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Internal Control System and Financial Performance of Financial Institutions in Rwanda: A Case Study of Bank of Kigali Plc (2020–2023)

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Abstract: *This research investigated the effect of internal control system on the financial performance of commercial banks in Rwanda, a case of Bank of Kigali Plc. The findings indicated that for the statement that stated that "Effective control environment over financial reporting to minimize errors and fraud at Bank of Kigali" the respondents agreed with a mean of 4.00 and standard deviation of .961 with the statement. This indicated that the respondents strongly agreed with the statement as indicated by the mean and heterogeneity of answers as indicated by the standard deviation where the respondents had different opinions of the statement and lead to the same answer. The other statement evaluated was "The internal control principles identify irregularities at Bank of Kigali" where the respondents agreed with a mean of 3.96 and standard deviation of .940. This indicated that the respondents agreed with the statement as indicated by the strong mean and heterogeneity of answers as indicated by the standard deviation where the respondents had different opinions of the statement and lead to the same answer. The internal control system plays a vital role in ensuring the financial stability and sustainability of commercial banks in Rwanda. The study conducted on the internal control system of commercial banks in Rwanda reveals that the majority of the banks have a well-established internal control framework, which is in line with the regulatory requirements and international best practices. Banks should conduct regular risk assessments to identify potential risks and implement measures to mitigate them.*

Keywords: *Internal Control System, Financial Performance, Commercial Banks, Control Environment, Preventive Controls, Detective Controls, Corrective Controls*

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1. Introduction

The control environment is in fact the overall governance of the bank. It starts with the tone at the top level of the organization, and includes the organization's corporate culture, its ethics, the quality of its personnel, and how the organization is controlled. Many of the major financial institution failures of the past ten years can be linked to problems in the control environment (Rikhardsson, Rohde, Christensen, & Batt, 2021).

Internal control systems play a crucial role in the financial performance of commercial banks in Rwanda, as they do globally. These systems help ensure accuracy, transparency, and accountability in financial operations, ultimately contributing to the financial health of the institutions (Certo, 2019). Internal control systems help identify, assess, and mitigate various financial and operational risks with managing of the risks effectively; banks can reduce the likelihood of significant financial losses and enhance their overall stability. Internal controls streamline processes and reduce redundancy, leading to increased operational efficiency (Cebenoyan and Strahan, 2018). When processes are efficient, banks can reduce costs and improve service delivery, positively impacting profitability. When customers are confident that their money is secure and that the bank operates with integrity, they are more likely to remain loyal. Strong internal controls contribute to building that trust, which enhances customer retention and attract new clients. Internal controls help protect the bank's physical and financial assets. By implementing strong safeguarding measures, banks minimize losses from theft, fraud, or mismanagement. Continuous monitoring of internal controls allows for the identification of areas needing improvement. This commitment to continuous improvement can lead to better overall performance and innovation in services offered.

The Bank of Kigali, as one of the leading financial institutions in Rwanda, plays a critical role in the country's economic landscape by providing a broad range of financial services, including retail banking, corporate banking, and investment banking (Iradukunda & Tuyisenge, 2022). However, like many banks, it faces challenges related to internal control systems, which are essential for ensuring accuracy, transparency, and accountability in financial reporting and operations. Internal control refers to the policies and procedures that organizations implement to safeguard their assets, ensure the integrity of financial reporting, and promote compliance with applicable laws and regulations (Ntuite, 2022).

In the banking sector, robust internal control mechanisms are particularly crucial due to the significant volume of transactions and the regulatory scrutiny under which financial institutions operate. Many studies have found that inadequate or poorly implemented internal control systems can lead to financial misreporting, fraud, and operational inefficiencies. Napitupulu, (2023) emphasizes the need for effective internal controls to protect bank assets and ensure accurate financial reporting. Researchers have sought to analyze how robust internal control systems contribute to the financial performance of banks. The problem often addresses whether banks with strong internal controls demonstrate better profitability, reduced risk of losses, and improved overall financial health. This lack of localized study creates challenges in formulating effective strategies and policies that can enhance internal controls and, consequently, financial performance.

It is observed that poor control environment, preventive controls, risk assessment and corrective controls affect negatively financial performance of commercial banks particularly in Bank of Kigali Plc. Internal control system allows banks to foresee potential problems which may cause financial losses and thereby prevent or minimize any future losses. Regular training programs for staff on the importance of internal controls and compliance requirements to foster a culture of accountability. Establish a schedule for regular internal audits to review and assess control systems, ensuring ongoing compliance and performance. Weaknesses in the internal control systems of commercial banks and enhancing them with technology, training, and rigorous evaluation, banks significantly improve their financial performance while mitigating risks. The above framework provides a comprehensive strategy to not only reinforce internal controls but also to ensure they contribute positively to the overall financial health of the institution. The above financial issues pushed the researcher to conduct this research in order to assess the effect of internal control system provide the successful financial management in banking institutions with reference of Bank of Kigali.

The general objective of this study assessed the effect of internal control system on the financial performance of commercial banks in Rwanda.

The specific objectives are the following:

i. To examine the effect of control environment on financial performance of Bank of Kigali;
ii. To analyze the effect of preventive controls on financial performance of Bank of Kigali;
iii. To determine the effect of control activities on financial performance of Bank of Kigali;
iv. To establish the effect of monitoring activities on financial performance of Bank of Kigali.

Research hypotheses:

$H_0$1: Control environment doesn't have significant effect on financial performance of Bank of Kigali;
$H_0$2: There is no significant effect of risk assessment on financial performance of Bank of Kigali;
$H_0$3: There is no significant effect of control activities on financial performance of Bank of Kigali;
$H_0$4: There is no significant effect of monitoring activities on financial performance of Bank of Kigali.

2. Literature Review

2.1 Theoretical Framework

This section explores the various theories related to the study; theoretical framework involves the review of theories underlying the study topic. Theories covered in this study include: Allocation of resource theory, expenditure theory, economic theory and progressive theory of expenditure.

2.1.1 Allocation of Resource Theory

Allocation of resource theory was developed by Peteraf and Barney (2017). It is concerned with the discovery of how nations, corporate, entrepreneurs or individuals distribute financial resources through budget management process to attain financial goals. For corporate economic resource to attain sustained competitive advantage, it should have the following qualities: priceless, rare, imperfectly imitable and non-substitutable. This calls for use of budget management systems to allocate those scarce economic resources in government institutions (Anantadjaya, 2018).

The economic concept of resource allocation is an important area of study in an organization using the invisible hand theory. Under invisible hand theory, the allocation of resources is done through competition, supply and demand by individuals and corporate (Peteraf, 2020). "Corporates distribute financial resources through budgeting in their attempts to meet predetermined financial targets". Therefore, the allocation of resource theory, helps organizations in allocating financial resources at their disposal through budget management system.

2.1.2 Modern Portfolio Theory

Balancing risk and returns is a cornerstone of modern portfolio theory. Markowitz's (2017) seminal work derived measures for calculating expected returns and expected risk of a portfolio. He presented variance as a meaningful measure of risk, and created a method of calculating the overall portfolio risk taking into account the imperfect correlation of price movements between assets. Variance is a statistical measure of how widely disbursed set of probability outcomes are around its mean value. When combining multiple assets that are less than perfectly correlated, the combined variance of the portfolio reduces. Markowitz's work into calculating these measures at a portfolio level allows today's investors to quantify the relationship between risk and return rather than relying on the investor's best guess.

Markowitz makes a number of important assumptions (Reilly & Brown, 2020) Each asset has a set of probable outcomes which can be thought of as a probability distribution. Investors aim to maximize their single period utility of wealth. Investors can estimate risk based on the variability of returns. Investors only base their investment decisions on the first and second moments of the distribution expected return and variance. For any given level of risk (or variance), the investor prefers a higher expected return. Similarly, for any given expected return, the investor prefers a lower level of risk.

2.1.3 Expenditure Theory

Expenditure theory was developed by (Rubin, 2017). This theory is of two kinds, the normative theory and the descriptive theory. Budget management needs a normative theory in deciding its critical policy on financial expenditure. Normative theory also explains why some corporate expenditure are given priority while others are not considered in their budgeting process, which in turn helps these corporates to perform well financially (Posner and Blondal, 2017). Normative theory of budgeting accomplishment and acceptance means end of conflict over the government's role in society. Budget management has become predominant process of government decision making.

Descriptive theory is based on keen observations or participations in public sector financial activities on budgets in order to achieve financial objective. This theory emphasizes importance of corporates having relevant facts to explain individual budget expenditure variation and which in turn assist in knowing why expenditures change as opposed to set financial targets (Ulrich, 2019). Organization use normative theory to choose activities or projects to be undertaken depending on the desirability of the project as expressed on the budget which in turn helps corporate to attain set financial targets.

2.2 Control environment on financial performance of commercial banks

Internal control is a procedure established by management, supervisors, and other employees to provide reasonable assurance that the organization's objectives are achieved. The internal control system used in this study is based on four main control areas: control environment, risk assessment, control activities, and monitoring. Control Activity, another element of internal control is the controlled activity. For example, the steps required to solve dangerous risks to ensure the purpose of the object in order to ensure compliance in the direction of management are policies and procedures to guarantee this (Nyakundi, Nyamita & Tinega, 2019). Control operations, whether performed manually or through computer systems, have different purposes and are used at different organizational and functional levels. Policies and procedures related to the following can be classified as key control activities in an audit, performance evaluation (Nyakundi, Nyamita, and Tinega, 2019).

Monitoring activities, controls are monitored to make sure they keep working properly. For example, the staff will probably stop the preparation of banking reconciliations if the acid and the accuracy of these reports are not taken into account. Continuous monitoring efforts, independent notes or combination of these are used to monitor control (Slaus, 2019). Monitoring is a continuous process whose main objective is to promptly alert management and key stakeholders of positive or adverse events in the process of achieving objectives.

2.3 Risk assessment on financial performance of commercial banks

Pagano (2020) emphasized the importance of risk management in financial institutions to create value for customers and shareholders. Corporate finance has linked the benefits of risk management to the hypothesis of maximizing shareholder value. Ali & Luft (2022) suggested that if there is an increase in communal value, the company will participate in the risk management policy. Therefore, the risk management, which was effective in either non -banking companies or banking organizations, hoped to enhance business value and shareholder wealth.

Pagano focused only on one element of the internal control system, risk management, which was considered to be primarily focused on enhancing shareholder wealth. Unlike other scientists engaged in similar research, this scientist borrowed heavily from agency theory. Linbo Fan (2019), in his study of the risk efficiency of large domestic US banks, found that earnings efficiency responded to credit risk with bankruptcy risk, but not to liquidity risk or the mix of credit instruments.

HoHahm (2019) reviewed the literature on exchange rates including the exposure of organizations in Korea to the interest rate. The study results revealed that commercial banks in Korea and banking companies involved in commodity operations had been subjected to a large extent to interest rate as well as exchange rate risks and that the subsequent profitability of commercial banks was significantly related to the degree of exposure associated with the pre-crisis. HoHahm (2019) on his study focused only on risk management while leaving the other four components of the internal control system intact. One component of an internal control system cannot be used to justify that all internal control systems have any relationship to the financial performance of a particular organization. Mwangi (2019) sought to determine whether risk management had an impact on the financial performance of Kenyan commercial banks. The study used a descriptive research design in which secondary data were collected from the Central Bank researcher as well as the banks' financial statements. Data was analyzed using multiple regression analysis. The studies confirmed that the Rwanda Bank's commercials in Rwanda lack effectiveness in risk management.

Kimoto (2015) surveys show that credit risk management procedures affect bank profitability. Researchers conducted research to determine whether credit risk management has influenced the financial indicators of Rwandan's commercial bank. The researcher adopted a descriptive research design and used a semi-structured questionnaire to collect primary data. The data was analyzed using Statistical Package for Social Sciences (SPSS) version 20 by the same researcher. Kimotto's research design was similar to that of Mwangi (2019) as both used a descriptive research design. Like Olumbe and Mwangi, Kimot also focused on risk management as one component of internal control systems, but his findings were not sufficient to support the conclusion that internal control systems have an impact on the financial performance of commercial banks. In conclusion, risk assessment plays an important role in understanding and assessing potential risks that may affect the financial performance of an entity. Identifying and assessing these risks can help companies develop strategies to mitigate them and improve overall financial performance.

2.4 Control activities on financial performance of commercial banks

Collins (2019) has highly evaluated how to control the preventive management to change the financial indicators of Bank of South Africa, using ASSA Limited Group as the theme research. The profile was introduced by some branches, 80 respondents, and the highest level of leadership in the ASSA Limit Group. Three components of preventive controls, namely control activities, internal audit and monitoring, were integrated to measure preventive controls. The linear regression model used showed that preventive controls have a positive influence on bank performance. However, risk assessment and internal environment, which are important components of internal control, were omitted from the assessment and the study drew its conclusions based on commercial banks. Mash (2019) studied the impact of internal and external audits on the financial performance of Pakistani banks by randomly selecting 115 respondents.

Through regression model, the findings revealed that there is a significant relationship between internal audit, external audit and bank performance in Pakistan. He recommended bank management and auditors to improve financial performance by incorporating internal and external audit in their decision making process. Despite the meaningful conclusions, his study does not take into account all activities involved in preventive control and does not open avenues for further research. Gnabry (2018) investigated how internal auditors contribute to changes in performance in German insurance companies. Information was gathered utilizing surveys from 39 insurance firms, which was analyzed utilizing the partial least square techniques. The results showed that monitoring and risk assessment exhibited a critical relationship 20 with of insurance firms' profitability. The internal environment had a non-significant negative impact on the profitability of the insurance company.

The study also utilized few components of preventive controls leaving out internal audit as well as information and communication. Hamadi&Juma (2018) investigated internal controls contribution on preventing fraud in financing administration among investment firms in Rwanda. Using a case study design, the researcher collected data through observations and semi-structured interviews. The results documented that weak internal controls contributed to fraudulent acts and that poor internal controls caused fraud. The survey also document that lack of control activities enhances fraud among Rwanda's investment companies.

2.5 Monitoring activities on financial performance of commercial banks

Monitoring the financial performance of commercial banks is crucial for regulators, investors, management, and other stakeholders to ensure stability, compliance, and sound financial practices. Understanding and analyzing key financial ratios can provide insights into a bank's performance: Measures a bank's capital in relation to its risk-weighted assets. A higher ratio indicates better financial health. Monitoring the financial performance of commercial banks involves a multifaceted approach that integrates quantitative metrics, qualitative assessments, and environmental factors. Regular, detailed analysis helps ensure that banks operate efficiently, remain compliant, and continue to meet their strategic objectives in an ever-changing economic landscape.

Afrigold Investment Company Limited was considered as a case study and was not a representative sample of investment companies in Rwanda. Kioko & Wambugu (2017) conducted corrective management and evaluation of selected companies. Fourteen companies were randomly selected from a pool of 13 listed companies. The study was based on a mixed method of data collection. Secondary data was used to measure the value of the firm while primary data recorded the internal controls adopted by the firm. It was concluded that control activities and risk assessment have a positive impact on firm value. Monitoring and communication and information exhibited insignificant influence on companies' firm value. The study employed a very limited sample and failed to elaborate on the methodology used. Kaunda & Aura (2017) was investigated as a means of adjusting Rwandan's commercial banks to increase fraud. The sample was composed of 10 managers of Branch 8 of various commercial banks. The study used regression models for analysis, and the results showed that financial governance controls have a negative impact on fraud detection. The association between reconciliation control and fraud detection was found to be negative and insignificant. It is evident that the researcher used a very small sample size and the geographical scope of the study was not clearly defined.

Njoroge (2017) examined how financial performance changes among pharmaceutical companies in Rwanda were attributable to risk assessment for the period between 2016-2018. Secondary data extracted from the company websites employed regression analysis and conclusions were made. According to the study, it has become obvious that the performance of pharmaceutical companies has been significantly influenced by risk assessment. The study used a limited period to perceive changes in financial indicators. Kyale & Mutua (2018) conducted a survey on internal controls on the profitability of financial institutions in the different banks. Fifteen financial institutions were useful, but six financial institutions were analyzed. Risk assessment, control activities, and internal audits have been used as the main internal control measures by the researcher. Primary data was used in this study and analyzed using inferential and descriptive statistics. They have concluded that internal auditors and activities have greatly influenced the profitability of financial institutions in Kigali. They used five Riccato scale to measure the profitability of financial institutions, but this is not a good profit.

3. Methodology

This chapter explains how the study was conducted. It was made up of methods, techniques of data collection, source of information and approaches both qualitative and quantitative that was used in the study. For any research carried out, the choice of methods and techniques to be used should depend on the objectives and purpose it has.

3.1 Research Design

The research was explanatory research; explanatory research is a research method that explores why something occurs when limited information is available. It can help a researcher to increase understanding of a given topic, ascertain how or why a particular phenomenon is occurring, and predict future occurrences.

3.2 Study population and Sample size

Population composed all employees of Bank of Kigali Headquarters which was comprised by 53 people. The target population was the staff from different departments. Due to the nature of the study, the study only considered staff from different departments, due to the smaller target population researcher decides to use all target population as sample size. Thus, the sample size was 53 respondents were considered representative of the total population.

The study used the Universal sampling technique in which every member of a population has a chance of being selected for a sample. This methodology aims to ensure that the sample is representative of the larger population, thereby minimizing bias and enhancing the validity of statistical inferences.

3.3 Data Collection Methods

researcher used questionnaires. Questionnaires consisted of close ended questions since they allowed for intensity and richness of individual perception in responding the asked questions and the questions were formulated according to the objectives of the study (Paige, 2012). In this research, the researcher used questionnaires to collect information related to research topic. The questionnaires were questions which are structured on a Likert scale with Strongly Agree, Agree, Neutral, Disagree and Strongly Disagree. To collect data, the researcher emailed questionnaires to all the respondents who were expected to fill in the questionnaire and email it back to the researcher within a week. The closed ended questions require simple answers from the respondents and open-ended questions require respondents to give fully their opinions and views regarding questions being asked in the study.

The researcher used documentation review method. This is the data collection process that was based on reading textbooks, documents and other sources which include internet, reports, newspapers, journals, government papers and the dissertations with information related to the study.

3.4 Data Analysis

This part presents the steps to be followed by the researcher after collecting the data from the field; It was employed Statistical package for Social Sciences (SPSS) version 20 in processing and data examination of which informed the presentation of findings, examination and elucidation. The presentation emphasized the hypothesis. Statistical treatment depends upon the problem, especially the specificity of data gathered. Data analysis was done based on descriptive statistics particularly means and standard deviation.

Where were there correlation analysis, regression analysis and model

$Y= \beta o+\beta_1 X_2 + \beta_2 X_2+ \beta_3 X_3 + \beta_4 X_4 +ȩ$

Where X= Internal control as independent variable

Y= Financial performance as dependent variable

βo= Constant

$\beta_1 X_{4=}$ Coefficient of estimation

X_1= Control environment

X_2= Preventive controls

X_3= Risk assessment

X_4= Corrective controls

This baseline model doesn’t make use of any independent variables to predict the value of dependent variable Y. Instead it uses the mean of the observed responses of dependent variable Y and always predicts this mean as the value of Y.

3.6 Ethical consideration

Research ethics are the moral principles that govern how researchers carry out their work. This study did not violate any ethical principles, which include safeguarding the privacy of research participants, clearly explaining the study's purpose, maintaining honesty and transparency, maintaining objectivity, respecting property, avoiding discrimination, and ensuring voluntary participation.

4. Results and Discussion

This section presents the detailed findings of the objectives which the researcher sought to achieve. These data analyzed using the Statistical Package for Social Sciences (SPSS) version 20.

4.1 Correlations Analysis

Correlation was conducted between independent and dependent variables. The aim was to establish the nature and strength of relation between independent and dependent variables. Correlation refers to a technique used to measure the relationship between two or more variables. When two variables are correlated, it means that they vary together. Positive correlation means that high values on one variable are associated with high values on the other, and that low values on one are associated with low values scores on the other (Kavale, 2017). In the interpretation of correlation, the sign of the correlation coefficient means either a positive or negative correlation coefficient. The positive correlation coefficient means that the variables move in the same direction, while negative correlation means variables move in opposite directions. The correlation significance is indicated by a probability value of less than 0.05 or 0.01. This means that the probability of obtaining such a correlation coefficient by chance is less than five times out of 100 or is less than one times out of 100, so the result indicates the presence of a relationship.

Table 1. Correlations between internal control system and financial performance of commercial banks

			Internal control system	Financial performance of commercial banks
Spearman's rho	**Internal control system**	Correlation Coefficient	1.000	.798*
		Sig. (2-tailed)	.	.016
		N	53	53
	Financial performance of commercial banks	Correlation Coefficient	.798*	1.000
		Sig. (2-tailed)	.016	.
		N	53	53

*. Correlation is significant at the 0.05 level (2tailed).

Legend:

[-1.00 - 0.00 [: Negative correlation;
[0.00 - 0.25 [: Positive and very low correlation;
[0.25 - 0.50 [: Positive and low correlation;
[0.50 - 0.75 [: Positive and high correlation and
[0.75 - 1.00] : Positive and strong correlation.

The Spearman correlation in Table 4.9 was used to determine the degree of association between internal control system and financial performance of commercial banks in Bank of Kigali Plc. The findings indicated that there is high positive correlation between internal control system and financial performance of commercial banks in Bank of Kigali Plc at r= 0.798*, p-value=0.016<0.05) and was found to be significant at 5% significance level suggesting the existence of high positive relationship between internal control system and financial performance of commercial banks in Bank of Kigali Plc, implying that the more often internal control system are designed, the increase of financial performance of commercial banks in Bank of Kigali Plc.

4.2 Multiple linear regression analysis

Multiple linear regression analysis was carried out to find out the effect of the independent variables (internal control system) on dependent variable (financial performance of commercial banks in Bank of Kigali Plc). Multiple Linear regressions were computed at 95 percent confidence interval to establish the relationship between independent variables and dependent variables. Based on the model summary, the coefficient of determination (R squared) shows the overall measure of strength of association between independent and dependent variables.

Table 2: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.698a	. 873	. 873	.639

a. a. Predictors: (Constant), Monitoring activities, Control environment, Control activities, Risk assessment

The results from Table 2, the value of adjusted r squared was .873 (87.3%) an indication that there was variation of 87.3% on financial performance of commercial banks in Bank of Kigali Plc was due to changes in internal control system at 95% confidence interval. Additionally, this means that factors not studied in this research contributed 12.7% of financial performance of commercial banks in Bank of Kigali Plc. These findings are in line with Abdul & Aldulaimi (2016), found that 87.3% of total variation in the dependent variable which is financial performance of commercial banks in Bank of Kigali Plc.

Table 3: ANOVA (Analysis of variance)

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	1.674	4	.418	125.437	.781b
	Residual	45.019	47	.958		
	Total	46.692	51			

a. Dependent Variable: Financial performance of Bank of Kigali
b. Predictors: (Constant), Monitoring activities, Control environment, Control activities, Risk assessment

As indicated in the Table 3 the F-test value was 125.437 with significance value of .781[b] at 5% level of significance. Since the p-value obtained was less than 0.05, the F-test was significant hence the conclusion that the regression model was good.

Table 4: Regression coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	5.277	.825		6.398	.000
	Control environment	-.034	.255	-.030	-.134	.894
	Risk assessment	.188	.468	.174	.401	.690
	Control activities	-.136	.273	-.118	-.498	.621
	Monitoring activities	-.220	.429	-.208	-.512	.611

a. Dependent Variable: Financial performance of Bank of Kigali

The equation ($Y = \beta 0+\beta_1 x_1+\beta_2 x_2+\beta_3 x_{3+}\beta_4 x_4$) becomes: Financial performance of commercial banks in Bank of Kigali Plc = $5.277-.034X_1+ .188X_2 -.136X_3 -.220X4$.
The regression equation above has established that taking all factors into account (internal control system) constant of 5.277 on financial performance of commercial banks in Bank of Kigali Plc.

The Table 4 provides the summary of results of regression analysis for the effect of internal control system on the financial performance of commercial banks in Rwanda. The results indicate that internal control system have positive and significant effect on financial performance of commercial banks at Bank of Kigali Plc (β_1= -.034, t= -.134, p = .894>0.05; β_2= .188, t= .401, p =.690>0.05; β_3= -.136, t= -.498, p = .621>0.05; β_4= -.220, t= -.512, p = .611>0.05), respectively. This shows that 1 per cent increase in internal control system will lead to -.034, .188, -.136 and -.220 percent increase on financial performance of commercial banks at Bank of Kigali Plc. Based on the findings above the model one (1) is represented as follows: financial performance of commercial banks at Bank of Kigali Plc = $5.277-.034X_1+ .188X_2 -.136X_3 -.220X4$. Thus, all hypotheses are higher than 0.05, it means that the hypotheses are accepted based on significant level.

5. Conclusion and Recommendations

5.1 Conclusion

The control environment plays a crucial role in the financial performance of commercial banks. A strong control environment is essential for maintaining the quality of financial reporting, ensuring compliance with regulatory requirements, and preventing financial misstatements or fraud. A well-established control environment leads to better financial performance, characterized by improved profitability, efficient use of resources, and a strong credit rating.
The implementation and maintenance of strong preventive controls directly enhance the financial performance of commercial banks by reducing losses, improving operational efficiency, lowering risk exposure, improving regulatory compliance, and strengthening their reputation. While there are associated costs and challenges, the benefits of these controls significantly contribute to the long-term financial health and sustainability of the banking institution.

The effect of control activities on the financial performance of commercial banks is overwhelmingly positive. Robust control activities are essential for mitigating risks, ensuring regulatory compliance, and fostering operational efficiency, all of which directly contribute to improved financial outcomes.

Effective monitoring, including internal controls, audit committees, and regulatory oversight, can enhance operational efficiency by identifying and mitigating risks. This, in turn, leads to lower operating costs and potentially higher profitability. Monitoring helps in identifying and controlling credit risk, market risk, and operational risk. This reduces the probability of loan defaults, investment losses, and fraud, improving asset quality and leading to a more stable financial position.

5.2 Recommendations

This study provides the following recommendations to the Bank of Kigali Plc as follows:

Bank of Kigali should implement preventive controls, such as credit risk management and operational risk management, which will reduce the bank's exposure to risks, which can lead to reduced provisions for loan impairment and improved liquidity.

5.3 Area for Further Research

The research recommended other researchers to conduct the following research:

1. Analyzing how effective internal control frameworks help banks identify, assess, and mitigate various financial and operational risks.

2. Examining the relationship between the quality of internal audits and the financial outcomes of commercial banks.

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