THE CONTROL ENVIRONMENT AND RISK ASSESSMENT AS FACTORS OF INTERNAL CONTROL SYSTEMS ON FINANCIAL PERFORMANCE AMONG LISTED COMMERCIAL BANKS IN KENYA

Kimicia Gitau.

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ABSTRACT

The purpose of the study was to assess the effect of the Control Environment and Risk Assessment as factors on internal control systems on financial performance among listed commercial banks in Kenya. Descriptive research design was used in the study. The target population was a total of 379 employees while the sample size was a total of 191 employees. Data was collected by use of self-administered questionnaires. Descriptive statistics including means, standard deviation and frequency distribution were used to analyze the data. In addition, the study used correlation and multivariate regression analysis to assess the effect of the independent variables on the dependent variable. The study found that Control environment had a positive and significant effect on commercial bank performance ($\beta_1 = 0.694$; $t = 3.022$; $p < 0.05$), while Risk assessment was the most significant factor in influencing performance of the surveyed commercial banks ($\beta_2 = 0.530$; $t = 3.308$; $p < 0.05$). The study concluded that control environment positively and significantly affected commercial bank performance, Additionally, risk assessment practices in the listed commercial banks significantly influenced performance, The study recommended that in order for a firm to perform effectively the elements of a strong control environment must be upheld and ensuring effective risk management practices would be crucial towards a firm's financial performance.

Keywords: Control Environment, Risk Assessment, Return on Assets (ROA).

INTRODUCTION

Internal control is a crucial aspect of an organization's governance system and ability to manage risk. It ensures the achievement of an organization's objectives and creating, enhancing, and protecting stakeholder value (IFAC, 2012).

In USA, the major US organizations that have articulated concepts of internal controls include ISACA (Information Systems Audit and Control Association), IIA (Institute of Internal Auditors), COSO (Committee of Sponsoring Organizations), and AICPA (American Institute of Certified Public Accountants). These controls are used in safeguarding assets of the business, providing relevant and reliable information, promoting operational efficiency, and complying with managerial policies and procedures (Deshmukh, 2004).

In Kenya, Anyanzwa (2013) stated that the recent incidence of corporate failures and accounting frauds are mostly preceded by failure in companies internal control structures. The article also notes that the CMA reckons that fraud is an area of concern for the financial sector due to its potential impact on market's confidence. Data from CMA shows that reported fraud cases rose by 18 per cent to 460 in 2011 from 390 in 2010. An article in the Business Daily (2012) notes that David Muturi, the executive director of Kenya Institute of Management, and serves as a managing trustee of the Management University of Africa, reckons that corporate governance standards must improve for Kenya to become competitive.

Statement of the Problem

The major problems caused by inappropriate or lack of internal controls is fraud and theft. This is largely manifested by corporate scandals and accounting frauds leading to colossal monetary losses often resulting in corporate failure. Waste, inefficient use of resources, poor management decisions, high rates of product errors, loss of records, carelessness and mistakes generally demonstrate poor business practices and ineffective management (Duggan, 2016).

Kenya has also not been spared its share of corporate scandals that have led to colossal monetary losses, in terms of billions of Kenya shillings. Recent examples include CMC Group, Mumias Sugar Co., Uchumi Ltd, NSSF, NYS, Imperial Bank and Chase Bank.

Banking fraud has been detrimental towards banks directly, and the banking industry as a whole, affecting their financial bottom line, customer relations and investor relations. As a result, fraud has had a severe negative impact on banks financial performance; For instance, Ochieng (2016) noted that senior management at Imperial Bank and Chase Bank perpetrated fraud leading to the loss of ksh 38 billion and 8 billion respectively which eventually led to their closure.

Therefore, the study sought to assess the effect of the Control Environment and Risk Assessment as factors on internal control systems on financial performance among listed commercial banks in Kenya.

Purpose of the Study

The purpose of the study was an assessment of Control Environment and Risk Assessment as factors on internal control systems on financial performance among listed commercial banks in Kenya

Objectives of the Study

The specific purpose of the study was:

i. To examine the effect of the control environment on financial performance among listed commercial banks in Kenya.
ii. To determine the effect of risk assessment on financial performance among listed commercial banks in Kenya.

Research Questions

i. To what extent does the control environment affect financial performance among listed commercial banks in Kenya?
ii. How does risk assessment affect financial performance among listed commercial banks in Kenya?

Theoretical Review

Agency Theory

Agency theory in a formal sense originated in the early 1970s, but the concepts behind it have a long and varied history. Among the influences are property-rights theories, organization economics, contract law, and political philosophy, including the works of Locke and Hobbes. Some noteworthy scholars involved in agency theory's formative period in the 1970s included Armen Alchian, Harold Demsetz, Michael Jensen, William Meckling, and S.A. Ross (RFB, 2016). Agency theory raises a fundamental problem in organizations—self-interested behavior. A corporation's managers may have personal goals that compete with the owner's goal of maximization of shareholder wealth. Since the shareholders authorize managers to administer the firm's assets, a potential conflict of interest exists between the two groups. The agency theory impacted highly the Control Environment and Risk Assessment,

Reliability theory

Reliability theory simply describes the probability of a system completing its expected function during an interval of time (Gavrilov & Gavrilova, 2001). According to the reliability theory, an internal control system comprises of components that are interrelated and for each component, there needs to be a defined measure of success. The two potential users of the reliability theory are the external auditor and organization management. Kinney (2000) states that; during the external audit, evidence is gathered to support a professional opinion. According to Stratton (2007), recent developments have increased the value to management of objective methodologies for the evaluation of internal control systems. Firm managers are there-fore required to assure the accuracy of these systems. The reliability theory impacted highly the Control Environment and Risk Assessment.

Empirical Literature

Control Environment

Ofori (2011) examined the effectiveness of internal controls: a perception or reality? The evidence of Ghana post company limited in Ashanti region. The study was guided by the following objectives: To determine whether internal controls exist in Ghana Post Company Limited To identify the types of internal controls in Ghana Post Company Limited; To review the effectiveness of the internal control systems; To examine the measures put in place to enhance the effectiveness of internal controls; To recommend appropriate ways that will improve the effectiveness of internal controls. The study used a sample size of 50 drawn from a from a target population of Ghana Post Company Limited Ashanti Kumasi and analyzed the data using multivariate regression analysis. The study concluded that the control environment is the overall control consciousness of an organization effected by management through policies, procedures, ethical standards, and monitoring processes

Musya (2014) analyzed the effect of internal controls on revenue collection by county governments in Kenya. The study was guided by the following objectives: To establish the effect of the control environment, risk assessment, control activities, information & communication and monitoring activities on revenue collection in county governments. The study used a sample size of 47, the heads of internal audit in all the 47 county governments in Kenya and analyzed the data using multivariate regression analysis. The study concluded that Control environment is the foundation for all the other components of internal control. The study recommended that the management should ensure that aspects relating to control activities should be enhanced so as to ensure attainment of objectives.

Risk Assessment

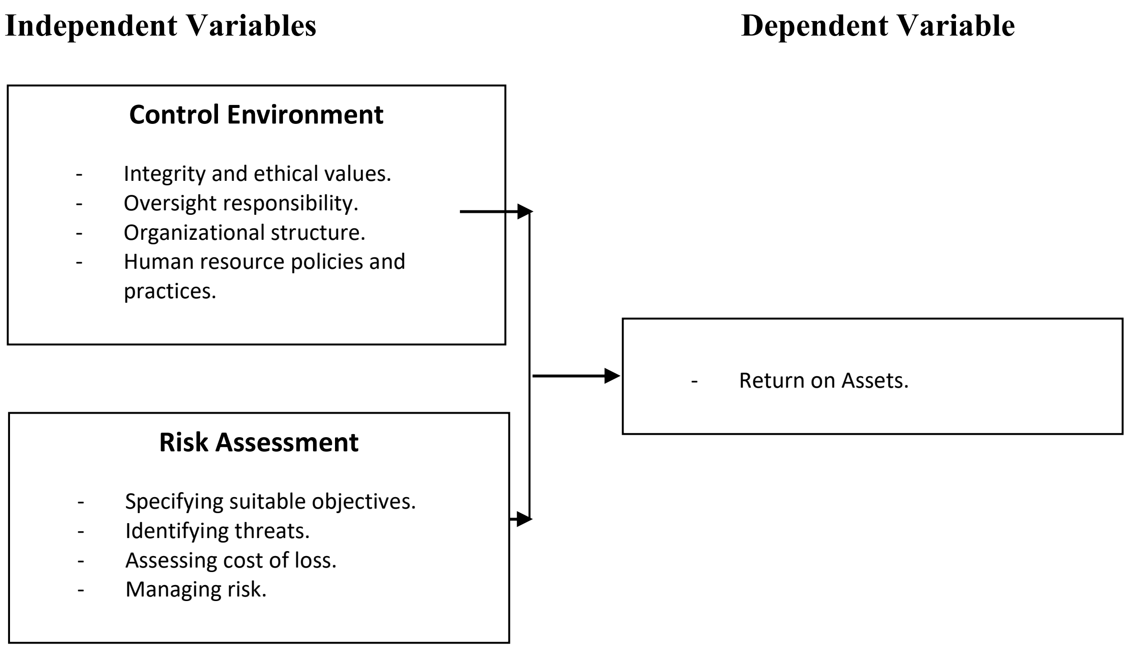
Qtish & Sawalca (2012) examined internal control and audit program effectiveness: empirical evidence from Jordan. The study was guided by the following objectives: To analyze the relationship between control environment, risk assessment and control activities as a component of internal control system, and audit program effectiveness. The study used a sample size of 102 licensed practicing auditors and analyzed the data using multiple regression analysis. The study concluded that risk assessment contributes significantly toward an effective audit program.
Mwachiro (2011) evaluated the effects of internal controls on revenue collection: a case of Kenya Revenue Authority. The study was guided by the following objectives: To analyze the effect of the control environment, risk assessment, control activities, information & communication and monitoring activities on revenue collection. The study used a sample size of 38 top and middle level management members and analyzed the data using both statistical and narrative methods. The study concluded that there is a direct correlation between the level of risk assessment and the amount of revenue collection by KRA.

Financial Performance

Nyakundi, Nyamita & Tinega (2014) analyzed the effect of internal control systems on financial performance of small and medium scale business enterprises in Kisumu City, Kenya. The study was guided by the following objectives: To assess the relationship between internal control systems and return on investment among SMEs; To establish the level of business knowledge of an entrepreneur in internal control systems and its effect on financial performance of small and medium business enterprises; To assess the relationship between internal control systems and growth in profits among SMEs. The study used a sample size of 117 SMEs in Kisumu registered with the Ministry of Labor. The study analyzed data using correlation and regression analysis as a way of assessing the relationship between internal controls and business financial performance. The study concluded that internal control systems as supported by the study findings significantly influence the financial performance of SMEs and that there is a significant positive relationship between internal control system and financial performance.

Muraleetharan (2010) investigated internal control and impact of financial performance of organizations (special reference public and private organizations in Jaffna district, Sri Lanka). The study was guided by the following objectives: to find out the relationship between internal control and financial performance; to find out the major determinants of internal control system; to find out the financial performance factors. The study used a sample size of 47 public and private organizations from Jaffna district and analyzed the data using multiple regression analysis to find out the impact of internal control on financial performance and chi-Square test to find out whether personal variables are dependent or independent. The study concluded that it is apparent that the perceived internal control has a significant impact on financial performance. Risk assessment, positively influences financial performance. The better the performance of risk assessment the better the financial performance.

Conceptual Framework



The control environment sets the tone of an organization, influencing the control consciousness of its people. It is the foundation for all other components of internal control, providing discipline and structure.

Risk assessment is the identification and analysis of relevant risks to achievement of the objectives, forming a basis for determining how the risks should be managed.

Financial performance refers to the degree to which financial objectives are being or have been accomplished. This may be measured using a variety of profitability measures including return on capital employed (ROCE), return on equity (ROE) and return on assets (ROA). In this study financial performance has been measured by ROA. This ratio is calculated as net profit after tax divided by the total assets. This ratio measures the operating efficiency of a company based on the firm's generated profits from its total assets. ROA is a useful measure of how well a bank manager is doing on the job because it indicates how well a bank's assets are being used to generate profits.

RESEARCH METHODOLOGY

Target Population

The study targeted the managers (heads of department) and assistant managers (assistant heads of department) within the key departments of the banks stated. It also included key accounting personnel and auditors from the stated banks.

Target Population

	Name of Listed Bank	No. of Managers & Assistant Managers	No. of key Accounting personnel & Auditors	Total
1.	Barclays Bank	30	9	39
2.	CFC Stanbic Holdings	28	5	33
3.	I&M Holdings	24	6	30
4.	Diamond Trust Bank Kenya	28	6	34
5.	Housing Finance Co Ltd	20	6	26
6.	Kenya Commercial Bank	30	9	39
7.	National Bank of Kenya	28	7	35
8.	NIC Bank Ltd	28	5	33
9.	Standard Chartered Bank	30	6	36
10.	Equity Bank	36	9	45
11.	The Co-operative Bank of Kenya	22	5	27
TOTAL		304	75	379

Source: NSE (2016)

Sampling Procedures & Techniques

For this study, stratified probability sampling was used.

When the population is more than 10,000 individuals, 384 of them are recommended as the desired sample size (Mugenda & Mugenda, 1999). The study population in this study was 384 key accounting personnel.

Mugenda and Mugenda (1999) recommended the formula:

$nf = \underline{\quad n \quad}$

$$1 + \frac{n}{N}$$

to be used to calculate samples size.
According to the above formula:
nf= desired sample size when the population is less than 10,000,
n= desired sample when the population is more than 10,000,
N= estimate of the population size.
Using the above formula the sample size is given by:

$$nf = \frac{379}{1 + \frac{379}{384}} = 191$$

Sample Size

	Name of Listed Bank	No. of Managers & Assistant Managers	No. of key Accounting personnel & Auditors	Total Sample size
1.	Barclays Bank	30	9	20
2.	CFC Stanbic Holdings	28	5	17
3.	I&M Holdings	24	6	15
4.	Diamond Trust Bank Kenya	28	6	17
5.	Housing Finance Co Ltd	20	6	13
6.	Kenya Commercial Bank	30	9	20
7.	National Bank of Kenya	28	7	18
8.	NIC Bank Ltd	28	5	17
9.	Standard Chartered Bank	30	6	18
10.	Equity Bank	36	9	22
11.	The Co-operative Bank of Kenya	22	5	14
TOTAL		304	75	191

Source: NSE (2016)

The sample size was the total of 191 managers (heads of department), assistant managers (assistant heads of department), key accounting personnel and auditors.

Testing for Validity and Reliability

The researcher ensured validity by discussing the data collection instrument with the supervisors. The feedback the experts helped in identifying any awkward, ambiguous or offensive questions.

Reliability of Data Collection Research Instrument

In this study, the Cronbach's alpha reliability coefficient was used to measure the reliability of the research instrument. According to Sekaran (2003) Cronbach's alpha is a measure of internal consistency, that is, how closely related a set of items are as a group. It is considered to be a measure of scale reliability. In this study a Cronbach's alpha coefficient of 0.82 was obtained showing that the study was reliable.

Data Collection Methods & Procedures

The data used included both primary and secondary data. Primary data was collected by use of questionnaires that were hand delivered to the relevant institutions. A five-point Likert scale was used to analyze the key internal control factors influencing financial performance among listed commercial banks in Kenya.

Data Analysis techniques & Procedures

In this regard the data collected was inspected and the completed questionnaires were edited for completeness and consistency. The data was then coded to enable the responses to be grouped into various categories. The responses were tabulated accordingly. As pertains to financial performance, the average financial performance of the period of 2010 to 2014 was taken as the measure of financial performance. Descriptive statistics including means, standard deviation and frequency distribution were used to analyze the data. In addition, inferential statistics including multiple regression analysis were used to assess the influence of the independent variables on the dependent variable. The regression model to be used was:

$$y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \varepsilon$$

Whereby:

y = Financial Performance.

β_0 = constant

β_1, β_2 = coefficients of the Control Environment and Risk Assessment influencing Financial Performance.

X_1 = Control Environment.

X_2 = Risk Assessment.

ε = Error term

Findings, Analysis & Interpretation

Statements were listed and respondents required to indicate the extent on a five-point likert scale. The scale used was 1 = Very low extent, 2 = Low extent, 3 = Moderate extent, 4 = High extent and 5 = Very high extent. Percentages were used to analyse the responses and results are presented.

Control Environment

The results indicated that 76% of the respondents indicated that human resource policies and practices influenced performance in the banking sector to a very high extent. Further results indicated that 75% of the respondents were of the view that exercising oversight responsibility by the board of directors, audit committee, and internal auditors were instrumental to a very high extent in influencing financial performance among listed commercial banks in Kenya. Similarly, 71% of the respondents indicated that integrity and ethical values were instruments to a very high extent in affecting financial performance of commercial banks while 65% also indicated that establishing structure, authority and responsibility was instrumental to a very high extent. These findings indicated that the control environment was instrumental to a very high extent in influencing commercial banks performance in Kenya. These findings concur with the results by Deshmukh (2004) that control environment significantly influenced performance of an organisation. Specifically, Deshmukh established that ensuring an environment of integrity and ethical values enhances trust and performance.

Control Environment

Statement	Moderate extent (%)	High extent (%)	Very high extent (%)
Integrity and ethical values (Management's commitment to integrity and ethical values)	4	25	71
Exercising oversight responsibility by the board of directors, audit committee, and internal auditors	1	24	75
Organizational structure (Establishing structure, authority and responsibility)	3	32	65
Human resource policies and practices (Ensuring adequate human resource policies & practices)	1	23	76

Source: Research (2016)

Risk Assessment

Statement	High extent (%)	Very high extent (%)
Specifying suitable objectives	29	71
Identifying threats in the financial, operational, and strategic areas	19	81
Assessing cost of loss due to the risk (the likelihood of occurrence of risk multiplied by possible loss)	21	79
Managing risk by designing appropriate controls	19	81

Source: Research (2016)

These findings agree with results by Qtish and Sawalca (2012) that effective internal control and risk assessment modalities contributed significantly toward an effective operational environment and hence improving firm performance.

Performance of the Banks

An average ROA (%) for five years (2011-2015) was computed.

Performance of the Banks

Bank	Average ROA (5 years) (%)
Barclays Bank	4.25
CFC Stanbic Holdings	2.99
I&M Holdings	3.30
Diamond Trust Bank Kenya	3.24
Housing Finance Co Ltd	1.60
Kenya Commercial Bank	3.76
National Bank of Kenya	1.71
NIC Bank Ltd	3.06
Standard Chartered Bank	4.06
Equity Bank	9.51
The Co-operative Bank of Kenya	3.29

Correlation Matrix

		Control Environment	Risk Assessment	Performance
Control Environment	Pearson Correlation	1		
	Sig. (2-tailed)			
	N	100		
Risk Assessment	Pearson Correlation	.607**	1	
	Sig. (2-tailed)	.000		
	N	100	100	
Performance	Pearson Correlation	.733**	.644**	1
	Sig. (2-tailed)	.000	.000	
	N	100	100	100

The results indicate that all the variables were significantly related to performance. Control environment had the greatest association with commercial banks performance ($r = 0.733$; $p < 0.05$). This indicates that with control environment in the banks was associated positively with bank performance hence improvement in control environment was likely to lead to improvement in bank performance. These findings agree with the results by Ofori (2011) that internal controls are

effective in enhancing firm performance when management is committed towards integrity and ethics.
Risk assessment had positive relationship with bank performance ($r = 0.644$; $p < 0.05$). Risk assessment activities in the banks were hence positively associated with banks performance implying that they were positively contributing to the performance by the banks. This agrees with findings by Mwachiro (2011) that the level of risk assessment influenced revenue collection performance by KRA.

Significance of Independent Variables

	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
(Constant)	.259	.123		2.109	.039
Control environment	.694	.229	.345	3.022	.003
Risk assessment	.530	.160	.264	3.308	.001

The resulting regression equation was of the form

$$\mathbf{y = 0.259 + 0.694X_1 + 0.530X_2}$$

The results reveal that risk assessment was the most significant factor in influencing performance of the surveyed commercial banks ($\beta_1 = 0.530$; $t = 3.308$; $p <0.05$). This indicates that bank performance was significantly and highly affected by the risk assessment activities in the commercial banks. The effect was also positive indicating that a unit change in risk assessment would result to a 0.530 improvement in commercial bank performance. Risk assessment was also the most significant factor due to its highest t statistic of 3.308. These findings agree with results by Ofori (2011) that risk assessment is critical towards functioning internal controls and financial performance of the firm.

Study results also indicated that control environment had a positive and significant effect on commercial bank performance ($\beta_2 = 0.694$; $t = 3.022$; $p < 0.05$). These results indicated that control environment positively influenced bank performance where a unit improvement in control environment was expected to result to an increase of 0.694 in bank performance. Ofori (2011) had similar findings with the finding from this study. The study by Ofori indicated that effective internal controls enhance financial performance. For effectiveness in control environment, management should have oversight and have an effective board of directors and internal auditors.

Conclusion

The study makes the following conclusions. First, control environment positively and significantly affected commercial bank performance. In the commercial banks surveyed, there were effective human resource policies and practices which enabled the banks to report high performance. The

board of directors of the listed commercial banks exercised oversight responsibility, whereas the audit committees and internal auditors were effective in providing the right control environment in the banks for better performance.
Secondly, risk assessment practices in the listed commercial banks significantly influenced performance. The listed commercial banks managed risks by designing appropriate controls and also engaged in identifying threats in the financial, operational, and strategic areas. The banks also assessed cost of loss due and specified suitable objectives in risk assessment. This enabled the listed commercial to improve their financial performance.

Recommendations of the Study

Following the findings from this study, recommendations were made. First, in order for a firm to perform effectively the elements of a strong control environment must be upheld. This includes upholding Integrity and ethical values, adequate oversight responsibility, effective organizational structure and adequate human resource policies and practices. This is recommended because the control environment sets the tone of an organization, influencing the control consciousness of its people. It is the foundation for all other components of internal control, providing discipline and structure.

Secondly, ensuring effective risk management practices would be crucial towards a firm's financial performance. These practices include specifying suitable objectives, effectively and efficiently identifying threats, adequately assessing cost of loss and satisfactorily managing risk. This is recommended because economic, industry, regulatory and operating conditions will continue to change, mechanisms are needed to identify and deal with the special risks associated with change.

Recommendations for Further Research

A recommendation is made for any future research to focus on other banks that have not been listed in the NSE to establish how internal control influences their performance. This study would be of much significance after the introduction of interest rate caps which calls for the banks to seek new sources of revenues as interest revenue sources are affected by this law.

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