions, accounting packages among other which will promote continuous training and develop organizational.

INTRODUCTION

The interests in the efficacy of internal audit and the respective elements influencing it have been a concern in the most recent years. These have also been on the increase globally in both the public and private segments. This was as a consequence of the dynamic internal audit duty. The expansiveness of its practical scope has ensured provision of value addition to the attainment of the institution's objectives (Cohen & Sayag, 2010). There exists, however, a paradigm shift from its ancient target on tests on conformity, internal

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control and protection of the organization's assets. Despite the developing and expansive duty of the internal audit including certain other reforms, institutions have kept performing less than desired in both segments (Shamshuddin & Bharathii, 2014).This was especially of concern in most third world countries where there has been little attention in the researches studied (Alzeban & Gwilliam, 2014).

This has limited the internal audit function's ability to offer financially advantageous activities to the institution's objective attainment in developing countries (Sakour & Laila, 2015).The Financial Reporting Council, United Kingdom, (2014) observed that the internal management, risk governance, and business administration operations were more productive if they were equipped with organized checks and balances. An effective IAF, CIIA (2015) and Ackermann (2015), gives acumen into the aforementioned issues. The internal audit promotes the observance of the principles of good governance, risk and control in public and private sector firms (IIA, SA 2011).

In the framework of the internal auditors' operational environment, Tsai et al. (2017) intended to determine the elemental compositions that define internal audit performance. They found out that it incorporated the operationalization of the ERM, the Enterprise Resource Planning ERP process, audit programs, and internal auditing IT and systems (Abdulmunim, 2018).Quality auditing plays a vital role in safeguarding an organization from the hazards of a collapse, which is an objective that all organizations strive for. This means that organizations whose activities are examined by professional auditors are at a lower risk (Chae et al., 2020).

Problem Statement

The application of the various reforms since the 1990s has sought to enhance and improve performance of various organizations. This has been in terms of the aggregate increase in Profit Before Tax (PBT). The steadiness, efficiency and access to finances have been the focus of these reforms. However, the performance of Kenyan banks, in terms of profits before tax increase, in the last decade has been 20% on average below expectation. Lumumba (2015) opines that the failure in the financial governance in Kenyan companies had led to corporate frauds, improper accounting and incorrect financial reporting, which in return had led to the collapse of Chase and Imperial banks in 2015 and insolvency of Uchumi supermarkets. On average, however, bank performance in terms of the rate of increase in PBT has been inconsistent and less than desired. The increase in PBT was less than 20 percent over the 2008-2013 periods. In 2013, Kenyan commercial banks' PBT increased by 16.6 percent compared to 2012, when PBT grew by 20.6 percent (Onuonga, 2014). Kenyan banks' PBT increased in 2009 by twelve-point nine percent compared to 2008. In the year 2008 the PBT had increased by thirteen-point four percent. 2010 is the only year in which PBT rose by about fifty two percent. This trend is wanting despite the reforms done to boost or advance the banking sector performance.

Banks have as a consequence adopted the internal audit practices. Additionally, the great recession of 2007-2009 has led to the question of how the efficacy of internal audit is. This is both in its core design of

monitoring and adherence to internal controls and its economic integrity. This considering also that it is significant in its intrinsic part of the tradition of risk administration within big economic enterprises, whether private or public reporting enterprises (Alzeban and Gwilliam, 2014). Consequently, it was critical to study the effect of the internal control systems on financial performance. The focus was on the five elements of internal controls which include; monitoring, information and communication, control environment, control activities and risk assessment on the financial performance of the NSE-listed banks in Kenya.

Study Objectives

General Objectives

This objective of the research is to study the effect of the internal control systems on the financial

performance of NSE-listed commercial banks in Kenya.

Specific Objectives

The specific objectives include the following;

To determine the effectiveness of monitoring on the financial performance of the NSE-listed banks in

Kenya

To evaluate the effect of the control environment on the financial performance of the NSE-listed banks in

Kenya

To analyze the effect of the control activities on the financial performance of the NSE-listed banks in

Kenya

To assess the effect risk assessment on the financial performance of the NSE-listed banks in Kenya

To establish the effect of information and communication on the financial performance of NSE -listed

banks in Kenya

Study Hypotheses

The following null hypotheses guided the study:

$H0_1$: There is no significant effect between monitoring and the financial performance of NSE listed banks in Kenya.

$H0_2$: There is no significant effect between the control environment and the financial performance of NSE listed banks in Kenya.

$H0_3$: There is no significant effect between the control activities and the financial performance of NSE listed banks in Kenya.

$H0_4$: There is no significant effect between the risk assessment and the financial performance of NSE listed banks in Kenya.

$H0_4$: There is no significant effect between information and communication and the financial performance of NSE listed banks in Kenya.

The following alternate hypotheses guided the study:

$H1_a$: There is a significant effect between monitoring and the financial performance of NSE listed banks in

Kenya.

H$_{2a}$: There is a significant effect between the control environment and the financial performance of NSE listed banks in Kenya.

H$_{3a}$: There is a significant effect between the control activities and the financial performance of NSE listed banks in Kenya.

H$_{4a}$: There is a significant effect between risk assessment and the financial performance of NSE listed banks in Kenya.

H$_{4b}$: There is a significant effect between information and communication and the financial performance of NSE listed banks in Kenya.

RESEARCH METHODOLOGY

This descriptive case study involved 11 primary NSE listed banks in Kenya. The population of importance in this investigation was the 11 NSE listed banks in Kenya that have transacted between 2013 and 2017. The focus of the study was the Internal Audit Department of these banks. Data collection procedure observed all the necessary ethical consideration like explaining the purpose of the study, assuring the respondents of confidentiality.

FINDINGS & DISCUSSION

Response Rate

According to the defined methodology, the study targeted the banks listed with the NSE in Kenya, and were actively transacting between 2013 and 2017. The period 2013-2017 was chosen to ensure consistency in comparison at the time of the research study. The periods stated are readily available and have been audited, published and are available to the public by the CBK annual supervisory reports. Every of the targeted institutions participated in the study, thus rendering the response rate at 100%. The Cooperative Bank of Kenya had the highest representation while I&M Holdings had the lowest representation. The total number of participants from the institutions was 38 since each bank was given repeated chances to participate through its officers. The outcome is as observed in the figure plotted below.
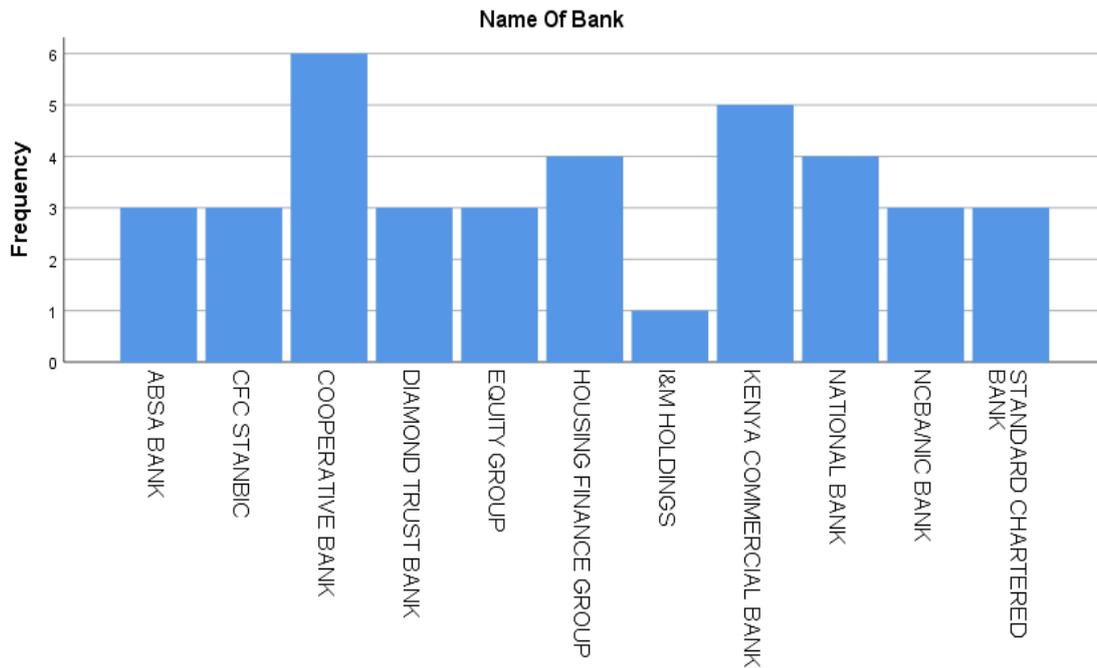
Figure 1 :Frequency of The NSE Listed Banks

The percentage and counts of the participation of the staff from the banking institutions is as demonstrated by the chart below.

Table 1: Frequency Distribution of Participating Banks

Name of the Banks	Count	Column N %
Absa Bank	3	8.1%
CFC Stanbic	3	8.1%
Cooperative Bank	6	16.2%
Diamond Trust Bank	3	8.1%
Equity Group	3	8.1%
Housing Finance Group	4	10.8%
I&M Holdings	1	2.7%
Kenya Commercial Bank	5	13.5%
National Bank	4	10.8%
NCBA/NIC Bank	3	8.1%
Standard Chartered Bank	3	8.1%

There were 3 respondents from ABSA, which is 8.1% of the total representation. The respondents from the Cooperative Bank comprised 16.2% and were the highest in number, while I&M Holdings was the lowest representation with 2.7%. There was only one entry recorded for the bank. From the table, it is evident that the participation was representative enough for use in drawing conclusions about the study at hand.

Demographic Characteristics of the Data

During the study, some of the demographic characteristics taken into consideration include gender, level of education, the professional certification, and the work experience held by the main officers included in the study. For the level of education, there was almost an equal chance of the participants having a Masters

or Bachelor's degree. Of the collected samples, 56.8% of the participants were undergraduates while 43.2% held a Masters. Additionally, majority of those working in the organization had been there for about 3-9 years (42.1%). Those working for less than 3 years were 31.6% while those staying in the firms for more than 20 years were 7.8% of the total population. The results reveal that about 75% of the organization only last up to 9 years before seeking different areas of work. The table below is an illustration of their working experience.

Table 2. Working Experience in the Institution

	Particulars	Frequency	Percent	%
Valid	10-15 years	7	18.4	18.4
	3-9 years	16	42.1	42.1
	Less than 3 years	12	31.6	31.6
	Over 20 years	3	7.9	7.9
				100.0

The recorded professional certifications were ACCA (5.4%), Banking and Credit management (2.7%), CIFA (5.4%), CPA (67.6%), CPSPK (2.7%), OCP (2.7%), and Higher National Diploma in human resource management (2.7%). 10.8% of the respondents did not have any professional certification at the time of data collection.

The Internal Control And The Financial Performance
In evaluating the internal control measures, the study considered five different aspects that include the control environment, risk assessment, the information and communication system, control activities, and monitoring activities. The research determined to investigate the extent to which internal controls influence financial performance of NSE listed banks in Kenya. From the results, 55% indicated a great extent, 30% of the respondents indicated to a very great extent whereas 15% of the respondents indicated to a moderate extent. These results showed that internal controls have an effect on performance of the NSE listed banks in Kenya to a great extent.

Table 3: Effects of the internal controls on the financial performance of NSE listed banks in Kenya.

Particulars	Frequency	%
Very great extent	11.4	30
Great extent	20.9	55
Moderate extent	5.7	15
Total	**38**	**100**

When evaluating the control environment, some of the analyzed factors included the capability to detect and manage the occurrence of fraudulent activities, the measurement of the efficacy of the auditors, promoting ethics, and the establishment of operating standards. A well-established environment with the capability to detect fraudulent activities reported better metrics for financial performance. Those strongly

disagreeing that the banks could manage such occurrences recorded lower values for ROA and ROE, which were 2.95 and 19.45 respectively. Majority of the respondents reported negatively for the banks having a controlled environment with the capability to enhance the internal audit functions effectively. The lacking honesty when dealing with other stakeholders and the lacking standards also contributed to the achievement of lower results for ROA and ROE upon analyzing the information as required. Finally, the management exhibiting commitment to maintaining set standards and ascertaining proper function has a significant influence on the outcomes determining financial performance. In the organizations, little consideration is given to the establishment of proper control environment that ascertains a better performance of the internal audits and the improvement of other functions like risk management.

The second aspect of internal controls is risk assessment that looks into the role of the management in identifying, classifying, and managing any risks occurring within the firm. Additionally, there is need to understand its function in escalating the observable risks to prevent any further damages. Without a proper definition of the objectives, identification of risks, and the establishment of proper mitigation plans, it is unlikely that the organization will experience better financial performance. The values posted for the ROA and ROE are sufficient evidence of the opinions leaning towards the establishment of the proper internal controls for better risk assessment. The results are as posted in the table constructed below.

Another aspect is the analysis of the performance of the information and communication systems. The study considered the capability to delegate the duties with an intention to enrich communication among staff, the proper understanding and coordination. Although important for checking organization performance, the control and monitoring activities did not seem to have much influence on the financial performance of the banks. The ROA and ROE did not show any significant difference when analysed according to the opinions of the individuals involved in the study. The overall influence of the elements can also be checked using the bivariate linear correlations containing the different factors defining the internal controls.

Table 4: Reliability Statistics

Factor	Cronbach's Alpha	No of items
Control assessment	.871	6
Risk assessment	.963	7
Information and communication systems	.940	3
Control activities	.963	7
Monitoring activities	.946	6

The values obtained for the Cronbach's Alpha are greater than 0.7, which is an indication of high-level reliability for the five elements used to measure the internal controls of the different banking institutions that participated in the study(Connelly, 2011). When doing the bivariate correlations, the parametric assumptions that need consideration are linearity, homoscedasticity, independence, paired values, level of

measurement, and normality. When testing for linearity, the constructed scatter matrix is as shown in the figure below.

Figure 2: Scatter matrix for Internal Control Systems (ICS)
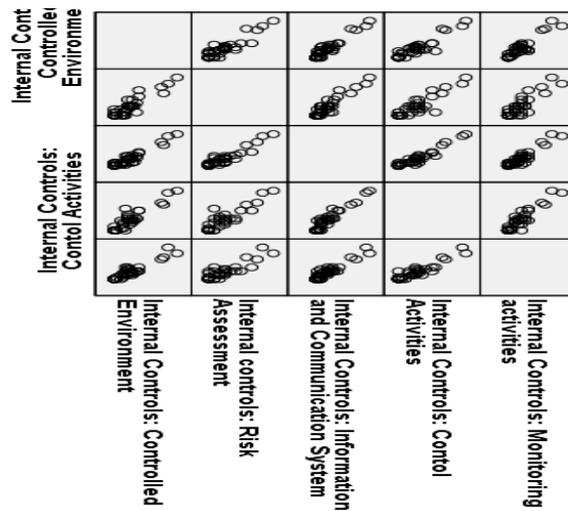
The plotted scatters assume a linear shape for every of the variables used in the construction; hence, sufficient proof for linearity. Secondly, the plotted PP plots to demonstrate homoscedasticity are as shown. When many of the observations are included in the fitted line, it is sufficient evidence for homoscedasticity. The plotted scatters assume a linear shape for every of the variables used in the construction; hence, sufficient proof for linearity. The results are plotted in the table below.

Table 5: The Correlations of Internal Control Systems (ICS)

Correlations	C. Env	Risk Ass.	IC	Control	Monitoring	ROA	ROE
C. Env.	1	.910**	.951**	.920**	.929**	.376*	.389*
Risk Ass.		1	.930**	.896**	.870**	.426**	.435**
IC			1	.950**	.931**	.412*	.425**
Control				1	.926**	.348*	.365*
Monitoring					1	.380*	.383*
ROA						1	.977**
ROE							1

Note: C.Env-Control Environment, Risk Ass-Risk assessment, IC- Information communication, Control- Control Activities, Monitoring- Monitoring Activities

The tabulated values show that there are weak positive relationships between the different internal control variables and the ROA and ROE. The risk assessment, information, and communication systems have the strongest influence (0.425 and 0.435 respectively) on the financial performance of every analyzed banking institution. Further, the control activities have the weakest influence of 0.365 and 0.348 on the ROA and ROA.

The results of the bivariate correlations are also useful in drawing conclusions to the stated hypothesis. The

formulated hypothesis aims at examining whether there exists a significant effect between the internal controls and the financial performance of NSE listed banks in Kenya. Every of the defined relationships were significant even though manifesting weak linear relationships.

An ANOVA run for the performance of the different construct variables of the internal controls gave a significant output as shown below. The values obtained, which function to determine the made conclusion are as tabulated. Since the model is significant, then there is need to construct a multiple linear regression model using the parameter estimates obtained for the two variables. The regression model will consist of the five different elements making up the internal controls, to estimate how much of an effect each of the variables is likely to have.

Table 6: ANOVA for Internal Controls

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	ROA	16.321[a]	5	3.264	1.213	.026
	ROE	432.522[b]	5	86.504	1.023	.041
Intercept	ROA	187.087	1	187.087	69.51	.000
	ROE	6736.460	1	6736.460	79.65	.000
Controlled Environment	ROA	1.028	1	1.028	.382	.041
	ROE	32.604	1	32.604	.386	.039
Risk Assessment	ROA	1.376	1	1.376	.511	.008
	ROE	35.529	1	35.529	.420	.022
Information and Comm. System	ROA	.040	1	.040	.015	.004
	ROE	.754	1	.754	.009	.025
Control Activities	ROA	.004	1	.004	.002	.019
	ROE	.376	1	.376	.004	.047
Monitoring Activities	ROA	1.360	1	1.360	.505	.023
	ROE	34.074	1	34.074	.403	.003
Error	ROA	83.430	31	2.691		
	ROE	2621.615	31	84.568		
Total	ROA	707.373	37			
	ROE	26940.300	37			
Corrected Total	ROA	99.751	36			
	ROE	3054.137	36			

a. R Squared = .664 (Adjusted R Squared = .629)

b. R Squared = .742 (Adjusted R Squared = .053)

The regression equation therefore is:
$performance = \beta_1 * controlled\ envrironment + \beta_2 * risk\ assessment + \beta_3 * ICT\ system + \beta_4 * control\ activities + \beta_5 * monitoring\ activities + \beta_0.$
The parameter estimates indicate the nature of contribution made by the construct variables regarding internal controls.

Table 7: Estimation of Parameters for the Internal Controls' Regression Line

Dependent Variable	Parameter	B	Std. Error	T	Sig.
ROA	Intercept	5.316	.638	8.338	.000
	Controlled Environment	.088	.142	.618	.041
	Risk Assessment	.179	.251	.715	.008
	Information and Communication System	.018	.151	.122	.004
	Control Activities	.007	.175	.040	.019
	Monitoring activities	.162	.227	.711	.023
ROE	Intercept	31.902	3.574	8.925	.000
	Controlled Environment	.495	.797	.621	.039
	Risk Assessment	.912	1.407	.648	.022
	Information and Communication System	.080	.845	.094	.025
	Control Activities	.065	.981	.067	.047
	Monitoring activities	.809	1.274	.635	.030

The constructed lines are in the following equations:

$$ROA = 0.088 * controlled\ environment + 0.179 * risk\ assessment + 0.018 * ICT\ system + 0.007 * control\ activiti\ es + 0.162 * monitoring\ activities + 5.316$$

$$ROE = 0.495 * controlled\ envrironment + 0.912 * risk\ assessment + 0.08 * ICT\ system + 0.065 * control\ activities + 0.809 * monitoring\ activities + 31.902$$

In this case, there is sufficient evidence advocating for the rejection of the null hypothesis and acceptance of the alternate hypothesis. This therefore means that the conclusion is that and the internal controls have a significant effect on the financial performance of the banking institutions listed with the NSE in Kenya. All the values of the correlation are significant, which is an indication that the results in the study are not by chance, and can be used to draw inference to every population of banking institutions.

Figure 3: Homoscedasticity for Internal Control Systems

Normal P-P Plot of ROA

Normal P-P Plot of ROE

Normal P-P Plot of Internal Controls: Controlled Environment

Normal P-P Plot of Internal controls: Risk Assessment

Normal P-P Plot of Internal Controls: Information and Communication System

Normal P-P Plot of Internal Controls: Contol Activities

Normal P-P Plot of Internal Controls: Monitoring activities
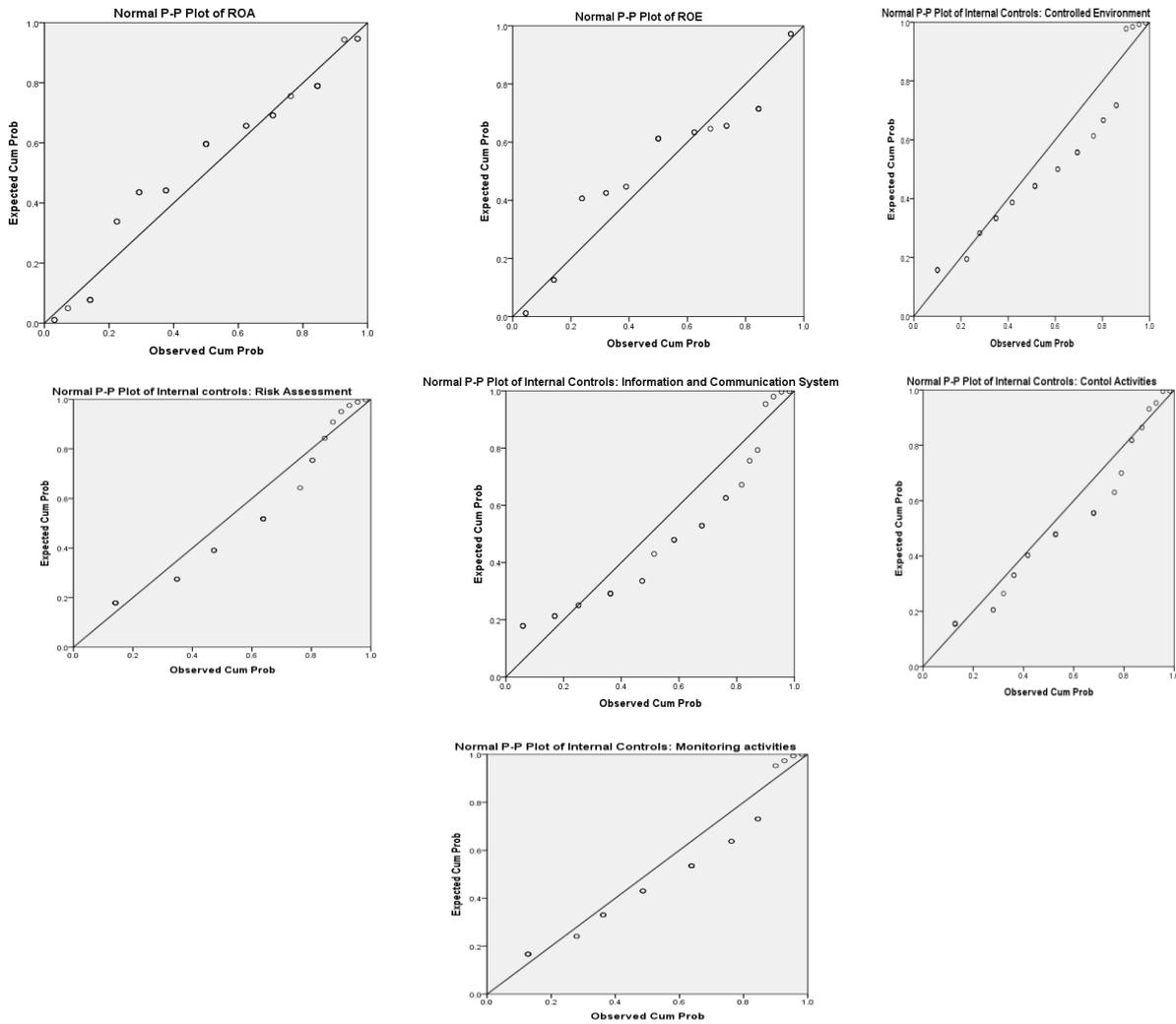
Since the plotted graphs exhibit the requirement, it serves as sufficient evidence for the existence of homoscedasticity. The third assumption is normality, which is measured using the Shapiro Wilk's and Kolmogorov Smirnov Tests(Schmidt & Finan, 2018). The results are plotted in the table below.

CONCLUSION & RECOMMENDATION

Summary

The general objective was to examine the role of the internal controls on the performance of the banks. When evaluating the control environment, some of the analyzed factors included the capability to detect and manage the occurrence of fraudulent activities, the measurement of the efficacy of the auditors, promoting ethics, and the establishment of operating standards. When viewing the results, 30% indicated a great extent, 55% of the respondents indicated to a very great extent whereas 15% of the respondents indicated to a moderate extent. According to the conducted ANOVA using the ROA and ROE as the dependent variable, every of the construct variables have a role to play in determining the performance of the banks. The significance observed indicates that even in the presence of other external factors, the result will still be significant.

Additionally, the study revealed that the internal controls had a positive relationship with the financial

performance. Every of the construct variables of the internal controls also exhibited a positive relationship with the financial performance of the organization. The results of the study therefore suggest that a unit change in any of the factors grows both the ROE and ROA of the firms positively. Besides these, it is important to note that the included measures have the potential to better the detection of any fraudulent activities. The internal controls: risk assessment and the controlled environment have features in them that are essential in establishing any corrupt activities occurring within the banks.

Policy Recommendations

Following the conducted research and the conclusions made from the study, the policy recommendations revolve around individual performance, better management practices, and the establishment of a better operating environment.

1. There is need for the internal auditors to upscale their skills by observing the changes in technology and professional regulations regarding the functioning of the internal audit department. Such an approach improves the efficiency of the team while also ascertaining better governance of the firm.

2. There is need for better monitoring within the department to ensure that all actions occur according to the defined procedures. Besides this, the continuous involvement lowers pressure from external factors like the top management, who could influence negative results. The manager has the capability to institute regulations that will ascertain the independence of the internal audit team.

3. As part of bettering the work environment, the management should ascertain the availability of the most recent technology by conducting an audit of the ICT tools. The auditors must also understand the software in use to enable precise execution of their assigned tasks. Further, the management must be aware of the prudential regulations set by the government for improved functionality.

Study Limitations

First, the study relied only one eleven banks from where three or more respondents participated. Unlike the recommended 100 for a sample size, only 38 respondents were available for the study even though the sample was representative.

There was a challenge in obtaining the most accurate data due to the sensitive nature of the required information. Some respondents, even though in the same firm, gave out extremely different information.

The method used to conduct the study is descriptive-correlational research design that does not allow the researcher to manipulate the variables to their liking.

The time constraint and the occurrence of the COVID-19 pandemic made it difficult to reach all the respondents on time during the data collection process.

Future Directions

The conducted study focused on both the private and public sector by including the National Bank, whose owner is the government. It is now appropriate to conduct a similar study using data from the public sector alone. Another research can consider institutions like schools to establish the nature of their challenges, the influence it has on both student and teacher performance, and the impact of the effective practice of the internal audit structures.

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