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Internal Control And Financial Performance Of Commercial Banks In Rwanda, A Case of Bank of Kigali

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Abstract:

Background: This study sought to investigate the internal control and financial performance of commercial banks in Rwanda, a case of Bank of Kigali (BK). Specifically it looked at examining the effect of control environment, risk assessment, control activities, monitoring on financial performance of bank. The target population of this study was 62 employees of BK. Sample size of the study was 62 employees of Bank of Kigali working in different departments related to financial and accounting obtained by using universal sampling technique.

Methods and Materials: In order to collect both primary and secondary data, questionnaires and document reviews were employed as the data collection instruments. Descriptive statistics and a multiple regression model were used as the data analysis tools.

Results: The findings showed that the average net profit margin during the previous four years was 6.15 percent, the average return on assets over that time was 0.68 percent, and the average return on equity over that time was 4.9 percent. The results showed that the Bank of Kigali's risk assessment had a very high mean impact on its financial performance, at 4.34, and that the risk assessment's regression coefficients were significant (β 1=0.574, p-value=0.028<0.05). The findings revealed that control activities in Bank of Kigali was at very high mean of 4.63 and also findings revealed that there is positive and significant moderate correlation between control activities and financial performance of Bank of Kigali at (ρ = 0.512*,sig=0.000<0.01). The findings show that regression of coefficients of control activities (β 2=0.503,p-value=0.016<0.05). The findings revealed that the overall view of respondents on control environment in Bank of Kigali was at very high mean of 4.36 and also the study revealed that there is positive and significant regression of coefficients of control environment and financial performance of Bank of Kigali was β 3=0.460, p-value=0.046<0.05. The results showed that respondents' perceptions of Bank of Kigali monitoring activities were generally very positive, with a mean score of 4.34. The study also showed that there was a positive and significant relationship between Bank of Kigali monitoring activities and financial performance, with a regression coefficient of β 4=.232,p-value=0.048<0.05.

Conclusion: The researcher recommends the BK establish a proper environment where internal controls are supported in order to improve commercial banks' performance.

Keyword: Internal Control, Financial Performance, Commercial Banks In Rwanda, Bank of Kigali.

i. Introduction

Although accountants and auditors are sometimes assumed to be in charge of internal controls, management is actually in charge of maintaining effective controls. Regularly assessing the effectiveness of internal controls to make sure they are well-designed and operating as intended is a crucial component of any comprehensive internal control mechanism. Failure to ensure that resources are allocated to clearly defined priorities and to ensure that value for money will be achieved in public spending is caused by weaknesses in internal control mechanisms (control over the payroll, over spending commitments, and over procurement processes) (Ibrahim Diibuzie, & Abubakari 2017). The Institute of Internal Auditors (IIA) has updated the definition of internal controls to reflect this possibility as a challenge.

Global companies have realized the need of internal control in enhancing asset management in businesses and enhancing their financial performance (Olumbe, 2020). Internal controls are crucial, as seen by the several recent worldwide company financial scandals. Enron and WorldCom in the United States, Parmalat in Europe, and Chuo Aoyama in Asia are notable cases. The findings of the Treadway Commission Report from 1987 in the United States (USA) indicated that internal control failures—either because there are no internal controls in place or there are poor

internal controls—are the main factor in many instances of false business financial reporting (Dumitrascu & Savulescu, 2020). Due to a rise in instances of poor internal control, commercial banks in developing countries, notably those in Africa, have been dealing with problems connected to a persistent slowdown in operational and financial performance as well as bank inefficiencies in service delivery.

Businesses and other financial institutions in Kenya continue to struggle with cash flow, the timely submission of financial reports, ineffective accountability for the use of commercial financial resources, fraud, as well as other inappropriate uses of bank resources, according to Njeri (2019), Muhunyo and Jagongo (2018), and other researchers. Weak internal controls that resulted in decreased bank efficiency and poor operational performance among commercial banks in African countries were the cause of these crises.

Due to the intricacy of banking transactions and the volume of consumers that conduct them, banks may produce systematic transactions that are particularly vulnerable. Therefore, soundness in bank transactions is necessary in order to sustain the stability of Rwanda's financial system. Internal control systems are essential for firms, particularly banks, as the banking industry plays a significant role in economic instability, the slow expansion of genuine economic activity, corruption, and fraud risk. With reference to the Bank of Kigali, this study aims to ascertain the impact of internal control on the profitability of commercial banks in Rwanda. The main objective of this research was Internal Control and Financial Performance of Commercial Banks in Rwanda. A Case of Bank of Kigali. The specific objectives that guided this thorough research are:

- i. To determine the effect of risk assessment on financial performance of Bank of Kigali;
- ii. To find out the effect of control activities on financial performance of Bank of Kigali;
- iii. To examine the effect of control environment on financial performance of Bank of Kigali;
- iv. To assess the effect of monitoring activities on financial performance of Bank of Kigali.

ii. Theoretical Literature

Internal Control System and Financial Performance

Internal controls are procedures created by management, individuals in charge of providing governance, and other staff in order to give reasonable certainty that the entity's objectives will be met. The internal control system employed in this study is built on four main control areas: control environment, risk assessment, control actions, and monitoring.

Control activities: One further element of internal controls is control activities. In order to ensure that management directions are followed, such as that required steps are made to address risks that endanger the achievement of the entity's objectives, control activities are the policies and procedures that help assure this (Nyakundi, Nyamita, & Tinega, 2019). Control operations, whether they are carried out manually or through an IT system, have different goals and are used at different organizational and functional levels. Policies and procedures that relate to the following can be classified as control activities that are important to an audit: Evaluations of performance (Nyakundi, Nyamita, & Tinega, 2019).

Risk assessment and financial performance: Risk assessment is the second important element of internal control. Events that pose a threat to the accomplishment of goals are referred to as risks. Finally, they have an impact on an organization's capacity to carry out its objective. The process of finding, evaluating, and choosing how to handle these items is known as risk assessment. At every level of a company, there are risks that could inhibit the accomplishment of set goals (Gamage, Lock, & Fernando, 2019). These risks can be internal or external. Risk assessment, according to COSO (2019), is the process of identifying and analyzing risks that are pertinent to the fulfillment of objectives and serving as a foundation for deciding how the risks should be handled.

Monitoring activities: Controls are monitored to make sure they keep working properly. For instance, staff is likely to quit preparing bank reconciliations if the timeliness and accuracy of those reports are not reviewed. Continuous monitoring efforts, independent evaluations, or a combination of the two are used to monitor controls (Slaus, 2019). Monitoring is a continuous process with the primary goal of giving management and key stakeholders early warnings of positive or unfavorable developments in the pursuit of goals.

Financial Performance

Bank financial performance is measured in terms of profitability, which means nothing else than an increase in net asset value. A bank's ability to return its owner's investment with a profit is referred to as profitability (Kamau, 2019). Most businesses are in business to make a profit, and profitability ratios reveal a business's general effectiveness and performance. Profit margin and returns are the two components that make up profitability ratios.

Net Profit Margin (NPM): The term "Net Profit Margin" (also known as "Profit Margin" or "Net Profit Margin Ratio") refers to a financial ratio that is used to determine the percentage of income that a company generates from its total sales. It measures how much net profit an organization makes for every dollar of revenue generated. The net profit margin is calculated as net earnings (also known as net income) divided by total revenue and expressed as a percentage. In order to obtain vital data about a business, financial ratios are calculated using statistics taken from financial documents.

The common profit margin ratio of every corporation can be extraordinary relying on which industry the organization is in. As a financial analyst, it is essential in every day financial analysis (CFI, 2018). At the end of the

year, a percentage of every dollar a business makes is left over as profit. In other words, it displays the amount of net income generated by a business for every dollar of sales. Based on management's sales projections, investors and analysts frequently use net margin to assess how effectively a company is run and project future profitability. Net profit Margin=

Return on Asset: An indicator of managerial effectiveness is return on assets (ROA), which assesses how well management has been able to convert assets into net earnings. ROA is a crucial metric for assessing an organization profitability. It measures the ratio of a company total assets to its net income after taxes. By displaying how much profit the firm makes for every dollar it invests in assets, the ROA shows what the corporation can do with its resources. It is a useful tool for comparing businesses in the same sector. It also gauges how well the management of the company can create revenue by utilizing the resources at their disposal. The higher ROA demonstrates the organization's improved resource (asset) utilization (Kosmidou, 2018).

The computation formula of the indicator is:

ROA = x100

Return on Equity (ROE): To determine return on equity, net income less preferred dividends is compared to the total equity of the shareholders. Return on equity (ROE), a financial metric, assesses a company's profitability in relation to the total amount of invested or reported shareholder equity on the balance sheet. The investors want to see a return on their equity (ROE). A company with a high return on equity is more likely to be able to generate cash on its own.

As a result, the company is better at making profits the greater the ROE (Kamau, 2019). The income attributable to shareholders is compared to the amount of money they invested in the business using this ratio. It takes a company's level of debt or other financial leverage into account. In both good and bad years, financial leverage amplifies the effect of earnings on ROE. The company may be using a significant amount of debt if the return on assets and return on equity show significant differences. The liquidity and solvency ratios should then be carefully examined. The indicator is determined thus:

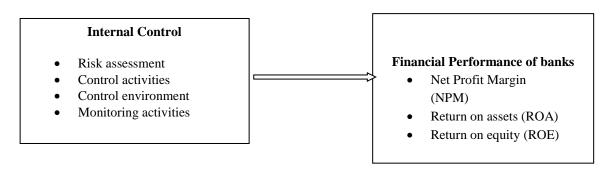
ROE = x

iii. Conceptual Framework

It is critical and crucial to clarify how each research is conceptualized in this section because it explicitly addresses the research questions from chapter one. Conceptualization, according to Miles and Huber (2011), is a technique for determining which aspect of a study should be foundational for the researcher. This section covers the theoretical background for analyzing how internal control systems affect BK's financial performance. Figure 2.1 below summarizes the relationships between the independent and dependent variables:

Figure 2.1: Conceptual Framework Independent Variables

Dependent Variables



iv. Research Materials and Methods Research Design

The structure and process to be used in order to address the research topic are described in a research design (Babbie, 2021). Both a descriptive and correlational research design were used in this study. The study's descriptive methodology allowed the researcher to gather comprehensive data about the population under examination.

A descriptive design was used to describe the internal control system of the Bank of Kigali, which consists of risk assessment, control actions, a controlled environment, and monitoring. The level of financial performance of BK from 2018 to 2021 in terms of Net Profit Margin, Return on Asset and Return on Equity was also described in the study using a descriptive research design. The association between internal control and the financial performance of the Bank of Kigali was established through the study's use of multiple linear regressions and correlation research design.

Target Population

A study population, according to Kothari (2018), is a clearly defined or determined group of the people, things, houses, businesses, services, elements, or events that are the subject of the study. Therefore, the population should meet the criteria that the researcher is studying and should be homogeneous. The total population was 62 employees of Bank of Kigali.

Table 1: Population Size

Category	Target population
Branch manager	1
Operational department	14
Accountant and financial management	6
Loan recovery and loan office	15
Commercial officers	14
Credit risk management	10
Auditors	2
Total	62

Source: Primary data, 2022

Data collection Instruments

This instrument was chosen because it made data collection easier for both the researcher and the respondents. It was composed of organized elements. With structured items, respondents select one of a few possible answers. Due to the bank's employees' rising transactions and business, they would not be able to provide the researcher the time they required to collect the primary data without making another visit to the bank. 62 different questions were created and self-administered in total. A self-administered questionnaire was used to collect information from Bank of Kigali employees.

Documentary review is used to collect secondary data through reading journals, books, thesis, regulations, brochures, annual reports and some other publications relating to the subject under the study. Documentation method was used because it enabled the researcher to get ready-made data and information by passing through various documents on the topic in the question. Therefore, this study used financial reports of BK from 2018 to 2021 and were obtained from office of Bank of Kigali.

Procedures of Data Collection

The researcher first initiated contact with the respondents via delivering them paper surveys, personal face-to-face and telephone contact, as well as an introduction letter alerting them of the study. Two trained research assistants and the researcher self-administered the questionnaires. A self-administered questionnaire made it possible to clarify the questions and dig deeper to find additional relevant information. This clarified it and produced pertinent responses. An introduction letter assuring the respondents of their confidentiality was attached to every questionnaire in an effort to boost response rates.

v. Results Findings on the Profile of Respondents

Background information on respondents is considered relevant since it has an important effect on their ability to offer enough information on the study variables. The data is shown below, categorized into groups for gender, education, and work experience.

Table 3: Gender of Respondents

		Frequency	%
Valid	Male	37	59.7
	Female	25	40.3
	Total	62	100.0

The study aimed to identify the respondents' gender. According to the data, there were 40.3% (25) females and 59.7% (37) male. The information gathered from both men and women is equally useful for the purpose of this study. Males made up the majority of the respondents, indicating that male employees make up a greater proportion of BK's human resource. It indicates that the BK emblazed the Rwandan policy of women inclusion in all aspects of the country.

Table 4. Education Level of Respondents

		Frequency	%
Valid	Diploma	0	0.0
	Bachelor's degree	51	82.3
	Masters	11	17.7
	PhD	0	0
	Total	62	100.0

Source: Primary data, 2023

The highest degree of education the respondents reached was requested of them. According to Table 4 findings, 51 respondents, or 82.3%, had bachelor's degrees as their highest level of education, while 17.7% had Master's degrees. This demonstrates that the respondents had the necessary training and familiarity with the internal controls used by BK, which gives pertinent data for the study. Additionally, the respondent's level of education allowed the researcher to collect accurate information about the functionality and effectiveness of the computerization system installed by the entity. This is because someone with this level of education has a strong understanding of logic and reasoning and can offer more accurate information about the computerization system used by BK.

Table 5: Working Experience of Respondents

	_	Frequency	%
Valid	Below 5 years	8	12.9
	Between 5 and 10 years	16	25.8
	Above 10 years	38	61.3
	Total	62	100.0

Source: Primary data, 2023

The respondents were requested to indicate the number of years they have been working with BK. Majority 38% (61.3) had been working at BK for the period above 10 years, 25.8% of respondents had been working at BK for the period between 5 and 10 years and the remaining 12.9% of respondents had been working in BK for the period below 5 years. This shows that the respondents had been at the bank long enough to understand the internal control employed in BK hence provided reliable information for the study. According to the study, most of the respondents have worked for a longer period of time, thus they are more familiar with the internal control systems that BK uses to remain competitive. This supports the findings of Park's (2012) study, which found that product intelligence improves performance levels due to scale and scope economies, market power effects, risk reduction effects, and learning effects.

Presentation of Findings

The presentation of findings in this study comprises of the descriptive statistics on internal control systems, financial performance of Bank of Kigali and correlation and multiple linear regressions analysis.

Descriptive Statistics on internal Control System used by Bank of Kigali

The objective of the study was to evaluate how well the Bank of Kigali current internal controls are working. The BK employees served as the primary respondents in achieving this goal. They expressed their opinions in reference to the literature review's citations of internal control procedures. These include monitoring activities, control environments, control activities, and risk assessment. On a five-point Likert scale, respondents were asked to rate how they perceived BK's internal control system.

The used Likert scale has five points: 1 for strongly disagreeing, 2 for disagreeing, 3 for neutrality, 4 for agreement, and 5 for strongly agreeing. Frequency, percentage, Mean score, and standard deviation were used to assess and describe the respondents' responses. The assumption was that the factors were more significant as evaluative criteria the higher the score.

Table 6: Findings on Risk Assessment used by BK

-		SD		D	_	N		A		SA	Mean	St. dev
	fi	%	Fi	%	fi	%	Fi	%	fi	%		
BK has defined adequate objectives for the bank	0	.0	4	6.5	6	9.7	5	8.1	47	75.8	4.53	.92
BK outlines risks that affect achievement of its goals	0	.0	9	14.5	11	17.7	5	8.1	37	59.7	4.13	1.17
BK has a set of standards for determining whether fraudrelated risks to the company are the most critical.	0	.0	8	12.9	5	8.1	5	8.1	44	71.0	4.37	1.09
BK has put in place procedures to guard against serious risks that could result from fraud.	4	6.5	4	6.5	1	1.6	10	16.1	43	69.4	4.35	1.20
Overall mean											4.34	1.09

Source: Primary data, 2023

Table 6 findings show that, with a very high mean of 4.53, which implies strong evidence of fact and a standard deviation of 0.92, which suggests heterogeneity of responses, BK has defined adequate objectives for the bank. 6.5% of respondents disagreed with this statement, while 9.7% were neutral, and 75.8% strongly agreed. The results showed that 14.5% of respondents disagreed and 17.7% were neutral, while 8.1% of respondents strongly agreed and the majority of 59.7% of respondents agreed, with a high mean of 4.13, which implies that fact appear more, and a standard deviation of 1.17, which implies heterogeneity of responses.

The findings demonstrated that BK has criteria for identifying which fraud-related risks to the organization are most serious, with a very high mean of 4.37, which shows there is strong evidence of the existence of fact, and a standard deviation of 1.09, which suggests heterogeneity of responses. The results also showed that, with 12.9% of respondents disagreeing, 8.1% of respondents being neutral, 8.1% of respondents agreeing, and 71% of respondents strongly agreeing. According to the findings, 6.5% of respondents strongly disagreed, 16.1% of respondents strongly agreed, while just 6.51% of respondents opposed and 1.6% of respondents were neutral. With a very high mean of 4.35, which suggests there is strong evidence of fact, and a standard deviation of 1.2, which suggests heterogeneity of responses, 69.4% of respondents agreed that BK had put in place systems to protect significant risks that may occur from fraud that may emerge from fraud. The overall perception of respondents toward risk assessment was at a very high mean of 4.34, which suggests that there is significant proof to support the claim that BK uses risk assessment as an internal control system, and a standard deviation of 1.09, which suggests that responses were heterogeneous. The aforementioned findings are consistent with those made by Magara (2013), who concluded that institutions would fall short of their objectives due to inefficient risk assessment in the absence of an effective internal control mechanism. The findings supported Ondieki's (2013) statement that internal control audit goals should be in line with management objectives in addition to business objectives. The aforementioned results are consistent with the study of Olatunji (2009), which came to the conclusion that a strong standard internal control system might help the bank prevent fraud and promote improved operations.

Table 7: Findings on Control Activities used by BK

		~~								~ .		~ -
_		SD		D		N		<u>A</u>		SA	Mean	St. dev
	fi	%	Fi	%	fi	%	Fi	%	fi	%		
Reconciled amounts are investigated and their sources determined	0	.0	1	1.6	1	1.6	7	11.3	53	85.5	4.81	.54
On a regular basis, independent process audits and evaluations of control actions are conducted.	0	.0	3	4.8	3	4.8	2	3.2	54	87.1	4.73	.77
Employees are trained to implement the accounting and financial management system in Bank of Kigali.	0	.0	6	9.7	1	1.6	5	8.1	50	80.6	4.60	.93
Unauthorized one employee to have access to all sensitive information without the approval of BK top management.	3	4.8	5	8.1	3	4.8	5	8.1	46	74.2	4.39	1.19
Policies defining what should be done and processes affecting those policies are typically part of control operations at the Bank of Kigali.	0	.0	5	8.1	3	4.8	1	1.6	53	85.5	4.65	.91
Overall mean											4.63	0.86

With a very high mean of 4.81, which indicates that there is strong evidence of the existence of a fact, and a standard deviation of 0.54, which denotes response heterogeneity, Table 7 results show that, while only 11.3% of respondents agreed and the majority, 85.5%, strongly agreed that reconciled amounts are investigated and their sources are established, the remaining respondents (the remaining 0.1%) disagreed. According to the results, 3.2% of respondents strongly agreed—as did 87.1% of those who responded at all—that independent process checks and evaluations of controls activities should be carried out regularly. The results also showed that 4.8% of respondents disagreed and 4.8% of respondents were neutral, with a very high mean of 4.73, which shows that there is significant evidence of this fact's existence, and a standard deviation of 0.77, which demonstrates heterogeneity of answers.

The results showed that 8.1% of respondents agreed and 80.6% of respondents strongly agreed that employees are trained to implement the accounting and financial management system in Bank of Kigali, with a very high mean of 4.60 implying there is strong evidence of existence of fact and standard deviation of 0.93 implying heterogeneity of responses. In contrast, 9.7% of respondents disagreed and 1.6% of respondents were neutral. The findings revealed that 8.1% of respondents agreed and the majority (74.2%) strongly agreed that it shouldn't be permitted for one employee to have access to all crucial data without the approval of BK's senior staff. The very high mean of 4.39 suggests there is considerable evidence for a fact existence, while the standard deviation of 1.19 suggests that responses were heterogeneous. According to the results, 1.6% of respondents highly agreed, and the majority— 85.5%—strongly agreed—that control operations often involve policies outlining what needs to be done and procedures that have an impact on those policies in the Bank of Kigali. The results also revealed that 8.1% of respondents disagreed, 4.8% were neutral, and 1.6% strongly agreed that there is substantial evidence for the existence of a fact, with the majority of respondents, or 85.5%, agreeing, standard deviation of 0.86 suggests that there is heterogeneity in the responses, as evidenced by the results. A very high mean of 4.63, which indicates that there is significant evidence to support the argument that BK uses control activities as an internal control system, and a standard deviation of 1.21, which suggests response heterogeneity, indicate that the overall perception of respondents about control activities in BK. The findings support Tunji (2013) claim that internal controls are a set of guidelines, instructions, and practices that a business uses to give a reasonable level of assurance that: (a) its financial reports are accurate; (b) its operations are effective and efficient; and (c) its activities are in compliance with relevant laws and regulations.

Table 8: Findings on Control Environment in BK

		SD		D	=	N		<u>A</u>		SA	Mean	St. dev
	fi	%	Fi	%	fi	%	Fi	%	fi	%		
The bank has a clear organization structure	0	.0	4	6.5	4	6.5	7	11.3	47	75.8	4.56	.88
The policies, procedures and guideline are documented	0	.0	5	8.1	3	4.8	5	8.1	49	79.0	4.58	.92
All employees are aware of the guidelines	2	3.2	5	8.1	5	8.1	8	12.9	42	67.7	4.34	1.13
The internal control principles can identify irregularities.	1	1.6	4	6.5	4	6.5	4	6.5	49	79.0	4.55	.99
Management review financial transaction regularly	0	.0	0	.0	2	3.2	1	1.6	59	95.2	4.92	.38
BK possesses goal, independent and active audit committee	1	1.6	6	9.7	6	9.7	47	75.8	2	3.2	3.69	.76
The bank control environment is adequate for achieving its objectives.	0	.0	16	25.8	2	3.2	14	22.6	30	48.4	3.94	1.25
Overall mean											4.36	0.90

With a very high mean of 4.56, which implies strong evidence of a fact existence, and a standard deviation of 0.88, which suggests response heterogeneity, Table 8 results demonstrate that the bank has a clear organizational structure. 11.3% of respondents agreed, and the majority, 75.8% of respondents strongly agreed, that the bank has a clear organizational structure. The majority of respondents (79%) strongly agreed that the policies, procedures, and guidelines are documented, whereas 8.1% of respondents and 4.8% of respondents had no opinion.

According to the high mean of 4.58, which suggests that the reality is more obvious, and the standard deviation of 0.92, which suggests response heterogeneity, 8.1% of respondents agreed and 4.8% were neutral. The results revealed that 12.9% of respondents agreed and the majority (67.7%) strongly agreed that all employees are aware of the guidelines. The mean was very high at 4.34, indicating that there is strong evidence to support this claim, and the standard deviation was 1.13, indicating that there was a wide range of opinions. 3.2% of respondents were neutral, while 8.1% of respondents disagreed.

According to the results, 1.6% of respondents strongly opposed, 6.5% disagreed, and 6.5% were neutral, whilst 6.5% agreed and the majority agreed. With a very high mean of 4.55, which suggests there is strong evidence of the existence of fact, and a standard deviation of 0.99, which suggests heterogeneity of responses, 79% of respondents strongly agreed that the internal control guidelines are able to detect anomalies. According to the statistics, 1.6% of respondents agreed, 3.2% disagreed, and the majority agreed. With a very high mean of 4.92, which suggests there is strong evidence of the presence of a fact, and a standard deviation of 0.38, which suggests homogeneity of responses, 95.2% of respondents strongly agreed that management reviews financial transactions on a frequent basis. According to the findings, 3.2% of respondents strongly agreed, making up the majority, as opposed to 1.6% who strongly disagreed, 9.7% who disagreed, and 9.7% who were neutral.

The majority of respondents—75.8%—agreed that BK has an active, independent audit committee that serves a purpose. This is indicated by a high mean of 3.69 and a standard deviation of 0.76, which both indicate that the fact is more apparent. The results showed that 25.8% of respondents disagreed, 3.2% were neutral, 48.4% strongly agreed, and the remaining 22.6% agreed, with a high mean of 3.94, which suggests that the fact appears more strongly, and a standard deviation of 1.25, which suggests heterogeneity of responses.

A very high mean of 4.36, which indicates that there is strong evidence to support the existence of a control environment in BK as a result of internal control activities used by BK, and a standard deviation of 0.90, which suggests response heterogeneity, indicate the respondents' overall perception of the control environment in BK. The results are consistent with Sarens & De Beelde's (2017) argument that management (control environment) should

serve as the cornerstone of any system of internal controls. They stress that an internal control system's performance depends on the "tone at the top, the level of risk and control awareness."

Table 9: Findings on Monitoring Activities used by BK

		SD		D		N		A		SA	Mean	St. dev
	fi	%	Fi	%	fi	%	Fi	%	fi	%		
BK assesses the quality of its system's performance over time	0	.0	12	19.4	1	1.6	46	74.2	3	4.8	3.65	.85
BK separates evaluations during monitoring its activities	1	1.6	2	3.2	6	9.7	10	16.1	43	69.4	4.48	.92
BK reports are prepared at the end of financial year	1	1.6	0	.0	4	6.5	10	16.1	47	75.8	4.65	.75
BK form an integrated system that reacts dynamically to changing conditions	2	3.2	0	.0	1	1.6	15	24.2	44	71.0	4.60	.82
Overall mean											4.34	0.85

Source: Primary data, 2023

The results from Table 9 show that 74.2% of respondents agreed that BK assesses the quality of its system's performance over time with a very high mean of 3.65, which implies that the fact appear more and standard deviation of 0.85, which implies heterogeneity of responses. However, 19.4% of respondents disagreed and 1.6% were neutral, while 4.8% of respondents strongly agreed.

According to the results, 16.1% of respondents strongly agreed, 1.6% of respondents strongly disagreed, 3.2% of respondents disagreed, and 9.7% of respondents were neutral. According to 69.4% of respondents, BK separates evaluations while monitoring its actions. The high mean of 4.48 suggests that this is the case more often, while the standard deviation of 0.92 suggests that there is response heterogeneity. With a very high mean of 4.65, which suggests that there is strong evidence of the existence of a fact, and a standard deviation of 0.75, which suggests heterogeneity of responses, the results showed that 16.1% of respondents agreed and the majority of 75.8% of respondents strongly agreed that Bank of Kigali reports are prepared at the end of the financial year. The results also showed that 1.6% of respondents strongly disagreed and 6.5% of respondents were neutral.

The results showed that, with a very high mean of 4.6, which implies that there is strong evidence of the existence of a fact, and a standard deviation of 0.82, which suggests heterogeneity of responses, Bank of Kigali form an integrated system that reacts dynamically to changing conditions, with 3.2% of respondents strongly disagreeing and 1.6% of respondents neutral. The overall perception of respondents toward Bank of Kigali's monitoring activities was very positive, with a mean of 4.34 and a standard deviation of 0.83 indicating that there is strong evidence to support the existence of BK's use of monitoring activities as an internal control system. The results are consistent with Drehmann (2016) argument that management (control environment) should serve as the cornerstone of any system of internal controls. They underline that the success of an internal control system depends on the tone set at the top and the degree of risk and control awareness.

Descriptive Statistics on the Financial Performance of BK

The study objective was to determine how respondents felt about BK's financial performance. The respondents were questioned about their opinions on the announcement regarding BK's financial performance. Descriptive statistics including frequency, percentage, mean, and standard deviation were used to examine the results.

Table 10: Findings on the Financial Performance of BK

	SD		D	D N		A			SA Mean	Mean	St. dev
	fi %	Fi	%	fi	%	Fi	%	fi	%		
BK has sufficient revenues to cover the costs and other operation	7 11.3	3 5	8.1	2	3.2	6	9.7	42	67.7	4.15	1.44
and administrative expenses											

Over the previous five years, the net income increased annually.	0	.0	0	.0	1	1.6	1	1.6	60	96.8	4.95	.28
BK has been efficient last five years in terms of rate of return on assets	1	1.6	4	6.5	3	4.8	38	61.3	16	25.8	4.03	.85
Net profit margin has been increased in the last five years	1	1.6	3	4.8	5	8.1	14	22.6	39	62.9	4.40	.95
Overall mean											4.38	0.88

According to Table 10 results, the majority of respondents (9.7%) agreed with the statement, while 11.3% strongly disagreed, 8.1% disagreed, and 3.2% were neutral. With a high mean of 4.19, which suggests that the fact appears more strongly, and a standard deviation of 1.44, which suggests that responses were heterogeneous, 67.7% of respondents strongly agreed that BK has enough income to cover costs and other operating and administrative expenses. The results showed that none of the respondents strongly agreed or disagreed, while 1.6% were neutral and 96.8% strongly agreed that net income increased year over year over the previous five years. The high mean of 4.95 meant that the presence of the fact was strongly supported, while the low standard deviation of 0.28 suggested that the replies were uniform. According to the results, 25.8% of respondents strongly agreed, 1.6% strongly disagreed, 6.5% disagreed, and 4.8% were neutral. With a very high mean of 4.05, which suggests that the fact appears to be more true, and a standard deviation of 0.85, which suggests response heterogeneity, 61.3% of respondents agreed that BK has been effective during the past five years in terms of rate of return on assets. The findings revealed that 22.6% of respondents agreed, making up the majority of the population. In contrast, 1.6% of respondents strongly disagreed, 4.8% disagreed, and 8.1% were neutral.

With a very high mean of 4.40, which suggests there is significant proof of the presence of the fact, and a standard deviation of 0.95, which suggests response heterogeneity, 62.9% of respondents strongly agreed that Net profit margin had increased over the previous five years. The overall perception of respondents toward BK's financial performance was at a very high mean of 4.38, which suggests that there is significant proof supporting the presence of the fact that BK used financial performance, and a standard deviation of 0.88, which suggests response heterogeneity.

Correlation analysis between internal Control System and Financial Performance

The purpose of the study was to determine whether the study variables were related. It made advantage of a correlation analysis. The Pearson correlation coefficient was used to determine the relationship between the study's variables. The strength and direction of the association between the dependent and independent variables were determined using correlation analysis. Spearman correlation coefficients are used in statistics to measure how strong a relationship is between two variables.

The quantity ρ , called the linear correlation coefficient, measures the strength and the direction of a linear relationship between two variables. Therefore, when both the dependent (outcome; response) and independent (predictor) variables are ordinal numeric, or when one variable is an ordinal numeric and the other is a continuous variable, Spearman's coefficient can be used. Simply said, a positive correlation value indicates a positive association between the variables, and a negative correlation value indicates the opposite. The next step is to determine whether or not the link is statistically significant. To do this, the estimated p-value is compared to two well-known p-alphas (0.01 and 0.05). The link is deemed to be statistically significant if the p-value for one of them is less, and statistically insignificant if the p-value is more.

Table 14: Correlation Coefficients between internal Control and Financial Performance

		X1	X2	Х3	X4	Y
Diek oscosoment(V1)	Pearson Correlation	1				
Risk assessment(X1) Control activities(X2)	Pearson Correlation	0.431	1			
Control environment(X3)	Pearson Correlation	0.430*	0.599*	1		
Monitoring activities(X4)	Pearson Correlation	0.384	0.189	0.254	1	
Financial performance of BK(Y)	Pearson Correlation	0.652**	0.512**	0.529*	0.679**	1

Sig. (2-tailed) 0.000 0.000 0.021 0.008

Source: Primary data, 2023

Table 14 findings showed that there is a moderately favourable and significant correlation between the Bank of Kigali's risk assessment and financial performance at (ρ =0.652*,sig=0.000<0.01). This suggests that an improvement in risk assessment has a somewhat positive impact on Bank of Kigali's financial performance. The results showed that there is a somewhat positive and substantial link between Bank of Kigali control activities and financial performance at (ρ = 0.512*,sig=0.000<0.01). This suggests that improving control processes help the Bank of Kigali's financial performance moderately improve. The results showed that there is a somewhat positive and substantial link between the Bank of Kigali's control environment and financial performance at (ρ = 0.529*,sig=0.021<0.05). This suggests that an improvement in the control environment helped the Bank of Kigali's financial performance moderately improve. The results showed that there is a somewhat favorable and substantial association between Bank of Kigali monitoring operations and financial performance at (ρ =0.679**,sig=0.008<0.01). This suggests that improved monitoring efforts help the Bank of Kigali's financial performance moderately improve.

Table 15: Analysis of Variance and F-Test Results (ANOVA)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1754.847	4	438.712	8.883	.000 ^a
	Residual	2814.869	57	49.383		
	Total	4569.716	61			

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

The data significance level was tested at the 5% level using ANOVA to see if the data fit well with the regression model. The calculated p-value of 0.000 is less than the critical threshold of significance of 0.05, and the F-value of 8.883 is more than the critical F(,v1=4,v2=61)=2.53 as indicated in Table 16. This suggests that internal control activities like monitoring, risk assessment, control environment, and control activities as an independent variable are effective predictors of banks' financial success. This further implies that the leaner regression model fits the data.

Table 16: Regression Coefficient

		Unstandardized Coefficients		Standardized Coefficients		
Model	I	В	Std. Error	Beta	t	Sig.
1	(Constant)	13.975	7.151		2.954	.044
	Risk assessment	.574	.257	.248	2.9	.028
	Control activities	.503	.204	.275	2.466	.016
	Control environment	.460	.247	.193	2.362	.046
	Monitoring activities	.232	.246	.089	2.344	.048

a. Dependent Variable: Financial performance of BK

Financial performance of BK=13.975+0.574 Risk assessment +0 .503 Control activities + 0.460 Control environment + 0.232 Monitoring activities.

According to the regression equation above, the result is zero when all variables (risk assessment, control measures, control surroundings, and monitoring activities) are held constant. The Bank of Kigali's financial performance will

^{**.} Correlation is significant at the 0.01 level (2-tailed).

^{*.} Correlation is significant at the 0.05 level (1-tailed).

b. Dependent Variable: Financial performance of BK

The equation $(Y = \beta 0 + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_{3+} \beta_4 x_4 + e)$ becomes:

Y=13.975+0.574X1+0.503X2+0.460X3+0.232X4. Therefore

be 13.975. This implies that there is others variables apart from internal control, system contributing 13.975 to financial performance of Bank of Kigali and also statistically significant because p-value of those variable equal to .000 which is less than 0.05. As evidenced by a p value of .028 that is less than the 0.05 level of significance, the regression of coefficients results in Table 4.16 demonstrate that there is a positive and significant association between risk assessment and the financial performance of Bank of Kigali.

This shows that an increase of one unit of risk assessment leads to an increase of 0.574 in financial performance of Bank of Kigali. A p value of 0.016—less than 0.05—from the regression of coefficients results in Table 17 supports the conclusion that there is a positive and significant association between control actions and Bank of Kigali's financial performance. This demonstrates how a rise in one unit of control activities causes a rise in Bank of Kigali's financial performance of 0.503.

The regression of coefficients results in Table 17 show that there is a positive and significant correlation between the control environment and the financial performance of the Bank of Kigali, with a p-value of 0.046, which is less than the 0.05 level of significance. This demonstrates that improving the control environment by one unit causes the financial performance of the Bank of Kigali to increase by 0.460. A p-value of 0.048, which is less than the 0.05 level of significance, and a beta coefficient of 0.232 support the assertion that there is a positive and significant association between the monitoring of controls and the financial performance of the Bank of Kigali.

This shows that an increase of one unit of monitoring of controls leads to an increase of 0.232 in financial performance of Bank of Kigali. The results are consistent with those of Muthusi (2017), who found a substantial positive association between internal control activities and a firm organizational success. According to Etuk (2011), poor internal control systems lead to disappointing performances within firms since fraud goes undetected. Furthermore, Nyambura (2013) noted that weak internal control systems within the organization were to blame for failures and poor revenue performances.

Testing Second null Research Hypothesis

The second premise of the study holds that no discernible relationship exists between control actions and the financial performance of BK H02: 2=0. Reject the null hypothesis if the p-value (Sig. value) is less than 0.05. Table 4.11 control method regression coefficients are $\beta 2=0.433$, p=0.008<0.05, less than 5% of the level of significance. The regression findings showed that the p-value calculated is less than the 0.05(5%) threshold of significance, hence the null hypothesis was rejected. The hypothesis was rejected as a result of the findings, which showed that control activities have a positive and significant link with BK's financial performance based on regression coefficients of 0.433, p=0.008<0.05, which is less than 0.005). As a result, the study came to the conclusion that there is a significant link between BK's financial success and its control measures.

Testing third null Research Hypothesis

According to the study's third hypothesis, there is no discernible connection between the control environment and BK's financial performance. H03: β 3=0. If the p-value (Sig. value) is less than 0.05, reject the null hypothesis. According to Table 4.11's findings, the control enironment regression coefficients were β 3=0.407, p=0.005<0.05, or less than 5% of the level of significance. The regression findings showed that the p-value calculated is less than the 0.05(5%) threshold of significance, hence the null hypothesis was rejected. According to the regression coefficients of 0.407 with (p-value = 0.005, less than 0.05), the financial performance of BK was positively and strongly associated to the control environment, which contradicted the premise.

Testing forth null Research Hypothesis

According to the third hypothesis of the study, H04: β 4=0, there is no apparent link between monitoring and BK's financial success. If the p-value (Sig. value) is less than 0.05, reject the null hypothesis. The results are shown in Table 4.11 as regression coefficients of monitoring activities by β 4= 0.270, p=0.0010.05, which is less than 5% of the level of significance. The null hypothesis was rejected as a result of the regression results, which revealed that the computed p-value is less than the 0.05(5%) limit of significance. Based on the regression coefficients of 0.270 with (p-value = 0.001 which is less than 0.05), the results disproved the hypothesis since monitoring activities had a positive and significant association between monitoring activities and the financial performance of BK.

vi.Summary of Findings

The objectives of the study were to ascertain the effects of risk assessment on the financial performance of the Bank of Kigali, the effects of control activities on that performance, and the effects of the control environment on that performance. This section summarizes the research's findings based on those objectives.

Summary on the effect of Risk assessment on Financial performance of Bank of Kigali

The results indicated that 75.8% of respondents strongly agreed that BK has defined adequate objectives for the bank with a very high mean of 4.53 which implies strong evidence of existence of fact and standard deviation of 0.92 implies heterogeneity of responses. The findings also revealed that risk assessment affecting Bank of Kigali's financial performance at very high mean of 4.50 where the results indicated that BK outlines risks that affect achievement of its goals with high mean of 4.13 which implies that fact appear more and standard deviation of 1.17 implies heterogeneity of responses. The results showed that there is a moderate but positive correlation between risk assessment and the Bank of Kigali's financial performance at (=0.652*,sig=0.000<0.01). This correlation is moderate but positive, with a standard deviation of 1.09 suggesting heterogeneity of responses. With a relatively high mean of 4.34 for the respondents' overall views on risk assessment, it is clear that BK implements risk assessment as an internal control mechanism. The regression of risk assessment coefficients (β 1=0.574, p-value=0.028<0.05) suggests that increasing the risk assessment process by one unit would result in a rise of 0.574 in the Bank of Kigali's financial performance.

Summary on the effect of Control activities on Financial performance of Bank of Kigali

The results showed that Bank of Kigali control activities were at a very high mean of 4.63, with 85.5% of respondents strongly agreeing that reconciled amounts are investigated and their sources determined, and with a standard deviation of 0.54 implying heterogeneity of responses. A very high mean of 4.60 indicates that there is strong support for the existence of the fact, and a standard deviation of 0.93 indicates response heterogeneity. Additionally, 87.1% of respondents strongly agreed that 80.6% of respondents strongly agreed that employees are trained to implement the accounting and financial management system in Bank of Kigali. Additionally, the results showed a moderately positive and significant correlation between the Bank of Kigali's financial performance and its control activities at ($\rho = 0.512*$, sig=0.000<0.01).

The results demonstrate a regression of control activity coefficients (β 2=0.503, p-value=0.016<0.05), which suggests that an increase in control activity intensity of one unit would result in an increase of 0.503 in Bank of Kigali's financial performance.

Summary on the effect of Control environment on Financial Performance of Bank of Kigali

The results showed that the majority of respondents—59.1%—strongly agreed that the bank has a clear organizational structure with a very high mean of 4.58; 79% of respondents—strongly agreed that the bank's policies, procedures, and guidelines are documented with a high mean of 4.56; and 75.8% of respondents—strongly agreed that the bank has a clear organizational structure with a very high mean of 4.39.

The findings revealed that there is positive and significant moderate correlation between control environment and financial performance of Bank of Kigali at ($\rho = 0.529*, \text{sig} = 0.021 < 0.05$) and also the findings revealed that regression of coefficients of control environment and financial performance of Bank of Kigali was $\beta = 0.460$, p-value=0.046<0.05) which implies that an increase of one unit of control environment leading to an increase of 0.460 in financial performance of Bank of Kigali.

Summary on the effect of monitoring activities on financial performance of Bank of Kigali

According to the data, 69.4% of respondents agreed that BK separates evaluations when monitoring its activities, with a high mean of 4.48, and the overall opinion of respondents on monitoring activities in Bank of Kigali was at a very high mean of 4.34. With a very high mean of 4.65, 75.8% of respondents strongly agreed that BK reports are prepared at the end of the fiscal year. The findings revealed that there is positive and significant moderate correlation between monitoring activities and financial performance of Bank of Kigali at (ρ =0.679**,sig=0.008<0.01). The regression of coefficients monitoring of activities and financial performance of Bank of Kigali was β 4=.232,p-value=0.048<0.05) which implies that an increase of one unit of monitoring of controls leading to an increase of 0.232 in financial performance of Bank of Kigali.

vii.Conclusion

The control environment within commercial banks is positively and strongly related to their financial performance, according to the data from chapter four above. The capacity of commercial banks to satisfy client needs and carry out tasks effectively influences how well the organization performs. This capacity is determined by the banks' ability to maintain an environment that is suitable to the application of internal control systems. The degree of performance of commercial banks is also impacted by the risk assessment methodologies used by those institutions.

Banks with sufficient levels of risk assessment in their operations have a better chance of performing well because they can identify operational risks that could result in losses and take action to mitigate those risks. A bank is assured of improved financial performance with less operational risk. Information and communication have a good and significant impact on BK's financial performance. The employees' access to information and the efficiency of the banks' communication system both have a significant impact on the banks' capacity for financial growth. The study provides evidence that the sensitive information held by commercial banks is a valuable asset to the banks since access by unauthorized individuals could cause the bank to fail and increase the risk of losses.

The study concluded that monitoring activities, risk assessment, control environment, and control activities significantly contributed to the company's improved financial performance over the previous four years in terms of improvement in return on assets, return on equity, and net profit margin. This conclusion was based on the findings from Chapter four above. This variation of 35.4% in financial performance could therefore be accounted for by these factors. As a result, the study found a significant positive correlation between internal control procedures and the financial performance of commercial banks in Rwanda, specifically the Bank of Kigali, for the years 2018 to 2021. The study also came to the conclusion that performing audits is what affects the Bank of Kigali's financial performance

viii. REFERENCES

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